



UNIVERSITY PROGRAM MANAGEMENT INFORMATION SYSTEM

FY 2002

**Prepared by:
Office of Education/N**

This publication (NASA/TM—2003-212256) is for sale by:

NASA Center for AeroSpace Information

7121 Standard Drive

Hanover, MD 21076–1320

E-mail: help@sti.nasa.gov

Fax: 301-621-0134

Phone: 301-621-0390

IMPORTANT NOTICE

This report is compiled primarily from information obtained from two internal NASA sources:

1. "CASE Report on Support of Colleges and Universities" (NASA Form 1356).
2. "Individual Procurement Action Report" (NASA Form 507).

Therefore, other sources should be used for completing Forms 507 and 1356.

Information in this publication is reviewed and revised for accuracy. Should any differences exist between publications, the latest edition should take precedence over earlier ones.

NASA's UNIVERSITY PROGRAM

ACTIVE PROJECTS

FISCAL YEAR 2002

Gary Gans, Project Manager

**National Aeronautics and Space Administration
Office of Education/N
Washington, DC 20546-0001**

FOREWORD

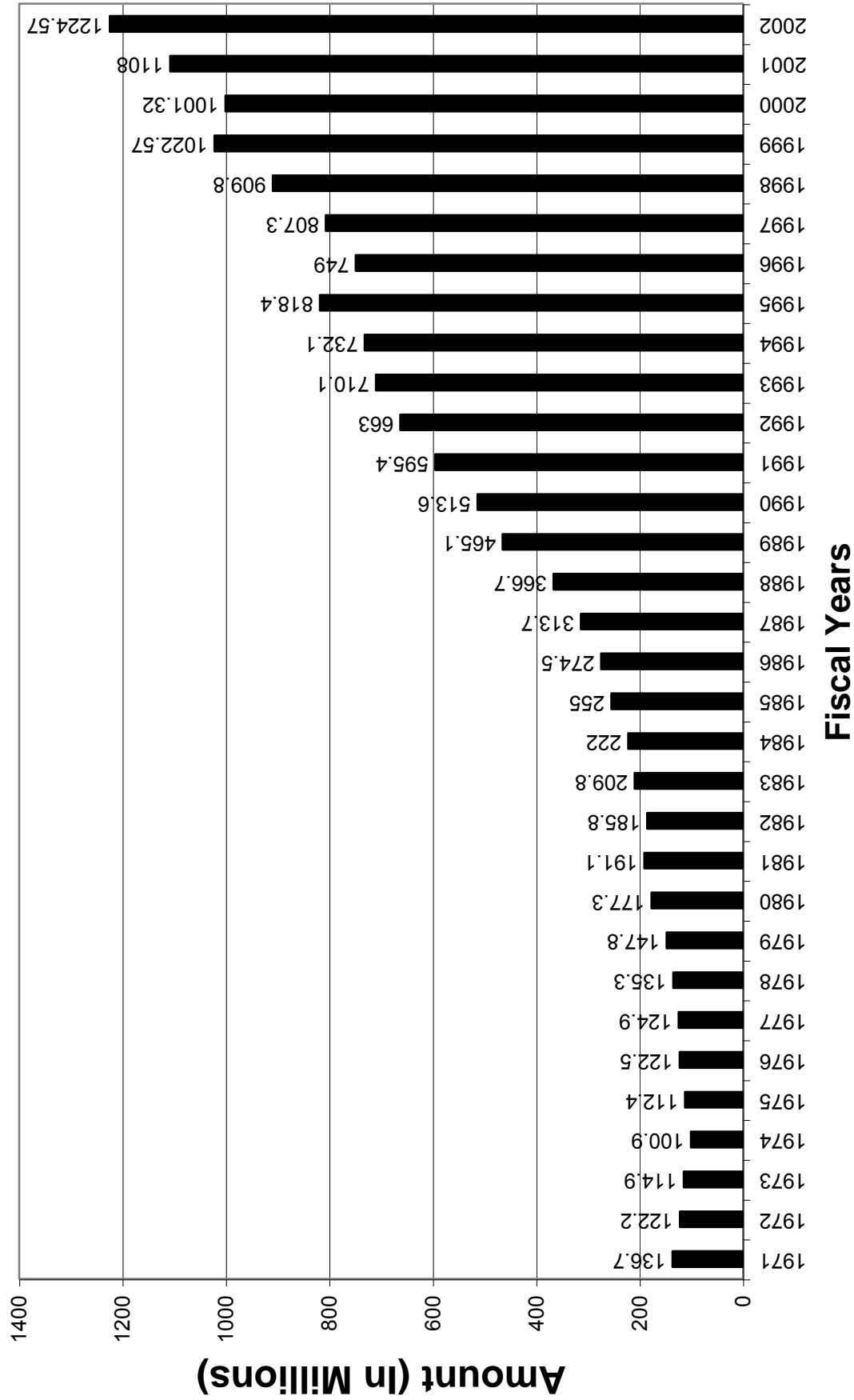
As basic policy, NASA believes that colleges and universities should be encouraged to participate in the nation's space and aeronautics program to the maximum extent practicable. Indeed, universities are considered as partners with government and industry in the nation's aerospace program. NASA's objective is to have them bring their scientific, engineering, and social research competence to bear on aerospace problems and on the broader social, economic, and international implications of NASA's technical and scientific programs. It is expected that, in so doing, universities will strengthen both their research and their educational capabilities to contribute more effectively to the national well being.

This annual report is one means of documenting the NASA-university relationship, frequently denoted, collectively, as NASA's University Program. This report is consistent with agency accounting records, as the data is obtained from NASA's Financial and Contractual Status (FACS) System, operated by the Financial Management Division and the Procurement Office. However, in accordance with interagency agreements, the orientation differs from that required for financial or procurement purposes. Any apparent discrepancies between this report and other NASA procurement or financial reports stem from the selection criteria for the data.*

This report was prepared by the Office of Education/N.

* Agreements which meet active criteria definition and have deobligations may result in agreements having negative obligations in the body of this publication.

NASA Obligations to Universities Fiscal Years 1971-2002



**FIFTY EDUCATIONAL INSTITUTIONS
LISTED ACCORDING TO TOTAL OBLIGATIONS – FY 2002**

	INSTITUTION	OBLIGATIONS	PERCENT
TOTALS*		1,224,570,313	100.00
1	Johns Hopkins University	167,103,681	13.65
2	Stanford University	64,685,637	5.28
3	University of Colorado - Boulder	49,621,199	4.05
4	University of Maryland - College Park	42,156,713	3.44
5	Baylor College of Medicine	26,539,222	2.17
6	University of Hawaii at Manoa - Honolulu	24,489,155	2.00
7	University of California - Berkeley	24,157,500	1.97
8	California Institute of Technology	23,560,782	1.92
9	Utah State University	22,860,619	1.87
10	Massachusetts Institute of Technology	22,783,130	1.86
11	Pennsylvania State Univ. - Univ. Park	20,620,356	1.68
12	University of Maryland Baltimore County	19,996,728	1.63
13	University of Alabama - Huntsville	18,590,296	1.52
14	New Mexico State University - Las Cruces	18,473,905	1.51
15	University of Arizona	15,805,740	1.29
16	University of Alaska - Fairbanks	15,495,275	1.27
17	University of California - Los Angeles	14,323,772	1.17
18	Columbia University	12,258,104	1.00
19	Georgia Institute of Technology	11,747,241	0.96
20	University of California - San Diego	11,742,971	0.96
21	Oklahoma State University	11,225,773	0.92
22	University of Florida	11,156,736	0.91
23	University of Texas - Austin	10,960,392	0.90
24	Wheeling Jesuit University	10,931,591	0.89
25	University of Michigan - Ann Arbor	10,457,672	0.85
26	University of Wisconsin - Madison	9,975,159	0.81
27	Texas A&M University	9,952,030	0.81
28	University of Washington	9,599,369	0.78
29	George Mason University	9,034,005	0.74
30	University of New Hampshire - Durham	8,907,356	0.73
31	San Jose State University	8,818,433	0.72
32	Harvard University	8,426,647	0.69
33	University of Alabama - Birmingham	8,023,081	0.66
34	Purdue University	7,697,090	0.63
35	Mississippi State University	7,335,238	0.60
36	Princeton University	7,192,687	0.59
37	Carnegie - Mellon University	7,123,116	0.58
38	The University of Central Florida	6,990,535	0.57
39	Cornell University	6,927,384	0.57
40	University of California - Irvine	6,894,120	0.56
41	Hampton University	6,814,571	0.56
42	University of Illinois at Urbana-Champaign	6,170,958	0.50
43	University of Miami	6,100,520	0.50
44	Oregon State University	6,017,003	0.49
45	University of Missouri - Columbia	5,958,311	0.49
46	Colorado State University	5,905,323	0.48
47	University of California - Santa Barbara	5,578,665	0.46
48	Old Dominion University	5,499,005	0.45
49	University of Iowa	5,496,691	0.45
50	University of Mississippi - University	5,406,236	0.44
	Other Colleges & Universities	360,982,590	29.48

* Excludes awards to California Institute of Technology for operation of the Jet Propulsion Laboratory.
Totals include de-obligations for this chart.

** Includes both foreign and domestic universities and colleges.

STATES AND U.S. TERRITORIES BY OBLIGATIONS
FISCAL YEAR 2001 (October 1, 2000 through September 30, 2002)

	STATE	FY02-OBLIGATIONS (WHOLE DOLLARS)	PERCENT
TOTALS*		1,224,369,999	100.00
1	Maryland.....	235,489,743	19.23
2	California.....	191,972,295	15.68
3	Texas.....	76,166,780	6.22
4	Colorado.....	60,990,150	4.98
5	Massachusetts.....	46,624,264	3.81
6	New York.....	41,490,734	3.39
7	Alabama.....	40,001,896	3.27
8	Florida.....	39,642,734	3.24
9	Pennsylvania.....	35,925,203	2.93
10	Virginia.....	33,207,153	2.71
11	Ohio.....	27,465,236	2.24
12	Utah.....	25,531,479	2.09
13	New Mexico.....	24,877,785	2.03
14	Hawaii.....	24,489,155	2.00
15	Arizona.....	21,767,550	1.78
16	Georgia.....	21,667,742	1.77
17	West Virginia.....	18,013,317	1.47
18	Michigan.....	17,165,449	1.40
19	Illinois.....	15,577,631	1.27
20	Alaska.....	15,495,275	1.27
21	Mississippi.....	13,798,196	1.13
22	New Jersey.....	12,970,219	1.06
23	Oklahoma.....	12,490,625	1.02
24	North Carolina.....	12,340,301	1.01
25	Missouri.....	11,624,108	0.95
26	New Hampshire.....	11,493,538	0.94
27	Tennessee.....	11,333,709	0.93
28	Wisconsin.....	10,688,960	0.87
29	Washington.....	10,677,805	0.87
30	Montana.....	9,894,370	0.81
31	Indiana.....	9,701,088	0.79
32	Iowa.....	9,691,193	0.79
33	Louisiana.....	9,470,387	0.77
34	District of Columbia.....	8,269,362	0.68
35	Oregon.....	7,149,129	0.58
36	Idaho.....	6,685,912	0.55
37	Puerto Rico.....	5,087,657	0.42
38	Minnesota.....	5,010,546	0.41
39	North Dakota.....	4,860,160	0.40
40	Connecticut.....	4,826,222	0.39
41	Rhode Island.....	4,797,345	0.39
42	South Carolina.....	3,891,333	0.32
43	Kentucky.....	2,699,707	0.22
44	Kansas.....	2,636,269	0.22
45	Nevada.....	1,692,342	0.14
46	Nebraska.....	1,570,135	0.13
47	Delaware.....	1,311,718	0.11
48	Vermont.....	1,143,908	0.09
49	Wyoming.....	946,453	0.08
50	South Dakota.....	922,083	0.08
51	Arkansas.....	783,233	0.06
52	Maine.....	350,415	0.03

* Starting in FY 1993, Active Actions with de-obligations will be reported in this chart.

TABLE OF CONTENTS

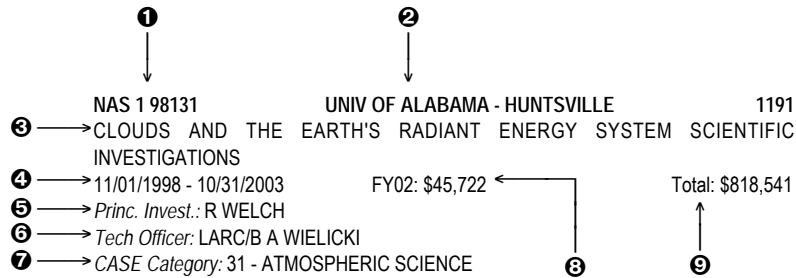
This report includes data on projects active during Fiscal Year 2002.

Alabama	1	Nebraska	336
Alaska	16	Nevada	338
Arizona	18	New Hampshire	340
Arkansas	39	New Jersey	347
California	40	New Mexico	357
Colorado	118	New York	364
Connecticut	143	North Carolina	389
Delaware	148	North Dakota	399
District of Columbia	151	Ohio	400
Florida	160	Oklahoma	424
Georgia	178	Oregon	427
Hawaii	190	Pennsylvania	431
Idaho	197	Rhode Island	453
Illinois	199	South Carolina	457
Indiana	213	South Dakota	462
Iowa	220	Tennessee	463
Kansas	225	Texas	469
Kentucky	228	Utah	497
Louisiana	230	Vermont	502
Maine	235	Virginia	503
Maryland	236	Washington	528
Massachusetts	275	West Virginia	539
Michigan	304	Wisconsin	541
Minnesota	318	Wyoming	549
Mississippi	323	Commonwealth of Puerto Rico	550
Missouri	326	Foreign Countries	552
Montana	333		
		Appendix/Cross Index by Field of Science and Engineering	555

USER'S GUIDE

The University Program Report provides current information and related statistics for each grant/contract/cooperative agreement active during the report period. The following guidance is provided as an aid to the reader in readily locating material of interest and in optimizing the use of this document.

I. Typical Citation



KEY

1. Agreement number*
2. Institution name
3. Brief work description
4. Approximate period of performance
5. Principal investigator(s) at the educational institution
6. NASA Technical Officer(s) and organizational location
7. CASE Field of Science and Engineering code and name
8. Amount (if any) actually provided during the indicated fiscal year
9. Total amount actually provided during the indicated period of performance

* Uniquely identifies project. Prefixes denote type of instrument as follows:

Grants: NAG, NAGW, NGF, NGT, NGL, NGR, NSG

Cooperative Agreements: NCC, NCCW

Contracts: DEN, NAS, NASR, NASW, NSR

Space Act Agreements: NCA

II. NASA Installations

NASA installations are included in the citation as abbreviations (item 7). The following listing of installations will be useful to those desiring further information on specific projects.

For additional information please visit the NASA Education website at: <http://education.nasa.gov/>.

Mr. Gary Gans Code N NASA Headquarters Office of Education Washington, DC 20546 Phone: 202-358-1110	HQ	Ms. Linda Rodgers University Programs Administrator Mail Stop 180-109 NASA Jet Propulsion Laboratory Pasadena, CA 91109-8099 Phone: 818-354-3274 Fax: 818-393-4977 Email: linda.rodgers@jpl.nasa.gov	JSC
Dr. Katie Blanding Mail Code: N NASA Headquarters Washington, DC 20546 Phone: 202-358-0402 Fax: 202-358-3048 Email: kblandin@hq.nasa.gov	HQ	Dr. Donn G. Sickorez Mail Stop AH2 Lyndon B. Johnson Space Center Houston, TX 77058 Phone: (281) 483-4724 FAX: (281) 483-9192 Email: donn.g.sickorez1@jsc.nasa.gov	JSC
Brenda Collins University Affairs Specialist NASA Ames Research Center Mail Stop is 204-14 Moffett Field, CA 94035 Phone: 650-604-3540 Fax: 650-604-0978 Email: bcollins@mail.arc.nasa.gov	ARC	Mr. Gregg Buckingham Mail Stop XA-D1 John F. Kennedy Space Center Kennedy Space Center, FL 32899 Phone: 321-867-8777 FAX: 321-867-2097 Email: gregg.buckingham-1@ksc.nasa.gov	KSC
Dr. Kajal K. Gupta NASA Dryden Flight Research Center P.O. Box 273, Mail Stop D2701 Edwards, CA 93523-0273 Phone: (661) 276-3710 FAX: (661) 276-3744 Email: kajal.gupta@dfrc.nasa.gov	DFRC	Mr. Roger A. Hathaway Mail Stop 400 Langley Research Center Hampton, VA 23681-2199 Phone: (757) 864-3312 FAX: (757) 864-8835 Email: r.a.hathaway@larc.nasa.gov	LARC
Dr. Francis J. Montegani Mail Stop 49-5 NASA Glenn Research Center Cleveland, OH 44135 Phone: (216) 433-2956 FAX: (216) 433-3687 Email: fjm@grc.nasa.gov	GRC	Dr. Shelia Nash-Stevenson George C. Marshall Space Flight Center Mail Stop CD60 MSFC, AL 35812 Phone: (256) 544 - 3453 FAX: (256) 544 - 8899 Email: shelia.nash-stevenson@msfc.nasa.gov	MSFC
Dr. Richard Fahey (Acting) University Affairs Officer Code 160 NASA Goddard Space Flight Center Greenbelt, MD 20771-0001 Phone: 301-286-9877 Fax: 301-286-1610 Email: fahey@stars.gsfc.nasa.gov	GSFC	Dr. Ramona E. Pelletier Travis John C. Stennis Space Center Code FA00 Stennis Space Center, MS 39529 Phone: (228) 688-3832 Fax: (228) 688-7499 Email: Ramona.Travis@ssc.nasa.gov	SSC

A full listing of the suffix letters and information on NASA's organizational structure may be found in the NASA Headquarters Telephone Directory. The directory is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

III. CASE

The National Science Foundation (NSF) operates a government-wide system originally designed by the Committee on Academic Science and Engineering (CASE) of the Federal Council for Science and Technology. Participating agencies report annually to NSF, which in turn issues the statistical report, Federal Science and Engineering Support to Universities, Colleges and Nonprofit Institutions.

Since its inception, this survey system has been the sole source of data on Federal funding to individual institutions for Science and Engineering (S&E) activities.

IV. Cross-Index

The cross-indexed Appendix provides rapid access to all projects in a particular area of endeavor, and is also easily used to determine the institutions and principal investigators conducting NASA projects.

ALABAMA

NAG 2 1130 **ALABAMA A&M UNIV** **1000**
 IRON-ION INDUCED LOW DOSE MUTAGENESIS
 06/11/1997 - 06/30/2002 FY02: \$0 Total: \$359,883
Prin. Invest.: P G KALE
Tech. Officer: ARC/A CARDENAS, ARC/P X CALLAHAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 2 1175 **ALABAMA A&M UNIV** **1001**
 NEURAL NETWORK ANALYSIS OF LEAF MULTISPECTRAL REFLECTANCE
 FOR DETECTION & DISCRIMINATION OF
 02/03/1998 - 04/30/2002 FY02: \$0 Total: \$299,752
Prin. Invest.: C A BEYL
Tech. Officer: ARC/M H KLISS, ARC/G S LEE
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 2 1527 **ALABAMA A&M UNIV** **1002**
 GENETIC EFFECTS IF NEUTRON RADIATION IN DROSOPHILA
 10/11/2001 - 09/30/2003 FY02: \$37,905 Total: \$100,492
Prin. Invest.: V HATZIMMANIKATIS
Tech. Officer: ARC/J HINES, ARC/P FUNG
CASE Category: 43 – CHEMICAL ENGR

NAG 3 1956 **ALABAMA A&M UNIV** **1003**
 OPTICAL SENSORS BASED ON SINGLE ARM THIN FILM WAVE GUIDE
 INTERFEROMETER
 08/19/1996 - 10/31/2000 FY02: -\$2 Total: \$257,998
Prin. Invest.: P VENKATESWARLY, S S SARKISOV
Tech. Officer: GRC/G ADAVOVSKY
CASE Category: 13 – PHYSICS

NAG 3 2302 **ALABAMA A&M UNIV** **1004**
 DEVELOPMENT OF IMPROVED HIGH TEMPERATURE SILICON CARBIDE
 SENSORS
 12/13/1999 - 11/02/2002 FY02: \$0 Total: \$199,136
Prin. Invest.: D ILA, M A GEORGE
Tech. Officer: GRC/D J LARKIN, GRC/R LAWRENCE
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9885 **ALABAMA A&M UNIV** **1005**
 STUDENT REFLECTION GPS EXPERIMENT
 08/24/2000 - 02/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: A MANU
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10202 **ALABAMA A&M UNIV** **1006**
 SPACE SCIENCE EDUCATION & THE SUN-EARTH CONNECTION
 12/22/2000 - 12/31/2003 FY02: \$225,000 Total: \$450,000
Prin. Invest.: A TAN
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10721 **ALABAMA A&M UNIV** **1007**
 CENTER FOR HYDROLOGY, SOIL CLIMATOLOGY, AND REMOTE SENSING
 (HSCARS): CONTINUATION OF A GROUP 2 MINOR
 04/20/2001 - 04/14/2006 FY02: \$999,979 Total: \$1,759,150
Prin. Invest.: T COLEMAN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11752 **ALABAMA A&M UNIV** **1008**
 THE 16TH NATIONAL CONFERENCE OF THE BLACK PHYSICS STUDENTS
 (NCBPS) NATIONAL SOCIETY OF BLACK PH
 02/20/2002 - 02/28/2003 FY02: \$85,000 Total: \$85,000
Prin. Invest.: R B LAL
Tech. Officer: GSFC/D MENCHAN
CASE Category: 13 – PHYSICS

NAG 5 12028 **ALABAMA A&M UNIV** **1009**
 CHARACTERIZING ELECTRO-OPTICAL PROPERTIES
 04/24/2002 - 04/30/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: M EDWARDS
Tech. Officer: GSFC/H A ABDELDAYEM
CASE Category: 13 – PHYSICS

NAG 5 12524 **ALABAMA A&M UNIV** **1010**
 R&D REQUIRED TO PROVIDE ESSENTIAL INPUTS TO SUPPORT DEVELOP
 MENT OF GUIDANCE & PRACTICES FOR CE
 09/19/2002 - 09/14/2003 FY02: \$30,785 Total: \$30,785
Prin. Invest.: E E MOYERS
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAG 8 1390 **ALABAMA A&M UNIV** **1011**
 R/S "BULK AND THIN FILM ORGANIC NONLINEAR OPTICAL CRYSTALS FOR
 DEVICES AND MICROGRAVITY PROCESSING"
 07/23/1997 - 07/22/2001 FY02: -\$43 Total: \$199,957
Prin. Invest.: M D AGGARWAL
Tech. Officer: MSFC/D FRAZIER, MSFC/W J LOVE
CASE Category: 13 – PHYSICS

NAG 8 1497 **ALABAMA A&M UNIV** **1012**
 COMPUTER MODEL OF THE TVC ELECTROMECHANICAL ACTUATOR
 06/10/1999 - 08/15/2002 FY02: \$0 Total: \$252,865
Prin. Invest.: A BOND
Tech. Officer: MSFC/J MONTENEGRO
CASE Category: 45 – ELECTRICAL ENGR

NAG 8 1498 **ALABAMA A&M UNIV** **1013**
 ELECTRO-OPTIC MODULATOR BASED ON ORGANIC PLANAR WAVEGUIDE
 INTEGRATED WITH PRISM COUPLER.
 06/24/1999 - 05/30/2002 FY02: \$0 Total: \$240,000
Prin. Invest.: S SARKISOV
Tech. Officer: MSFC/B PENN
CASE Category: 13 – PHYSICS

NAG 8 1541 **ALABAMA A&M UNIV** **1014**
 CYTOGENETIC INVESTIGATIONS INTO RADIOSENSITIVITY
 07/17/1998 - 07/16/2003 FY02: \$59,686 Total: \$264,490
Prin. Invest.: D KALE
Tech. Officer: MSFC/R C RICHMOND
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1560 **ALABAMA A&M UNIV** **1015**
 MATHEMATICAL SAFETY ANALYSIS
 09/30/1999 - 09/30/2002 FY02: \$0 Total: \$199,912
Prin. Invest.: M A ELSHAMY
Tech. Officer: MSFC/D O FRAZIER
CASE Category: 21 – MATHEMATICS

ALABAMA

NASA'S UNIVERSITY PROGRAM

NAG 8 1614 **ALABAMA A&M UNIV** **1016**
 RESEARCH ENTITLED: INVESTIGATION OF STRUCTURAL PROPERTIES OF
 COMPOSITE SMART MATERIALS .
 09/09/1999 - 12/31/2002 FY02: \$99,264 Total: \$296,480
Prin. Invest.: A SHARMA
Tech. Officer: MSFC/G MYERS
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1620 **ALABAMA A&M UNIV** **1017**
 FASAT REACTION SPATIAL-TEMPORAL LIGHT MODULATORS FOR OPTICAL
 RECOGNITION AND IMAGE PROCESSING.
 08/25/1999 - 08/30/2003 FY02: \$99,895 Total: \$286,287
Prin. Invest.: N KUKHATAREV, T KUHTEREVA
Tech. Officer: MSFC/B G PENN
CASE Category: 13 – PHYSICS

NAG 8 1623 **ALABAMA A&M UNIV** **1018**
 INNOVATIVE EXPLORATION OF SEMIORGANIC NONLINEAR OPTICAL MATE-
 RIALS FOR OPTICAL PROCESSING APPLIC.
 09/24/1999 - 09/23/2003 FY02: \$0 Total: \$200,000
Prin. Invest.: M D AGGARWAL
Tech. Officer: MSFC/B PENN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1624 **ALABAMA A&M UNIV** **1019**
 INVESTIGATION OF MICROBIAL LIFE IN PLAR ICE AND PERMA FROST
 08/13/1999 - 09/14/2001 FY02: -\$1,421 Total: \$98,579
Prin. Invest.: M G TADROS
Tech. Officer: MSFC/R HOOVER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1626 **ALABAMA A&M UNIV** **1020**
 RESEARCH ENTITLED: "HYPERSONIC NON-EQUILIBRIUM FLOWS WITH
 LOW REYNOLDS EFFECT"
 09/16/1999 - 05/31/2002 FY02: \$0 Total: \$199,057
Prin. Invest.: G S LIAW
Tech. Officer: MSFC/L CHOU, MSFC/W J LOVE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1642 **ALABAMA A&M UNIV** **1021**
 HIGH SCHOOL/HIGH-TECH CAREER DEVELOPMENT PROGRAM IN MATH-
 EMATICS, SCIENCE ENGINEERING, ADN TECH.
 09/30/1999 - 09/29/2002 FY02: \$0 Total: \$195,360
Prin. Invest.: B CADY
Tech. Officer: MSFC/W LOVE
CASE Category: 21 – MATHEMATICS

NAG 8 1643 **ALABAMA A&M UNIV** **1022**
 ENHANCEMENT OF STUDENTS IN SCIENCE, ENGINEERING, AND MATH-
 EMATICS.
 09/27/1999 - 03/26/2002 FY02: \$0 Total: \$195,592
Prin. Invest.: E TEMPLE
Tech. Officer: MSFC/J DOWDY
CASE Category: 21 – MATHEMATICS

NAG 8 1655 **ALABAMA A&M UNIV** **1023**
 PRODUCTION OF ULTRA-LIGHT MIRRORS
 03/20/2000 - 03/19/2001 FY02: \$0 Total: \$213,819
Prin. Invest.: D ILA
Tech. Officer: MSFC/W LOVE
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1800 **ALABAMA A&M UNIV** **1024**
 COMPUTATIONAL ANALYSIS OF ION TRAJECTORY IN PULSA MAGNETIC
 FLUX COMPRESSION REACTION
 06/07/2001 - 06/30/2002 FY02: -\$5,528 Total: \$24,191
Prin. Invest.: E W ROTHE, G P RECK
Tech. Officer: GRC/R C ANDERSON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1804 **ALABAMA A&M UNIV** **1025**
 RESEARCH, "NUMERICAL PREDUCATION OF DRAG OF AJAX TYPE VE-
 HICLES
 05/17/2001 - 05/15/2004 FY02: \$75,000 Total: \$135,000
Prin. Invest.: Z T DENG
Tech. Officer: MSFC/A CHOW
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1808 **ALABAMA A&M UNIV** **1026**
 RESEARCH, "WEAKLY IONIZED GAS CHARACTERISTICS AND EFFECT ON
 THE SHOCK WAVE STRUCTURE.
 05/02/2001 - 04/15/2004 FY02: \$50,000 Total: \$145,000
Prin. Invest.: K X HO
Tech. Officer: MSFC/A CHOW
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1861 **ALABAMA A&M UNIV** **1027**
 DIRECTIONALLY SENSITIVE SILICON RADIATION SENSOR
 05/20/2002 - 05/19/2003 FY02: \$99,691 Total: \$99,691
Prin. Invest.: K B COOK
Tech. Officer: MSFC/W T POWERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1095 **ALABAMA A&M UNIV** **1028**
 MICROBIAL VIABILITY AND BIOCIDES EFFICIENCY STUDIES FOR THE INTER
 SPACE STATION
 03/31/1999 - 04/01/2003 FY02: \$0 Total: \$281,916
Prin. Invest.: M TADROS
Tech. Officer: JSC/D PIERSON, JSC/L AREMNDARIZ
CASE Category: 13 – PHYSICS

NAG10 245 **ALABAMA A&M UNIV** **1029**
 MISSION PLANNING AND RISK MANAGEMENT
 04/06/1998 - 05/15/2002 FY02: -\$2,616 Total: \$289,386
Prin. Invest.: M ELSHAMY
Tech. Officer: KSC/R TILLEY
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG10 324 **ALABAMA A&M UNIV** **1030**
 STUDENT PREPARATION AND PARTICIPATION IN INTERNSHI PS FOR
 APPLIED STATISTICIANS
 09/03/2002 - 08/27/2003 FY02: \$119,357 Total: \$119,357
Prin. Invest.: E TEMPLE
Tech. Officer: KSC/G BUCKINGHAM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 736 **ALABAMA A&M UNIV** **1031**
 ALL OPTICAL MICRO MOTORS BASED ON MOVING GRATING IN PHOTO
 SENSITIVE MEDIA
 09/30/1999 - 09/30/2002 FY02: \$0 Total: \$187,128
Prin. Invest.: D CURLEY
Tech. Officer: GRC/G ADAMOVSKY
CASE Category: 13 – PHYSICS

NCC 8 140 **ALABAMA A&M UNIV** **1032**
 R/S "CENTER FOR HYDROLOGY, SOIL CLIMATOLOGY AND REMOTE SENSING (HSCARS)"
 07/21/1997 - 12/31/2000 FY02: \$0 Total: \$3,853,109
Prin. Invest.: T L COLEMAN
Tech. Officer: MSFC/R ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 8 211 **ALABAMA A&M UNIV** **1033**
 STUDEN LAUNCH INITIATIVE
 03/23/2001 - 12/31/2002 FY02: \$0 Total: \$49,997
Prin. Invest.: R B LAL, G SHARMA, M MANMOHAN
Tech. Officer: MSFC/JR PRUITT
CASE Category: 41 – AERONAUTICAL ENGR

NGT 8 52902 **ALABAMA A&M UNIV** **1034**
 FABRICATION & OPTICAL AND ELECTRICAL CHARACTERIZATION OF THE DIFFRACTIVE HOLOGRAPHIC OPTICAL ELEMN
 05/25/2001 - 06/30/2005 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J C WANG
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 13 – PHYSICS

NGT 8 52918 **ALABAMA A&M UNIV** **1035**
 URBAN SPRAWL AND THE DEVELOPMENT OF A LEAPFROG INDEX
 05/08/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W MCALLISTER
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2120 **AUBURN UNIV** **1036**
 TIAL JOINING SCIENCE AND TECHNOLOGY FOR ADVANCED AEROPRO-PULSION SYSTEM
 02/11/1998 - 01/13/2002 FY02: \$0 Total: \$238,491
Prin. Invest.: W F GALE, J W FERGUS
Tech. Officer: GRC/R D NOEBE, GRC/M V NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2597 **AUBURN UNIV** **1037**
 DAMPING AND CONTROL OF MULTI-DIRECTION COMPOSITE FLYWHEELS
 04/27/2001 - 11/05/2003 FY02: \$89,204 Total: \$150,248
Prin. Invest.: D GOWAYED
Tech. Officer: GRC/J TRUDELL
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2639 **AUBURN UNIV** **1038**
 A STUDY OF THE EFFECTS OF GAMMA AND CHARGED PARTICLE RADIATION ON SILICON CARBIDE DIODES AND METAL-
 06/22/2001 - 03/31/2003 FY02: \$63,147 Total: \$150,350
Prin. Invest.: J R WILLIAMS
Tech. Officer: GRC/G E SCHWARZE
CASE Category: 13 – PHYSICS

NAG 3 2682 **AUBURN UNIV** **1039**
 TRANSIENT LIQUID PHASE BONDING OF TIAL ALLOYS TRANSIENT LIQUID PHASE BONDING OF TIAL ALLOYS
 01/04/2002 - 12/20/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: W F GALE
Tech. Officer: GRC/S L DRAPER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 8081 **AUBURN UNIV** **1040**
 MAGNETIC RECONNECTION AND PARTICLE PRECIPITATION A CROSS THE MAGNETOPAUSE
 01/21/1999 - 02/28/2003 FY02: \$0 Total: \$169,914
Prin. Invest.: D LIN
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 11121 **AUBURN UNIV** **1041**
 RADIATION EFFECTS IN SIGE HBT BICMOS TECHNOLOGY
 07/13/2001 - 01/31/2003 FY02: \$0 Total: \$65,000
Prin. Invest.: J D CRESSLER
Tech. Officer: GSFC/R REED
CASE Category: 13 – PHYSICS

NAG 5 12316 **AUBURN UNIV** **1042**
 SINGLE-EVENT EFFECTS MODELING IN SIGE HBTS; NEW GRANT
 07/02/2002 - 08/31/2003 FY02: \$38,332 Total: \$38,332
Prin. Invest.: G NIU
Tech. Officer: GSFC/R REED
CASE Category: 13 – PHYSICS

NAG 8 1728 **AUBURN UNIV** **1043**
 "GROUND SYSTEM-RECTENNA-SATELLITE INTERFACE ISSUES FOR SPACE SOLAR POW SYSTEMS"
 06/09/2000 - 03/31/2001 FY02: -\$36,067 Total: \$18,407
Prin. Invest.: S A MERRYMAN
Tech. Officer: MSFC/J HOWELL
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1806 **AUBURN UNIV** **1044**
 RESEARCH, "X-33 ADVANCED GUIDANCE AND CONTROL PROJECT: SOFTWARE REFINEMENTS FOR VERIFICATION..."
 04/25/2001 - 03/15/2002 FY02: \$0 Total: \$32,188
Prin. Invest.: A S HODEL
Tech. Officer: MSFC/D R KRUP
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 3 99200 **AUBURN UNIV** **1045**
 EFFECTS OF HYPERVELOCITY IMPACTS ON HIGH VOLTAGE SOLAR ARRAYS
 09/17/1999 - 10/31/2000 FY02: -\$5,620 Total: \$119,161
Prin. Invest.: H W BRANDHORST
Tech. Officer: GRC/P J GEORGE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 8 98249 **AUBURN UNIV** **1046**
 DEVELOPMENT AND PACKAGING OF SUPERCAPACITORS FOR LAUNCH VEHICLE APPLICATIONS
 09/10/1998 - 07/06/2002 FY02: \$0 Total: \$523,572
Prin. Invest.: S A MERRYMAN, Z CHEN
Tech. Officer: MSFC/D K HALL, MSFC/T M EDGE
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 511 **AUBURN UNIV** **1047**
 CENTER FOR THE COMMERCIAL DEVELOPMENT OF SPACE: SPACE POWER & ADVANCED ELECTRONICS
 11/01/1996 - 10/31/2002 FY02: \$0 Total: \$4,620,501
Prin. Invest.: D W BRANDHORST, JR., M F ROSE
Tech. Officer: GRC/J E DUDENHOEFER, GRC/R J SOVIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

ALABAMA

NASA'S UNIVERSITY PROGRAM

NCC 3 864 **AUBURN UNIV** **1048**
 COUPLED RADIATION/THERMOPHORESUS EFFECTS IN SOOTIN G MICRO-
 GRAVITY FLAMES
 02/20/2001 - 12/20/2004 FY02: \$53,037 Total: \$102,204
Prin. Invest.: D W MACKOWSKI
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 46 – MECHANICAL ENGR

NCC 5 333 **AUBURN UNIV** **1049**
 SOIL ORGANIC MATTER FLUXES IN AMAZONIAN FORESTS: N ATURAL VS
 INTENSIVELY MANAGED SYSTEMS
 06/17/1998 - 12/31/2001 FY02: \$0 Total: \$225,482
Prin. Invest.: K MCNABB
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 459 **AUBURN UNIV** **1050**
 CENTER FOR SPACE POWER AND ADVANCED ELECTRONICS
 03/01/2000 - 01/31/2002 FY02: \$0 Total: \$1,030,000
Prin. Invest.: H W BRANDHORST
Tech. Officer: GSFC/D BRUNNER
CASE Category: 11 – ASTRONOMY

NCC 8 128 **AUBURN UNIV** **1051**
 FOR RESEARCH: "AUBURN COMMERCIAL SPACE CENTER FOR THE
 SOLIDIFICATION DESIGN/CASTNET PROGRAM"
 01/28/1997 - 01/31/2002 FY02: -\$1 Total: \$8,322,923
Prin. Invest.: R A OVERFELT
Tech. Officer: MSFC/S LAMBING
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 8 151 **AUBURN UNIV** **1052**
 GLOBAL CHANGE R/S EDUCATION & OUTREACH RELATED TO THE EARTH'S
 SURFACE RESOURCES AND HYDROLOGIC CYCLE
 06/30/1998 - 03/31/2003 FY02: -\$10,000 Total: \$483,343
Prin. Invest.: U HATCH
Tech. Officer: MSFC/J R ARNOLD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 237 **AUBURN UNIV** **1053**
 PROMOTE COMMERCIALY FUNDED RESCH & DEV IN THE FIELD OF SPACE
 POWER AND ADV ELECTRONICS
 01/09/2002 - 10/31/2002 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: H BRANDHORST, JR
Tech. Officer: MSFC/S LAMBING
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 240 **AUBURN UNIV** **1054**
 ROMOTE COMMERCIALY FUNDED RESEARCH AND TECH DEV. IN THE
 FIELD OF SOLIDIFICATION DESIGN
 01/08/2002 - 10/31/2002 FY02: \$1,750,000 Total: \$1,750,000
Prin. Invest.: R A OVERFELT
Tech. Officer: MSFC/J SAMS
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 247 **AUBURN UNIV** **1055**
 RESEARCH AND DEVELOPMENT, NSSTC
 02/06/2002 - 02/05/2007 FY02: \$230,200 Total: \$230,200
Prin. Invest.: C MORIARTY
Tech. Officer: MSFC/S COLEMAN, MSFC/J SIMONDS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 02015 **AUBURN UNIV** **1056**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/20/2002 - 06/30/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: M E BAGINSKI, D L FAIRCLOTH
Tech. Officer: LARC/M DESHPANDE
CASE Category: 45 – ELECTRICAL ENGR

NGT 1 52205 **AUBURN UNIV** **1057**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 09/04/1998 - 06/30/2001 FY02: -\$1 Total: \$65,999
Prin. Invest.: M L WALLER, T H SHUMPERT, S M RAO
Tech. Officer: LARC/F B BECK, LARC/M C BAILEY
CASE Category: 45 – ELECTRICAL ENGR

NGT 8 52851 **AUBURN UNIV** **1058**
 ADVANCED METHOD FOR VIBRATION ANALYSIS OF HIGH SPEED ROTOR
 SYSTEMS
 07/21/1998 - 12/31/2001 FY02: -\$23 Total: \$60,477
Prin. Invest.: G T FLOWERS
Tech. Officer: MSFC/J F DOWDY
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52870 **AUBURN UNIV** **1059**
 OPTIMAL APPLICATION OF COMBUSTION TEST DATA TO FLAMABILITY
 ASSESSMENT IN GASEOUS OXYGEN
 07/27/1998 - 08/15/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P D JONES
Tech. Officer: MSFC/J F DOWDY
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52904 **AUBURN UNIV** **1060**
 CLOSED LOOP ROBUST CONTROL ALLOCATION FOR AEROSPACE VEHICLE
 RELIABLE STABILITY AND PERFORMANCE
 05/25/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A S HODEL
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 11870 **BIRMINGHAM SOUTHERN COLL** **1061**
 INVESTIGATIONS OF COMPRESSIONAL SOLUTIONS FOR THE IO CURRENT
 WING
 04/04/2002 - 03/31/2005 FY02: \$23,467 Total: \$23,467
Prin. Invest.: D PONTIUS
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12251 **JACKSONVILLE STATE UNIV** **1062**
 VON BRAUN SCHOLARS PROGRAM
 05/30/2002 - 05/31/2004 FY02: \$1,843,000 Total: \$1,843,000
Prin. Invest.: T HUDDLESTON
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1330 **JACKSONVILLE STATE UNIV** **1063**
 DECODING EMG SIGNALS TO REDUCE LATENCY IN VE APPLI CATIONS
 03/29/2002 - 03/31/2003 FY02: \$19,635 Total: \$19,635
Prin. Invest.: M AGUILAR
Tech. Officer: ARC/Y BARNIV
CASE Category: 22 – COMPUTER SCIENCE

NASA'S UNIVERSITY PROGRAM

ALABAMA

NAG 5 11986 **LAWSON STATE COMM COLL** **1064**
 INFUSING TECHNOLOGY, ENGINEERING, MATHEMATICS, AND SCIENCE IN
 THE DUAL ENROLLMENT/ACCELERATED STUDEN
 04/26/2002 - 04/30/2005 FY02: \$98,110 Total: \$98,110
Prin. Invest.: B CRAWFORD
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1871 **LAWSON STATE COMM COLL** **1065**
 GIRLS LEADING OTHERS BY EXAMPLE (GLOBE) PROJECT
 06/06/2002 - 06/05/2003 FY02: \$40,000 Total: \$40,000
Prin. Invest.: B CRAWFORD
Tech. Officer: MSFC/W J LOVE
CASE Category: 76 – SOCIOLOGY

NAG 8 1653 **OAKWOOD COLL** **1066**
 MINORITY STUDENT DEVELOPMENT PROGRAM IN SCIENCE & ENGINEER-
 ING
 02/03/2000 - 02/04/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: E GWEBU
Tech. Officer: MSFC/W LOVE
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1734 **OAKWOOD COLL** **1067**
 DEVELOPMENT OF ULTRA-LIGHT NORMAL INCIDENCE MIRROR ELECTOR-
 CHEMICAL ASPECTS
 08/18/2000 - 08/17/2003 FY02: \$115,030 Total: \$215,030
Prin. Invest.: A VOLKOV
Tech. Officer: MSFC/W BRANTLEY
CASE Category: 12 – CHEMISTRY

NAG 8 1868 **OAKWOOD COLL** **1068**
 EVALUATION OF NUMERICAL TECHNIQUES FOR MGD PROPUL- SION
 SIMULATION
 08/19/2002 - 08/18/2003 FY02: \$49,668 Total: \$49,668
Prin. Invest.: A OSEI
Tech. Officer: MSFC/W LOVE, MSFC/E ORDONEZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1888 **OAKWOOD COLL** **1069**
 ENHANCING MATHEMATICS AND SCIENCE EDUCATION THUR RESEARCH
 (EMSER)
 09/27/2002 - 09/26/2006 FY02: \$350,829 Total: \$350,829
Prin. Invest.: A OSEI
Tech. Officer: MSFC/W LOVE
CASE Category: 21 – MATHEMATICS

NCC 1 02033 **OAKWOOD COLL** **1070**
 2002 PRE SERVICE TEACHER INST (PSTI)
 06/14/2002 - 09/13/2002 FY02: \$46,850 Total: \$46,850
Prin. Invest.: F BLISS
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1866 **STILLMAN COLL** **1071**
 PROJECT MI FUTURO
 07/11/2002 - 07/11/2005 FY02: \$99,818 Total: \$99,818
Prin. Invest.: H PRADO, M D GREEN
Tech. Officer: MSFC/E S ORDONEZ
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 8 1610 **TRENHOLM STATE TECHNICAL COLL** **1072**
 NASA HIGH SCHOOL SCIENCE ENRICHMENT PROGRAM (HSSEP)
 06/07/1999 - 06/06/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: C THOMPSON
Tech. Officer: MSFC/W LOVE, MSFC/A C BEAM
CASE Category: 21 – MATHEMATICS

NAG 2 6049 **TUSKEGEE UNIV** **1073**
 NASA'S SLSTP ACADEMIC PARTNER ALLIANCE (NSAPA)
 04/16/2001 - 03/31/2003 FY02: \$180,000 Total: \$360,691
Prin. Invest.: W A HILL, C E MORRIS
Tech. Officer: ARC/P X CALLAHAN, ARC/K A SOUZA
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 3 2127 **TUSKEGEE UNIV** **1074**
 STUDY OF ELECTRICAL CONTACTS AND DEVICES IN ADVANC ED SEMI-
 CONDUCTORS
 02/13/1998 - 07/31/2001 FY02: -\$16,764 Total: \$282,873
Prin. Invest.: K K DAS
Tech. Officer: GRC/S A ALTEROVITZ
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2347 **TUSKEGEE UNIV** **1075**
 SPUTTERING EROSION IN THE ION THRUSTER SPUTTERING EROSION IN
 THE ION THRUSTER
 03/09/2000 - 10/31/2001 FY02: -\$3,163 Total: \$41,837
Prin. Invest.: D K RAY
Tech. Officer: GRC/M A MANTENIEKS
CASE Category: 13 – PHYSICS

NAG 3 2432 **TUSKEGEE UNIV** **1076**
 POLYIMIDE BASED NANOCOMPOSITES FOR AFFORDABLE SPACE TRANS-
 PORT
 06/23/2000 - 04/16/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: D DEAN
Tech. Officer: GRC/S CAMPBELL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2654 **TUSKEGEE UNIV** **1077**
 SURVIVABILITY OF AFFORDABLE HIGH TEMPERATURE POLYM ER MATRIX
 COMPOSITES FOR PROPULSION ENGINE COMPON
 01/31/2002 - 12/11/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D HAGUE
Tech. Officer: GRC/M A MEADOR
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2667 **TUSKEGEE UNIV** **1078**
 A NONLINEAR MODEL FOR FUEL ATOMIZATION IN SPRAY CO MBUSTION
 12/11/2001 - 12/31/2004 FY02: \$87,278 Total: \$87,278
Prin. Invest.: D A IBRAHIM
Tech. Officer: GRC/N LIU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 169 **TUSKEGEE UNIV** **1079**
 EFFECTS OF ABOVE REAL TIME TRAINING
 05/17/1999 - 05/31/2001 FY02: -\$208 Total: \$68,503
Prin. Invest.: S FIRASAT ALI
Tech. Officer: DFRC/K A NORLIN, DFRC/R BINKLEY
CASE Category: 41 – AERONAUTICAL ENGR

ALABAMA

NASA'S UNIVERSITY PROGRAM

NAG 4 201 **TUSKEGEE UNIV** **1080**
 DURABILITY ASSESSMENT OF AIRFRAME COMPOSITE REPAIR PATCHES
 02/15/2000 - 09/30/2002 FY02: \$0 Total: \$120,000
Prin. Invest.: H A AGLAN
Tech. Officer: DFRC/M W KEHOE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 203 **TUSKEGEE UNIV** **1081**
 EFFECTS OF SELF-INSTRUCTIONAL METHODS AND ABOVE RE AL TIME
 TRAINING (ARTT) FOR MANEUVERING TASKS ON
 03/03/2000 - 02/28/2003 FY02: \$0 Total: \$52,447
Prin. Invest.: D ALI
Tech. Officer: DFRC/K NORLIN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 226 **TUSKEGEE UNIV** **1082**
 DEVELOPMENT AND ASSESSMENT OF A NOVEL TRAINING PAC KAGE FOR
 BASIC MANEUVERING TASKS ON A FLIGHT SIMU
 03/25/2002 - 03/21/2005 FY02: \$99,331 Total: \$99,331
Prin. Invest.: S F ALI
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10535 **TUSKEGEE UNIV** **1083**
 SOY RESEARCH PILOT STUDY
 03/08/2001 - 09/14/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: R D PACE
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1408 **TUSKEGEE UNIV** **1084**
 2002 NASA/TUSKEGEE UNIV INTERNSHIP PRGRM
 07/16/2002 - 07/15/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: D MORTLEY
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 55 – AGRICULTURE

NAG10 209 **TUSKEGEE UNIV** **1085**
 SWEETPOTATO STEM CUTTING DATABASE IN PREPARATION FOR FLIGHT
 09/01/1997 - 02/28/2002 FY02: \$0 Total: \$295,346
Prin. Invest.: D MARTLEY
Tech. Officer: KSC/R WHEELER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG10 253 **TUSKEGEE UNIV** **1086**
 EVAL OF FIRE EXTINGUISHING HALON COMPOUNDS
 02/01/1999 - 12/31/2002 FY02: \$0 Total: \$302,507
Prin. Invest.: N VAHDAT
Tech. Officer: KSC/M COLLINS
CASE Category: 43 – CHEMICAL ENGR

NAG10 256 **TUSKEGEE UNIV** **1087**
 TUSKEGEE UNIV GATEWAY ACHIEVEMENT PROGRAM
 03/01/1999 - 03/01/2002 FY02: -\$54,265 Total: \$203,041
Prin. Invest.: C DAVIS
Tech. Officer: KSC/R MCKINNEY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 281 **TUSKEGEE UNIV** **1088**
 NASA SPACEFLIGHT AND LIFE SCIENCES TRAINING PROGRA M
 04/25/2000 - 06/18/2003 FY02: \$266,309 Total: \$886,334
Prin. Invest.: D HILL
Tech. Officer: KSC/S POTTER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG10 298 **TUSKEGEE UNIV** **1089**
 STARSAT 12000 TESTING TACTICS AND STRATEGIES STARSAT 12000
 TESTING TACTICS AND STRATEGIES
 04/27/2001 - 08/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: H J FINDLAY
Tech. Officer: KSC/C D BLACK
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NCC 3 591 **TUSKEGEE UNIV** **1090**
 HIGH TEMPERATURE FATGUE AND CREEP BEHAVIOR OF CERA MIC MATRIX
 COMPOSITES FOR EXHAUST NOZZLE APPLICAT
 03/11/1998 - 06/30/2001 FY02: -\$11,630 Total: \$350,805
Prin. Invest.: A HAQUE, H MAHFUZ, U VAIDA
Tech. Officer: GRC/M J VERILLE, GRC/J E GRADY
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 5 346 **TUSKEGEE UNIV** **1091**
 CENTER FOR LIDAR AND ATMOSPHERIC SCIENCES STUDENTS
 07/01/1998 - 02/28/2002 FY02: -\$136,242 Total: \$1,352,336
Prin. Invest.: N O EGIEBOR
Tech. Officer: HQ/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 234 **TUSKEGEE UNIV** **1092**
 PROVIDE FUNDING FOR YEAR 4 OF COOP AGREEMENT NCC5-346
 09/05/2001 - 07/31/2003 FY02: \$886,142 Total: \$886,142
Prin. Invest.: N O EGREFOR
Tech. Officer: MSFC/C TERRELL, MSFC/W LOVE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 9 51 **TUSKEGEE UNIV** **1093**
 CENTER FOR FOOD & ENVIRON SYS ...(CFESH)
 07/31/1997 - 12/31/2002 FY02: \$1,000,000 Total: \$6,225,000
Prin. Invest.: W A HILL
Tech. Officer: JSC/D BARTA
CASE Category: 62 – PSYCHOLOGY SOCIAL ASPECTS

NAG 3 2560 **UNIV OF ALABAMA - BIRMINGHAM** **1094**
 MAGNETICALLY ASSISTED COMBUSTION EXPERIMENT (MACE)
 03/22/2001 - 05/17/2002 FY02: -\$20,000 Total: \$0
Prin. Invest.: J BAKER
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4853 **UNIV OF ALABAMA - BIRMINGHAM** **1095**
 FORMATION OF THE HYDROCARBONS OF CARBONACEOUS CHON
 07/23/1997 - 09/30/2002 FY02: \$0 Total: \$130,412
Prin. Invest.: D WDOWIAK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 6815 **UNIV OF ALABAMA - BIRMINGHAM** **1096**
 INVESTIGATION OF THE CONTRIBUTION OF POLYCYCLIC AR OMATIC
 HYDROCARBONS TO INTERSTELLAR ULTRAVIOLET E
 01/05/1998 - 12/31/2001 FY02: \$0 Total: \$76,492
Prin. Invest.: T WDOWIAK
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NASA'S UNIVERSITY PROGRAM

ALABAMA

NAG 5 8786 **UNIV OF ALABAMA - BIRMINGHAM** **1097**
 DEVELOPMENT OF HIGH AFFINITY SENSORS FOR BIOLOGICAL PATHOGENS
 09/02/1999 - 09/30/2001 FY02: \$0 Total: \$800,000
Prin. Invest.: L DELUCAS
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8819 **UNIV OF ALABAMA - BIRMINGHAM** **1098**
 THE IR EMITTING AROMATIC COMPONENT OF THE INTERSTELLAR AND CIRCUMSTELLAR MEDIUMS
 09/07/1999 - 07/31/2003 FY02: \$0 Total: \$115,460
Prin. Invest.: T WDOWIAK
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9424 **UNIV OF ALABAMA - BIRMINGHAM** **1099**
 TOF MS IN SITU PLANETARY SCIENCE AND EXOBIOLOGY ON EUROPA
 04/17/2000 - 04/30/2003 FY02: \$120,174 Total: \$368,912
Prin. Invest.: T WDOWIAK
Tech. Officer: GSFC/B BETTS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10694 **UNIV OF ALABAMA - BIRMINGHAM** **1100**
 NEAR-CRITICAL WATER AQUEOUS ALTERATION PROCESSES IN PLANETESIMALS
 04/16/2001 - 04/14/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: T WDOWIAK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11146 **UNIV OF ALABAMA - BIRMINGHAM** **1101**
 STRUCTURE-BASED DRUG DESIGN AND EVALUATION OF NATURAL COMPOUNDS AGAINST CHAGAS'DISEASE
 08/09/2001 - 09/30/2003 FY02: \$0 Total: \$997,800
Prin. Invest.: L J DELUCAS
Tech. Officer: GSFC/L P CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11267 **UNIV OF ALABAMA - BIRMINGHAM** **1102**
 DEVELOPMENT OF HIGH AFFINITY SENSORS FOR BIOLOGICAL PATHOGENS
 09/26/2001 - 11/30/2002 FY02: \$300,000 Total: \$309,000
Prin. Invest.: L DELUCAS
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1228 **UNIV OF ALABAMA - BIRMINGHAM** **1103**
 THE EFFECT OF CONVECTION ON MORPHOLOGICAL STABILITY
 05/01/1996 - 11/30/2001 FY02: -\$17,612 Total: \$402,388
Prin. Invest.: J B ANDREWS
Tech. Officer: MSFC/P DOTY, MSFC/R POWER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1678 **UNIV OF ALABAMA - BIRMINGHAM** **1104**
 RESEARCH "CONTROLLED SYNTHESIS OF NANOPARTICLES USING BLOCK COPOLYMERS: NANOREACTORS IN MICROGRAVITY
 04/11/2000 - 10/10/2003 FY02: \$110,000 Total: \$264,500
Prin. Invest.: J W MAYS
Tech. Officer: MSFC/P M DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 8 02062 **UNIV OF ALABAMA - BIRMINGHAM** **1105**
 "IMPROVED REAL FLUIDS MODEL FOR THE FDNS 550 CDF"
 05/13/2002 - 09/30/2002 FY02: \$140,000 Total: \$140,000
Prin. Invest.: G CHENG
Tech. Officer: MSFC/K TUCKER
CASE Category: 22 – COMPUTER SCIENCE

NAS 8 40189 **UNIV OF ALABAMA - BIRMINGHAM** **1106**
 PROTEIN CRYSTAL GROWTH IN MICROGRAVITY
 04/01/1994 - 06/30/2004 FY02: \$660,000 Total: \$23,289,136
Prin. Invest.: L J DELUCAS
Tech. Officer: MSFC/D K COLLINS
CASE Category: 59 – LIFE SCIENCE, OTHER

NAS 8 99059 **UNIV OF ALABAMA - BIRMINGHAM** **1107**
 R/S COUPLED GROWTH IN HYPERMONOTECTICS
 01/22/1999 - 06/22/2003 FY02: \$422,000 Total: \$1,390,323
Prin. Invest.: J B ANDREWS
Tech. Officer: MSFC/R KING
CASE Category: 13 – PHYSICS

NCC 8 126 **UNIV OF ALABAMA - BIRMINGHAM** **1108**
 FOR RES: "CONTINUATION OF SUPPORT FOR COMMERCIAL SPACE CENTER FOR MACROMOLECULAR CRYSTALLOGRAPHY"
 01/27/1997 - 09/30/2002 FY02: \$38,698 Total: \$37,538,945
Prin. Invest.: L J DELUCAS
Tech. Officer: MSFC/S LIDE, MSFC/S LAMBIHG
CASE Category: 41 – AERONAUTICAL ENGR

NCC 8 172 **UNIV OF ALABAMA - BIRMINGHAM** **1109**
 "MICROGRAVITY CRYSTAL GROWTH STUDIES OF MEDICALLY RELEVANT MACROMOLECULES"
 02/11/1999 - 09/30/2002 FY02: \$101,000 Total: \$900,512
Prin. Invest.: L J DELUCAS
Tech. Officer: MSFC/T OWEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 204 **UNIV OF ALABAMA - BIRMINGHAM** **1110**
 STRUCTURAL FLUCTUATIONS & THERMOPHYSICAL PROPERTIES OF MOLTEN II - IV COMPOUNDS
 07/14/2000 - 11/30/2003 FY02: \$35,000 Total: \$77,969
Prin. Invest.: R SCRIPA
Tech. Officer: MSFC/C HUA SU
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 8 246 **UNIV OF ALABAMA - BIRMINGHAM** **1111**
 PROMOTE COMMERCIALY FUNDED RESEARCH AND TECHNOLOGY DEVELOPMENT IN THE FIELD OF BIOPHYSICAL AND ENGINEERING
 01/29/2002 - 10/31/2002 FY02: \$6,105,352 Total: \$6,105,352
Prin. Invest.: L DELUCAS
Tech. Officer: MSFC/J WEST
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 248 **UNIV OF ALABAMA - BIRMINGHAM** **1112**
 RESEARCH AND DEVELOPMENT, NSSTC
 02/08/2002 - 02/07/2007 FY02: \$4,500 Total: \$4,500
Prin. Invest.: J F LORDEN
Tech. Officer: MSFC/S COLEMAN, MSFC/B HARPER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

ALABAMA

NASA'S UNIVERSITY PROGRAM

NGT 5 50409 **UNIV OF ALABAMA - BIRMINGHAM** **1113**
 THE EFFECTS OF MICROGRAVITY ON FIBROBLAST MIGRATION AND THY-
 SURFACE EXPRESSION. STUDENT: THOM
 07/29/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J HAGOOD
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52845 **UNIV OF ALABAMA - BIRMINGHAM** **1114**
 GRADUATE STUDENT RESEARCH PROGRAM FELLOWSHIP
 09/12/1997 - 02/11/2001 FY02: -\$31 Total: \$65,969
Prin. Invest.: C M LAWSON
Tech. Officer: MSFC/J F DOWDY, MSFC/J R PRUITT
CASE Category: 13 – PHYSICS

NAG 1 2026 **UNIV OF ALABAMA - HUNTSVILLE** **1115**
 AEROSOL RETRIEVALS FROM HIGH RESOLUTION BROADBAND ATMOS-
 SOLAR OCCULTATION SPECTRA
 03/19/1998 - 12/31/2001 FY02: -\$1 Total: \$201,000
Prin. Invest.: M J NEWCHURCH
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2204 **UNIV OF ALABAMA - HUNTSVILLE** **1116**
 OZONE TRENDS IN SAGE, HALOE, TOMS, UMKEHR, AND LIDAR MEASURE-
 MENTS (NRA-98-OES-04)
 06/11/1999 - 06/30/2002 FY02: \$0 Total: \$275,066
Prin. Invest.: M J NEWCHURCH
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01008 **UNIV OF ALABAMA - HUNTSVILLE** **1117**
 NUMERICAL STUDY OF BLAST WAVES GENERATED DURING LAUNCH
 VEHICLE TAKE-OFF & SUPPRESSION BY WATER ADD
 02/06/2001 - 01/31/2004 FY02: \$40,000 Total: \$94,637
Prin. Invest.: K FRENDI
Tech. Officer: LARC/B A SINGER, LARC/R J SILCOX
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02073 **UNIV OF ALABAMA - HUNTSVILLE** **1118**
 INCREASED AVIATION SAFETY THRU IMPROVED COMPOSITE MATERIALS C
 EARMARK #11
 04/03/2002 - 04/02/2005 FY02: \$950,000 Total: \$950,000
Prin. Invest.: F C WESSLING
Tech. Officer: LARC/C M BELCASTRO
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2285 **UNIV OF ALABAMA - HUNTSVILLE** **1119**
 STUDY OF THE STRUCTURE COMPOSITION AND ELECTRICAL PROPERTIES
 OF SILICON CARBIDE EPITAXIAL FILMS FOR
 08/04/1999 - 06/30/2002 FY02: \$0 Total: \$30,909
Prin. Invest.: D A GEORGE
Tech. Officer: GRC/D J LARKIN
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 4268 **UNIV OF ALABAMA - HUNTSVILLE** **1120**
 THERMAL STRUCTURE AND COMPOSITION OF THE INNER MAG
 03/25/1997 - 05/14/2001 FY02: \$0 Total: \$189,325
Prin. Invest.: D H COMFORT
Tech. Officer: GSFC/J BOHLIN
CASE Category: 13 – PHYSICS

NAG 5 4608 **UNIV OF ALABAMA - HUNTSVILLE** **1121**
 ION ACCELERATION AND ABUNDANCE ENHANCEMENTS IN IMP
 05/20/1997 - 12/31/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: P A MILLER
Tech. Officer: GSFC/J A LING
CASE Category: 11 – ASTRONOMY

NAG 5 5273 **UNIV OF ALABAMA - HUNTSVILLE** **1122**
 PHASE 1 OF THOR PROJECT PHAS 1 OF THOR PROJECT
 04/17/2000 - 04/13/2006 FY02: \$0 Total: \$281,000
Prin. Invest.: J DIMMOCK
Tech. Officer: GSFC/D L PIERCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5298 **UNIV OF ALABAMA - HUNTSVILLE** **1123**
 SCINTILLATING FIBER TELESCOPE FOR ENERGETIC RADIATION, GAMMA-
 RAY APPLICATIONS (SIFTER)
 06/12/2000 - 06/30/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: PENDLETON
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6986 **UNIV OF ALABAMA - HUNTSVILLE** **1124**
 QUANTIFICATION OF CHANGES IN THE ATMOSPHERIC O₂/N₂ FROM OBSERVA-
 TIONS OF UV AIRGLOW AND AURORA
 02/10/1998 - 03/31/2001 FY02: \$0 Total: \$228,256
Prin. Invest.: G A GERMANY
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NAG 5 7269 **UNIV OF ALABAMA - HUNTSVILLE** **1125**
 DERIVATION OF TROPOSPHERIC OZONE CLIMATOLOGY AND TRENDS
 FROM TOMS DATA
 05/07/1998 - 05/14/2002 FY02: \$0 Total: \$259,246
Prin. Invest.: M NEWCHURCH
Tech. Officer: GSFC/S CHANDRA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7270 **UNIV OF ALABAMA - HUNTSVILLE** **1126**
 VALIDATION AND INTERCOMPARISON OF TOMS AEROSOL PRO DUCTS
 USING SATELLITE AND GROUND BASED MEASUREMENTS
 04/22/1998 - 09/30/2003 FY02: \$0 Total: \$227,500
Prin. Invest.: S A CHRISTOPHER
Tech. Officer: GSFC/J R HERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7811 **UNIV OF ALABAMA - HUNTSVILLE** **1127**
 A NEW GRB DURATION MEASURE AND ITS APPLICATIONS TO COSMOLOGI-
 CAL INVARIANT PARAMETERS
 11/12/1998 - 11/30/2000 FY02: -\$12 Total: \$14,988
Prin. Invest.: R PREECE
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 7927 **UNIV OF ALABAMA - HUNTSVILLE** **1128**
 RELATIVISTIC ASTROPHYSICS IN BLACK HOLE AND LOW-MASS NEUTRON
 STAR X-RAY BINARIES - LTSA98
 01/12/1999 - 01/14/2004 FY02: \$33,527 Total: \$130,127
Prin. Invest.: S ZHANG
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7972 **UNIV OF ALABAMA - HUNTSVILLE** **1129**
 TESTING THE PHYSICAL MECHANISMS OF GAMMA-RAY BURST S WITH
 MULTI-INSTRUMENT TIME-RESOL
 12/22/1998 - 12/31/2004 FY02: \$96,161 Total: \$363,174
Prin. Invest.: M S BRIGGS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7991 **UNIV OF ALABAMA - HUNTSVILLE** **1130**
 AN EMPIRICAL MODEL OF CORONAL HEATING DEDUCED FROM SOHO
 OBSERVATIONS OF TRANSITION REGION DYNAM
 01/05/1999 - 01/31/2002 FY02: \$0 Total: \$166,538
Prin. Invest.: G EMSLIE
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8011 **UNIV OF ALABAMA - HUNTSVILLE** **1131**
 GROUND-LEVEL SOLAR COSMIC RAY DATA FROM SOLAR CYCL E 19
 01/13/1999 - 03/31/2002 FY02: \$0 Total: \$57,000
Prin. Invest.: M SHEA
Tech. Officer: GSFC/J H BREDEKAMP
CASE Category: 11 – ASTRONOMY

NAG 5 8034 **UNIV OF ALABAMA - HUNTSVILLE** **1132**
 UAH ANALYSIS OF TIDE/PSI DATA FOR ISTEP SOLAR MAXIM UM EXTENDED
 MISSION
 01/19/1999 - 04/30/2002 FY02: \$0 Total: \$307,862
Prin. Invest.: H COMFORT
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 11 – ASTRONOMY

NAG 5 8210 **UNIV OF ALABAMA - HUNTSVILLE** **1133**
 TOWARDS AN UNDERSTANDING OF THE LUMINOUS SOFT EXCE SS
 EMISSION FROM CLUSTERS OF GALAXIES (ADP9
 02/25/1999 - 02/28/2003 FY02: \$0 Total: \$118,486
Prin. Invest.: R LIEU
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8234 **UNIV OF ALABAMA - HUNTSVILLE** **1134**
 BASTE TRIGGERED MULTIWAVELENGTH OBSERVATIONS OF TH E GALAC-
 TIC SUPERLUMINAL SOURCES GRO J1655-40 AND
 03/03/1999 - 02/14/2002 FY02: \$0 Total: \$23,779
Prin. Invest.: C ROBINSON
Tech. Officer: GSFC/J SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 8303 **UNIV OF ALABAMA - HUNTSVILLE** **1135**
 RESTORATION, ENHANCEMENT, AND DISTRIBUTION OF THE ATLAS-1 IM-
 AGING SPECTROMETRIC OBSERVATORY (ISO)
 03/05/1999 - 09/14/2001 FY02: \$0 Total: \$221,869
Prin. Invest.: G A GERMANY
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 11 – ASTRONOMY

NAG 5 8440 **UNIV OF ALABAMA - HUNTSVILLE** **1136**
 BROAD BAND LONG TERM MONITORING OF X-RAY BURSTERS
 04/01/1999 - 01/31/2001 FY02: -\$4 Total: \$14,696
Prin. Invest.: S ZHANG
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 8480 **UNIV OF ALABAMA - HUNTSVILLE** **1137**
 STOCHASTIC PARTICLE ACCELERATION IN IMPULSIVE SOLA RE FLARES
 04/29/1999 - 12/31/2000 FY02: -\$9,710 Total: \$102,471
Prin. Invest.: J J MILLER
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8523 **UNIV OF ALABAMA - HUNTSVILLE** **1138**
 MULTIWAVELENGTH EXAMINATION OF GALACTIC SUPERLUMIN AL JET
 SOURCES (LTS498
 05/27/1999 - 05/31/2004 FY02: \$88,880 Total: \$309,440
Prin. Invest.: S ZHANG
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8956 **UNIV OF ALABAMA - HUNTSVILLE** **1139**
 SEARCH FOR UV EMISSION LINES FROM THE WARM INTRA CLUSTER
 MEDIUM - FUSE
 01/24/2000 - 01/31/2002 FY02: \$0 Total: \$36,200
Prin. Invest.: R LIEU
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9045 **UNIV OF ALABAMA - HUNTSVILLE** **1140**
 STUDIES OF ACCRETING NEUTRON STARS WITH RXTE CYCLE 4 OBS, II:
 TOO OBSERVATIONS OF TRANSIENT LOW-MAS
 02/25/2000 - 02/28/2001 FY02: -\$55 Total: \$42,238
Prin. Invest.: W PACIESAS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9183 **UNIV OF ALABAMA - HUNTSVILLE** **1141**
 DIAGNOSING THE SOFT EXCESS EMISSION OF A1795 CLUST ER OF
 GALAXIES - BEPOSAX BROAD BAND IMAGING
 03/07/2000 - 03/14/2002 FY02: \$0 Total: \$40,482
Prin. Invest.: R LIEU
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9200 **UNIV OF ALABAMA - HUNTSVILLE** **1142**
 INVESTIGATION OF THERMOSPHERIC & IONOSPHERIC CHANGES DURN-
 ING IONOSPHERIC STORMS WITH SATELLITE
 03/09/2000 - 03/14/2003 FY02: \$85,662 Total: \$243,070
Prin. Invest.: P RICHARDS
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9292 **UNIV OF ALABAMA - HUNTSVILLE** **1143**
 STUDIES OF ACCRETING BLACK HOLES WITH RXTE (CYCLE 4
 OBSERVATIONS)-ADP99
 03/20/2000 - 03/31/2001 FY02: -\$200 Total: \$22,393
Prin. Invest.: W PACIESAS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9397 **UNIV OF ALABAMA - HUNTSVILLE** **1144**
 THREE-DIMENSIONAL KINETIC SIMULATIONS OF THE COMBI NED CROSS-
 CURRENT AND TEARING MODE INSTABILITIES
 04/05/2000 - 09/30/2001 FY02: -\$94 Total: \$16,406
Prin. Invest.: N SINGH
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

ALABAMA

NASA'S UNIVERSITY PROGRAM

NAG 5 9508 **UNIV OF ALABAMA - HUNTSVILLE** **1145**
 ANALYSES OF EIT/LASCO OBSERVATIONS USING AVAILABLE MHD MODELS:
 INVESTIGATION OF CME INITIATION
 04/25/2000 - 05/31/2001 FY02: -\$1 Total: \$21,999
Prin. Invest.: S WU
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9585 **UNIV OF ALABAMA - HUNTSVILLE** **1146**
 EARTH SCIENCE MARKUP LANGUAGE
 05/19/2000 - 05/14/2002 FY02: \$0 Total: \$335,000
Prin. Invest.: D GRAVES
Tech. Officer: GSFC/J BEHNKE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9598 **UNIV OF ALABAMA - HUNTSVILLE** **1147**
 PRODUCTION OF LOOP-TOP HARD X-RAY EMISSION
 05/15/2000 - 04/30/2003 FY02: \$76,180 Total: \$144,875
Prin. Invest.: J K MILLER
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9686 **UNIV OF ALABAMA - HUNTSVILLE** **1148**
 BATSE/SAX & BATSE/RXTE-ASM JOINT SPECTRAL STUDIES OF GRBS
 06/05/2000 - 06/14/2001 FY02: -\$198 Total: \$9,802
Prin. Invest.: W PACIESAS
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 9741 **UNIV OF ALABAMA - HUNTSVILLE** **1149**
 PROPERTIES OF CUSP DIAMAGNETIC CAVITIES
 06/21/2000 - 06/30/2002 FY02: \$0 Total: \$69,999
Prin. Invest.: R SHELDON
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9923 **UNIV OF ALABAMA - HUNTSVILLE** **1150**
 THERMAL & NONTHERMAL EMISSION FROM THE INTRACLUSTER MEDIUM OF A 2199
 09/05/2000 - 09/14/2002 FY02: \$0 Total: \$7,600
Prin. Invest.: R LIEU
Tech. Officer: GSFC/P M ATKINS
CASE Category: 11 – ASTRONOMY

NAG 5 10009 **UNIV OF ALABAMA - HUNTSVILLE** **1151**
 PULSARS OLD AND CLOSE IN SPACE: HOT POLAR-CAPS OR MAGNETOSPHERIC EMISSION
 09/25/2000 - 09/30/2001 FY02: \$0 Total: \$8,600
Prin. Invest.: S N ZHANG
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10012 **UNIV OF ALABAMA - HUNTSVILLE** **1152**
 PROBING THE X-RAY EMISSION MECHANISMS OF RECYCLED PULSARS:
 PSR J0034-0534
 09/25/2000 - 09/30/2002 FY02: \$0 Total: \$6,600
Prin. Invest.: S N ZHANG
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10134 **UNIV OF ALABAMA - HUNTSVILLE** **1153**
 STUDY OF THE EVOLUTION OF PRECIPITATION AND CLOUD STRUCTURES
 DURING THE LIFE CYCLE OF TROPICAL MEOSCs
 12/15/2000 - 07/31/2003 FY02: \$0 Total: \$43,970
Prin. Invest.: Q HAN
Tech. Officer: GSFC/W B ROSSOW
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10407 **UNIV OF ALABAMA - HUNTSVILLE** **1154**
 ESML FOR EARTH SCIENCE DATA SET AND ANALYSIS.
 04/02/2001 - 04/30/2003 FY02: \$0 Total: \$300,000
Prin. Invest.: D GRAVES
Tech. Officer: GSFC/K L MOE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10743 **UNIV OF ALABAMA - HUNTSVILLE** **1155**
 ONLINE SEARCH AND METADATA VISUALIZATION TOOL
 04/12/2001 - 04/30/2004 FY02: \$117,545 Total: \$242,247
Prin. Invest.: G A GERMANY
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10785 **UNIV OF ALABAMA - HUNTSVILLE** **1156**
 HISTORICAL EVIDENCE FOR MAJOR-SOLAR-TERRRESTRIAL- OUTBURSTS
 FOR PAST 150 YEARS FROM THE ANALYSIS OF
 04/27/2001 - 04/30/2003 FY02: \$0 Total: \$57,698
Prin. Invest.: M A SHEA
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10943 **UNIV OF ALABAMA - HUNTSVILLE** **1157**
 CHANGES IN GEOMAGNETIC CUTOFF RIGIDITIES OVER A 400-YEAR INTERVAL
 05/15/2001 - 06/30/2003 FY02: \$22,408 Total: \$57,016
Prin. Invest.: D F SMART
Tech. Officer: GSFC/J F SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10949 **UNIV OF ALABAMA - HUNTSVILLE** **1158**
 COMPTEL GRB SPECTRAL CATALOG (ADP 2000)
 05/24/2001 - 05/31/2002 FY02: -\$25,813 Total: \$0
Prin. Invest.: M R KIPPEN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10965 **UNIV OF ALABAMA - HUNTSVILLE** **1159**
 OZONE RETRIEVAL ERRORS ASSOCIATED WITH CLOUDS
 06/01/2001 - 05/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: M NEWCHURCH
Tech. Officer: GSFC/R MCPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11096 **UNIV OF ALABAMA - HUNTSVILLE** **1160**
 CRITICAL ASSESSMENT OF TOMS-DERIVED TROPOSPHERIC OZONE: COMPARISONS WITH OTHER MEASUREMENTS & MODEL
 07/11/2001 - 08/31/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: M NEWCHURCH
Tech. Officer: GSFC/R MCPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

<p>NAG 5 11100 UNIV OF ALABAMA - HUNTSVILLE 1161 VALIDATING AIRS OZONE OBSERVATIONS WITH TOMS, DOBS ON, BREWER, SAGE, MLS,HALOE AND OZONESONDE OBSERV 07/10/2001 - 08/31/2004 FY02: \$103,647 Total: \$160,616 <i>Prin. Invest.:</i> M J NEWCHURCH <i>Tech. Officer:</i> GSFC/D STARR <i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER</p>	<p>NAG 5 11995 UNIV OF ALABAMA - HUNTSVILLE 1170 INTEROPERABLE FRAMEWORK FOR DATA MINING AND ANALYSIS OF SPACE SCIENCE DATA. 04/11/2002 - 04/30/2005 FY02: \$124,956 Total: \$124,956 <i>Prin. Invest.:</i> S J GRAVES <i>Tech. Officer:</i> GSFC/P E HUNTER <i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER</p>
<p>NAG 5 11209 UNIV OF ALABAMA - HUNTSVILLE 1162 EARLY BATSE GRB AFTERGLOWS (ADP 2000) 09/10/2001 - 08/31/2002 FY02: \$0 Total: \$10,000 <i>Prin. Invest.:</i> V C CONNAUGHTON <i>Tech. Officer:</i> GSFC/R J OLIVERSEN <i>CASE Category:</i> 11 – ASTRONOMY</p>	<p>NAG 5 12008 UNIV OF ALABAMA - HUNTSVILLE 1171 SOURCES OF CUSP ENERGETIC IONS AND THEIR IMPLICATION 04/11/2002 - 04/14/2005 FY02: \$75,061 Total: \$75,061 <i>Prin. Invest.:</i> S CHANG <i>Tech. Officer:</i> GSFC/J SPANN <i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER</p>
<p>NAG 5 11248 UNIV OF ALABAMA - HUNTSVILLE 1163 OPTIMAL AEROSOL PARAMETERIZATION FOR REMOTE SENSING RETRIEVALS 08/16/2001 - 08/14/2004 FY02: \$0 Total: \$132,485 <i>Prin. Invest.:</i> M NEWCHURCH <i>Tech. Officer:</i> GSFC/P DECOLA <i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER</p>	<p>NAG 5 12109 UNIV OF ALABAMA - HUNTSVILLE 1172 TERRESTRIAL PLASMASPHERE FEATURE TRACKING & VOLUME VISUALIZATION. 04/11/2002 - 04/14/2005 FY02: \$76,022 Total: \$76,022 <i>Prin. Invest.:</i> T NEWMAN <i>Tech. Officer:</i> GSFC/P E HUNTER <i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER</p>
<p>NAG 5 11484 UNIV OF ALABAMA - HUNTSVILLE 1164 CLUSTER SOFT EXCESS BY EUVE AND OTHER MISSIONS (AD P 2001) 12/18/2001 - 12/31/2004 FY02: \$51,815 Total: \$51,815 <i>Prin. Invest.:</i> R LIEU <i>Tech. Officer:</i> GSFC/R J OLIVERSEN <i>CASE Category:</i> 11 – ASTRONOMY</p>	<p>NAG 5 12368 UNIV OF ALABAMA - HUNTSVILLE 1173 INTERCHANGE TECHNOLOGY FOR ENABLING DATA APPLICATION INTEROPERABILITY IN EARTH S 07/10/2002 - 03/31/2003 FY02: \$125,000 Total: \$125,000 <i>Prin. Invest.:</i> D GRAVES <i>Tech. Officer:</i> GSFC/K L MOE <i>CASE Category:</i> 22 – COMPUTER SCIENCE</p>
<p>NAG 5 11606 UNIV OF ALABAMA - HUNTSVILLE 1165 A HARD X-RAY ALL-SKY IMAGING SURVEY 01/22/2002 - 01/31/2005 FY02: \$56,263 Total: \$56,263 <i>Prin. Invest.:</i> V C CONNAUGHTON <i>Tech. Officer:</i> GSFC/R J OLIVERSEN <i>CASE Category:</i> 11 – ASTRONOMY</p>	<p>NAG 5 12468 UNIV OF ALABAMA - HUNTSVILLE 1174 MAGNETIC CLOUD INDUCED MAGNETIC STORM INTENSITY AND TIMING: REAL TIME PREDICTION 09/12/2002 - 09/30/2004 FY02: \$52,000 Total: \$52,000 <i>Prin. Invest.:</i> C WU <i>Tech. Officer:</i> GSFC/R LEPPING <i>CASE Category:</i> 13 – PHYSICS</p>
<p>NAG 5 11626 UNIV OF ALABAMA - HUNTSVILLE 1166 FOLLOW ON TO NAG5-8034 ANALYSIS OF TIDE/Psi DATA 01/17/2002 - 01/31/2005 FY02: \$90,000 Total: \$90,000 <i>Prin. Invest.:</i> R COMFORT <i>Tech. Officer:</i> GSFC/B GILES <i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER</p>	<p>NAG 5 12530 UNIV OF ALABAMA - HUNTSVILLE 1175 FUZE OBSERVATIONS OF WARM GAS IN CLUSTERS OF GALAXIES AND OF GALACTIC OVI EMISSION 08/28/2002 - 08/31/2003 FY02: \$75,000 Total: \$75,000 <i>Prin. Invest.:</i> M BONAMENTE <i>Tech. Officer:</i> GSFC/G SONNEBORN <i>CASE Category:</i> 11 – ASTRONOMY</p>
<p>NAG 5 11633 UNIV OF ALABAMA - HUNTSVILLE 1167 SCIENCE DATA SUBSETTING 01/18/2002 - 01/31/2004 FY02: \$489,000 Total: \$489,000 <i>Prin. Invest.:</i> D GRAVES <i>Tech. Officer:</i> GSFC/J BEHNKE <i>CASE Category:</i> 22 – COMPUTER SCIENCE</p>	<p>NAG 5 12563 UNIV OF ALABAMA - HUNTSVILLE 1176 PASSIVE MICROWAVE HURRICANE INTENSITY FORECASTS 09/12/2002 - 09/14/2005 FY02: \$77,278 Total: \$77,278 <i>Prin. Invest.:</i> D CECIL <i>Tech. Officer:</i> GSFC/M WEI <i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER</p>
<p>NAG 5 11843 UNIV OF ALABAMA - HUNTSVILLE 1168 SOLAR FLARE ELECTRONS 03/11/2002 - 03/31/2004 FY02: \$82,862 Total: \$82,862 <i>Prin. Invest.:</i> G EMSLIE <i>Tech. Officer:</i> GSFC/T KUCERA <i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER</p>	<p>NAG 8 1354 UNIV OF ALABAMA - HUNTSVILLE 1177 R/S PROTEIN PRECIPITANT SPECIFIC CRITERIA FOR THE IMPACT OF REDUCED GRAVITY ON CRYSTAL PERFECTION 06/04/1997 - 07/31/2001 FY02: -\$442 Total: \$618,964 <i>Prin. Invest.:</i> F ROSENBERGER <i>Tech. Officer:</i> MSFC/C R TALLEY, MSFC/J P DOWNEY <i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)</p>
<p>NAG 5 11941 UNIV OF ALABAMA - HUNTSVILLE 1169 THE IMPACT OF DEFORESTATION ON CONVECTIVE AND OROGRAPHIC CLOUD FORMATION IN A COMPLEX TROP 03/29/2002 - 03/31/2005 FY02: \$170,000 Total: \$170,000 <i>Prin. Invest.:</i> R M WELCH <i>Tech. Officer:</i> GSFC/P R HOUSER <i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER</p>	

ALABAMA

NASA'S UNIVERSITY PROGRAM

NAG 8 1355 **UNIV OF ALABAMA - HUNTSVILLE** **1178**
 RESEARCH "INFRARED SIGNATURES FOR MAMMALIAN CELLS IN CULTURE"
 06/26/1997 - 11/30/2002 FY02: \$0 Total: \$437,984
Prin. Invest.: K CHITTUR
Tech. Officer: JSC/N PELLIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1403 **UNIV OF ALABAMA - HUNTSVILLE** **1179**
 THEORETICAL ANALYSIS FOR CONSTRUCTION OF A NON- GRAVITY LABORATORY ON ORBIT
 08/28/1997 - 12/31/2001 FY02: -\$4,980 Total: \$81,020
Prin. Invest.: L SMALLEY
Tech. Officer: MSFC/J CAMPBELL
CASE Category: 12 – CHEMISTRY

NAG 8 1456 **UNIV OF ALABAMA - HUNTSVILLE** **1180**
 GROUND BASED EXPERIMENTS IN SUPPORT OF MICRO- GRAVITY RESEARCH RESULTS VAPOR GROWTH OF ORGANIC
 03/31/1998 - 07/31/2002 FY02: \$14,999 Total: \$337,499
Prin. Invest.: M T ZUGRAV
Tech. Officer: MSFC/P M DOTY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1464 **UNIV OF ALABAMA - HUNTSVILLE** **1181**
 REDUCTION OF CONVECTION IN CLOSED TUBE VAPOR GROWTH EXPERIMENTS
 03/24/1998 - 01/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: R J NAUMANN
Tech. Officer: MSFC/P M DOTY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1476 **UNIV OF ALABAMA - HUNTSVILLE** **1182**
 THERMOPHYSICAL PROPERTY MEASUREMENTS OF TE-BASED II-VI SEMICONDUCTOR COMPOUNDS
 03/26/1998 - 04/30/2003 FY02: \$136,500 Total: \$774,435
Prin. Invest.: M BANISH
Tech. Officer: MSFC/M CROUCH
CASE Category: 56 – MEDICAL

NAG 8 1548 **UNIV OF ALABAMA - HUNTSVILLE** **1183**
 STUDY OF INSPECTION OF CRITICAL SURFACES AND AEROSPACE SYSTEMS
 09/24/1998 - 12/04/2002 FY02: \$34,917 Total: \$186,801
Prin. Invest.: G WORKMAN
Tech. Officer: MSFC/S RUSSELL
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1577 **UNIV OF ALABAMA - HUNTSVILLE** **1184**
 CONTROL OF TRANSPORT IN PROTEIN CRYSTAL USING RESTRICTIVE GEOMETRIES
 12/16/1998 - 08/31/2003 FY02: \$0 Total: \$251,450
Prin. Invest.: R J NAVMANN
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1786 **UNIV OF ALABAMA - HUNTSVILLE** **1185**
 2001 SUMMER FACULTY FELLOWSHIP PROGRAM
 04/25/2001 - 04/24/2003 FY02: \$0 Total: \$771,141
Prin. Invest.: G KARR, M FREEMAN
Tech. Officer: MSFC/J R PRUITT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1787 **UNIV OF ALABAMA - HUNTSVILLE** **1186**
 IMPROVED RE-CONFIGURABLE SLIDING MODE CONTROLLER FOR REUSABLE LAUNCH VEHICLE OF SECOND GENERATION
 01/24/2001 - 11/30/2001 FY02: -\$66 Total: \$31,312
Prin. Invest.: Y B SHTESSEL
Tech. Officer: MSFC/K MCCALL
CASE Category: 45 – ELECTRICAL ENGR

NAG 8 1790 **UNIV OF ALABAMA - HUNTSVILLE** **1187**
 R/S ENTITLED, "EFFECTS OF CONVECTIVE TRANSPORT OF SOLUTE IMPURITIES ON DEFECT-CAUSING KINETICS..."
 02/14/2001 - 08/31/2001 FY02: -\$201,043 Total: \$64,957
Prin. Invest.: P G VEKILOV
Tech. Officer: MSFC/H K HIGGINBOTHAM
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1815 **UNIV OF ALABAMA - HUNTSVILLE** **1188**
 OPTICAL AMPLIFIER BASED SPACE SOLAR POWER SYSTEMS
 05/08/2001 - 11/07/2001 FY02: -\$190 Total: \$24,808
Prin. Invest.: R FORK
Tech. Officer: MSFC/G W JOHNSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1816 **UNIV OF ALABAMA - HUNTSVILLE** **1189**
 MACROMOLECULE NUCLEATION AND GROWTH RATE DISPERSION STUDIES
 05/10/2001 - 12/31/2002 FY02: \$134,999 Total: \$287,526
Prin. Invest.: R JUDGE
Tech. Officer: MSFC/H K HIGGINBOTHAM
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1850 **UNIV OF ALABAMA - HUNTSVILLE** **1190**
 NON-EQUILIBRIUM THERMODYNAMICS OF HGZNTMELTS
 09/10/2001 - 12/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: J BAIRD
Tech. Officer: MSFC/C H SU
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 1 98131 **UNIV OF ALABAMA - HUNTSVILLE** **1191**
 CLOUDS AND THE EARTH'S RADIANT ENERGY SYSTEM SCIENTIFIC INVESTIGATIONS
 11/01/1998 - 10/31/2003 FY02: \$321,420 Total: \$1,094,239
Prin. Invest.: R WELCH
Tech. Officer: LARC/B A WIELICKI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 2 00102 **UNIV OF ALABAMA - HUNTSVILLE** **1192**
 REFINEMENT AND TESTING OF AN XML BASED SENSOR MODEL LANGUAGE
 11/20/2000 - 11/19/2003 FY02: \$165,139 Total: \$477,787
Prin. Invest.: M BOTTS, A COOK
Tech. Officer: ARC/S LAU, ARC/R CARVALHO
CASE Category: 22 – COMPUTER SCIENCE

NAS 2 01003 **UNIV OF ALABAMA - HUNTSVILLE** **1193**
 AIST PROGRAM RESEARCH PROJECT ENTITLED: "EVE: AN ENVIRONMENT FOR ON-BOARD PROCESSING"
 12/18/2000 - 12/18/2003 FY02: \$245,543 Total: \$991,957
Prin. Invest.: S GRAVES
Tech. Officer: ARC/S LAU, ARC/R CARVALHO
CASE Category: 22 – COMPUTER SCIENCE

NAS 5 31718 **UNIV OF ALABAMA - HUNTSVILLE** **1194**
 EOS ASTER/HIRIS INVESTIGATION
 01/09/1992 - 06/14/2003 FY02: \$119,760 Total: \$1,904,421
Prin. Invest.: R WELCH
Tech. Officer: GSFC/T BRAKE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 8 00180 **UNIV OF ALABAMA - HUNTSVILLE** **1195**
 INTERNATIONAL SPACE STATION PROGRAM INDEPENDENT DATABASE ASSESSMENT
 08/01/2000 - 07/31/2001 FY02: \$0 Total: \$185,000
Prin. Invest.: S J GRAVES
Tech. Officer: MSFC/G HULLETT-SMITH, MSFC/G A WOOD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 8 98226 **UNIV OF ALABAMA - HUNTSVILLE** **1196**
 THE DESIGN AND DEVELOPMENT OF THE ORBITAL ARRAY OF WIDE ANGLE LENSES MISSION OPTICAL SYSTEM
 07/01/1998 - 12/31/2001 FY02: \$0 Total: \$845,000
Prin. Invest.: Y TAKAHASHI
Tech. Officer: MSFC/M WATSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 165 **UNIV OF ALABAMA - HUNTSVILLE** **1197**
 TO SUPPORT RESEARCH ACTIVITIES UNDER THE NASA EXPE STIMULATE COMPETITIVE RESEARCH (EPSCOR)
 11/02/1996 - 02/28/2002 FY02: \$0 Total: \$2,269,998
Prin. Invest.: J C GREGORY
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 391 **UNIV OF ALABAMA - HUNTSVILLE** **1198**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/13/1999 - 02/28/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: J GREGORY
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 580 **UNIV OF ALABAMA - HUNTSVILLE** **1199**
 ALABAMA NASA EPSCOR PROGRAM
 08/22/2001 - 07/31/2004 FY02: \$0 Total: \$316,814
Prin. Invest.: J C GREGORY
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 99 **UNIV OF ALABAMA - HUNTSVILLE** **1200**
 SELF-DIFFUSION IN LIQUID ELEMENTS
 05/24/1996 - 04/30/2003 FY02: \$230,867 Total: \$1,827,479
Prin. Invest.: F ROSENBERGER
Tech. Officer: MSFC/S SPEARMAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 8 132 **UNIV OF ALABAMA - HUNTSVILLE** **1201**
 FOR RESEARCH: "CONSORTIUM FOR MATERIALS DEVELOPMENT IN SPACE."
 01/29/1997 - 02/28/2002 FY02: -\$1 Total: \$9,142,071
Prin. Invest.: G WORKMAN
Tech. Officer: MSFC/J PRESSON
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 141 **UNIV OF ALABAMA - HUNTSVILLE** **1202**
 GLOBAL CHANGE RESEARCH RELATED TO THE EARTH'S ENERGY AND HYDROLOGY CYCLE
 09/22/1997 - 09/29/2002 FY02: \$417,579 Total: \$15,012,867
Prin. Invest.: R MCNIDER
Tech. Officer: MSFC/R GREENWOOD, MSFC/J SIMON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 146 **UNIV OF ALABAMA - HUNTSVILLE** **1203**
 R/S INVESTIGATION OF SPACE BASED SOLID STATE COHERENT LIDAR UNDER DR. FARZIN AMZAJERDIAN
 10/02/1997 - 11/30/2001 FY02: -\$177 Total: \$1,289,742
Prin. Invest.: J DIMMOCK
Tech. Officer: MSFC/S C JOHNSON, MSFC/B F JONES
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 180 **UNIV OF ALABAMA - HUNTSVILLE** **1204**
 INTERNATIONAL SPACE STATION MICROGRAVITY DATA AND INFORMATION SYSTEMS
 03/19/1999 - 02/28/2003 FY02: \$125,000 Total: \$509,520
Prin. Invest.: S J GRAVES
Tech. Officer: MSFC/C C LAPENTA
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 8 200 **UNIV OF ALABAMA - HUNTSVILLE** **1205**
 RESEARCH AND DEVELOPMENT
 08/10/2000 - 08/09/2005 FY02: \$10,447,104 Total: \$40,778,025
Prin. Invest.: L R GREENWOOD, B J SCHROER, T D SHURTZ
Tech. Officer: MSFC/S COLEMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 203 **UNIV OF ALABAMA - HUNTSVILLE** **1206**
 INVESTIGATION OF INTER-AND INTRA-MOLECULAR INTER-ACTIONS OF RECOMBINANT CANAVALLIN /E. COLI
 07/20/2000 - 06/30/2002 FY02: -\$1,572 Total: \$75,765
Prin. Invest.: J D NG
Tech. Officer: MSFC/M L PUSEY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 205 **UNIV OF ALABAMA - HUNTSVILLE** **1207**
 STRUCTURAL FLUCTUATIONS & THERMOPHYSICAL PROPERTIES OF MOLTEN II - IV COMPOUNDS
 09/08/2000 - 11/30/2003 FY02: \$24,000 Total: \$46,730
Prin. Invest.: S FETH
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 8 207 **UNIV OF ALABAMA - HUNTSVILLE** **1208**
 MECHANIZATIONS FOR THE CRYSTALLIZATION OF ZBLAN
 07/24/2000 - 11/30/2003 FY02: \$51,086 Total: \$95,689
Prin. Invest.: W KINKLER
Tech. Officer: MSFC/E ETHRIDGE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 8 209 **UNIV OF ALABAMA - HUNTSVILLE** **1209**
 THEORETICAL INVESTIGATION OF ULTRASONIC PROCESSING FOR DIRECTIONAL SOLIDIFICATION OF HYPERMONOTECTIC
 12/01/2000 - 04/30/2002 FY02: -\$4 Total: \$24,996
Prin. Invest.: A FEDOSEYEV
Tech. Officer: MSFC/R N GRUGEL
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

ALABAMA

NASA'S UNIVERSITY PROGRAM

NCC 8 213 **UNIV OF ALABAMA - HUNTSVILLE** **1210**
 STUDENT LAUNCH INITIATIVE
 03/23/2001 - 12/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: C R KARR
Tech. Officer: MSFC/J R PRUITT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 8 243 **UNIV OF ALABAMA - HUNTSVILLE** **1211**
 PROMOTE COMMERCIALY FUNDED RESEARCH AND TECH DEVELOP-
 MENT IN THE FIELD OF MATERIALS RESEARCH
 12/19/2001 - 03/31/2003 FY02: \$2,532,002 Total: \$2,532,002
Prin. Invest.: W GATHINGS
Tech. Officer: MSFC/J WEST
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 245 **UNIV OF ALABAMA - HUNTSVILLE** **1212**
 THEORETICAL INVESTIGATION OF ULTRASONIC PROCESSING FOR DIREC-
 TIONS SOLIDIFICATION OF HYPERMONOTEC ALL
 11/19/2001 - 12/30/2002 FY02: \$6,132 Total: \$6,132
Prin. Invest.: W KAUKLER
Tech. Officer: MSFC/R N GRUGEL
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 9 109 **UNIV OF ALABAMA - HUNTSVILLE** **1213**
 COOPERATIVE AGREEMENT
 06/22/2000 - 07/01/2001 FY02: -\$5,605 Total: \$16,395
Prin. Invest.: J RUPERT
Tech. Officer: JSC/N Q QURASHI, JSC/D SICKOREZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52283 **UNIV OF ALABAMA - HUNTSVILLE** **1214**
 EMBRYO DEVELOPMENT & HATCHING BEHAVIOR IN BOBWHITE & COTUNIX
 QUAIL EXPOSED TO EARTH'S GRAVITY & HYP
 08/09/2001 - 08/31/2003 FY02: \$22,220 Total: \$42,870
Prin. Invest.: R F EATON
Tech. Officer: ARC/A E RONCA, ARC/E HOTTON
CASE Category: 51 – BIOLOGY(EXCLUDING ENVIR)

NGT 5 30430 **UNIV OF ALABAMA - HUNTSVILLE** **1215**
 SHORTWAVE AEROSOL RADIATIVE FORCING FROM TERRA (STUDENT:
 JIANGLONG ZHANG)
 08/15/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S CHRISTOPHER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30455 **UNIV OF ALABAMA - HUNTSVILLE** **1216**
 CLIMATIC INFLUENCE OF LAND USE ON THE MESOAMERICAN BIOLOGICAL
 CORRIDOR. STUDENT: RAY K. DEEPAK
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R M WELCH
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40018 **UNIV OF ALABAMA - HUNTSVILLE** **1217**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM.
 01/09/1997 - 01/31/2001 FY02: -\$412,915 Total: \$1,570,847
Prin. Invest.: J GREGORY
Tech. Officer: GSFC/D E DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40077 **UNIV OF ALABAMA - HUNTSVILLE** **1218**
 ALABAMA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$874,427 Total: \$1,436,302
Prin. Invest.: J C GREGORY
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50163 **UNIV OF ALABAMA - HUNTSVILLE** **1219**
 AN EMPIRICAL MODEL OF CORONAL HEATING DEDUCED FROM SOHO
 OBSERVATIONS OF TRANSITION REGION DYNAMICS
 06/02/1998 - 07/31/2001 FY02: -\$15,996 Total: \$28,004
Prin. Invest.: E EMSLIE
Tech. Officer: HQ/A NURRIDIN
CASE Category: 13 – PHYSICS

NGT 8 52874 **UNIV OF ALABAMA - HUNTSVILLE** **1220**
 1999 SUMMER FACULTY FELLOWSHIP PROGRAM
 04/12/1999 - 06/30/2001 FY02: -\$1,786 Total: \$866,023
Prin. Invest.: G R KARR
Tech. Officer: MSFC/J F DOWDY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52878 **UNIV OF ALABAMA - HUNTSVILLE** **1221**
 ION CYCLOTRON RESONANCE HEATING OF A PLASMA BY HELICON WAVES
 FOR THE GASDYNAMICMIRROR FUSION...
 08/31/1999 - 08/11/2002 FY02: \$24,000 Total: \$90,000
Prin. Invest.: C HAWK
Tech. Officer: MSFC/J DOWDY
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52882 **UNIV OF ALABAMA - HUNTSVILLE** **1222**
 GRADUATE STUDENT RESEARCH PROGRAM "OPTIMIZATION OF A MAG-
 NETIC MIRROR FUSION REACTOR FOR SPACE PROPUL
 09/15/1999 - 08/14/2003 FY02: \$24,000 Total: \$90,000
Prin. Invest.: S WU
Tech. Officer: MSFC/J DOWDY
CASE Category: 41 – AERONAUTICAL ENGR

NGT 8 52886 **UNIV OF ALABAMA - HUNTSVILLE** **1223**
 DIFFRACTION LIMITED GRAZING INCIDENCE OPTICS
 05/17/2000 - 08/22/2003 FY02: \$28,200 Total: \$72,200
Prin. Invest.: W PACIESAS
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 8 52891 **UNIV OF ALABAMA - HUNTSVILLE** **1224**
 INTERACTION OF EXPANDING PLASMA WITH A COMPRESSED MAGNETIC
 FIELD
 06/22/2000 - 07/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: C HAWK
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52908 **UNIV OF ALABAMA - HUNTSVILLE** **1225**
 CERAMIC MATRIX COMPOSITE DEV FOR SPACE TRANS APPLI CATIONS
 05/25/2001 - 08/31/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: R CERRO
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 43 – CHEMICAL ENGR

NASA'S UNIVERSITY PROGRAM

ALABAMA

NAG 2 1499	UNIV OF ALABAMA - UNIV	1226	NAG 5 11204	UNIV OF ALABAMA - UNIV	1234
CATECHOLAMINE REGULATION AND RESPONSE TO ENVIRONMENTAL CHANGE IN DROSOPHILA MELANOGASTER			SHOCKS IN GROUPS		
07/11/2001 - 06/30/2003	FY02: \$174,753	Total: \$282,294	08/08/2001 - 08/14/2002	FY02: \$0	Total: \$8,700
<i>Prin. Invest.:</i> J M O'DONNELL			<i>Prin. Invest.:</i> J W SULENTIC		
<i>Tech. Officer:</i> ARC/M M AVERNER, ARC/R D MACELROY			<i>Tech. Officer:</i> GSFC/R MUSHOTZKY		
<i>CASE Category:</i> 51 - BIOLOGY(EXCLUDING ENVIR)			<i>CASE Category:</i> 11 - ASTRONOMY		
NAG 5 4346	UNIV OF ALABAMA - UNIV	1227	NAG 8 1724	UNIV OF ALABAMA - UNIV	1235
PROJECT NOVA			"2000 SUMMER FACULTY FELLOWSHIP PROGRAM"		
05/01/1997 - 02/28/2002	FY02: \$0	Total: \$2,775,000	06/22/2000 - 03/30/2002	FY02: -\$21,222	Total: \$712,170
<i>Prin. Invest.:</i> M FREEMAN			<i>Prin. Invest.:</i> L M FREEMAN		
<i>Tech. Officer:</i> HQ/D V GALLAWAY			<i>Tech. Officer:</i> MSFC/J R PRUITT		
<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER		
NAG 5 7702	UNIV OF ALABAMA - UNIV	1228	NAG 8 1753	UNIV OF ALABAMA - UNIV	1236
ESTIMATE THE INDIRECT AEROSOL EFFECT AND RETRIEVAL OF RELATED PARAMETERS FROM SATELLITE MEASUREMENT			RESEARCH THE APPLICATIONS THAT RESULTED IN SUCCESSFUL PROJECT MANAGEMENT IN INDUSTRY.		
09/23/1998 - 09/30/2001	FY02: -\$34	Total: \$228,373	11/28/2000 - 05/31/2002	FY02: -\$520	Total: \$66,994
<i>Prin. Invest.:</i> Q HAN			<i>Prin. Invest.:</i> P S RAY		
<i>Tech. Officer:</i> GSFC/M MISHCHENKO			<i>Tech. Officer:</i> MSFC/A DUARTE		
<i>CASE Category:</i> 31 - ATMOSPHERIC SCIENCE			<i>CASE Category:</i> 49 - ENGINEERING, OTHER		
NAG 5 8269	UNIV OF ALABAMA - UNIV	1229	NAG 8 1859	UNIV OF ALABAMA - UNIV	1237
THEORETICAL CALCULATION OF CO2 FAR-WING LINE SHAPE S			2002 SUMMER FACULTY FELLOWSHIP PROGRAM		
02/25/1999 - 12/31/2001	FY02: -\$28	Total: \$123,672	05/23/2002 - 05/23/2003	FY02: \$843,185	Total: \$843,185
<i>Prin. Invest.:</i> R H TIPPING			<i>Prin. Invest.:</i> M FREEMAN, G KARR		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> MSFC/S STEVENSON		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER		
NAG 5 8959	UNIV OF ALABAMA - UNIV	1230	NAG 9 1419	UNIV OF ALABAMA - UNIV	1238
NEARBY GALAXIES IN THE FAR-UV: TOWARD COMPARISON WITH HIGH-REDSHIFT GALAXIES -FUSE			DESIGN OF AN INTEGRATED HYBRID SYSTEM		
01/24/2000 - 01/31/2003	FY02: \$0	Total: \$29,600	08/17/2000 - 08/17/2001	FY02: -\$17,790	Total: \$82,209
<i>Prin. Invest.:</i> W C KEEL			<i>Prin. Invest.:</i> G P, P S ROY, D J FONSECA		
<i>Tech. Officer:</i> GSFC/G SONNEBORN			<i>Tech. Officer:</i> JSC/F Y KUO		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 49 - ENGINEERING, OTHER		
NAG 5 9388	UNIV OF ALABAMA - UNIV	1231	NAG10 305	UNIV OF ALABAMA - UNIV	1239
THE PROJECT NOVA CONSORTIUM			EVALUATION OF IONIC LIQUIDS FOR USE IN A PROPOSED LOW TEMPERATURE ELECTROLYSIS CELL FOR THE PROCESS		
04/10/2000 - 03/31/2003	FY02: \$1,022,000	Total: \$3,114,690	08/27/2001 - 08/31/2002	FY02: \$0	Total: \$24,980
<i>Prin. Invest.:</i> L FREEMAN			<i>Prin. Invest.:</i> R D ROGERS		
<i>Tech. Officer:</i> GSFC/M PHELPS			<i>Tech. Officer:</i> KSC/D E LUECK		
<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 12 - CHEMISTRY		
NAG 5 9855	UNIV OF ALABAMA - UNIV	1232	NAS 8 00207	UNIV OF ALABAMA - UNIV	1240
TO EXPAND AND CONTINUE TO DISSEMINATE A HIGHER EDUCATION MODEL FOR CREATING INPRE-SERVICE EDUCATION			PARTICLE ENGULFMENT AND PUSHING BY SOLIDIFYING INTERFACES (PEP)		
08/07/2000 - 07/31/2001	FY02: \$0	Total: \$118,581	10/03/2000 - 09/28/2004	FY02: \$443,072	Total: \$686,072
<i>Prin. Invest.:</i> M FREEMAN			<i>Prin. Invest.:</i> D M STEFANESCU		
<i>Tech. Officer:</i> GSFC/J HARRINGTON			<i>Tech. Officer:</i> MSFC/M PURVEY		
<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 19 - PHYSICAL SCIENCE, OTHER		
NAG 5 10914	UNIV OF ALABAMA - UNIV	1233	NAS 8 39715	UNIV OF ALABAMA - UNIV	1241
INVESTIGATING THE INTERACTION-STARBURST CONNECTION (ADP 2000)			PARTICLE ENGULFMENT AND PUSHING BY SOLIDIFYING INTERFACES		
05/18/2001 - 04/30/2003	FY02: \$0	Total: \$37,396	02/17/1993 - 09/29/2000	FY02: \$0	Total: \$1,236,938
<i>Prin. Invest.:</i> J W SULENTIC			<i>Prin. Invest.:</i> D M STEFANESCU, P A CURRERI, B K DHINDAW		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> MSFC/T DE LOACH		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 19 - PHYSICAL SCIENCE, OTHER		
NCC 2 1326	UNIV OF ALABAMA - UNIV	1242			
AN IMMUNIZED AIRCRAFT MANEUVER SELECTION SYSTEM					
03/22/2002 - 03/31/2003	FY02: \$40,000	Total: \$40,000			
<i>Prin. Invest.:</i> C KARR					
<i>Tech. Officer:</i> ARC/K KRISHNAKUMAR, ARC/J KANESHIGE					
<i>CASE Category:</i> 41 - AERONAUTICAL ENGR					

ALASKA

NASA'S UNIVERSITY PROGRAM

NCC 3 964 **UNIV OF ALABAMA - UNIV** **1243**
 MAGNETICALLY-ASSISTED COMBUSTION EXPERIMENT (MACE)
 MAGNETICALLY-ASSISTED COMBUSTION EXPERIMENT (MACE)
 05/07/2002 - 05/06/2005 FY02: \$36,000 Total: \$36,000
Prin. Invest.: J BAKER
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 256 **UNIV OF ALABAMA - UNIV** **1244**
 RESEARCH & DEVELOPEMENT NSSTC
 02/15/2002 - 02/14/2007 FY02: \$33,293 Total: \$33,293
Prin. Invest.: R L WELLS
Tech. Officer: MSFC/S COLEMAN, MSFC/M HUIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9085 **UNIV OF NORTH ALABAMA** **1245**
 EARTH SYS SCIENCE ON-LINE COURSE: ON OPPURTUNITY IN GEOGRA-
 PHY EDUCATION
 02/17/2000 - 01/31/2003 FY02: \$32,574 Total: \$97,650
Prin. Invest.: W R STRONG
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1282 **UNIV OF SOUTH ALABAMA** **1246**
 MATHEMATICAL MODELING OF FOOD SUPPLY FOR LONG TERM SPACE
 MISSIONS USING LIFE SUPPORT
 02/12/2001 - 05/15/2001 FY02: -\$363 Total: \$11,865
Prin. Invest.: J CRUTHIRDS
Tech. Officer: JSC/V L KLOERIS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 161 **UNIV OF SOUTH ALABAMA** **1247**
 REGIONAL/INTERNATIONAL CHANGE ASSESSMENT STRATEGIES, RE-
 SEARCH AND TECHNOLOGY
 01/19/1999 - 01/18/2004 FY02: \$56,369 Total: \$169,474
Prin. Invest.: M CARPENTER
Tech. Officer: MSFC/R ARNOLD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 249 **UNIV OF SOUTH ALABAMA** **1248**
 RESEARCH AND DEVELOPMENT, NSSTC
 05/22/2002 - 05/21/2007 FY02: \$34,875 Total: \$34,875
Prin. Invest.: J E AYLING, R G GALBRAITH
Tech. Officer: MSFC/S COLEMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52896 **UNIV OF SOUTH ALABAMA** **1249**
 STRUCTURE DETERMINATION OF PP5, A SENSOR OF CELL CYCLE CON-
 TROL CHECKPOINTS AND A PROGNOSTIC INDICAT
 05/25/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R HONKANEN
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

ALASKA

NAG 2 1534 **UNIV OF ALASKA - FAIRBANKS** **1250**
 UNDERSTANDING THE EFFECT OF LAND COVER CLASSIFICAT ION ON
 MODEL ESTIMATES OF REGIONAL CARBON CYCLING
 02/07/2002 - 01/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: A MCGUIRE
Tech. Officer: ARC/C S POTTER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4269 **UNIV OF ALASKA - FAIRBANKS** **1251**
 UNIQUE SIMULTANEOUS OBSERVATIONS OF THE CONJUGATE HEMI-
 SPHERES WITH THE DYNAMICS EXPLORER AND VIKING
 03/25/1997 - 12/31/2001 FY02: \$0 Total: \$99,987
Prin. Invest.: D D CRAVEN
Tech. Officer: GSFC/D EVANS
CASE Category: 13 – PHYSICS

NAG 5 5125 **UNIV OF ALASKA - FAIRBANKS** **1252**
 GROUND AND BALLOON-BORNE OBSERVATIONS OF RED SPRITES AND
 BLUE JETS
 07/02/1997 - 01/31/2002 FY02: \$0 Total: \$343,690
Prin. Invest.: E WESTCOTT
Tech. Officer: GSFC/H NEEDLEMAN
CASE Category: 13 – PHYSICS

NAG 5 5218 **UNIV OF ALASKA - FAIRBANKS** **1253**
 CODA: COUPLING OF DYNAMICS AND AURORA-A CO- INVESTIGATION
 PROPOSAL WITH AEROSPACE PI COLLINS
 01/15/1999 - 01/14/2003 FY02: \$0 Total: \$29,267
Prin. Invest.: COLLINS
Tech. Officer: GSFC/W JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5243 **UNIV OF ALASKA - FAIRBANKS** **1254**
 FIRST YEAR OF A TWO YEAR EFFORT NAG5-5243 PI DR. RICHARD COLLINS
 03/29/1999 - 12/31/2002 FY02: \$0 Total: \$38,624
Prin. Invest.: R COLLINS
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5316 **UNIV OF ALASKA - FAIRBANKS** **1255**
 MAPPING THE E-REGION VERTICAL AND ZONAL WINDS NEAR A STABLE
 AURORAL ARC USING A NEAR HORIZONTAL
 02/14/2001 - 02/11/2004 FY02: \$255,059 Total: \$470,914
Prin. Invest.: M CONDE
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6275 **UNIV OF ALASKA - FAIRBANKS** **1256**
 THE ROLE OF LAND-COVER CHANGE IN HIGH LATITUDE ECO FOR THE
 GLOBAL CARBON CYCLE
 08/27/1997 - 08/31/2001 FY02: \$0 Total: \$520,000
Prin. Invest.: D MCGUIRE
Tech. Officer: GSFC/A JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6338 **UNIV OF ALASKA - FAIRBANKS** **1257**
 VALIDATION OF MODIS SNOW & SEA ICE PRODUCTS IN THE SOUTHERN
 OCEAN
 10/02/1997 - 03/31/2003 FY02: \$19,954 Total: \$488,696
Prin. Invest.: S LI
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7507 **UNIV OF ALASKA - FAIRBANKS** **1258**
 JERS-1 NORTH AMERICAN BOREAL FOREST MAPPING STUDY TASK PLAN
 UAF COMPONENT
 06/26/1998 - 06/30/2001 FY02: \$0 Total: \$150,000
Prin. Invest.: C L WILLIAMS
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7603 **UNIV OF ALASKA - FAIRBANKS** **1259**
 THE INFLUENCE OF PROPAGATING EDDIES ON THE ENVIRONMENT OF
 THE CONTINENTAL SHELF IN THE NORTHERN G
 07/21/1998 - 07/31/2002 FY02: \$0 Total: \$71,973
Prin. Invest.: S R OKKONEN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7659 **UNIV OF ALASKA - FAIRBANKS** **1260**
 'SPACE GEODETIC CASE STUDIES OF RECENT VOLCANIC EVENTS IN
 ALASKA' SENH98-0028
 09/09/1998 - 08/31/2002 FY02: \$0 Total: \$240,000
Prin. Invest.: J T FREYMUELLER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7683 **UNIV OF ALASKA - FAIRBANKS** **1261**
 MODELING OF THE ATMOSPHERE-MAGNETOSPHERE-IONOSPHERE SYSTEM:
 BASELINE EFFORT
 09/15/1998 - 09/30/2001 FY02: \$0 Total: \$335,010
Prin. Invest.: M H REES
Tech. Officer: GSFC/S A CURTIS
CASE Category: 13 – PHYSICS

NAG 5 7799 **UNIV OF ALASKA - FAIRBANKS** **1262**
 A STUDY OF THE INSTANTANEOUS DISTRIBUTION OF BIRKLAND CURRENTS
 USING POLAR UVI, SUPERDARN, IMP8
 12/17/1998 - 09/30/2002 FY02: \$0 Total: \$275,081
Prin. Invest.: W A BRISTOW
Tech. Officer: GSFC/L ZANETTI
CASE Category: 11 – ASTRONOMY

NAG 5 8042 **UNIV OF ALASKA - FAIRBANKS** **1263**
 THERMOSPHERIC NEUTRAL WIND RESPONSE TO THE AURORA AT HIGH
 RESOLUTION; SIMULTANEOUS GROUND-BASED AN
 01/07/1999 - 09/30/2001 FY02: -\$25 Total: \$58,485
Prin. Invest.: J D CRAVEN
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8614 **UNIV OF ALASKA - FAIRBANKS** **1264**
 APPLICATION OF SATELLITE SAR IMAGERY IN MAPPING THE ACTIVE LAYER
 OF ARCTIC PERMAFROST
 06/14/1999 - 06/30/2002 FY02: \$22,013 Total: \$208,631
Prin. Invest.: S LI
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8722 **UNIV OF ALASKA - FAIRBANKS** **1265**
 RUSSIAN-US PARTNERSHIP TO STUDY THE 23-KM-DIAMETER
 EL'GYGYTGYN IMPACT CRATER, NORTHEAST RUSSIA
 08/25/1999 - 08/14/2002 FY02: \$0 Total: \$70,000
Prin. Invest.: V SHARPTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9315 **UNIV OF ALASKA - FAIRBANKS** **1266**
 MONITORING BOREAL LANDCOVER AND ECOSYSTEM DYNAMICS AT REGIONAL
 SCALES USING INTEGRATED SPACEBORNE
 03/28/2000 - 04/30/2003 FY02: \$66,000 Total: \$99,000
Prin. Invest.: C WILLIAMS
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9457 **UNIV OF ALASKA - FAIRBANKS** **1267**
 PLASMA PROCESSES AT THE EARTH'S MAGNETOSPHERIC BOUNDARY
 AND CUSPS
 04/24/2000 - 04/30/2003 FY02: \$55,696 Total: \$165,425
Prin. Invest.: A OTTO
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9513 **UNIV OF ALASKA - FAIRBANKS** **1268**
 PHOTOTROPHIC ORGANISMS AT HYDROTHERMAL VENTS
 04/25/2000 - 04/30/2003 FY02: \$0 Total: \$160,000
Prin. Invest.: G PLUMLEY
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9859 **UNIV OF ALASKA - FAIRBANKS** **1269**
 APPLICATION OF THE TERRESTRIAL ECOSYSTEM MODEL TO SIMULATE
 CARBON DYNAMICS OF THE BOREAS REGION
 08/07/2000 - 08/31/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: A D MCGUIRE
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10069 **UNIV OF ALASKA - FAIRBANKS** **1270**
 CEDAR/TIMED: THERMOSPHERIC VERTICAL WIND OBSERVATIONS FROM
 THREE SITES IN THE NORTHERN AURORAL ZON
 10/24/2000 - 08/31/2003 FY02: \$59,300 Total: \$246,300
Prin. Invest.: M CONDE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11142 **UNIV OF ALASKA - FAIRBANKS** **1271**
 THE ROLE OF LAND-COVER CHANGE IN HIGH LATITUDE ECOSYSTEMS:
 IMPLICATIONS FOR CARBON BUDGETS IN NORTH
 07/31/2001 - 07/31/2004 FY02: \$151,884 Total: \$239,243
Prin. Invest.: D MCGUIRE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11213 **UNIV OF ALASKA - FAIRBANKS** **1272**
 PERIGLACIAL GEOMORPHOLOGY ANALYSES ON UTOPIA PLANITIA
 08/13/2001 - 08/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: K YOSHIKAWA
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11226 **UNIV OF ALASKA - FAIRBANKS** **1273**
 INTERNATIONAL SYMPOSIUM ON FAST GLACIER FLOW
 08/13/2001 - 08/31/2003 FY02: \$0 Total: \$20,000
Prin. Invest.: C LINGLE
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11411 **UNIV OF ALASKA - FAIRBANKS** **1274**
 TIMED SOLAR EUV EXPERIMENT PHASE E CO-INVESTIGATOR - SCOTT
 BAILEY.
 12/13/2001 - 12/31/2005 FY02: \$60,000 Total: \$60,000
Prin. Invest.: S M BAILEY
Tech. Officer: GSFC/R A GOLDBERGB
CASE Category: 31 – ATMOSPHERIC SCIENCE

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 11822 UNIV OF ALASKA - FAIRBANKS 1275
TOWARD IMPROVED PROCESS BASED PAN-ARCTIC PREDICTION OF
LAND SURFACE MOISTURE AND ENERGY FLUXES
03/01/2002 - 08/28/2005 FY02: \$72,000 Total: \$72,000
Prin. Invest.: L D HINZMAN
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12192 UNIV OF ALASKA - FAIRBANKS 1276
LARGE SCALE CONSEQUENCES OF SMALL SCALE AURORAL STRUCTURES
05/16/2002 - 05/14/2005 FY02: \$160,529 Total: \$160,529
Prin. Invest.: D LUMMERZHEIM
Tech. Officer: GSFC/J SPANN
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12411 UNIV OF ALASKA - FAIRBANKS 1277
DETECTION OF CLIMATE CHANGE IN THE WESTERN ARCTIC: SEA ICE
TELECONNECTION AND PRODUCTIVITY
08/01/2002 - 08/14/2005 FY02: \$75,000 Total: \$75,000
Prin. Invest.: L MCNUTT
Tech. Officer: GSFC/C TREES
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12449 UNIV OF ALASKA - FAIRBANKS 1278
THE MAGNITUDE AND VARIABILITY OF THE SOLAR SOFT X- RAY IRRADI-
ANCE
08/19/2002 - 08/14/2003 FY02: \$65,399 Total: \$65,399
Prin. Invest.: S M BAILEY
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAS 5 01074 UNIV OF ALASKA - FAIRBANKS 1279
MAINTENANCE/MISSION SUPPORT AT POKER FLAT RESEARCH RANGE.
03/12/2001 - 03/11/2006 FY02: \$2,185,188 Total: \$3,125,188
Prin. Invest.: G W WALKER, R SHEFCHIK
Tech. Officer: GSFC/W F LAU
CASE Category: 49 - ENGINEERING, OTHER

NAS 5 98129 UNIV OF ALASKA - FAIRBANKS 1280
OPERATION & MANAGEMENT OF ALASKA SAR FACILITY
03/30/1998 - 03/31/2003 FY02: \$11,547,800 Total: \$46,442,782
Prin. Invest.: N AVAILABLE
Tech. Officer: GSFC/P J ONDRUS
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCA 5 112 UNIV OF ALASKA - FAIRBANKS 1281
PROCESSING SYNTHETIC APERTURE RADAR DATA
04/27/1988 - 03/31/2003 FY02: \$400,000 Total: \$22,445,886
Prin. Invest.: J MILLER, W F WEEKS, G WELLER
Tech. Officer: GSFC/G H TROFFORD
CASE Category: 11 - ASTRONOMY

NCC 5 379 UNIV OF ALASKA - FAIRBANKS 1282
MODIS/SNOW MAPPING: IN-SITU MEASUREMENTS ON THE S OUNW OF
INTERIOR & ARCTIC ALASKA
01/29/1999 - 09/30/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: C S BENSON
Tech. Officer: GSFC/S K HALL
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 30381 UNIV OF ALASKA - FAIRBANKS 1283
GLACIAL UNLOADING: FORCINGS, RESPONSES & PROCESSES
/CHRISTOPHER LARSEN
08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$45,984
Prin. Invest.: J FREYMUELLER
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 40100 UNIV OF ALASKA - FAIRBANKS 1284
ALASKA SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
02/28/2001 - 02/28/2005 FY02: \$212,500 Total: \$435,953
Prin. Invest.: J G HAWKINS
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50324 UNIV OF ALASKA - FAIRBANKS 1285
TREES, FIRE & CLIMATE: EVALUATING POTENTIAL FEEDBACKS BETWEEN
DISTURBANCE REGIME FOREST SUCCESSION
08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S F CHAPIN
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 50423 UNIV OF ALASKA - FAIRBANKS 1286
METHANE EFFLUX FROM THERMOKARST LAKES IN NE SIBERIA: PHYSICAL,
HYDROLOGICAL, & BIOGEOCHEMICAL
08/12/2002 - 08/31/2005 FY02: \$23,978 Total: \$23,978
Prin. Invest.: T CHAPIN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

ARIZONA

NAG 1 1781 ARIZONA STATE UNIV 1287
PENETRATION OF HIGH-INTENSITY RADIATED FIELDS INTO GENERAL
AVIATION AIRCRAFT
12/13/1995 - 12/31/2001 FY02: \$0 Total: \$641,878
Prin. Invest.: C BALANIS, P TIRKAS
Tech. Officer: LARC/T X NGUYEN
CASE Category: 45 - ELECTRICAL ENGR

NAG 1 1988 ARIZONA STATE UNIV 1288
DEVELOPMENT OF COMPREHENSIVE MODELING TECHNIQUES FOR
SMART COMPOSITE STRUCTURES
01/06/1998 - 01/14/2001 FY02: -\$1 Total: \$128,402
Prin. Invest.: A CHATTOPADYAY
Tech. Officer: LARC/C D WIESEMAN, LARC/A R MCGOWAN
CASE Category: 41 - AERONAUTICAL ENGR

NAG 1 2233 ARIZONA STATE UNIV 1289
DETERMINATION & USE OF SENSITIVITIES FOR REDESIGN/ANALYSIS OF MISTUNED
BLADED DISKS - NRA 98-LARC-8
09/27/1999 - 07/31/2002 FY02: \$1 Total: \$153,440
Prin. Invest.: M P MIGNOLET
Tech. Officer: LARC/P W GOODE
CASE Category: 29 - MATH/COMPUTER SCI, OTHER

NAG 1 2241 ARIZONA STATE UNIV 1290
USING FORMAL APPROACH FOR REVERSE ENGINEERING & DESIGN RECOVERY
TO SUPPORT SOFTWARE REUSE--NRA-98-LARC-8
09/27/1999 - 08/30/2002 FY02: \$0 Total: \$192,186
Prin. Invest.: G C GANNOD
Tech. Officer: LARC/B L DI VITO
CASE Category: 22 - COMPUTER SCIENCE

NAG 1 2283 **ARIZONA STATE UNIV** **1291**
 A NONLINEAR THEORY FOR SMART COMPOSITE STRUCTURES
 03/24/2000 - 03/14/2003 FY02: \$0 Total: \$98,305
Prin. Invest.: A CHATTOPADHYAY
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02010 **ARIZONA STATE UNIV** **1292**
 COUPLED NONLINEAR AERO-THERMO-ELASTIC ANALYSIS FOR AEROSPACE APPLICATIONS
 12/06/2001 - 01/15/2005 FY02: \$45,857 Total: \$45,857
Prin. Invest.: A CHATIPHADYAJ
Tech. Officer: LARC/W A SILVA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1461 **ARIZONA STATE UNIV** **1293**
 CONTINUAL PLANNING IN METRIC/TEMPORAL DOMAINS
 03/13/2001 - 02/28/2003 FY02: \$114,000 Total: \$275,928
Prin. Invest.: S KAMBHAMPPATI
Tech. Officer: ARC/R A MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2081 **ARIZONA STATE UNIV** **1294**
 DECOUPLING THE ROLE OF INERTIA & GRAVITY ON PARTICLE DISPERSION LSN000850-(NRA-94-OLMSA)
 09/26/1997 - 09/16/2001 FY02: \$0 Total: \$49,456
Prin. Invest.: K D SQUIRES
Tech. Officer: GRC/A CHAIT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2591 **ARIZONA STATE UNIV** **1295**
 OPTIMIZATION OF ENGINEERED III-N MATERIAL FOR ELECTRON EMISSION DEVICES
 04/16/2001 - 02/28/2003 FY02: \$20,000 Total: \$39,990
Prin. Invest.: N NEWMAN
Tech. Officer: GRC/I KRAINSKY
CASE Category: 13 – PHYSICS

NAG 5 3628 **ARIZONA STATE UNIV** **1296**
 THERMAL-INFRARED LABORATORY STUDIES
 02/25/1997 - 12/31/2001 FY02: -\$17,984 Total: \$458,937
Prin. Invest.: D R CHRISTENSEN
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3783 **ARIZONA STATE UNIV** **1297**
 DETERMINING THE COMPOSITION OF MARTIAN AND VENUSIAN
 02/21/1997 - 06/30/2002 FY02: \$0 Total: \$361,350
Prin. Invest.: D FINK
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3908 **ARIZONA STATE UNIV** **1298**
 STUDIES IN PLANETARY VOLCANOLOGY
 02/12/1997 - 02/28/2002 FY02: \$0 Total: \$919,053
Prin. Invest.: D GREELEY
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4131 **ARIZONA STATE UNIV** **1299**
 ORGANICS IN METEORITES
 03/15/1997 - 09/14/2001 FY02: -\$276 Total: \$344,724
Prin. Invest.: D CRONIN
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 6741 **ARIZONA STATE UNIV** **1300**
 SYSTEMATIC DETERMINATIONS OF ELEMENTAL ABUNDANCES FOR GALACTIC AND LMC NOVAE
 12/19/1997 - 12/31/2001 FY02: \$0 Total: \$200,688
Prin. Invest.: S STARRFIELD
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7540 **ARIZONA STATE UNIV** **1301**
 INVESTIGATION OF NEBULAR PROCESSES THROUGH OXYGEN ISOTOPIC ANALYSIS OF PRIMITIVE METEORITE MATERIAL
 06/18/1998 - 09/30/2002 FY02: \$0 Total: \$121,100
Prin. Invest.: L LESHIN
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8158 **ARIZONA STATE UNIV** **1302**
 MICROBEAM INVESTIGATIONS OF PRESOLAR AND EARLY SOLAR SYSTEM MATERIALS
 02/04/1999 - 01/31/2003 FY02: \$0 Total: \$299,000
Prin. Invest.: D R HUSS
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8173 **ARIZONA STATE UNIV** **1303**
 PRESOLAR GRAINS AS TRACERS OF NEBULAR PROCESSES
 02/03/1999 - 10/14/2001 FY02: -\$106 Total: \$37,894
Prin. Invest.: D R HUSS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8278 **ARIZONA STATE UNIV** **1304**
 MULTI-WAVELENGTH SPECTRAL SYNTHESIS OF NOVA ATMOSPHERES (ADP 98)
 02/24/1999 - 02/28/2002 FY02: \$0 Total: \$98,991
Prin. Invest.: S G STARRFIELD
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8286 **ARIZONA STATE UNIV** **1305**
 ACQUISITION OF A CAMECA IMS 6F SECONDARY ION MASS SPECTROMETER FOR APPLICATIONS IN COSMOCHEMISTRY
 02/22/1999 - 02/28/2001 FY02: -\$9 Total: \$489,491
Prin. Invest.: L A LESHIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8453 **ARIZONA STATE UNIV** **1306**
 ANALYSIS OF AEOLIAN FEATURES AND PROCESSES ON MARS
 04/14/1999 - 04/14/2003 FY02: \$0 Total: \$234,000
Prin. Invest.: R GREELEY
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8481 **ARIZONA STATE UNIV** **1307**
 FORMATION & EVOLUTION OF BINARY SYSTEMS CONTAINING COLLAPSED STARS (ATP 98)
 04/29/1999 - 04/30/2003 FY02: \$0 Total: \$29,420
Prin. Invest.: M POLITANO
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 8721 **ARIZONA STATE UNIV** **1308**
 SMALL IMPACTS ON MARS: ATMOSPHERIC EFFECTS
 08/03/1999 - 08/14/2002 FY02: \$0 Total: \$70,500
Prin. Invest.: R GREELEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8805 **ARIZONA STATE UNIV** **1309**
 PHASE-RESOLVED INVESTIGATION OF SUPERSOFT X-RAY BINARIES -
 FUSE
 02/01/2000 - 02/14/2002 FY02: \$0 Total: \$23,900
Prin. Invest.: A P COWLEY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8897 **ARIZONA STATE UNIV** **1310**
 GEOLOGICAL STUDIES OF THE GALILEAN SATELLITES
 01/13/2000 - 01/14/2003 FY02: \$0 Total: \$176,600
Prin. Invest.: R GREELEY
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8898 **ARIZONA STATE UNIV** **1311**
 MECHANISMS, MANIFESTATION AND IMPLICATIONS OF CRYO MAGMATISM
 ON EUROPA
 01/13/2000 - 01/14/2003 FY02: \$0 Total: \$83,700
Prin. Invest.: S A FAGENTS
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8948 **ARIZONA STATE UNIV** **1312**
 STUDIES OF MARTIAN AEOLIAN GEOLOGY
 01/19/2000 - 02/28/2003 FY02: \$94,400 Total: \$275,750
Prin. Invest.: R GREELEY
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 9070 **ARIZONA STATE UNIV** **1313**
 MONITORING THE HAZARDS OF SILICIC VOLCANOES WITH REMOTE
 SENSING
 02/27/2000 - 02/28/2003 FY02: \$35,802 Total: \$134,505
Prin. Invest.: J FINK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9263 **ARIZONA STATE UNIV** **1314**
 MULTIDIMENSIONAL STUDIES OF THE CONSEQUENCES OF THERMO-
 NUCLEAR RUNAWAYS ON ACCRETING WHITEDWARFS
 03/13/2000 - 03/14/2003 FY02: \$100,229 Total: \$286,810
Prin. Invest.: S STARRFIELD
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9352 **ARIZONA STATE UNIV** **1315**
 COSMOCHEMISTRY & MINERALOGY OF PRIMITIVE METEORITE
 03/30/2000 - 03/31/2003 FY02: \$102,000 Total: \$296,000
Prin. Invest.: P R BUSECK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9381 **ARIZONA STATE UNIV** **1316**
 HIGH PRESSURE MINERALS IN SHOCKED METEORITES: CONS TRRAINTS
 ON SHOCK CONDITIONS AND DURATION
 04/03/2000 - 03/31/2003 FY02: \$51,100 Total: \$149,100
Prin. Invest.: T G SHARP
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 9395 **ARIZONA STATE UNIV** **1317**
 FUSE OBSERVATIONS OF GALACTIC AND LMC NOVAE IN OUT BURST -
 FUSE
 04/05/2000 - 04/14/2002 FY02: \$0 Total: \$9,084
Prin. Invest.: S G STARRFIELD
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9430 **ARIZONA STATE UNIV** **1318**
 ENVIRONMENTS OF EARLY EVOLUTION AND THE SEARCH FOR AN EXTRA-
 TERRESTIAL FOSSIL RECORD
 04/13/2000 - 05/31/2003 FY02: \$100,000 Total: \$292,316
Prin. Invest.: P KNAUTH
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9451 **ARIZONA STATE UNIV** **1319**
 CHIRAL ANALYSES OF ORGANIC COMPOUNDS IN CARBONACEO US
 METEORITES
 04/12/2000 - 04/14/2003 FY02: \$110,000 Total: \$323,620
Prin. Invest.: S PIZZARELLO
Tech. Officer: GSFC/M MEYER
CASE Category: 12 – CHEMISTRY

NAG 5 9507 **ARIZONA STATE UNIV** **1320**
 MICROBIAL PALEONTOLOGY, MINERALOGY & GEOCHEMISTRY OF MODERN
 & ANCIENT THERMAL SPRING DEPOSITS & THEI
 05/23/2000 - 04/30/2003 FY02: \$116,973 Total: \$357,965
Prin. Invest.: J FARMER
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9773 **ARIZONA STATE UNIV** **1321**
 GEOLOGY OF POTENTIAL LANDING SITES FOR MARTIAN SAM PLE RE-
 TURNS
 07/05/2000 - 06/30/2003 FY02: \$42,700 Total: \$126,500
Prin. Invest.: R GREELEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9838 **ARIZONA STATE UNIV** **1322**
 RADIATION SCIENCE PROGRAM TRANSMISSION ELECTRON MI CROSCOPY
 (TEM) STUDY OF SOUTHERN AFRICAN FIRE-ATM
 11/20/2000 - 11/30/2003 FY02: \$99,000 Total: \$223,000
Prin. Invest.: P R BUSECK
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10077 **ARIZONA STATE UNIV** **1323**
 CHEMICAL CONSTRAINTS ON THE EARLY SOLAR NEBULA: IRACING MO-
 LECULAR & ISOTOPIC ABUNDANCES FROM INTE
 11/15/2000 - 11/14/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: S WYCKOFF
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10214 **ARIZONA STATE UNIV** **1324**
 THERMAL CONDUCTIVITY RELATIONSHIPS TO PHYSICAL PROPERTIES OF
 MARTIAN SURFICIAL MATERIALS: A TOOL FOR
 01/04/2001 - 01/14/2003 FY02: \$55,900 Total: \$110,900
Prin. Invest.: M A PRESLEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10268 **ARIZONA STATE UNIV** **1325**
 RECENT VOLCANIC AND FLUVIAL ACTIVITY ON MARS
 01/18/2001 - 04/30/2003 FY02: \$75,000 Total: \$241,400
Prin. Invest.: A S MCEWEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10310 **ARIZONA STATE UNIV** **1326**
 MAPPING MINERALOGY, ROCK ABUNDANCE, & THERMAL INERTIA USING
 MGS THERMAL EMISSION SPECTROMETER (TES)
 01/25/2001 - 01/31/2004 FY02: \$300,000 Total: \$450,000
Prin. Invest.: P R CHRISTIANSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10316 **ARIZONA STATE UNIV** **1327**
 OBSERVATIONS OF THE LISM WITH HOT WHITE DWARFS - FUSE - 2000
 01/26/2001 - 04/30/2002 FY02: \$0 Total: \$23,600
Prin. Invest.: J B HOLBERG
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10449 **ARIZONA STATE UNIV** **1328**
 PRESOLAR GRAINS: PROBES OF PROCESS IN INTERSTELLAR SPACE, IN
 THE SOLAR NEBULA, & ON METEORITE PARENTS
 02/21/2001 - 10/31/2002 FY02: \$0 Total: \$33,000
Prin. Invest.: G HUSS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10460 **ARIZONA STATE UNIV** **1329**
 REGIONAL PLANETARY IMAGE FACILITY-ARIZONA STATE UNIV
 02/26/2001 - 02/28/2006 FY02: \$76,800 Total: \$142,700
Prin. Invest.: R GREELY
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10523 **ARIZONA STATE UNIV** **1330**
 ISOTOPIC & PETROLOGIC INVESTIGATIONS OF EXTRATERRESTRIAL
 MATERIALS: CONSTRAINTS ON NEBULAR, ASTEROID
 03/06/2001 - 03/14/2004 FY02: \$135,000 Total: \$235,000
Prin. Invest.: L A LESHIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10524 **ARIZONA STATE UNIV** **1331**
 ASU/MICHIGAN COLLABORATION: THE ABUNDANCE & ISOTOPIC COMPO-
 SITION OF Hg IN EXTRATERRESTRIAL MATERIAL
 03/05/2001 - 07/31/2001 FY02: \$0 Total: \$3,158
Prin. Invest.: D LAURETTA
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10689 **ARIZONA STATE UNIV** **1332**
 THE EVOLUTIONARY DEVELOPMENT OF PHOTOSYNTHESIS & THE TRANSI-
 TION FROM AN ANAEROBIC TO AN AEROBIC
 04/06/2001 - 03/31/2004 FY02: \$93,000 Total: \$183,000
Prin. Invest.: R BLANKENSHIP
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10753 **ARIZONA STATE UNIV** **1333**
 CHEMICAL CONSTRAINTS ON THE EARLY SOLAR NEBULA
 04/11/2001 - 04/14/2003 FY02: \$0 Total: \$20,000
Prin. Invest.: S WYCKOFF
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10899 **ARIZONA STATE UNIV** **1334**
 THIRD INTERNATIONAL SYMPOSIUM ON ENVIRONMENTAL HYDRAULICS
 05/04/2001 - 05/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: D BOYER
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11199 **ARIZONA STATE UNIV** **1335**
 ORIGINS OF SMALL VOLCANIC CONES: ERUPTION MECHANISMS AND
 IMPLICATIONS FOR WATER ON MARS
 08/07/2001 - 08/14/2004 FY02: \$0 Total: \$49,926
Prin. Invest.: S FAGENTS
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11494 **ARIZONA STATE UNIV** **1336**
 THERMAL INFRARED LABORATORY MEASUREMENTS
 12/27/2001 - 12/31/2004 FY02: \$97,000 Total: \$97,000
Prin. Invest.: P R CHRISTENSEN
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11543 **ARIZONA STATE UNIV** **1337**
 MICROBEAM INVESTIGATIONS OF PRESOLAR & EARLY SOLAR SYSTEM
 MATERIALS
 01/04/2002 - 01/31/2005 FY02: \$105,000 Total: \$105,000
Prin. Invest.: G HUSS
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11552 **ARIZONA STATE UNIV** **1338**
 CHARACTERIZATION OF INDIVIDUAL AEROSOL PARTICLES ASSOCIATED
 WITH CLOUDS (CRYSTAL-FACE)
 01/10/2002 - 01/14/2004 FY02: \$96,000 Total: \$96,000
Prin. Invest.: P BUSECK
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11566 **ARIZONA STATE UNIV** **1339**
 INJECTION OF SHORT-LIVED RADIOACTIVITIES INTO THE PRESOLAR CLOUD
 02/08/2002 - 02/14/2005 FY02: \$25,000 Total: \$25,000
Prin. Invest.: H VANHALA
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 11655 **ARIZONA STATE UNIV** **1340**
 ANALYSIS OF EXTRATERRESTRIAL VOLCANISM FROM LAVA FLOW-SCALE
 TO EDIFICE-SCALE PROCESSES
 02/11/2002 - 02/14/2003 FY02: \$54,700 Total: \$54,700
Prin. Invest.: J FINK
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11770 **ARIZONA STATE UNIV** **1341**
 CHARACTERIZATION AND HISTORY OF THE PRESOLAR DUST THAT BE-
 CAME THE SOLAR SYSTEM
 02/25/2002 - 02/28/2005 FY02: \$25,000 Total: \$25,000
Prin. Invest.: G R HUSS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11787 **ARIZONA STATE UNIV** **1342**
 STUDIES IN PLANETARY VOLCANOLOGY
 02/22/2002 - 02/28/2003 FY02: \$82,000 Total: \$82,000
Prin. Invest.: R GREELEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11809 **ARIZONA STATE UNIV** **1343**
 CONTINUED INVESTIGATION OF NEBULAR PROCESSES THROUGH ISOTO-
 PIC ANALYSES OF PRIMITIVE METEORITE MATES
 02/27/2002 - 03/31/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: L A LESHIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11899 **ARIZONA STATE UNIV** **1344**
 SECONDARY ION ISOTOPE RATIO DETERMINATION USING A SENSITIVE
 ELECTROMETER ARRAY DETECTOR
 03/27/2002 - 03/31/2005 FY02: \$411,000 Total: \$411,000
Prin. Invest.: P WILLIAMS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12141 **ARIZONA STATE UNIV** **1345**
 SEDIMENTARY MATERIALS IN WESTERN ARABIA AND INTRACRATER
 DEPOSITS SIMILAR TO WHITE ROCK: CLUES TO PAST
 05/08/2002 - 05/14/2005 FY02: \$51,150 Total: \$51,150
Prin. Invest.: M A PRESLEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12142 **ARIZONA STATE UNIV** **1346**
 ANALYSIS OF AEOLIAN FEATURES AND PROCESSES ON MARS
 05/08/2002 - 05/14/2005 FY02: \$127,272 Total: \$127,272
Prin. Invest.: R GREELEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12460 **ARIZONA STATE UNIV** **1347**
 NEXT GENERATION FRONTIER STUDIES OF GALAXY FORMATION AND
 EVOLUTION WITH NEXT GENERATION SPACE TELESCOPES
 09/09/2002 - 09/14/2014 FY02: \$54,358 Total: \$54,358
Prin. Invest.: R A WINDHORST
Tech. Officer: GSFC/M GREENHOUSE
CASE Category: 11 – ASTRONOMY

NAG 5 12543 **ARIZONA STATE UNIV** **1348**
 HYDROTHERMAL ECOSYSTEMS IN A SOLAR SYSTEM CONTEXT
 09/05/2002 - 08/31/2005 FY02: \$140,557 Total: \$140,557
Prin. Invest.: E SHOCK
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1331 **ARIZONA STATE UNIV** **1349**
 GENESIS OF THE CRYSTALLINE HEMATITE DEPOSIT IN SINUS MERIDIANI
 MARS
 07/05/2001 - 06/30/2003 FY02: \$22,000 Total: \$44,000
Prin. Invest.: P R CHRISTENSON
Tech. Officer: JSC/R V MORRIS
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1359 **ARIZONA STATE UNIV** **1350**
 A MICROFLUIDIC BIO REPORTER FOR EXPLORATORY BIOENGINEERING
 07/27/2001 - 09/30/2004 FY02: \$138,000 Total: \$177,000
Prin. Invest.: B C TOWE
Tech. Officer: JSC/D RISEN
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAS 5 31371 **ARIZONA STATE UNIV** **1351**
 EOS INVESTIGATION "ADVANCED SPACEBORNE THERMAL EMISSION AND
 REFLECTION"
 12/23/1991 - 06/14/2003 FY02: \$189,593 Total: \$1,866,430
Prin. Invest.: P CHRISTENSEN
Tech. Officer: GSFC/H BLODGET
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 1 01051 **ARIZONA STATE UNIV** **1352**
 PENETRATION OF HIGH INTENSITY RADIATED FIELDS (HIRF) INTO AIR-
 CRAFT
 05/29/2001 - 05/31/2004 FY02: \$50,000 Total: \$104,000
Prin. Invest.: C BALANIS
Tech. Officer: LARC/T X NGUYEN
CASE Category: 45 – ELECTRICAL ENGR

NCC 2 1051 **ARIZONA STATE UNIV** **1353**
 EXPLORING THE LIVING UNIVERSE: ORIGIN, EVOLUTION AND DISTRIBU-
 TION OF LIFE IN THE SOLAR SYSTEM
 09/22/1998 - 06/30/2003 FY02: \$1,446,549 Total: \$5,353,741
Prin. Invest.: J D FARMER
Tech. Officer: ARC/R A GRAYMES, ARC/W W DOLCI
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1109 **ARIZONA STATE UNIV** **1354**
 OPERATION OF THE PLANETARY AEOLIAN LABORATORY
 04/02/1999 - 04/30/2003 FY02: \$102,053 Total: \$382,853
Prin. Invest.: R GREELEY
Tech. Officer: ARC/S G EDDLEMON, ARC/B F SMITH
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 2 1225 **ARIZONA STATE UNIV** **1355**
 HEURISTIC CONTROL OF PLANNING & EXECUTION IN METRIC/TEMPORAL
 DOMAINS
 03/23/2001 - 02/28/2003 FY02: \$30,191 Total: \$78,191
Prin. Invest.: S KAMBHAMPATI
Tech. Officer: ARC/R MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NASA'S UNIVERSITY PROGRAM

ARIZONA

NCC 2 1232 **ARIZONA STATE UNIV** **1356**
 AGENT DEVELOPMENT & CONTROL VERIFICATION USING DUAL CHARACTERIZATION
 03/26/2001 - 11/30/2002 FY02: \$100,000 Total: \$175,000
Prin. Invest.: C BARAL
Tech. Officer: ARC/R MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5362 **ARIZONA STATE UNIV** **1357**
 TERA-HERTZ MODULATION OF QUANTUM WELL LASERS WITH AN ELECTRICAL FIELD
 01/19/2000 - 12/14/2001 FY02: -\$4 Total: \$46,996
Prin. Invest.: Y ZHANG
Tech. Officer: ARC/M MEYYPAPPAN
CASE Category: 13 – PHYSICS

NCC 2 5411 **ARIZONA STATE UNIV** **1358**
 ECOGENOMICS: MOLECULAR BIOLOGICAL ANALYSES OF HYPERBACILLAR BACTERIAL COMMUNITIES
 11/22/2000 - 11/30/2002 FY02: \$60,110 Total: \$120,080
Prin. Invest.: F G PICHEL
Tech. Officer: ARC/D J DESMARAIS, ARC/B M BEBOUT
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 1 02013 **ARIZONA STATE UNIV** **1359**
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/05/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: A CHATTOPADHYAY, C R SWANN
Tech. Officer: LARC/D R AMBUR
CASE Category: 46 – MECHANICAL ENGR

NGT 2 52284 **ARIZONA STATE UNIV** **1360**
 THE PROTECTIVE ROLES OF THE ANTIOXIDANT ENZYME SUPEROXIDE DISMUTASE & CATALASE IN THE GREEN PHOTOSYNTHESIS
 08/09/2001 - 08/31/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R E BLAKENSHIP
Tech. Officer: ARC/L ROTHSCCHILD, ARC/E P CONDON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 30221 **ARIZONA STATE UNIV** **1361**
 EFFECTS OF TECTONIC PROCESSES AND CLIMATIC FLUCTUATIONS ON LANDSCAPE DEVELOPMENT
 08/26/1999 - 08/31/2001 FY02: -\$10 Total: \$43,990
Prin. Invest.: J R ARROWSMITH
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50276 **ARIZONA STATE UNIV** **1362**
 PARTITIONING OF HIGHLY SIDEROPHILE ELEMENTS AT ELEVATED PRESSURE & TEMPERATURE: CONSTRAINTS ON
 06/20/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: T SHARP
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 62 **ARIZONA STATE UNIV** **1363**
 ASSESSMENT OF PALEOENVIRONMENT ON MARS
 05/29/2002 - 05/31/2005 FY02: \$23,492 Total: \$23,492
Prin. Invest.: P NILES
Tech. Officer: JSC/G MCKAY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10254 **DINE COLL (FORMERLY NAVAJO COMM COLL)** **1364**
 INTERNET-BASED EDUCATION & RESEARCH WITH ROBOTIC TELESCOPES FOR NATIVE AMERICAN & HISPANIC
 01/10/2001 - 01/14/2004 FY02: \$198,000 Total: \$416,000
Prin. Invest.: S SEMKEN
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 9 1172 **DINE COLL (FORMERLY NAVAJO COMM COLL)** **1365**
 SCIENCE ENRICHMENT ACTIVITIES
 09/28/1999 - 09/29/2001 FY02: \$0 Total: \$200,000
Prin. Invest.: M C BAUER
Tech. Officer: JSC/L ARMEDARIZ
CASE Category: 49 – ENGINEERING, OTHER

NAG13 99028 **DINE COLL (FORMERLY NAVAJO COMM COLL)** **1366**
 EXPANDING THE POOL OF GIS PROFESSIONALS FOR THE NAVAJO NATION
 09/02/1999 - 09/27/2001 FY02: -\$93,748 Total: \$98,332
Prin. Invest.: D ISELY
Tech. Officer: JSC/R TRAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 4 234 **ESTRELLA MOUNTAIN COMM COLL** **1367**
 NASA PRECOLL ACHIEVEMENT OF EXCELLENCE IN MATHEMATICS, SCIENCE, ENGINEERING, AND TECHNOLOGY (PAC)
 09/25/2002 - 09/30/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: M A REYES
Tech. Officer: DFRC/M RODAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12476 **ESTRELLA MOUNTAIN COMM COLL** **1368**
 NASA ESTRELLA MOUNTAIN CENTER FOR SUCCESS IN MATH AND SCIENCE
 09/05/2002 - 07/31/2003 FY02: \$120,000 Total: \$120,000
Prin. Invest.: M REYES
Tech. Officer: HQ/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 6790 **NORTHERN ARIZONA UNIV** **1369**
 INFRARED SPECTROSCOPY OF PLANETARY SATELLITES
 02/10/1998 - 09/14/2001 FY02: \$0 Total: \$164,147
Prin. Invest.: C A GRIFFITH
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7757 **NORTHERN ARIZONA UNIV** **1370**
 A PHOTOMETRIC SURVEY OF TRANS-NEPTUNIAN OBJECTS
 12/07/1998 - 09/30/2002 FY02: \$0 Total: \$126,030
Prin. Invest.: S C TEGLER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8146 **NORTHERN ARIZONA UNIV** **1371**
 SPECTROSCOPIC INVESTIGATIONS OF EXTRASOLAR PLANETS AND BROWN DWARFS
 02/04/1999 - 09/30/2002 FY02: \$0 Total: \$58,000
Prin. Invest.: C A GRIFFITH
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 8203 **NORTHERN ARIZONA UNIV** **1372**
 X-RAY PROCESSING OF COMETARY ICE MIXTURES
 02/08/1999 - 01/31/2003 FY02: \$0 Total: \$102,000
Prin. Invest.: D M CORNELISON
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9214 **NORTHERN ARIZONA UNIV** **1373**
 STRUCTURE AND COMPOSITION OF PLANETARY ATMOSPHERES
 03/09/2000 - 03/14/2003 FY02: \$0 Total: \$80,000
Prin. Invest.: R YELLE
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11078 **NORTHERN ARIZONA UNIV** **1374**
 DYNAMICS, COMPOSITION, AND THERMAL STRUCTURE OF TITAN'S UPPER ATMOSPHERE
 08/06/2001 - 08/14/2004 FY02: \$0 Total: \$41,802
Prin. Invest.: R YELLE
Tech. Officer: GSFC/D J BOGAN
CASE Category: 42 – AERONAUTICAL ENGR

NAG 5 11239 **NORTHERN ARIZONA UNIV** **1375**
 SPECTROSCOPIC INVESTIGATIONS OF TITAN'S ATMOSPHERE AND SURFACE
 08/15/2001 - 11/30/2001 FY02: -\$70,600 Total: \$0
Prin. Invest.: C GRIFFITH
Tech. Officer: GSFC/J HILMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11729 **NORTHERN ARIZONA UNIV** **1376**
 PROCESSING AND ANALYSIS OF COMETARY ICE MIXTURES
 02/14/2002 - 02/14/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: D CORNELISON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12510 **NORTHERN ARIZONA UNIV** **1377**
 CONTINUED INVESTIGATIONS OF MARTIAN IMPACT CRATER MORPHOLOGIES AND MORPHOMETRIES
 09/05/2002 - 08/31/2004 FY02: \$35,000 Total: \$35,000
Prin. Invest.: N BARLOW
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NCC 2 5356 **NORTHERN ARIZONA UNIV** **1378**
 STUDY OF THE HOST ROCKS OF CARBONACEOUS MATTER FROM IMPACT DEPOSITS, METEORITES & EXPERIMENTAL PROD
 09/29/1999 - 03/31/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: J H WITTKÉ
Tech. Officer: ARC/M L FONDA, ARC/T E BUNCH
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5429 **NORTHERN ARIZONA UNIV** **1379**
 AN UNSTEADY REYNOLDS-AVERAGED NAVIER-STOKES SIMULATION OF THE FLOW AROUND AN UNCONFINED CUBOID AT H
 03/22/2001 - 06/14/2003 FY02: \$15,282 Total: \$53,643
Prin. Invest.: E P DUQUE
Tech. Officer: ARC/C TUNG, ARC/R STRAWN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1409 **PRESCOTT COLL** **1380**
 STATE AND LOCAL GOVERNMENT APPLICATIONS PROGRAM
 06/07/2000 - 12/31/2001 FY02: \$0 Total: \$872,000
Prin. Invest.: W W ORR
Tech. Officer: ARC/E P CONDON
CASE Category: 13 – PHYSICS

NAG 5 11550 **PRESCOTT COLL** **1381**
 STATE AND LOCAL GOVERNMENT APPLICATIONS PROGRAM
 03/06/2002 - 02/28/2003 FY02: \$350,479 Total: \$350,479
Prin. Invest.: W ORR
Tech. Officer: GSFC/R VENEZIA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2023 **UNIV OF ARIZONA** **1382**
 SATELLITE DATA STUDIES OF STRATOSPHERIC OZONE MY 1/3
 03/18/1998 - 04/30/2001 FY02: -\$453 Total: \$279,237
Prin. Invest.: L L HOOD
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2041 **UNIV OF ARIZONA** **1383**
 DEVELOPMENT OF ANALYSIS METHODS FOR DESIGNING WITH COMPONENTS
 03/31/1998 - 03/31/2001 FY02: -\$1 Total: \$270,001
Prin. Invest.: E MADENCI
Tech. Officer: LARC/J H STARNES, LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2052 **UNIV OF ARIZONA** **1384**
 BOLTED DOUBLE-LAP JOINTS W/SANDWICH PANELS & LAMINATES UNDER MECH & THERMAL LOADING
 04/08/1998 - 04/07/2001 FY02: -\$1 Total: \$155,175
Prin. Invest.: E MADENCI
Tech. Officer: LARC/S P WALKER
CASE Category: 46 – MECHANICAL ENGR

NAG 1 2218 **UNIV OF ARIZONA** **1385**
 IMPROVEMENT AND REFINEMENT OF THE GPS/MET (GLOBAL POSITIONING SYS/METEOROLOGY) DATA ANAL ALGORITHM
 08/10/1999 - 07/31/2001 FY02: \$0 Total: \$124,000
Prin. Invest.: B M HERMAN, D S FENG
Tech. Officer: LARC/V E DELNORE, LARC/J L RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2317 **UNIV OF ARIZONA** **1386**
 TAILORING OF BONDED AND BOLTED LAP JOINTS AND PATCH REPAIR OF DAMAGED COMPOSITE PANELS
 06/28/2000 - 10/31/2002 FY02: \$85,000 Total: \$283,450
Prin. Invest.: E MADENCI
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01124 **UNIV OF ARIZONA** **1387**
 SAGE II AND SAGE III SATELLITE VALIDATION AND SCIENCE STUDIES
 09/18/2001 - 03/31/2004 FY02: \$174,977 Total: \$218,677
Prin. Invest.: B M HERMAN
Tech. Officer: LARC/W P CHU
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02017 **UNIV OF ARIZONA** **1388**
 SATELLITE DATA STUDIES OF STRATOSPHERIC OZONE MY 1/3
 12/07/2001 - 12/06/2004 FY02: \$190,000 Total: \$190,000
Prin. Invest.: L L HOOD
Tech. Officer: LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1187 **UNIV OF ARIZONA** **1389**
 INFLUENCE OF UNWEIGHTING ON INSULIN SIGNAL TRANSDU CTION IN
 MUSCLE
 03/18/1998 - 04/30/2002 FY02: -\$8,317 Total: \$417,677
Prin. Invest.: M E TISCHLER, E J HENRISKSEN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1369 **UNIV OF ARIZONA** **1390**
 EFFECT OF MICROGRAVITY ON THE DEVELOPMENT OF THE IMMUNE
 SYSTEM
 08/02/1999 - 07/31/2003 FY02: \$115,885 Total: \$587,490
Prin. Invest.: D DELUCA
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1446 **UNIV OF ARIZONA** **1391**
 CONSTRUCTION METHODS FOR VERY LARGE FORMAT FAR INFRARED
 ARRAYS
 09/28/2000 - 08/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: E T YOUNG
Tech. Officer: ARC/C R MCCREIGHT, ARC/R E MCMURRAY
CASE Category: 11 – ASTRONOMY

NAG 3 1869 **UNIV OF ARIZONA** **1392**
 AN EXPERIMENTAL STUDY OF RICHTMYER
 05/09/1996 - 05/08/2002 FY02: \$0 Total: \$414,000
Prin. Invest.: J JACOBS
Tech. Officer: GRC/A T CHAI
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2154 **UNIV OF ARIZONA** **1393**
 MODELING OF TRANSPORT PROCESSES IN A SOLID OXIDE ELECTROLYZED
 GENERATING OXYGEN ON MARS
 04/10/1998 - 01/31/2002 FY02: \$0 Total: \$343,750
Prin. Invest.: K R SRIDHAR
Tech. Officer: GRC/J S LING, GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2354 **UNIV OF ARIZONA** **1394**
 RESONANCE EFFECTS IN SINGLE-AND DOUBLE-DIFFUSIVE SYSTEMS
 UNDER GRAVITY MODULATION
 03/15/2000 - 11/30/2003 FY02: \$95,000 Total: \$240,000
Prin. Invest.: C F CHEN
Tech. Officer: GRC/C E NIEDERHAUS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2725 **UNIV OF ARIZONA** **1395**
 AN EXPERIMENTAL INVESTIGATION OF INCOMPRESSIBLE RICHTMYER-
 MESHKOV INSTABILITY
 03/07/2002 - 11/30/2005 FY02: \$87,975 Total: \$87,975
Prin. Invest.: D NIEDERHAUS
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3436 **UNIV OF ARIZONA** **1396**
 ABSOLUTE RADIOMETRIC CALIBRATION AND ATMOSPHERIC CORRECTION
 OF LANDSAT-7 THEMATIC MAPPER.
 10/07/1996 - 06/30/2001 FY02: -\$372 Total: \$693,307
Prin. Invest.: C J THOME
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3631 **UNIV OF ARIZONA** **1397**
 PLANET FORMATION AND EVOLUTION: COLLISIONAL AND
 02/12/1997 - 09/30/2001 FY02: \$0 Total: \$426,690
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3640 **UNIV OF ARIZONA** **1398**
 UTILIZATION OF EOS DATA IN QUANTIFYING THE PROCESS HYDROLOGIC
 CYCLE IN ARID/SEMI-ARID REGIONS
 02/12/1997 - 03/31/2002 FY02: \$0 Total: \$2,809,008
Prin. Invest.: S SOROOSHAIN
Tech. Officer: GSFC/E Y WOOD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3791 **UNIV OF ARIZONA** **1399**
 A STUDY OF DUST JET EVOLUTION IN COMET HALLEY
 03/07/1997 - 08/31/2002 FY02: \$0 Total: \$233,634
Prin. Invest.: M M LARSON
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 3796 **UNIV OF ARIZONA** **1400**
 RELATIVE ABUNDANCES OF ¹³C, ¹⁸O, ¹⁵N AND ²H ON TRI B MEASURE-
 MENTS AND REFLECTANCE SPECTROSCOPY
 03/11/1997 - 03/14/2003 FY02: \$0 Total: \$421,245
Prin. Invest.: D H BROWN
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3914 **UNIV OF ARIZONA** **1401**
 SUPPORT FOR THE SPACE IMAGERY CENTER
 02/21/1997 - 12/31/2000 FY02: -\$1,563 Total: \$77,038
Prin. Invest.: R G STROM
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3937 **UNIV OF ARIZONA** **1402**
 PLANETARY SPECTROSCOPY
 03/26/1997 - 07/31/2001 FY02: \$0 Total: \$267,280
Prin. Invest.: D FINK
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 3938 **UNIV OF ARIZONA** **1403**
 BEGINNING RESEARCH WITH THE 1.8-METER SPACEWATCH T
 03/10/1997 - 11/30/2000 FY02: -\$28 Total: \$387,632
Prin. Invest.: D GEHRELS
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 4214 **UNIV OF ARIZONA** **1404**
 INTERIORS AND ATMOSPHERES OF THE OUTER PLANETS
 03/24/1997 - 12/31/2002 FY02: \$0 Total: \$336,648
Prin. Invest.: D B HUBBARD
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 4598 **UNIV OF ARIZONA** **1405**
 LONG TERM DOPPLER SHIFT AND LINE PROFILE STUDIES O TARGET STARS
 05/20/1997 - 02/28/2002 FY02: \$0 Total: \$410,967
Prin. Invest.: D S MCMILLAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4767 **UNIV OF ARIZONA** **1406**
 NOBLE GAS STUDIES OF EARLY SOLAR SYSTEM HISTORY
 06/09/1997 - 05/31/2002 FY02: \$0 Total: \$228,000
Prin. Invest.: D D SWINDLE
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 4832 **UNIV OF ARIZONA** **1407**
 COSMOGENIC 14C IN METEORITES AND LUNAR SAMPLES
 06/17/1997 - 05/31/2002 FY02: \$0 Total: \$175,000
Prin. Invest.: D JULL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4834 **UNIV OF ARIZONA** **1408**
 TRANSPORT EQUATIONS OF COSMIC RAYS
 06/17/1997 - 11/30/2000 FY02: -\$2 Total: \$201,583
Prin. Invest.: M KOTA
Tech. Officer: GSFC/M A FORMAN
CASE Category: 11 – ASTRONOMY

NAG 5 4944 **UNIV OF ARIZONA** **1409**
 MINERALOGIC AND TRACE-ELEMENT STUDIES OF METEORITE IMPACTS
 06/23/1997 - 03/14/2001 FY02: -\$3,821 Total: \$795,179
Prin. Invest.: D V BOYNTON
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 5336 **UNIV OF ARIZONA** **1410**
 FULL FUNDING FOR THE 1ST YEAR OF THE GRANT FOR \$10 K, PI: G. G. WILLIAMS GRANT TITLE: LOTIS (W/ PARK
 05/31/2001 - 09/30/2002 FY02: \$30,000 Total: \$40,000
Prin. Invest.: G WILLIAMS
Tech. Officer: WFF/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6339 **UNIV OF ARIZONA** **1411**
 VALIDATION AND CORRECTION FOR THE MODIS SPATIAL RE SPONSE
 10/02/1997 - 09/30/2002 FY02: \$0 Total: \$593,294
Prin. Invest.: R SCHOWENGERDT
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6461 **UNIV OF ARIZONA** **1412**
 LIS VALIDATION STUDIES USING LIGHTNING AT THE KSC- ER
 10/14/1997 - 09/30/2000 FY02: \$0 Total: \$225,560
Prin. Invest.: P KRIDER
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6543 **UNIV OF ARIZONA** **1413**
 IMPACT CRATERING AND THE EVOLUTION OF THE TERRESTRIAL PLANETS
 12/08/1997 - 09/30/2001 FY02: \$0 Total: \$592,500
Prin. Invest.: H MELOSH
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6779 **UNIV OF ARIZONA** **1414**
 ANALYSIS OF ICE CORES FOR ESTIMATING ACCUMULATION PATTERNS AND PAST ATMOSPHERIC CHEMISTRY IN GREE
 01/14/1998 - 06/30/2001 FY02: -\$1,356 Total: \$464,239
Prin. Invest.: R BALES
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7073 **UNIV OF ARIZONA** **1415**
 A COMPREHENSIVE THEORY FOR M DWARFS, BROWN DWARFS, AND GIANT PLANETS-ATP
 02/24/1998 - 02/14/2002 FY02: \$0 Total: \$263,467
Prin. Invest.: A S BURROWS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7083 **UNIV OF ARIZONA** **1416**
 INFRARED OBSERVATIONS OF SMALL BODIES IN THE OUTER SOLAR SYSTEM
 03/10/1998 - 03/31/2001 FY02: -\$481 Total: \$149,458
Prin. Invest.: R H BROWN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7089 **UNIV OF ARIZONA** **1417**
 STRUCTURE OF THE HELIOSPHERE INFERRED FROM VOYAGER UVS MEASUREMENTS
 02/23/1998 - 01/31/2003 FY02: \$0 Total: \$117,700
Prin. Invest.: B R SANDEL
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7215 **UNIV OF ARIZONA** **1418**
 INCORPORATION OF NOBLE GASES INTO INTERSTELLAR ICE ANALOGS
 03/31/1998 - 05/31/2001 FY02: -\$82 Total: \$87,218
Prin. Invest.: T D SWINDLE
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7249 **UNIV OF ARIZONA** **1419**
 MODELING OF MOSS AND LICHEN IN THE BOREAL FORESTS
 04/28/1998 - 12/31/2000 FY02: -\$281 Total: \$141,940
Prin. Invest.: K E SCHAUDT
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7257 **UNIV OF ARIZONA** **1420**
 ALGORITHM FOR FUTURE OZONE PROFILING USING LIMB SCATTER MEASUREMENTS
 04/14/1998 - 06/30/2002 FY02: \$0 Total: \$262,000
Prin. Invest.: B M HERMAN
Tech. Officer: GSFC/R D MCPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7364 **UNIV OF ARIZONA** **1421**
 THERMAL HISTORY OF PLANETARY MATERIALS: EXPERIMENTAL & THEORETICAL STUDIES, AND APPLICATIONS
 04/29/1998 - 04/30/2001 FY02: -\$5 Total: \$178,995
Prin. Invest.: J GANGULY
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NASA'S UNIVERSITY PROGRAM

ARIZONA

NAG 5 7499 **UNIV OF ARIZONA** **1422**
 THEORETICAL MODELS OF EXTRASOLAR GIANT PLANETS
 06/01/1998 - 04/30/2002 FY02: \$0 Total: \$145,000
Prin. Invest.: A BURROWS
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7533 **UNIV OF ARIZONA** **1423**
 MOSAIC OF CCDS TO SURVEY FOR ASTEROIDS AND COMETS
 06/11/1998 - 12/31/2001 FY02: \$0 Total: \$730,006
Prin. Invest.: R S MCMILLAN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7554 **UNIV OF ARIZONA** **1424**
 PRECURSORY SIGNALS ASSOCIATED WITH REGIONAL AND IN TERANNUAL
 VARIABILITY OF THE NORTH AMERICAN SUMME
 06/25/1998 - 06/30/2001 FY02: \$0 Total: \$399,999
Prin. Invest.: W SHUTTLEWORTH
Tech. Officer: GSFC/E ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7734 **UNIV OF ARIZONA** **1425**
 HEAVY ELEMENT ABUNDANCES: CLUES TO THE EVOLUTION OF STAR
 12/18/1998 - 10/31/2003 FY02: \$107,400 Total: \$450,131
Prin. Invest.: D GARNETT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7758 **UNIV OF ARIZONA** **1426**
 2MASS ASTEROID AND COMET CATALOG
 12/08/1998 - 09/30/2001 FY02: \$0 Total: \$110,700
Prin. Invest.: M V SYKES
Tech. Officer: GSFC/TMORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7780 **UNIV OF ARIZONA** **1427**
 WORKSHOP ON SUN-TERRESTRIAL CLIMATE CONNECTIONS
 10/29/1998 - 07/31/2001 FY02: -\$432 Total: \$83,585
Prin. Invest.: W A SPRIGG
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 7793 **UNIV OF ARIZONA** **1428**
 THEORY AND MODELING OF ENERGETIC PARTICLE COMPOSIT ION SPEC-
 TRA AND ANISOTROPIES AND TIME VARIA
 12/10/1998 - 10/31/2001 FY02: \$0 Total: \$280,414
Prin. Invest.: J GIACALONE
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NAG 5 7834 **UNIV OF ARIZONA** **1429**
 A COMPARISON OF OBSERVATIONS AND GCM SIMULATIONS O F THE
 QUASI-DECADAL OSCILLATION
 12/14/1998 - 03/14/2002 FY02: \$42,150 Total: \$126,594
Prin. Invest.: L L HOOD
Tech. Officer: GSFC/R RIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7854 **UNIV OF ARIZONA** **1430**
 SOLAR SYSTEM RESEARCH WITH THE SPACEWATCH 1.8-M TE LESCOPE
 12/07/1998 - 11/30/2001 FY02: \$0 Total: \$382,450
Prin. Invest.: D S MCMILLAN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7923 **UNIV OF ARIZONA** **1431**
 HUBBLE SPACE TELESCOPE ASTRONOMY
 12/14/1998 - 09/30/2001 FY02: \$0 Total: \$5,683,316
Prin. Invest.: R THOMPSON
Tech. Officer: GSFC/J JELETIC
CASE Category: 11 – ASTRONOMY

NAG 5 7966 **UNIV OF ARIZONA** **1432**
 STUDY OF SOLAR AND HELIOSPHERIC ENERGETIC IONS VIA ENERGETIC
 NEUTRAL ATOMS USING CELIAS/SOHO
 12/15/1998 - 12/31/2001 FY02: \$0 Total: \$135,784
Prin. Invest.: K HSIEH
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NAG 5 7994 **UNIV OF ARIZONA** **1433**
 THE MARS LOWER AND UPPER ATMOSPHERE: DETAILED COUP LING
 USING GENERAL CIRCULATION MODELS
 01/06/1999 - 01/14/2003 FY02: \$0 Total: \$249,896
Prin. Invest.: S BOUGHER
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8051 **UNIV OF ARIZONA** **1434**
 GALILEO EUV OBSERVATIONS OF IO'S PLASMA TORUS AND JUPITER'S
 ATMOSPHERE
 01/13/1999 - 01/14/2001 FY02: \$0 Total: \$114,918
Prin. Invest.: D HERBERT
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8095 **UNIV OF ARIZONA** **1435**
 PRESERVATION AND ENHANCEMENT OF THE SPACEWATCH DAT A AR-
 CHIVES
 01/29/1999 - 01/31/2003 FY02: \$0 Total: \$127,278
Prin. Invest.: J A LARSEN
Tech. Officer: GSFC/P HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8117 **UNIV OF ARIZONA** **1436**
 COMBINED LIDAR AND RASSIVE SENSING TECHNIQUES FOR CHARACTER-
 IZATION OF AEROSOL RADIATIVE EFFECTS
 01/26/1999 - 01/31/2002 FY02: \$0 Total: \$314,862
Prin. Invest.: J A REAGAN
Tech. Officer: GSFC/M MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8152 **UNIV OF ARIZONA** **1437**
 MARS GLOBAL SURVEYOR AEROBRAKING: THERMOSPHERE- IONOSHERE
 TRENDS & MTGCM INTERPRETATION
 02/11/1999 - 03/31/2002 FY02: \$0 Total: \$125,300
Prin. Invest.: S W BOUGHER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8157 **UNIV OF ARIZONA** **1438**
 SUPPORT AN EXTENSION SPECIALIST IN GEOSPATIAL INFO RMATION
 TECHNOLOGY FOR THE STATE OF ARIZONA
 02/05/1999 - 01/31/2002 FY02: \$0 Total: \$399,349
Prin. Invest.: D YOUNG
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 8185 **UNIV OF ARIZONA** **1439**
 ANALYSIS OF THE CRUSTAL MAGNETIC FIELD OF MARS
 02/17/1999 - 02/28/2002 FY02: \$0 Total: \$124,200
Prin. Invest.: L L HOOD
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8214 **UNIV OF ARIZONA** **1440**
 INFLUENCE OF SUBGRID-SCALE HETEROGENEITY ON REMOTE LY
 SENSED ESTIMATES OF THE AMAZONIAN SURFACE EN
 03/01/1999 - 02/28/2003 FY02: \$118,064 Total: \$178,065
Prin. Invest.: J W SHUTTLEWORTH
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8239 **UNIV OF ARIZONA** **1441**
 A COMPREHENSIVE THEORETICAL STUDY OF THE INNER 10 PARSECS AT
 THE GALACTIC CENTER (ATP98)
 02/26/1999 - 02/28/2002 FY02: \$0 Total: \$182,404
Prin. Invest.: F MELIA
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8308 **UNIV OF ARIZONA** **1442**
 QUANTITATIVE INTERPRETATION OF VOLCANIC FEATURES I N MOC IM-
 AGES
 03/03/1999 - 11/30/2001 FY02: \$0 Total: \$94,300
Prin. Invest.: L KESZTHELYI
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8340 **UNIV OF ARIZONA** **1443**
 COLORIMETRY OF THE GALILEAN SATELLITES
 04/07/1999 - 03/31/2001 FY02: -\$1,588 Total: \$73,196
Prin. Invest.: D E GEISLER
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8341 **UNIV OF ARIZONA** **1444**
 MODELS AND MODES OF ENABLING THE USE OF NASA EARTH SCIENCE
 AND DATA IN DECISION MAKING
 04/07/1999 - 12/31/2002 FY02: \$0 Total: \$580,000
Prin. Invest.: S E MARSH
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8349 **UNIV OF ARIZONA** **1445**
 ACCURATE SPECTROPHOTOMETRY OF THE PATHFINDER LANDI NG SITE
 02/26/1999 - 02/28/2001 FY02: -\$228 Total: \$144,772
Prin. Invest.: P H SMITH
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8426 **UNIV OF ARIZONA** **1446**
 MULTIWAVELENGTH DIAGNOSTICS OF GALAXY EVOLUTION AN D STAR
 FORMATION L TSA98
 04/26/1999 - 04/30/2004 FY02: \$128,262 Total: \$494,094
Prin. Invest.: R C KENNICUTT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8502 **UNIV OF ARIZONA** **1447**
 SUPPORT OF ACTIVITIES AND OPERATION OF THE GLOBAL ENERGY AND
 WATER CYCLE EXPERIMENT SCIENCE STE
 05/11/1999 - 05/14/2003 FY02: \$0 Total: \$507,641
Prin. Invest.: S ROROOSHIAN
Tech. Officer: GSFC/R SCHIEFFER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8503 **UNIV OF ARIZONA** **1448**
 AN INTEGRATED INFORMATION SYSTEM FOR MULTI-PURPOSE USER-
 ADAPTIVE ACCESS TO LAND SURFACE HYDROLOGIC
 05/11/1999 - 05/14/2003 FY02: \$500,706 Total: \$1,553,031
Prin. Invest.: S SOROOSHIAN
Tech. Officer: GSFC/E WOOD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8660 **UNIV OF ARIZONA** **1449**
 VALIDATION OF MODLAND PRODUCTS WITH LIGHT AIRCRAFT AT LBA AND
 COMM SITES WITH MQUALS.
 08/31/1999 - 08/31/2001 FY02: -\$3 Total: \$29,997
Prin. Invest.: A HAUTE
Tech. Officer: GSFC/J PRIVETTE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8686 **UNIV OF ARIZONA** **1450**
 MEMBERSHIP TO THE AEROSOL RADIATIVE FORCING SCIENC E TEAM
 07/16/1999 - 07/14/2002 FY02: \$0 Total: \$39,297
Prin. Invest.: K J THOME
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8843 **UNIV OF ARIZONA** **1451**
 THE PLANET-B NEUTRAL MASS SPECTROMETER: THERMOSPHE RE-
 IONOSPHERE STUDIES USING THE MTGCM
 10/05/1999 - 10/14/2001 FY02: \$0 Total: \$50,000
Prin. Invest.: S W BOUGHER
Tech. Officer: GSFC/J E RICHARDS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8911 **UNIV OF ARIZONA** **1452**
 COPERNICAN CRATERS AND THE PHANEROZOIC IMPACT FLUX
 12/29/1999 - 01/31/2003 FY02: \$43,600 Total: \$127,450
Prin. Invest.: A S MCEWEN
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 8937 **UNIV OF ARIZONA** **1453**
 NUMERICAL MODELING OF TECTONIC PROCESSES AND METOR ITE
 IMPACTS ON THE GALILEAN SATELLITES
 01/13/2000 - 01/14/2003 FY02: \$0 Total: \$85,000
Prin. Invest.: E P TURTLE
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8941 **UNIV OF ARIZONA** **1454**
 CYCLODIAL LINEAMENTS AND TIDAL TECTONICS ON EUROPA
 01/13/2000 - 04/14/2002 FY02: \$0 Total: \$105,000
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8949 **UNIV OF ARIZONA** **1455**
 THEORETICAL STUDIES OF VOLATILE PROCESSES IN SOLAR SYSTEM BODIES
 01/19/2000 - 01/31/2003 FY02: \$30,000 Total: \$88,260
Prin. Invest.: J I LUNINE
Tech. Officer: GSFC/D BOGAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8952 **UNIV OF ARIZONA** **1456**
 IO AND ITS PLASMA TORUS: ATMOSPHERE-MAGNETOSPHERE INTERACTIONS
 01/21/2000 - 12/31/2002 FY02: \$56,200 Total: \$165,540
Prin. Invest.: F HERBERT
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8970 **UNIV OF ARIZONA** **1457**
 HYDROCARBONS IN JUPITER'S TROPOSPHERE
 01/24/2000 - 01/14/2003 FY02: \$0 Total: \$101,000
Prin. Invest.: D HUNTEN
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9072 **UNIV OF ARIZONA** **1458**
 AN ALL-METAL CASSEGRAIN TELESCOPE FOR SPACE APPLICATIONS
 02/15/2000 - 02/14/2003 FY02: \$80,000 Total: \$235,360
Prin. Invest.: J HOLBERG
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9079 **UNIV OF ARIZONA** **1459**
 ELECTRON TEMPERATURE IN THE IO PLASMA TORUS: THE KEY TO UNDERSTANDING TORUS ENERGY FLOW
 02/23/2000 - 02/28/2003 FY02: \$66,005 Total: \$194,950
Prin. Invest.: F L HERBERT
Tech. Officer: GSFC/J SHARBER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9081 **UNIV OF ARIZONA** **1460**
 NEO FOLLOWUP OBSERVATIONS TO THE NASA NEAR EARTH OBJECTS OBSERVATIONS PROGRAM
 02/16/2000 - 02/14/2003 FY02: \$58,000 Total: \$200,664
Prin. Invest.: S M LARSON
Tech. Officer: GSFC/T H MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9100 **UNIV OF ARIZONA** **1461**
 MICROMACHINING OF THZ WAVEGUIDE AND QUASI-OPTICAL COMPONENTS FOR SUB-ORBITAL AND SPACE-BORNE DETECTORS
 02/24/2000 - 01/31/2003 FY02: \$125,000 Total: \$428,000
Prin. Invest.: C K WALKER
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9112 **UNIV OF ARIZONA** **1462**
 EFFECTS OF LITHOLOGIES ON IMPACT CRATERING: NUMERICAL MODELING OF KNOWN TERRESTRIAL CRATERS
 02/28/2000 - 02/28/2002 FY02: \$0 Total: \$81,900
Prin. Invest.: E PIERAZZO
Tech. Officer: GSFC/J GRANT
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9174 **UNIV OF ARIZONA** **1463**
 PLANNING, COORDINATION, MATERIALS PREPARATION & MARKET SURVEY FOR REGIONAL INFORMATIONAL WORKS
 03/06/2000 - 12/31/2001 FY02: \$0 Total: \$375,493
Prin. Invest.: C F HUTCHINSON
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9176 **UNIV OF ARIZONA** **1464**
 INVESTIGATION OF EXTREME TEMPERATURE VOLCANISM ON IO
 03/08/2000 - 03/31/2003 FY02: \$50,800 Total: \$98,300
Prin. Invest.: L KESZTHELYI
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9181 **UNIV OF ARIZONA** **1465**
 ESTABLISHMENT OF ABSOLUTE SPECTROPHOTOMETRIC STANDARD STARS FROM 100 A TO 10,000 A - ADP99
 03/07/2000 - 03/14/2002 FY02: \$0 Total: \$86,434
Prin. Invest.: J HOLBERG
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9182 **UNIV OF ARIZONA** **1466**
 ANALYSIS OF THE IUE LOW DISPERSION SPECTRA OF THE WHITE DWARF STARS ADP99
 03/07/2000 - 03/14/2002 FY02: \$0 Total: \$90,528
Prin. Invest.: J HOLBERG
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9198 **UNIV OF ARIZONA** **1467**
 AN IN SITU GEOCHRONOLOGY SYSTEM BASED ON LASER-INDUCED BREAKDOWN SPECTROSCOPY & NOBLE GAS MASS SPECTROMETRY
 03/09/2000 - 03/14/2003 FY02: \$235,305 Total: \$651,189
Prin. Invest.: T SWINDLE
Tech. Officer: GSFC/B BETTS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9205 **UNIV OF ARIZONA** **1468**
 A MULTI-WAVELENGTH STUDY OF THE INNER 50 PC-REGION AT THE GALACTIC CENTER (LTS99)
 03/14/2000 - 03/14/2005 FY02: \$32,703 Total: \$122,293
Prin. Invest.: F MELIA
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9208 **UNIV OF ARIZONA** **1469**
 LIS VALIDATION STUDIES USING LIGHTNING AT THE KSC - ER
 03/23/2000 - 03/31/2002 FY02: \$0 Total: \$99,754
Prin. Invest.: P KRIDER
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9234 **UNIV OF ARIZONA** **1470**
 MEASURING MARTIAN ATMOSPHERIC WATER VAPOR & CARBON DIOXIDE
 03/23/2000 - 03/21/2001 FY02: \$0 Total: \$45,000
Prin. Invest.: A L SPRAGUE
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 9293 **UNIV OF ARIZONA** **1471**
 REMOTE SENSING FOR DEBRIS FLOODING HAZARD ASSESSMENT IN ARID
 REGIONS.
 03/24/2000 - 03/31/2003 FY02: \$75,000 Total: \$225,000
Prin. Invest.: V R BAKER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9306 **UNIV OF ARIZONA** **1472**
 QUASARS AS PROBES (LTSA 99)
 03/20/2000 - 03/31/2005 FY02: \$103,359 Total: \$304,231
Prin. Invest.: C D IMPEY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9325 **UNIV OF ARIZONA** **1473**
 NGST AD HOC SCIENCE WORKING GROUP (ASWG) SUPPORT
 03/22/2000 - 03/14/2001 FY02: -\$1 Total: \$15,149
Prin. Invest.: M MEYER
Tech. Officer: GSFC/E P SMITH
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 9408 **UNIV OF ARIZONA** **1474**
 A DATABASE OF THE WHITE DWARF STARS
 04/11/2000 - 04/30/2003 FY02: \$115,300 Total: \$389,800
Prin. Invest.: J HOLBERG
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9425 **UNIV OF ARIZONA** **1475**
 PENETRATOR-BASED SAMPLE COLLECTION OF COMETS AND OTHER
 SMALL BODIES
 04/17/2000 - 04/30/2003 FY02: \$241,058 Total: \$673,849
Prin. Invest.: W BOYNTON
Tech. Officer: GSFC/B BETTS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9435 **UNIV OF ARIZONA** **1476**
 GEOCHEMICAL EVOLUTION OF THE EARTH, MOON, IGNEOUS METEORITES
 & OTHER TERRESTRIAL PLANETARY BODIES
 04/24/2000 - 12/31/2002 FY02: \$245,000 Total: \$689,000
Prin. Invest.: M J DRAKE
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9465 **UNIV OF ARIZONA** **1477**
 A SOUTHERN HEMISPHERE NEO SURVEY
 04/18/2000 - 03/31/2003 FY02: \$118,000 Total: \$331,323
Prin. Invest.: S LARSON
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9549 **UNIV OF ARIZONA** **1478**
 IMPROVING SATELLITE RAIN EST. ALGORITHMS USING A COMBO. OF TRMM
 INSTANTANEOUS PRECIP. RETRIEVALS
 06/19/2000 - 11/30/2002 FY02: \$107,000 Total: \$270,110
Prin. Invest.: S SOROOSHIAN
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9577 **UNIV OF ARIZONA** **1479**
 INFRARED EMISSION SPECTROSCOPY OF ASTROPHYSICAL MOLECULES
 05/17/2000 - 04/30/2001 FY02: -\$154 Total: \$19,846
Prin. Invest.: D F BERNATH
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9609 **UNIV OF ARIZONA** **1480**
 STUDY OF STAR AND PLANETARY SYSTEM FORMATION
 05/18/2000 - 03/14/2003 FY02: \$0 Total: \$54,712
Prin. Invest.: A CAMERON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9691 **UNIV OF ARIZONA** **1481**
 A STUDY OF DUST IN AND AROUND GALAXIES
 06/26/2000 - 11/14/2002 FY02: \$84,400 Total: \$265,683
Prin. Invest.: D F ZARITSKY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9775 **UNIV OF ARIZONA** **1482**
 CHARACTERIZATION OF THE MARTIAN SURFACE FOR FUTURE MISSIONS
 06/30/2000 - 06/30/2003 FY02: \$38,000 Total: \$113,600
Prin. Invest.: A S MCEWEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9790 **UNIV OF ARIZONA** **1483**
 IDENTIFICATION OF MARTIAN HYDROTHERMAL SITES: A GEOLOGIC
 INVESTIGATION UTILIZING MULTIPLE DATASETS
 07/11/2000 - 07/31/2003 FY02: \$60,000 Total: \$180,000
Prin. Invest.: V R BAKER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9796 **UNIV OF ARIZONA** **1484**
 REPRESENTING HETEROGENEOUS VEGETATION IN THE CPTEC ETA MOD-
 ELS
 07/20/2000 - 09/30/2003 FY02: \$0 Total: \$93,586
Prin. Invest.: W SHUTTLEWORTH
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9803 **UNIV OF ARIZONA** **1485**
 SO/GSFC SUPER-LOTIS PROJECT COLLABORATION
 07/19/2000 - 07/31/2001 FY02: -\$2,724 Total: \$28,720
Prin. Invest.: B PETERSON
Tech. Officer: GSFC/N GEHRELS
CASE Category: 11 – ASTRONOMY

NAG 5 9957 **UNIV OF ARIZONA** **1486**
 XMM OBSERVATIONS OF ISOLATED ELLIPTICAL GALAXIES
 09/13/2000 - 09/14/2002 FY02: \$0 Total: \$45,500
Prin. Invest.: A I ZABLUDOFF
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10007 **UNIV OF ARIZONA** **1487**
 ASSESSMENT OF GRANT PROGRAM UNDER CENTERS OF EXCELLENCE IN
 APPLICATIONS OF REMOTE SENSING IN REGION
 09/20/2000 - 09/30/2002 FY02: \$0 Total: \$59,410
Prin. Invest.: M W WALLENDORF
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10123 **UNIV OF ARIZONA** **1488**
 SAR INVESTIGATIONS OF LATE PLEISTOCENE PALEOFLOODS PALE-
 OLAKES, AND PALEOCLIMATE
 11/28/2000 - 11/30/2003 FY02: \$50,000 Total: \$100,000
Prin. Invest.: V BAKER
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10162 **UNIV OF ARIZONA** **1489**
 SURFACE CHANGES ON IO
 12/20/2000 - 12/31/2003 FY02: \$45,700 Total: \$90,700
Prin. Invest.: P GEISSLER
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10166 **UNIV OF ARIZONA** **1490**
 OBSERVATIONS AND NUMERICAL MODELING OF TECTONIC PROCESSES
 ON IO
 01/04/2001 - 11/30/2003 FY02: \$50,800 Total: \$100,800
Prin. Invest.: E TURTLE
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10167 **UNIV OF ARIZONA** **1491**
 TIDAL TECTONIC PROCESSES ON EUROPA: DISPLACEMENTS, STRESS
 AND CYCLOIDS
 01/04/2001 - 11/30/2004 FY02: \$0 Total: \$50,000
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10174 **UNIV OF ARIZONA** **1492**
 IMPROVING REGIONAL AND GLOBAL RAINFALL ESTIMATES USING THE
 COMBINATIONS OF TRMM SATELLITE OBSERVATI
 12/21/2000 - 12/31/2001 FY02: \$0 Total: \$77,500
Prin. Invest.: S SOROOSHIAN
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10205 **UNIV OF ARIZONA** **1493**
 INFRARED & NEAR INFRARED SPECTROSCOPY OF ASTROPHYSICAL
 MOLECULES
 12/28/2000 - 12/31/2003 FY02: \$80,000 Total: \$160,000
Prin. Invest.: P BERNATH
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10245 **UNIV OF ARIZONA** **1494**
 ACCRETION ONTO MAGNETIC WHITE DWARFS (FUSE 00)
 02/12/2001 - 02/14/2002 FY02: \$0 Total: \$7,455
Prin. Invest.: G SCHMIDT
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10264 **UNIV OF ARIZONA** **1495**
 ANALYSIS OF ICE CORES FOR ESTIMATING ACCUMULATION PATTERNS
 AND THE INFLUENCE OF ACCUMULATION ON ICE
 01/09/2001 - 12/31/2001 FY02: \$0 Total: \$149,978
Prin. Invest.: R BALES
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10267 **UNIV OF ARIZONA** **1496**
 RETRIEVING BI-REFLECTANCE SPECTRA OF ROCKS ILLUMI- NATED BY
 DIRECT SUNLIGHT & BRIGHT SKY:A RE-E
 01/08/2001 - 12/31/2002 FY02: \$90,000 Total: \$204,200
Prin. Invest.: P H SMITH
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10294 **UNIV OF ARIZONA** **1497**
 EVOLUTION OF VOLATILES IN THE SOLAR SYSTEM
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: J I LUNINE
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10315 **UNIV OF ARIZONA** **1498**
 A FUSE SEARCH FOR NITROGEN AND CARBON IN HOT WHITE DWARFS -
 FUSE 2000
 01/26/2001 - 04/30/2002 FY02: \$0 Total: \$46,300
Prin. Invest.: J B HOLBERG
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10332 **UNIV OF ARIZONA** **1499**
 SUPPORT FOR SPACE IMAGERY CENTER NASA REGIONAL PLANETARY
 IMAGE FACILITY
 01/30/2001 - 01/31/2005 FY02: \$25,400 Total: \$50,400
Prin. Invest.: D KRING
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10333 **UNIV OF ARIZONA** **1500**
 SUB-MILLIMETER SPECTROSCOPY OF ASTROPHYSICALLY IMPORTANT
 METAL-CONTAINING MOLECULES
 01/30/2001 - 01/31/2002 FY02: \$0 Total: \$72,000
Prin. Invest.: L ZIURYS
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10346 **UNIV OF ARIZONA** **1501**
 KUIPER BELT DYNAMICS
 02/01/2001 - 02/14/2004 FY02: \$40,600 Total: \$80,600
Prin. Invest.: R MALHOTRA
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10441 **UNIV OF ARIZONA** **1502**
 AN INFRARED STUDY OF SPACECRAFT TARGETED COMETS
 02/16/2001 - 02/29/2004 FY02: \$51,800 Total: \$101,200
Prin. Invest.: H CAMPINS
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10442 **UNIV OF ARIZONA** **1503**
 2MASS ASTEROIDS, COMETS & SATELLITES
 02/16/2001 - 02/28/2003 FY02: \$66,800 Total: \$97,700
Prin. Invest.: M SYKES
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 10446 **UNIV OF ARIZONA** **1504**
 INFRARED OBSERVATIONS OF SMALL BODIES
 02/20/2001 - 03/31/2004 FY02: \$80,954 Total: \$160,354
Prin. Invest.: R BROWN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10447 **UNIV OF ARIZONA** **1505**
 SPACEWATCH SURVEY OF THE SOLAR SYSTEM
 02/20/2001 - 01/31/2004 FY02: \$88,028 Total: \$168,028
Prin. Invest.: R MCMILLAN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10450 **UNIV OF ARIZONA** **1506**
 COUPLED PHYSICAL & CHEMICAL PROCESSES IN THE SOLAR NEBULA &
 EXTRASOLAR PLANETS
 02/20/2001 - 01/31/2004 FY02: \$40,000 Total: \$80,000
Prin. Invest.: J LUNINE
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10452 **UNIV OF ARIZONA** **1507**
 MINERALOGIC & TRACE-ELEMENT STUDIES OF METEORITES & METEOR-
 ITE IMPACTS
 02/21/2001 - 08/31/2002 FY02: \$0 Total: \$180,000
Prin. Invest.: W BOYNTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10486 **UNIV OF ARIZONA** **1508**
 THERMAL HISTORY OF PLANETARY MATERIALS: THEORY, EXPERIMENTS &
 APPLICATIONS
 03/05/2001 - 04/30/2004 FY02: \$70,000 Total: \$140,000
Prin. Invest.: J GANGULY
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10543 **UNIV OF ARIZONA** **1509**
 SOUTHERN HEMISPHERE NEO SURVEY INSTRUMENTATION
 03/14/2001 - 03/14/2003 FY02: \$0 Total: \$500,000
Prin. Invest.: S LARSON
Tech. Officer: GSFC/T MORGAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10592 **UNIV OF ARIZONA** **1510**
 IMPACTS & ENVIRONMENTAL CATASTROPHES: A STUDY OF THE EFFECTS
 OF IMPACT EVENTS ON THE CLIMATE SYST
 03/21/2001 - 03/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: E PIERAZZO
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10629 **UNIV OF ARIZONA** **1511**
 THE CLASSIFICATION AND DETECTABILITY OF SUBSTELLAR- MASS OB-
 JECTS
 03/17/2001 - 03/31/2003 FY02: \$45,000 Total: \$90,000
Prin. Invest.: A BURROWS
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10643 **UNIV OF ARIZONA** **1512**
 CODES & DECODERS FOR BANDWIDTH-EFFICIENT COMMUNICA TIONS IN
 NEAR-EARTH MISSIONS.
 03/21/2001 - 03/31/2003 FY02: \$0 Total: \$87,273
Prin. Invest.: W RYAN
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10660 **UNIV OF ARIZONA** **1513**
 IMPROVED MARS UPPER ATMOSPHERE CLIMATOLOGY
 03/21/2001 - 03/31/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: S BOUGHER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10700 **UNIV OF ARIZONA** **1514**
 TEMPERATURE, GRAVITY AND COMPOSITION OF DAO WHITE DWARFS -
 FUSE 2000
 04/13/2001 - 10/14/2002 FY02: \$0 Total: \$18,300
Prin. Invest.: J B HOLBERG
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10734 **UNIV OF ARIZONA** **1515**
 INCORPORATION OF NOBLE GASES INTO ANALOGS FOR INTERSTELLAR
 CARBONACEOUS AND METALLIC MATERIALS
 04/18/2001 - 04/30/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: T SWINDLE
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10749 **UNIV OF ARIZONA** **1516**
 CAPTURING PLANETARY SCIENCE DATA FROM NASA SUPPORT ED RE-
 SEARCH
 04/13/2001 - 04/14/2004 FY02: \$113,981 Total: \$239,981
Prin. Invest.: M V SYKES
Tech. Officer: GSFC/P E HUNTER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10760 **UNIV OF ARIZONA** **1517**
 THEORY OF BROWN DWARFS & GIANT PLANETS (ATP-2000)
 04/23/2001 - 04/30/2004 FY02: \$130,000 Total: \$210,000
Prin. Invest.: A S BURROWS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10827 **UNIV OF ARIZONA** **1518**
 THE SMALL SCALE STRUCTURE OF THE UNIVERSE (ATP 2000)
 05/01/2001 - 05/14/2004 FY02: \$98,384 Total: \$186,628
Prin. Invest.: M STEINMETZ
Tech. Officer: GSFC/R OLIVERSON
CASE Category: 11 – ASTRONOMY

NAG 5 10843 **UNIV OF ARIZONA** **1519**
 RECALIBRATION OF THE NEAR INFRARED CAMERA & MULTI- OBJECT
 SPECTROMETER (NICMOS) & ANALYSIS OF
 05/04/2001 - 06/14/2004 FY02: \$566,000 Total: \$1,693,294
Prin. Invest.: R THOMPSON
Tech. Officer: GSFC/J JELETIC
CASE Category: 11 – ASTRONOMY

NAG 5 10853 **UNIV OF ARIZONA** **1520**
 OPERATION & OPTIMIZATION OF THE CATALINA SKY SURVEY FOR NEOS
 05/02/2001 - 04/30/2004 FY02: \$460,600 Total: \$917,100
Prin. Invest.: S LARSEN
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10884 **UNIV OF ARIZONA** **1521**
 ENERGETIC PARTICLES AND THE EARTH'S ENVIRONMENT IN SPACE
 05/03/2001 - 04/30/2004 FY02: \$100,508 Total: \$196,959
Prin. Invest.: J KOTA
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10893 **UNIV OF ARIZONA** **1522**
 MODELING SUPPORT FOR SEC OBSERVATIONS
 05/10/2001 - 05/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: J JOKIPII
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10961 **UNIV OF ARIZONA** **1523**
 INSTRUMENT UPGRADE: OFFNER SPECTROMETER VISIBLE UPGRADE &
 EXTENSION DESIGN TO 2.5 MICR
 05/23/2001 - 06/30/2003 FY02: \$0 Total: \$74,200
Prin. Invest.: U FINK
Tech. Officer: GSFC/T MORGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10974 **UNIV OF ARIZONA** **1524**
 WAVES, TURBULENCE AND ENERGETIC PARTICLES IN THE HELIOSPHERE
 05/29/2001 - 05/31/2004 FY02: \$75,489 Total: \$153,055
Prin. Invest.: G M WEBB
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10990 **UNIV OF ARIZONA** **1525**
 THEORY OF ENERGETIC PARTICLE TRANSPORT IN HELIO- SPHERIC &
 SOLAR PLASMAS
 06/05/2001 - 06/14/2004 FY02: \$75,000 Total: \$150,000
Prin. Invest.: J R JOKIPII
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11044 **UNIV OF ARIZONA** **1526**
 MONITORING & PREDICTION OF WATER DISTRIBUTION/ AVAILABILITY IN
 SEMI-ARID REGIONS
 07/05/2001 - 06/14/2004 FY02: \$175,390 Total: \$700,390
Prin. Invest.: S SOROOSHIAN
Tech. Officer: GSFC/M JASINSKI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11108 **UNIV OF ARIZONA** **1527**
 CONSTRAINING THE DARK MATTER HALOS OF GIANT ELLIPTICAL GALAX-
 IES
 07/13/2001 - 08/31/2006 FY02: \$0 Total: \$99,861
Prin. Invest.: A I ZABLUDOFF
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11153 **UNIV OF ARIZONA** **1528**
 STUDIES OF COSMOGONIC PROCESSES
 08/02/2001 - 07/31/2004 FY02: \$25,000 Total: \$50,000
Prin. Invest.: A CAMERON
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11163 **UNIV OF ARIZONA** **1529**
 ASSIMILATION OF GPS METEOROLOGICAL DATA INTO WEATHER AND
 CLIMATE ANALYSES.
 08/07/2001 - 08/14/2002 FY02: \$0 Total: \$33,801
Prin. Invest.: E KURINSKI
Tech. Officer: GSFC/J JOINER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11166 **UNIV OF ARIZONA** **1530**
 INTER-CALIBRATION AND UTILIZATION OF GROUND-BASED AND TES DATA
 TO STUDY MARTIAN WATER VAPOR
 08/07/2001 - 08/14/2003 FY02: \$59,377 Total: \$126,877
Prin. Invest.: A L SPRAGUE
Tech. Officer: GSFC/J M BOYCE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11168 **UNIV OF ARIZONA** **1531**
 PALEOMAGNETIC INVESTIGATION OF POLAR REORIENTATION ON MARS
 08/07/2001 - 08/14/2004 FY02: \$48,728 Total: \$97,456
Prin. Invest.: L L HOOD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11169 **UNIV OF ARIZONA** **1532**
 MONITORING THE GEOLOGICAL ACTIVITY OF MARS
 08/07/2001 - 08/14/2004 FY02: \$55,000 Total: \$109,000
Prin. Invest.: P E GEISSLER
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11183 **UNIV OF ARIZONA** **1533**
 MGS RADIO SCIENCE ELECTRON DENSITY PROFILES AND IMPLICATIONS
 FOR THE NEUTRAL ATMOSPHERE
 08/13/2001 - 08/14/2002 FY02: -\$9,500 Total: \$35,500
Prin. Invest.: S W BOUGHER
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11188 **UNIV OF ARIZONA** **1534**
 RETRIEVAL OF CLOUD PRESSURE FROM OMI MEASUREMENTS USING
 ROTATIONAL RAMAN SCATTERING
 08/07/2001 - 08/14/2003 FY02: \$0 Total: \$29,000
Prin. Invest.: D FLITTNER
Tech. Officer: GSFC/J JOINER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11195 **UNIV OF ARIZONA** **1535**
 COOPERATIVE CENTER FOR ATMOSPHERIC SCIENCE AND TECHNOLOGY
 08/30/2001 - 09/30/2004 FY02: \$93,960 Total: \$185,183
Prin. Invest.: R LOUGHMAN
Tech. Officer: GSFC/W HOEGY
CASE Category: 31 – ATMOSPHERIC SCIENCE

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 5 11316 **UNIV OF ARIZONA** **1536**
 USE OF AIRBORNE REMOTE SENSING FOR UNCERTAINTY ASSESSMENTS
 IN REGIONAL EXTRAPOLATIONS OF GROUND
 09/17/2001 - 12/14/2001 FY02: -\$87,368 Total: \$0
Prin. Invest.: A R HUETE
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11339 **UNIV OF ARIZONA** **1537**
 LANDSAT RADIOMETRIC CALIBRATION: TOWARDS A 20 YEAR RECORD OF
 CALIBRATED THEMATIC MAPPER CLASS DATA
 09/14/2001 - 09/14/2004 FY02: \$34,500 Total: \$149,499
Prin. Invest.: K THOME
Tech. Officer: GSFC/B L MARKHAM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11348 **UNIV OF ARIZONA** **1538**
 STEWARD OBSERVATORY'S GSFC GCN/SUPERLOTIS PROJECT COLLABO-
 RATION
 09/26/2001 - 07/31/2004 FY02: \$23,498 Total: \$46,561
Prin. Invest.: B PETERSON
Tech. Officer: GSFC/S D BARTHELOMY
CASE Category: 11 – ASTRONOMY

NAG 5 11355 **UNIV OF ARIZONA** **1539**
 ASU/MICHIGAN COLLABORATION: THE ABUNDANCE & ISOTOPIC COMPO-
 SITION OF HG IN EXTRATERRESTRIALMATERIA
 09/21/2001 - 02/28/2004 FY02: \$20,000 Total: \$36,842
Prin. Invest.: D LAURETTA
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11381 **UNIV OF ARIZONA** **1540**
 ESTIMATING GLOBAL RAINFALL AND STUDYING PRECIPITATION DIURNAL
 CYCLE USING THE COMBINATIONS OF TRMM
 10/30/2001 - 12/31/2003 FY02: \$82,985 Total: \$82,985
Prin. Invest.: S SOROOSHIAN
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11433 **UNIV OF ARIZONA** **1541**
 LARGE FORMAT FAR-INFRARED DETECTOR ARRAYS
 12/05/2001 - 04/30/2005 FY02: \$190,000 Total: \$190,000
Prin. Invest.: E T YOUNG
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11461 **UNIV OF ARIZONA** **1542**
 SUPPORT RESEARCH AND SCIENCE REQUIREMENTS AND CAPABILITIES
 AND THE INSTRUMENT FUNCTIONS NEEDED
 12/07/2001 - 12/14/2002 FY02: \$7,306 Total: \$7,306
Prin. Invest.: D H REIKE
Tech. Officer: GSFC/D C MATHER
CASE Category: 11 – ASTRONOMY

NAG 5 11471 **UNIV OF ARIZONA** **1543**
 SUB-MILLIMETER SPECTROSCOPY OF ASTROPHYSICALLY IMPORTANT
 METAL-CONTAINING MOLECULES
 12/14/2001 - 12/31/2002 FY02: \$40,000 Total: \$40,000
Prin. Invest.: L M ZIURYS
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11493 **UNIV OF ARIZONA** **1544**
 IMPACT CRATERING AND THE EVOLUTION OF THE TERRESTRIAL PLANETS
 12/27/2001 - 12/31/2004 FY02: \$152,300 Total: \$152,300
Prin. Invest.: H J MELOSH
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11497 **UNIV OF ARIZONA** **1545**
 COLLISIONAL AND DYNAMICAL PROCESSES OF PLANETARY EVOLUTION
 12/28/2001 - 12/31/2004 FY02: \$87,500 Total: \$87,500
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11565 **UNIV OF ARIZONA** **1546**
 GAS-GRAIN INTERACTIONS
 02/08/2002 - 02/14/2005 FY02: \$38,000 Total: \$38,000
Prin. Invest.: L L HOOD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11596 **UNIV OF ARIZONA** **1547**
 SOHO'S OBSERVATION OF HELIOSPHERIC ENERGETIC NEUTRAL ATOMS.
 NEW SEC GRANT.
 01/17/2002 - 01/31/2003 FY02: \$72,664 Total: \$72,664
Prin. Invest.: K HSIEH
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11661 **UNIV OF ARIZONA** **1548**
 DYNAMICAL PROCESSES IN THE EARLY SOLAR SYSTEM
 02/07/2002 - 02/14/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: R MALHOTRA
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11745 **UNIV OF ARIZONA** **1549**
 MINERALOGIC AND TRACE-ELEMENT STUDIES OF METEORITES
 02/20/2002 - 02/28/2003 FY02: \$104,207 Total: \$104,207
Prin. Invest.: W BOYNTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11828 **UNIV OF ARIZONA** **1550**
 SPACEWATCH SURVEY AND STUDY OF HAZARDOUS ASTEROIDS AND
 COMETS
 03/06/2002 - 03/14/2003 FY02: \$574,095 Total: \$574,095
Prin. Invest.: R S MCMILLAN
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11838 **UNIV OF ARIZONA** **1551**
 FUNDING FOR "POWER AND BANDWIDTH-EFFICIENT COMMUNICATIONS IN
 NEAR-EARTH MISSIONS VIA MULTILEVEL LDP
 03/07/2002 - 03/14/2003 FY02: \$65,000 Total: \$65,000
Prin. Invest.: W RYAN
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11957 **UNIV OF ARIZONA** **1552**
 MODELS AND MODES OF ENABLING THE USE OF NASA EARTH SCIENCE
 AND DATA IN DECISION MAKING
 04/02/2002 - 03/31/2003 FY02: \$200,000 Total: \$200,000
Prin. Invest.: S E MARSH
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11968 **UNIV OF ARIZONA** **1553**
 A FUSE DETERMINATION OF THE GRAVITATIONAL REDSHIFT AND SPEC-
 TROSCOPIC MASS OF SIRIUS B
 04/03/2002 - 04/14/2003 FY02: \$39,500 Total: \$39,500
Prin. Invest.: J B HOLBERG
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11979 **UNIV OF ARIZONA** **1554**
 COSMOGENIC ¹⁴C AND ¹⁰BE IN METEORITES AND LUNAR SA MPLES
 04/08/2002 - 05/31/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: A JULL
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12014 **UNIV OF ARIZONA** **1555**
 MODELING THE ATMOSPHERES OF URANUS AND SATURN
 04/22/2002 - 04/30/2005 FY02: \$89,756 Total: \$89,756
Prin. Invest.: K KARKOSCHKA
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12059 **UNIV OF ARIZONA** **1556**
 NOBLE GAS STUDIES OF EARLY SOLAR SYSTEM HISTORY
 04/19/2002 - 05/31/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: T SWINDLE
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12086 **UNIV OF ARIZONA** **1557**
 FIRST NULLING & SIMULTANEOUS DIFFERENTIAL IMAGING SURVEY FOR
 MASSIVE PLANETS
 04/30/2002 - 04/30/2005 FY02: \$74,000 Total: \$74,000
Prin. Invest.: L CLOSE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12152 **UNIV OF ARIZONA** **1558**
 SUPPORT OF ACTIVITIES AND OPERATION OF THE GLOBAL ENERGY AND
 WATER CYCLE EXPERIMENT SCIENCE STEERING
 05/13/2002 - 05/14/2005 FY02: \$210,649 Total: \$210,649
Prin. Invest.: S SOROOSHIAN
Tech. Officer: GSFC/J KAYE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12272 **UNIV OF ARIZONA** **1559**
 SPECTROSCOPIC INVESTIGATIONS OF TITAN'S ATMOSPHERE AND SUR-
 FACE
 06/27/2002 - 08/31/2004 FY02: \$70,600 Total: \$70,600
Prin. Invest.: C GRIFFITH
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12318 **UNIV OF ARIZONA** **1560**
 MID INFRARED INSTRUMENT (MIRI) PRINCIPAL INVESTIGATOR FOR THE
 NEXT GENERATION SPACE TELESCOPE
 07/08/2002 - 07/31/2003 FY02: \$157,774 Total: \$157,774
Prin. Invest.: G RIEKE
Tech. Officer: GSFC/M GREENHOUSE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12433 **UNIV OF ARIZONA** **1561**
 OBSERVATIONAL AND MECHANISTIC MODEL STUDIES OF THE QUASI-
 DECADAL OSCILLATION
 08/01/2002 - 07/31/2005 FY02: \$45,844 Total: \$45,844
Prin. Invest.: L L HOOD
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12459 **UNIV OF ARIZONA** **1562**
 INTERDISCIPLINARY SCIENTIST INVESTIGATIONS IN ASTRONOMY FOR
 NEXT GENERATION SPACE TELESCOPE
 09/09/2002 - 09/14/2013 FY02: \$26,476 Total: \$26,476
Prin. Invest.: J I LUNINE
Tech. Officer: GSFC/M GREENHOUSE
CASE Category: 11 – ASTRONOMY

NAG 5 12461 **UNIV OF ARIZONA** **1563**
 SIGNAL APPLICATION, CALIBRATION AND CORRECTION ALGORITHMS FOR
 THE GLAS ATMOSPHERIC CHANNEL
 08/13/2002 - 08/14/2005 FY02: \$75,000 Total: \$75,000
Prin. Invest.: D A REAGAN
Tech. Officer: GSFC/J D SPINHIRNE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12471 **UNIV OF ARIZONA** **1564**
 ANALYSIS OF THE CRUSTAL MAGNETIC FIELD OF MARS
 08/15/2002 - 08/14/2003 FY02: \$35,000 Total: \$35,000
Prin. Invest.: L L HOOD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12484 **UNIV OF ARIZONA** **1565**
 ASSIMILATION OF NASA SCIENCE RESULTS AND DATA INTO NATIONAL
 DECISION SUPPORT SYSTEMS
 08/26/2002 - 08/31/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: C F HUTCHINSON
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12619 **UNIV OF ARIZONA** **1566**
 IMPACT RECORDS ON ASTEROIDS: INTEGRATIVE EVALUATION OF THE
 BOMBARDING POPULATION, COLLISIONAL PROC
 09/26/2002 - 09/30/2005 FY02: \$72,855 Total: \$72,855
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1469 **UNIV OF ARIZONA** **1567**
 DEVELOPMENT OF SUPERIOR MATERIALS FOR LAYERED SOLID OXIDE
 ELECTROLYZERS BASED ON MECHANICAL
 04/17/1998 - 01/31/2003 FY02: \$12,500 Total: \$281,250
Prin. Invest.: J R SRIDHAR
Tech. Officer: MSFC/P M DOTY
CASE Category: 46 – MECHANICAL ENGR

ARIZONA

NASA'S UNIVERSITY PROGRAM

NAG 8 1520 **UNIV OF ARIZONA** **1568**
 QUANTIFYING THE EFFECTS OF SUB-GRID TOPOGRAPHY & VEGETATION
 ON SEASONAL SNOW COVER, RELATED SNOWMLT
 05/29/1998 - 03/31/2002 FY02: \$0 Total: \$347,829
Prin. Invest.: Z YANG, R BALES, R E DICKINSON
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1523 **UNIV OF ARIZONA** **1569**
 IMPROVING GCM MODELING THRU HYDROLOGICALLY REAL-ISTIC SUB-
 GRID REPRESENTATION OF LAND-ATMOSPHERE
 05/26/1998 - 05/31/2001 FY02: \$0 Total: \$519,764
Prin. Invest.: S SOROOSHIAN, H GUPTA, X GAO
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1531 **UNIV OF ARIZONA** **1570**
 INFLUENCE OF SUBGRID SCALE HETEROGENEITY ON REMOTELY SENSED
 SURFACE TEMPERATURES
 06/01/1998 - 12/31/2001 FY02: -\$977 Total: \$599,023
Prin. Invest.: W J SHUTTLEWORTH, J J TOTH
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1654 **UNIV OF ARIZONA** **1571**
 MARS ATMOSPHERE AND DUST IN OPTICAL AND RADIO (MATADOR)
 01/19/2000 - 09/30/2002 FY02: \$0 Total: \$328,175
Prin. Invest.: P H SMITH
Tech. Officer: MSFC/C A DARBY
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 8 1667 **UNIV OF ARIZONA** **1572**
 GROWTH OF ROD EUTECTICS
 05/24/2000 - 11/30/2003 FY02: \$90,000 Total: \$215,500
Prin. Invest.: K J JACKSON
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1754 **UNIV OF ARIZONA** **1573**
 A PHYSICALLY BASED INVESTIGATION OF TROPICAL CONVECTIVE RE-
 GIMES
 01/23/2001 - 01/29/2004 FY02: \$25,000 Total: \$75,000
Prin. Invest.: D J BOCCIPPIO
Tech. Officer: MSFC/J D ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1775 **UNIV OF ARIZONA** **1574**
 ATOM OPTICS IN CONTROLLED AND MICROGRAVITY ENVIRIO NMNETS
 04/24/2001 - 04/30/2005 FY02: \$85,000 Total: \$165,000
Prin. Invest.: P MEYSTRE
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 923 **UNIV OF ARIZONA** **1575**
 POLYCRYSTALLINE ZIRCONIA ELEC CELL STACK FOR CO2 ELECTROLYSIS
 01/29/1997 - 05/31/2002 FY02: \$0 Total: \$380,749
Prin. Invest.: K R SRIDHAR
Tech. Officer: JSC/R S BAIRD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1175 **UNIV OF ARIZONA** **1576**
 SIMULTANEOUS PRODUCTION OF OXYGEN AND METHANE USING ZIRCO-
 NIA ELECTROLYSIS
 11/03/1999 - 11/09/2001 FY02: -\$9,903 Total: \$79,966
Prin. Invest.: K R SRIDHAR
Tech. Officer: JSC/R S BAIRD
CASE Category: 43 – CHEMICAL ENGR

NAG 9 1212 **UNIV OF ARIZONA** **1577**
 ULTRA HIGH SPATIAL RESOLUTION HARD X-RAY DETECTORS
 06/30/2000 - 06/30/2003 FY02: \$149,944 Total: \$249,863
Prin. Invest.: H B
Tech. Officer: JSC/L C SHACKELFORD
CASE Category: 13 – PHYSICS

NAG 9 1229 **UNIV OF ARIZONA** **1578**
 DEFINITION PHASE STUDY REPORT FOR END TO END ISRU MARS FLIGHT
 EXPERIMENT
 05/10/2000 - 02/09/2001 FY02: \$0 Total: \$850,000
Prin. Invest.: K R SRIDHAR
Tech. Officer: JSC/J CONNOLLY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1307 **UNIV OF ARIZONA** **1579**
 SCANNING CHEMICAL MICROSCOPY USING SURFACE ENHANCE D RAMAN
 SCATTERING
 05/23/2001 - 02/28/2003 FY02: \$148,000 Total: \$370,000
Prin. Invest.: D SARID
Tech. Officer: JSC/D MCKAY
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1378 **UNIV OF ARIZONA** **1580**
 TESTING OF COMPACT & ROBUST HIGH INTENSITY WATER JACKETED
 PLANT LIGHTING SYSTEM
 08/24/2001 - 07/31/2004 FY02: \$10,550 Total: \$21,100
Prin. Invest.: G GIACOMELLI
Tech. Officer: JSC/D BARTA
CASE Category: 55 – AGRICULTURE

NAG10 255 **UNIV OF ARIZONA** **1581**
 RESEARCH HYBRID SOLAR AND ARTIFICIAL LIGHTING FOR SPACE LIFE
 SUPPORT
 03/17/1999 - 03/15/2002 FY02: -\$3,087 Total: \$208,944
Prin. Invest.: J L CUELLO
Tech. Officer: KSC/R WHEELER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG10 286 **UNIV OF ARIZONA** **1582**
 STUDIES OF ATMOSPHERIC ELECTRICITY AT THE KENNEDY SPACE CEN-
 TER AND EASTERN RANGE
 06/05/2000 - 09/15/2002 FY02: \$9,000 Total: \$231,638
Prin. Invest.: E KRIDER
Tech. Officer: KSC/J MADURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG10 302 **UNIV OF ARIZONA** **1583**
 SAFELY REDUCE THE IMPACT OF LIGHTNING ON GROUND PROCESSING,
 LAUNCH, FLIGHT AND LANDING ON OPERATION
 06/22/2001 - 06/30/2006 FY02: \$74,022 Total: \$137,022
Prin. Invest.: E KRIDER
Tech. Officer: KSC/J MADURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NASA'S UNIVERSITY PROGRAM

ARIZONA

NAG13 02001 **UNIV OF ARIZONA** **1584**
 REMOTE SENSING TOOLS FOR MONITORING AND MANAGING A SENSITIVE,
 ARID-ZONE RIPARIAN CORRIDOR: THE LOW
 11/26/2001 - 09/23/2004 FY02: \$410,677 Total: \$410,677
Prin. Invest.: E P GLENN
Tech. Officer: SSC/C DEL CASTILLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02004 **UNIV OF ARIZONA** **1585**
 ESTABLISHING A BASIS FOR CARBON MANAGEMENT POLICY AT THE STATE
 LEVEL: CARBON DYNAMICS AT SITE, LANDS
 12/10/2001 - 09/16/2004 FY02: \$504,200 Total: \$504,200
Prin. Invest.: C F HUTCHINSON
Tech. Officer: SSC/R HARRIS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02044 **UNIV OF ARIZONA** **1586**
 RADIOMETRIC AND SPATIAL CHARACTERIZATION OF HIGH-S PATIAL RESO-
 LUTION SENSORS
 08/09/2002 - 05/31/2003 FY02: \$109,659 Total: \$109,659
Prin. Invest.: K THOME
Tech. Officer: SSC/N ZANONI
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG13 99005 **UNIV OF ARIZONA** **1587**
 NASA SOUTHWEST EARTH SCIENCE APPLICATIONS CENTER SAME
 02/19/1999 - 08/31/2002 FY02: \$0 Total: \$1,499,981
Prin. Invest.: R DAVIS
Tech. Officer: SSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 1 18939 **UNIV OF ARIZONA** **1588**
 SAGE III SCIENCE INVESTIGATION SUPPORT - P.I. - B. HERMAN
 02/28/1990 - 01/31/2005 FY02: \$80,000 Total: \$1,154,500
Prin. Invest.: B M HERMAN
Tech. Officer: LARC/G L MADDREA JR, LARC/L R MCMASTER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99055 **UNIV OF ARIZONA** **1589**
 ACTIVE TROPOSPHERIC OZONE AND MOISTURE SOUNDER (ATOMS)
 04/21/1999 - 09/30/2002 FY02: \$0 Total: \$462,641
Prin. Invest.: B M HERMAN
Tech. Officer: LARC/J R HILL, LARC/F PERI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99102 **UNIV OF ARIZONA** **1590**
 PICASSO-CENA SCIENCE TEAM SUPPORT FOR AERSOL AND CLOUD
 STUDIES
 05/17/1999 - 05/16/2003 FY02: \$45,800 Total: \$303,102
Prin. Invest.: J A REAGAN
Tech. Officer: LARC/G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 2 00117 **UNIV OF ARIZONA** **1591**
 RESEARCH PROJECT-DEVEL AND TEST ULTRA HIGH DENSITY FAST READ-
 OUT OPTICAL STORAGE
 10/31/2000 - 10/31/2003 FY02: \$172,801 Total: \$833,635
Prin. Invest.: T MILSTER, F AKHAVAN
Tech. Officer: ARC/S LAU, ARC/R CARVALLHO
CASE Category: 22 – COMPUTER SCIENCE

NAS 5 00197 **UNIV OF ARIZONA** **1592**
 R & D TO SUPPORT GSFC'S SIMBIOS PROJECT ORIGINAL POP 11/30/01
 12/21/2000 - 01/31/2002 FY02: \$0 Total: \$137,909
Prin. Invest.: J ZALEWSKI
Tech. Officer: GSFC/C R MCCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 02105 **UNIV OF ARIZONA** **1593**
 NGST NIR CAM - PHASE A
 07/17/2002 - 02/01/2003 FY02: \$1,830,865 Total: \$1,830,865
Prin. Invest.: M RIEKE
Tech. Officer: GSFC/R CSMITH
CASE Category: 11 – ASTRONOMY

NAS 5 31364 **UNIV OF ARIZONA** **1594**
 EOS/MODIS INVESTIGATION FROM DR. HUETE
 01/24/1992 - 06/14/2003 FY02: \$437,000 Total: \$4,380,109
Prin. Invest.: A HUETE
Tech. Officer: GSFC/H OSEROFF
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 31717 **UNIV OF ARIZONA** **1595**
 EOS INVESTIGATION
 01/03/1992 - 06/14/2003 FY02: \$743,067 Total: \$9,200,201
Prin. Invest.: P N SLATER
Tech. Officer: GSFC/L STUART
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 8 97309 **UNIV OF ARIZONA** **1596**
 FABRICATION, TEST, AND DELIVERY OF PRIMARY MIRROR SYSTEM DEM-
 ONSTRATOR.
 07/17/1997 - 12/20/2002 FY02: \$0 Total: \$6,462,490
Prin. Invest.: J H BURGE
Tech. Officer: MSFC/D JACOBSON
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1342 **UNIV OF ARIZONA** **1597**
 INTERPLANETARY TRANSFER OF ENDOLITHIC BACTERIA IN IMPACT
 EJECTA
 05/23/2002 - 05/31/2003 FY02: \$69,903 Total: \$69,903
Prin. Invest.: W NICHOLSON, P FAJARDO-CAVAZOS, H JMELOSH
Tech. Officer: ARC/M FONDA, ARC/D DEVINCENZI
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5357 **UNIV OF ARIZONA** **1598**
 ISRU TECHNOLOGIES FOR MARS LIFE SUPPORT
 09/29/1999 - 09/30/2002 FY02: \$15,711 Total: \$118,760
Prin. Invest.: K R SRIDHAR
Tech. Officer: ARC/J E FINN
CASE Category: 46 – MECHANICAL ENGR

NCC 2 5375 **UNIV OF ARIZONA** **1599**
 DEVELOPMENT OF A SYSTEM FOR QUANTIFYING IN VIVO BO NE STRAINS
 IN RODENTS IN NORMAL AND ALTERED GRAVI
 03/31/2000 - 03/31/2001 FY02: -\$2 Total: \$10,206
Prin. Invest.: J SZIVEK
Tech. Officer: ARC/J SCHONFELD
CASE Category: 56 – MEDICL

NCC 2 5385 **UNIV OF ARIZONA** **1600**
 SOLID STATE SENSORS FOR AEROASSIST TECHNOLOGY APPLICATIONS
 06/01/2000 - 09/30/2002 FY02: \$0 Total: \$73,300
Prin. Invest.: K R SRIDHAR
Tech. Officer: ARC/G A RAICHE, ARC/P F WERCINSKI
CASE Category: 41 – AERONAUTICAL ENGR

ARIZONA

NASA'S UNIVERSITY PROGRAM

NCC 2 5477 **UNIV OF ARIZONA** **1601**
 FINDING THE TRUE COLOR OF MARTIAN ROCKS
 01/29/2002 - 01/14/2003 FY02: \$9,000 Total: \$9,000
Prin. Invest.: P H SMITH
Tech. Officer: ARC/C STOKER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 5487 **UNIV OF ARIZONA** **1602**
 FEASIBILITY STUDY FOR QUICK COLLING OF BIOLOGICAL SAMPLES ON A NANOSATELLITE
 03/19/2002 - 07/14/2003 FY02: \$49,914 Total: \$49,914
Prin. Invest.: K R SRIDHAR
Tech. Officer: ARC/R D MACELROY, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5518 **UNIV OF ARIZONA** **1603**
 TIDAL DISSIPATION IN THE GIANT PLANETS
 08/21/2002 - 08/14/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: A SHOWMAN
Tech. Officer: ARC/R E YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 991 **UNIV OF ARIZONA** **1604**
 OPTIMAL PLACING OF ROUGHNESS ELEMENTS FOR SEPARATI ON DELAY IN LPT AIRFOILS
 07/31/2002 - 09/20/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: A TUMIN
Tech. Officer: GRC/D E ASHPIS
CASE Category: 41 – AERONAUTICAL ENGNR

NCC 5 355 **UNIV OF ARIZONA** **1605**
 PROPOSAL FOR GRADUATE STUDENT SUPPORT UNDER CCAST. NOW INCLUDES ADDITIONAL SUPP
 08/04/1998 - 09/30/2001 FY02: \$0 Total: \$539,798
Prin. Invest.: B M HERMAN
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 460 **UNIV OF ARIZONA** **1606**
 RADIOMETRIC CALIBRATION, SPATIAL CHARACTERIZATION, AND SPECTRAL EVALUATION OF THE ADVANCED LAND IMAG
 03/03/2000 - 12/31/2002 FY02: \$174,261 Total: \$590,266
Prin. Invest.: S F BIGGAR
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 478 **UNIV OF ARIZONA** **1607**
 INTER-SENSOR CALIBRATION OF VEGETATION INDICES FOR MONITORING AND CONTINUITY STUDIES
 03/22/2000 - 09/30/2003 FY02: \$108,805 Total: \$394,429
Prin. Invest.: A R HUETE
Tech. Officer: GSFC/S G UNGER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 603 **UNIV OF ARIZONA** **1608**
 USE OF AIRBORNE REMOTE SENSING FOR UNCERTAINTY ASS ESSMENTS IN REGIONAL EXTRAPOLATIONS OF GROUND LB
 12/06/2001 - 09/14/2004 FY02: \$209,683 Total: \$209,683
Prin. Invest.: A R HUETE
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 96 **UNIV OF ARIZONA** **1609**
 COMPARISON OF STRUCTURE AND SEGREGATION IN ALLOYS
 06/07/1996 - 05/30/2003 FY02: \$119,000 Total: \$962,943
Prin. Invest.: D R POIRIER
Tech. Officer: MSFC/M HUBBARD
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 160 **UNIV OF ARIZONA** **1610**
 REMOTE SENSING INVESTIGATION OF THE ANCIENT MAYA LANDSCAPE
 12/08/1998 - 12/07/2001 FY02: \$0 Total: \$234,787
Prin. Invest.: T P CULBERT
Tech. Officer: MSFC/T SEVER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 1 52176 **UNIV OF ARIZONA** **1611**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 08/25/1997 - 07/31/2001 FY02: -\$118 Total: \$87,882
Prin. Invest.: J A REAGAN, M A RUBIE
Tech. Officer: LARC/C A HOSTETLER, LARC/D M WINKER
CASE Category: 49 – ENGINEERING, OTHER

NGT 1 52206 **UNIV OF ARIZONA** **1612**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 09/14/1998 - 02/28/2002 FY02: -\$100 Total: \$75,067
Prin. Invest.: H F FASEL, H F FASEL
Tech. Officer: LARC/B A SINGER, LARC/B A SINGER
CASE Category: 41 – AERONAUTICAL ENGNR

NGT 2 52268 **UNIV OF ARIZONA** **1613**
 ISRU TECHNOLOGIES FOR HUMAN MARS EXPLORATION
 08/10/2000 - 07/31/2003 FY02: \$23,980 Total: \$67,980
Prin. Invest.: K R SRIDHAR
Tech. Officer: ARC/J E FINN, ARC/M H KLISS
CASE Category: 41 – AERONAUTICAL ENGNR

NGT 5 111 **UNIV OF ARIZONA** **1614**
 MINIATURE DOPPLER AEROSOL BACKSCATTER LIDAR FOR DETECTION OF ATMOSPHERIC WINDS/STUDENT: JEREMY DOB
 07/07/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J A REAGAN
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 13 – PHYSICS

NGT 5 114 **UNIV OF ARIZONA** **1615**
 CATASTROPHIC FLOODING ON ICELAND AND MARS (STUDENT : DEVON BURR)
 05/31/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A S MCEWEN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 5 30140 **UNIV OF ARIZONA** **1616**
 ECOSYSTEM DEGRADATION AND HOUSEHOLD VULNERABILITY IN THE SEMI ARID REGION OF CHILE
 08/27/1998 - 12/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C HUTCHINSON
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30148 **UNIV OF ARIZONA** **1617**
 SYNTHETIC LAHAR HAZARD MODELING USING ORBITAL DEM DATA/NASA
 EARTH SCI. SYSTEM_PROGRAM/STUDENT: KLI
 08/28/1998 - 03/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C E GLASS
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30386 **UNIV OF ARIZONA** **1618**
 SEASONAL ACCUMULATION & NITROGEN DEPOSITION MAPPING ON THE
 GREENLAND ICESHEET/JOHNNY BURKHART
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R C BALES
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40082 **UNIV OF ARIZONA** **1619**
 ARIZONA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$475,000 Total: \$1,124,132
Prin. Invest.: M J DRAKE
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50190 **UNIV OF ARIZONA** **1620**
 THEORETICAL & OBSERVATIONAL STUDY OF ORIGIN & EVOLUTION OF
 PLANETS & PLANETARY SYSTEMS
 06/05/1998 - 08/14/2001 FY02: -\$301 Total: \$21,699
Prin. Invest.: R H BROWN
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 5 50243 **UNIV OF ARIZONA** **1621**
 PHYSICAL STUDIES OF NEA & TNO OBJECTS USING SPECTROPHOTOM-
 ETRY STUDENT: RONALD FEVIG
 06/02/1999 - 06/30/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: U FINK
Tech. Officer: GSFC/K HOLLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50246 **UNIV OF ARIZONA** **1622**
 DEVELOPMENT OF LASER MICROMACHINED COMPONENTS FOR SUBMIL-
 LIMETER HETERODYNE RECEIVERS_(STUDENT CHRIS
 06/02/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C WALKER
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50282 **UNIV OF ARIZONA** **1623**
 SUBMILLIMETER LABORATORY AND OBSERVATIONAL STUDIES OF MO-
 LECULAR ION CHEMISTRY IN PHOTON-DOMINATE
 06/20/2000 - 07/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: L ZIURYS
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50283 **UNIV OF ARIZONA** **1624**
 THE EVOLUTION OF GALAXIES IN $0.54 < Z < 1.2$ CLUSTERS
 06/22/2000 - 07/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D MCCARTHY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50289 **UNIV OF ARIZONA** **1625**
 THE COLLISIONAL EVOLUTION OF THE ASTEROID BELT: RECONCILING
 CONTRADICTORY EVIDENCE-STUDENT DOBRIE
 06/26/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50300 **UNIV OF ARIZONA** **1626**
 NEUTRINO PROCESSES & R-PROCESS NUCLEOSYNTHESIS IN PROTO-
 NEUTRON STAR WINDS/ STUDENT: TODD THOMPSON
 06/28/2000 - 06/30/2003 FY02: \$4,000 Total: \$48,000
Prin. Invest.: A BURROWS
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50303 **UNIV OF ARIZONA** **1627**
 THE EFFECTS OF MICROGRAVITY ON THE DEVELOPMENT OF THE IMMUNE
 SYSTEM/STUDENT: CHRIS C. WOODS
 07/06/2000 - 06/30/2003 FY02: \$23,700 Total: \$65,448
Prin. Invest.: D DELUCA
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50394 **UNIV OF ARIZONA** **1628**
 A UNIQUE DIRECT-DETECTION SURVEY FOR MASSIVE EXTRA-SOLAR
 PLANETS/STUDENT: MELANIE FREED
 05/31/2002 - 07/31/2005 FY02: \$23,790 Total: \$23,790
Prin. Invest.: L CLOSE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50400 **UNIV OF ARIZONA** **1629**
 THE EVOLUTION OF DEBRIS DISKS AND STELLA ANGULAR MOMENTUM IN
 PRE-MAIN SEQUENCE SOLAR SYSTEMS
 06/12/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M MEYER
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50419 **UNIV OF ARIZONA** **1630**
 INDEX INHOMOGENEITY EFFECTS ON IMAGING SYSTEMS STUDENT: BRIAN
 STAMPER
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J BURGE
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

ARKANSAS

NAG 3 2798 **ARKANSAS TECH UNIV** **1631**
 DEVELOPMENT OF A GENERIC CREEP-FATIGUE PREDICTION MODEL
 08/06/2002 - 12/31/2002 FY02: \$5,000 Total: \$5,000
Prin. Invest.: T GOSWAMI
Tech. Officer: GRC/G R HALFORD
CASE Category: 49 – ENGINEERING, OTHER

NAG13 99016 **HENDRIX COLL** **1632**
 DETECTION OF SMALL MOLECULES IN HYBRID ROCKET MOTOR COMBUS-
 TION BY NEAR IR ABSORPTION
 05/24/1999 - 04/30/2002 FY02: -\$171 Total: \$19,829
Prin. Invest.: M W TEAGUE
Tech. Officer: SSC/B ST. CYR
CASE Category: 49 – ENGINEERING, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 9 1061 UNIV OF ARKANSAS - LITTLE ROCK 1633
 EFFECTS OF RESISTANCE TRAINING
 12/17/1998 - 07/31/2001 FY02: \$0 Total: \$532,137
Prin. Invest.: P A TESCH
Tech. Officer: JSC/C SAWIN
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG10 277 UNIV OF ARKANSAS - LITTLE ROCK 1634
 SYNTHESIS AND CHARACTERIZATION OF CROSS-LINKABLE W ATER-
 BORNE CONDUCTING POLYMERS FOR CORROSION PROT
 02/07/2000 - 01/18/2002 FY02: \$0 Total: \$115,000
Prin. Invest.: T VISWANATHAN
Tech. Officer: KSC/C J BRYAN
CASE Category: 19 – PHYSICALSCIENCE, OTHER

NCC 5 260 UNIV OF ARKANSAS - LITTLE ROCK 1635
 ARKANSAS EPSCOR PROGRAM - THE ARKANSAS PLAN FOR EN HANCE-
 MENT OF AERO- SPACE RESEARCH AND ECONOMIC
 01/07/1998 - 07/31/2002 FY02: \$0 Total: \$1,800,000
Prin. Invest.: M HUDSON
Tech. Officer: HQ/D DETROYE
CASE Category: 11 – ASTRONOMY

NCC 5 404 UNIV OF ARKANSAS - LITTLE ROCK 1636
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/14/1999 - 02/28/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: K HUDSON
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 597 UNIV OF ARKANSAS - LITTLE ROCK 1637
 ARKANSAS NASA EPSCOR PROGRAM
 09/28/2001 - 08/14/2004 FY02: \$287,500 Total: \$412,500
Prin. Invest.: K HUDSON
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40119 UNIV OF ARKANSAS - LITTLE ROCK 1638
 ARKANSAS SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/14/2001 - 02/28/2005 FY02: \$370,387 Total: \$626,637
Prin. Invest.: M HUDSON
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT13 52718 UNIV OF ARKANSAS - LITTLE ROCK 1639
 DESIGN OF HIGH TEMPERATURE PROBE FOR MASS SPECTROSCOPY OF
 HYBRID ROCKET PLUME
 07/13/1998 - 07/31/2001 FY02: -\$22 Total: \$65,978
Prin. Invest.: C MEADORS
Tech. Officer: SSC/A JOYCE
CASE Category: 41 – AERONAUTICAL ENGR

NGT13 52757 UNIV OF ARKANSAS - LITTLE ROCK 1640
 GRADUATE RESEARCH STUDY - SIGNAL CORRELATION IN A HYBRID
 ROCKET MOTOR
 06/25/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: K HUDSON
Tech. Officer: SSC/R TRAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 02021 U OF ARKANSAS MAIN CAMP-FAYETTEVILLE 1641
 MODELING BREAST CANCER TUMORS IN FREQUENCY DOMAIN USING THE
 STEEPEST DESCENT MULTIPOLE METHOD(SDFMM)
 12/19/2001 - 11/30/2002 FY02: \$57,539 Total: \$57,539
Prin. Invest.: M EL-SHENAWE
Tech. Officer: LARC/J W JOHNSON
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9496 U OF ARKANSAS MAIN CAMP-FAYETTEVILLE 1642
 THERMOLUMINESCENCE STUDIES OF METEORITES
 04/21/2000 - 09/30/2001 FY02: \$0 Total: \$43,000
Prin. Invest.: P BENOIT
Tech. Officer: GSFC/J BOYCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10736 U OF ARKANSAS MAIN CAMP-FAYETTEVILLE 1643
 THERMOLUMINESCENCE STUDIES OF METEORITES
 04/18/2001 - 04/30/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: P BENOIT
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NCC 2 5360 U OF ARKANSAS MAIN CAMP-FAYETTEVILLE 1644
 GROWTH OF METHANOGENS ON CARVON MONOXIDE
 12/10/1999 - 11/30/2003 FY02: \$15,000 Total: \$30,000
Prin. Invest.: T KRAL
Tech. Officer: ARC/M J LEON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52243 U OF ARKANSAS MAIN CAMP-FAYETTEVILLE 1645
 METHANOGENIC METABOLISM: IMPLICATIONS FOR MARS & EARLY EARTH
 07/28/1998 - 11/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: T A KRAL
Tech. Officer: ARC/C P MCKAY
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NGT13 52753 U OF ARKANSAS MAIN CAMP-FAYETTEVILLE 1646
 REMOTE SENSING TO DETECT MOISTURE AND SDS STRESS I N SOYBEAN
 06/20/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S BAJAWA
Tech. Officer: SSC/R P TRAVIS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

CALIFORNIA

NAG 5 12576 AMERICAN RIVER COLL 1647
 PATHWAYS CENTER FOR STUDENT SUCCESS
 09/20/2002 - 09/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S GRIFFITH
Tech. Officer: GSFC/D HALE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 1975 CALIFORNIA INST OF TECHNOLOGY 1648
 GLOBAL FAILURE MODES IN HIGH TEMPERATURE COMPOSITE STRUC-
 TURES
 11/25/1997 - 05/14/2001 FY02: \$0 Total: \$190,188
Prin. Invest.: W G KNAUSS
Tech. Officer: GSFC/J H STARNES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2151 CALIFORNIA INST OF TECHNOLOGY 1649
 CHEMISTRY AND TRANSPORT IN A MULTI-DIMENSIONAL MODEL
 02/23/1999 - 12/31/2001 FY02: \$0 Total: \$354,542
Prin. Invest.: Y L YUNG
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01038 CALIFORNIA INST OF TECHNOLOGY 1650
 ULTRADENSE SILICON CMOS-BASED MERGED MULTISPECTRAL
 IMAGER/NONVOLATILE MEMORY DEVICE BASED ON INJECTN
 08/24/2001 - 05/30/2004 FY02: \$278,900 Total: \$507,700
Prin. Invest.: H A ATWATER
Tech. Officer: LARC/C D ARMSTRONG
CASE Category: 13 – PHYSICS

NAG 1 02029 CALIFORNIA INST OF TECHNOLOGY 1651
 GLOBAL FAILURE MODES IN COMPOSITE STRUCTURES FOR HIGH ALTI-
 TUDES
 01/07/2002 - 09/25/2002 FY02: \$47,178 Total: \$47,178
Prin. Invest.: W G KNAUS
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02081 CALIFORNIA INST OF TECHNOLOGY 1652
 CHEMISTRY AND TRANSPORT IN A MULTI-DIMENSIONAL MODEL
 04/10/2002 - 04/09/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: Y L YUNG
Tech. Officer: LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1346 CALIFORNIA INST OF TECHNOLOGY 1653
 EVOLUTION OF NEURAL CREST & PLACODES
 07/21/1999 - 07/14/2003 FY02: \$92,853 Total: \$473,312
Prin. Invest.: M BRONNER-FRASER
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1368 CALIFORNIA INST OF TECHNOLOGY 1654
 TRANSCRIPTIONAL REGULATION & EVOLUTION OF BILATERAL BODY
 PLANS
 08/05/1999 - 01/31/2003 FY02: \$103,270 Total: \$657,594
Prin. Invest.: E M DAVIDSON
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1370 CALIFORNIA INST OF TECHNOLOGY 1655
 TRANSCRIPTION FACTOR EVOLUTION & LYMPHOCYTE ORIGIN S
 08/05/1999 - 09/30/2002 FY02: \$138,676 Total: \$524,038
Prin. Invest.: E V ROTHENBERG
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1541 CALIFORNIA INST OF TECHNOLOGY 1656
 DISCOVERY AND DEFINITION OF THE MICROGRAVITY TRANS CRIPTOME
 WITH APPLICATION TOMUSCLE ATROPHY AND R
 03/14/2002 - 02/28/2003 FY02: \$342,123 Total: \$342,123
Prin. Invest.: E H DAVIDSON
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1573 CALIFORNIA INST OF TECHNOLOGY 1657
 ROBUSTNESS OF NETWORKED AGENTS
 07/24/2002 - 11/30/2002 FY02: \$40,000 Total: \$40,000
Prin. Invest.: J C DOYLE
Tech. Officer: ARC/K TURNER, ARC/D WOLPERT
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2166 CALIFORNIA INST OF TECHNOLOGY 1658
 INERTIAL EFFECTS IN SUSPENSION DYNAMICS
 05/08/1998 - 02/10/2002 FY02: \$25,000 Total: \$395,000
Prin. Invest.: J F BRADY
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2358 CALIFORNIA INST OF TECHNOLOGY 1659
 GRANULAR MATERIAL FLOWS WITH INTERSTITIAL FLUID EF FECTS
 03/12/2000 - 11/30/2003 FY02: \$85,401 Total: \$211,586
Prin. Invest.: M L HUNT
Tech. Officer: GRC/J H AGUI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2686 CALIFORNIA INST OF TECHNOLOGY 1660
 IN-SITU INVESTIGATION OF ADVANCED STRUCTURAL COATI NG AND
 COMPOSITES
 01/10/2002 - 09/30/2004 FY02: \$92,974 Total: \$92,974
Prin. Invest.: U USTUNDAG
Tech. Officer: GRC/S C FARMER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2737 CALIFORNIA INST OF TECHNOLOGY 1661
 INERTIAL EFFECTS IN SUSPENSION DYNAMICS. INERTIAL EFFECTS IN
 SUSPENSION DYNAMICS.
 03/14/2002 - 10/30/2005 FY02: \$80,704 Total: \$80,704
Prin. Invest.: J F BRADY
Tech. Officer: GRC/N R HALL
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3911 CALIFORNIA INST OF TECHNOLOGY 1662
 MOLECULAR BEAM STUDIES OF STRATOSPHERIC PHOTOCHEMI
 02/26/1997 - 09/30/2002 FY02: \$0 Total: \$262,937
Prin. Invest.: D OKUMURA
Tech. Officer: GSFC/P J DECOLA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4093 CALIFORNIA INST OF TECHNOLOGY 1663
 RESEARCH IN GRAVITATION ASTROPHYSICS
 03/10/1997 - 12/31/2001 FY02: \$0 Total: \$183,500
Prin. Invest.: P LINDBLOM
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 4191 CALIFORNIA INST OF TECHNOLOGY 1664
 DYNAMICS OF PLANETARY ATMOSPHERES
 06/27/1997 - 11/30/2001 FY02: \$0 Total: \$376,230
Prin. Invest.: D P INGERSOLL
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4319 CALIFORNIA INST OF TECHNOLOGY 1665
 EXPERIMENTAL AND ANALYTICAL STUDIES OF SOLAR SYSTE
 04/04/1997 - 07/31/2002 FY02: \$0 Total: \$594,000
Prin. Invest.: D S BURNETT
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 4437 CALIFORNIA INST OF TECHNOLOGY 1666
 PARTICIPATION OF D.O. MUHLEMAN AS A CO-INVESTIGATO OBSERVER
 LASER ALTIMETER (MOLA) TEAM
 04/28/1997 - 12/31/2002 FY02: \$0 Total: \$360,394
Prin. Invest.: D O MUHLEMAN
Tech. Officer: GSFC/D E SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 5289 CALIFORNIA INST OF TECHNOLOGY 1674
 HIGH ENERGY FOCUSING TELESCOPE HIGH ENERGY FOCUSING TELESCOPE
 06/02/2000 - 05/25/2003 FY02: \$735,000 Total: \$2,140,000
Prin. Invest.: F HARRISON
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5052 CALIFORNIA INST OF TECHNOLOGY 1667
 GLOBAL MAPPING OF THE INTERSTELLAR MEDIUM IN THE FAR-ULTRAVIOLET
 01/24/1996 - 06/30/2001 FY02: \$0 Total: \$1,281,913
Prin. Invest.: C MARTIN
Tech. Officer: GSFC/R H PLESS
CASE Category: 11 – ASTRONOMY

NAG 5 5303 CALIFORNIA INST OF TECHNOLOGY 1675
 GLOBAL MAPPING OF THE COSMIC UV BACKGROUND GLOBAL MAPPING OF THE COSMIC UV BACKGROUND
 09/29/2000 - 09/27/2002 FY02: \$320,000 Total: \$621,440
Prin. Invest.: C MARTIN
Tech. Officer: WFF/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5166 CALIFORNIA INST OF TECHNOLOGY 1668
 INTEGRATED-CIRCUIT READOUT FOR THE ACCESS SILICON ARRAY
 03/26/1998 - 06/30/2001 FY02: \$0 Total: \$112,710
Prin. Invest.: R A MEWALDT
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5322 CALIFORNIA INST OF TECHNOLOGY 1676
 THE PRESIDENTIAL EARLY CAREER AWARD (PECA)
 03/21/2001 - 10/31/2006 FY02: \$100,000 Total: \$200,000
Prin. Invest.: F HARRISON
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5203 CALIFORNIA INST OF TECHNOLOGY 1669
 ULTRA HEAVY AND HEAVY COSMIC-RAY MEASUREMENTS ON ACCESS
 08/29/1998 - 02/28/2002 FY02: \$0 Total: \$119,067
Prin. Invest.: R A MEWALDT
Tech. Officer: GSFC/B A MERRITT
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 5338 CALIFORNIA INST OF TECHNOLOGY 1677
 DETERMINATION OF THE CONFIDENCE LIMIT ON HHT RESULTS
 07/09/2001 - 09/30/2002 FY02: \$0 Total: \$30,992
Prin. Invest.: T WU
Tech. Officer: WFF/S LONG
CASE Category: 33 – OCEANOGRAPHY

NAG 5 5216 CALIFORNIA INST OF TECHNOLOGY 1670
 A PROPOSAL FOR CONVERSION OF THE TRANS-IRON GALACTIC ELEMENT RECORDER (TIGER) PI STONE
 12/01/1998 - 11/30/2001 FY02: \$0 Total: \$76,156
Prin. Invest.: E C STONE
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5346 CALIFORNIA INST OF TECHNOLOGY 1678
 BASIC RESEARCH ON THE COMPOSITION OF HEAVY COSMIC RAYS - THE TRANS-IRON GALACTIC ELEMENT RECORDER EX
 01/16/2002 - 01/07/2005 FY02: \$63,000 Total: \$63,000
Prin. Invest.: E STONE
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5227 CALIFORNIA INST OF TECHNOLOGY 1671
 FIRST INCREMENTAL FUNDING FOR NAG5-5227 PI DR. EDWARD C. STONE
 03/29/1999 - 05/31/2002 FY02: \$0 Total: \$480,200
Prin. Invest.: E C STONE
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6263 CALIFORNIA INST OF TECHNOLOGY 1679
 PHOTOCHEMICAL STUDIES OF CHEMISTRY IN OUTER SOLAR
 08/21/1997 - 12/31/2002 FY02: \$92,275 Total: \$493,287
Prin. Invest.: D L YUNG
Tech. Officer: GSFC/J HILLMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 5228 CALIFORNIA INST OF TECHNOLOGY 1672
 FIRST YEAR FUNDING FOR NAG5-5228 PI DR. EDWARD C STONE
 03/29/1999 - 05/31/2002 FY02: \$0 Total: \$215,632
Prin. Invest.: E C STONE
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6402 CALIFORNIA INST OF TECHNOLOGY 1680
 5HE ORIGIN AND EVOLUTION OF NEUTRON STARS_(LTSA)
 10/15/1997 - 10/31/2003 FY02: \$112,000 Total: \$530,000
Prin. Invest.: S KULKARNI
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 5286 CALIFORNIA INST OF TECHNOLOGY 1673
 HIGH SPECTRAL & SPATIAL RESOLUTION GE DETECTOR & READOUT TECHNOLOGIES FOR NUCLEAR SPECTROSCOPIC IMG
 05/31/2000 - 05/17/2003 FY02: \$45,000 Total: \$89,000
Prin. Invest.: S BOGGS
Tech. Officer: GSFC/B A MERRITT
CASE Category: 11 – ASTRONOMY

NAG 5 6816 CALIFORNIA INST OF TECHNOLOGY 1681
 SUBMILLIMETER WAVELENGTH SPECTROSCOPY AND IMAGING OF THE PLANETS
 01/07/1998 - 12/31/2001 FY02: \$0 Total: \$137,405
Prin. Invest.: E SERABYN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 6912 CALIFORNIA INST OF TECHNOLOGY 1682
 MO&DA OF THE ADVANCED COMPOSITION EXPLORER MISSION
 01/30/1998 - 01/31/2003 FY02: \$2,900,000 Total: \$16,728,115
Prin. Invest.: E STONE
Tech. Officer: GSFC/B WORRALL
CASE Category: 11 – ASTRONOMY

NAG 5 6981 CALIFORNIA INST OF TECHNOLOGY 1683
 BROWN DWARFS: DETECTION AND DETAILED STUDIES
 02/06/1998 - 08/14/2001 FY02: \$0 Total: \$181,000
Prin. Invest.: S KULKARNI
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7007 CALIFORNIA INST OF TECHNOLOGY 1684
 BLACK HOLE ASTROPHYSICS_- ATP
 02/11/1998 - 08/31/2001 FY02: \$0 Total: \$257,591
Prin. Invest.: R BLANDFORD
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7034 CALIFORNIA INST OF TECHNOLOGY 1685
 ORIGIN AND EVOLUTION OF THE SPINS AND FIELDS OF WH ITE DWARFS,
 NEUTRON STARS AND BLACK HOLES - ATP
 02/18/1998 - 08/14/2001 FY02: \$0 Total: \$243,017
Prin. Invest.: E PHINNEY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7081 CALIFORNIA INST OF TECHNOLOGY 1686
 ADVANCED SPACE PARTICLE ANALYSIS SYSTEM
 03/10/1998 - 09/30/2002 FY02: \$0 Total: \$376,096
Prin. Invest.: J BEAUCHAMP
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 11 – ASTRONOMY

NAG 5 7230 CALIFORNIA INST OF TECHNOLOGY 1687
 STUDY OF TROPOSPHERIC OZONE AND UV REFLECTIVITY US ING TOMS
 DATA
 04/16/1998 - 05/31/2002 FY02: \$0 Total: \$222,474
Prin. Invest.: Y L YUNG
Tech. Officer: GSFC/E HILSEN RATH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7680 CALIFORNIA INST OF TECHNOLOGY 1688
 VARIABILITY OF CLOUDS OVER A SOLAR CYCLE YEAR 1 OF A 3 YEAR
 GRANT
 09/17/1998 - 12/31/2001 FY02: \$0 Total: \$242,005
Prin. Invest.: Y L YUNG
Tech. Officer: GSFC/M CHOU
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8217 CALIFORNIA INST OF TECHNOLOGY 1689
 STAR FORMATION IN GIANT MOLECULAR CLOUDS_ L TSA98
 02/08/1999 - 02/14/2004 FY02: \$99,296 Total: \$306,137
Prin. Invest.: J M CARPENTER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8251 CALIFORNIA INST OF TECHNOLOGY 1690
 GEOCHEMICAL AND ISOTOPIC INVESTIGATIONS OF LUNAR & PLANETARY
 MATERIALS
 02/10/1999 - 02/14/2003 FY02: \$0 Total: \$1,030,000
Prin. Invest.: D A PAPANASTASSIOU
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8318 CALIFORNIA INST OF TECHNOLOGY 1691
 MILLISECOND PULSARS AND PLANETARY SYSTEMS
 03/30/1999 - 09/30/2001 FY02: \$0 Total: \$145,000
Prin. Invest.: S R KULKARNI
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8535 CALIFORNIA INST OF TECHNOLOGY 1692
 HIGH RESOLUTION, HIGH ENERGY FOCUSING OPTICS FOR THE NEXT
 GENERATION GAMMA RAY EXPLORER.
 07/08/1999 - 07/14/2002 FY02: \$0 Total: \$541,664
Prin. Invest.: F A HARRISON
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 13 – PHYSICS

NAG 5 8576 CALIFORNIA INST OF TECHNOLOGY 1693
 NEW GRANT: YEAR 1 OF 2 FOR "A BEOWULF SYSTEM SOFTWARE
 INITIATIVE"
 05/27/1999 - 05/31/2001 FY02: -\$1,929 Total: \$148,059
Prin. Invest.: T STERLING
Tech. Officer: GSFC/J FISCHER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 8743 CALIFORNIA INST OF TECHNOLOGY 1694
 VERY HIGH SPECTRAL & SPATIAL RESOLUTION GE DETEC TORS &
 READOUT ELECTRONICS FORHARD X-RAY ASTRONOM
 08/20/1999 - 08/31/2002 FY02: \$0 Total: \$221,519
Prin. Invest.: S BOGGS
Tech. Officer: GSFC/F A HERRERO
CASE Category: 11 – ASTRONOMY

NAG 5 8822 CALIFORNIA INST OF TECHNOLOGY 1695
 SPECTROSCOPIC STUDIES OF PRE-BIOTIC CARBON CHEMIST RY
 09/08/1999 - 02/28/2002 FY02: \$0 Total: \$106,520
Prin. Invest.: G BLAKE
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 8907 CALIFORNIA INST OF TECHNOLOGY 1696
 IMPACT & COLLISIONAL PROCESSES IN THE SOLAR SYSTEM
 12/29/1999 - 09/30/2000 FY02: -\$1,635 Total: \$150,365
Prin. Invest.: T J AHRENS
Tech. Officer: GSFC/J A GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 8915 CALIFORNIA INST OF TECHNOLOGY 1697
 IMPACT CRATERING CALCULATIONS
 01/05/2000 - 09/30/2000 FY02: -\$130 Total: \$29,870
Prin. Invest.: T AHRENS
Tech. Officer: GSFC/J A GRANT
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 8922 CALIFORNIA INST OF TECHNOLOGY 1698
 PARTICIPATION OF THE NITRIC ACID CIMS INSTRUMENT IN THE SAGE III
 OZONE LOSS & VALIDATION EXPERIMENT
 01/06/2000 - 12/31/2002 FY02: \$191,550 Total: \$600,107
Prin. Invest.: P WENNERBERG
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9307 CALIFORNIA INST OF TECHNOLOGY 1699
 CLOSEOUT OF "LABORATORY STUDIES OF THE PHOTOCHEMISTRY OF
 PEROXYNITRIC ACID" ASSET FORTH IN THE ATT
 03/22/2000 - 03/31/2002 FY02: \$0 Total: \$123,169
Prin. Invest.: D O WENNERBERG
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9344 CALIFORNIA INST OF TECHNOLOGY 1700
 BALLOON-BORNE OBSERVATIONS OF THE POLARIZATION OF THE COSMIC
 MICROWAVE BACKGROUND
 03/27/2000 - 03/31/2003 FY02: \$132,982 Total: \$443,132
Prin. Invest.: A LANGE
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9434 CALIFORNIA INST OF TECHNOLOGY 1701
 THE PHYSICAL & CHEMICAL STRUCTURE OF CIRCUMSTELLAR DISKS &
 ENVELOPES
 04/24/2000 - 04/14/2001 FY02: \$0 Total: \$35,000
Prin. Invest.: G A BLAKE
Tech. Officer: GSFC/J BOYCE, SR
CASE Category: 11 – ASTRONOMY

NAG 5 9462 CALIFORNIA INST OF TECHNOLOGY 1702
 USE OF SATELLITE FIRE PRODUCTS AND MODELS TO INVESTIGATE THE
 EFFECTS OF FIRE ON THE GLOBAL CARBON CYCLE
 04/18/2000 - 04/30/2003 FY02: \$147,074 Total: \$430,327
Prin. Invest.: J RANDERSON
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9471 CALIFORNIA INST OF TECHNOLOGY 1703
 ATMOSPHERIC TRACE GAS ABUNDANCES & STABLE ISOTOPE RATIOS VIA
 INFRARED LASER INDUCED FLUORESCENCE (IR)
 04/14/2000 - 04/30/2003 FY02: \$166,500 Total: \$489,843
Prin. Invest.: G BLAKE
Tech. Officer: GSFC/B BETTS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9482 CALIFORNIA INST OF TECHNOLOGY 1704
 KNOWLEDGE DISCOVERY AND DATABASE TECHNOLOGIES FOR DIGITAL
 SKY SURVEYS AND VIRTUAL OBSERVATORIES
 04/21/2000 - 04/30/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: S DJORGOVSKI
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9487 CALIFORNIA INST OF TECHNOLOGY 1705
 INTERANNUAL VARIABILITY OF SNOW AND ICE AND IMPACT ON THE
 CARBON CYCLE
 04/25/2000 - 04/30/2003 FY02: \$236,666 Total: \$514,828
Prin. Invest.: Y L YUNG
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9493 CALIFORNIA INST OF TECHNOLOGY 1706
 DEVELOPMENT OF SUBMILLIMETER SIS MIXERS AND BROAD BAND HEMT
 AMPLIFIERS
 04/18/2000 - 04/30/2003 FY02: \$150,000 Total: \$438,000
Prin. Invest.: J ZMUIDZINAS
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9530 CALIFORNIA INST OF TECHNOLOGY 1707
 MILLIMETER-WAVE INTERFEROMETRY OF PROTO-PLANETARY DISKS
 04/27/2000 - 04/30/2003 FY02: \$105,000 Total: \$275,000
Prin. Invest.: S SARGENT
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9601 CALIFORNIA INST OF TECHNOLOGY 1708
 MARTIAN ATMOSPHERIC CIRCULATION AND CLIMATE
 05/17/2000 - 04/30/2003 FY02: \$69,100 Total: \$204,400
Prin. Invest.: A P INGERSOL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9603 CALIFORNIA INST OF TECHNOLOGY 1709
 VIRTUAL OBSERVATORIES OF THE FUTURE
 05/19/2000 - 05/14/2002 FY02: -\$4 Total: \$24,996
Prin. Invest.: S DJORGOVSKI
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9606 CALIFORNIA INST OF TECHNOLOGY 1710
 IMPLICATIONS OF MARTIAN NORTH-SOUTH POLAR DIFFERENCES
 05/12/2000 - 05/14/2003 FY02: \$53,000 Total: \$153,700
Prin. Invest.: B C MURRAY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9687 CALIFORNIA INST OF TECHNOLOGY 1711
 IN SITU CHEMICAL IMAGER
 06/05/2000 - 05/31/2001 FY02: -\$13,210 Total: \$80,940
Prin. Invest.: J L KIRSCHVINK
Tech. Officer: GSFC/B BETTS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9821 CALIFORNIA INST OF TECHNOLOGY 1712
 COSMOLOGY & PARTICLE ASTROPHYSICS THEORY (ATP-98)
 08/23/2000 - 04/30/2003 FY02: \$0 Total: \$190,107
Prin. Invest.: M P KAMIONKOWSKI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9919 CALIFORNIA INST OF TECHNOLOGY 1713
 THE HOT PHASE OF THE VIOLENT ISM OF NEARBY DWARF IRREGULAR
 GALAXIES
 09/05/2000 - 09/30/2003 FY02: \$0 Total: \$46,300
Prin. Invest.: F WALTER
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10047 CALIFORNIA INST OF TECHNOLOGY 1714
 MEASURING THE MAGNETIC FIELD AND RELATIVISTIC PARTICLES IN
 RELIC RADIO GALAXIES
 10/03/2000 - 09/30/2002 FY02: \$16,400 Total: \$43,400
Prin. Invest.: F A HARRISON
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10189 CALIFORNIA INST OF TECHNOLOGY 1715
 PLANETARY ORIGIN, EVOLUTION AND STRUCTURE
 01/03/2001 - 01/14/2004 FY02: \$89,700 Total: \$178,100
Prin. Invest.: D J STEVENSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10198 CALIFORNIA INST OF TECHNOLOGY 1716
 IMPACT PROCESSES IN THE SOLAR SYSTEM
 01/04/2001 - 12/31/2003 FY02: \$221,900 Total: \$440,500
Prin. Invest.: T AHRENS
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10208 CALIFORNIA INST OF TECHNOLOGY 1717
 IMPACT CRATERING CALCULATIONS
 01/02/2001 - 09/30/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: T AHRENS
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10293 CALIFORNIA INST OF TECHNOLOGY 1718
 APPLICATION OF ISOTOPIC AND CHEMICAL ANALYSES TO UNDERSTANDING THE ORIGIN OF EXTRATERRESTRIAL
 02/06/2001 - 02/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: G J WASSERBURG
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10317 CALIFORNIA INST OF TECHNOLOGY 1719
 LARGE-FORMAT, ANTENNA-COUPLED, MULTI-FREQUENCY, BOLOMETRIC (LAMB) FOCAL PLANE ARRAYS FOR MM & SUB
 02/07/2001 - 01/31/2004 FY02: \$181,876 Total: \$351,770
Prin. Invest.: A E LANGE
Tech. Officer: GSFC/E J WOLLACK
CASE Category: 11 – ASTRONOMY

NAG 5 10358 CALIFORNIA INST OF TECHNOLOGY 1720
 DEVELOPMENT OF SUPERCONDUCTING DETECTOR WITH MULTIPLEXED READOUTS-
 02/01/2001 - 02/14/2004 FY02: \$189,022 Total: \$407,892
Prin. Invest.: J ZMUIZINAS
Tech. Officer: GSFC/C STAHL
CASE Category: 13 – PHYSICS

NAG 5 10406 CALIFORNIA INST OF TECHNOLOGY 1721
 A NEOTECTONIC MAP OF THE EARTH: A PILOT STUDY OF SRTM DATA
 04/02/2001 - 03/31/2003 FY02: \$75,000 Total: \$150,000
Prin. Invest.: K E SIEH
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10410 CALIFORNIA INST OF TECHNOLOGY 1722
 MINIATURE IRON BIOMINERAL DETECTOR FOR MARTIAN EXO BIOLOGY
 04/10/2001 - 04/14/2004 FY02: \$0 Total: \$166,514
Prin. Invest.: J KIRSCHVINK
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 10423 CALIFORNIA INST OF TECHNOLOGY 1723
 EXPERIMENTAL STUDIES OF PHASE EQUILIBRIA OF METEORITES AND PLANETARY BODIES
 02/20/2001 - 02/28/2004 FY02: \$150,000 Total: \$300,000
Prin. Invest.: E STOLPER
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10467 CALIFORNIA INST OF TECHNOLOGY 1724
 THE STRUCTURE OF YOUNG STELLAR SYSTEMS: ESTABLISHING INITIAL CONDITIONS FOR PLANET FORMATION
 02/22/2001 - 02/28/2004 FY02: \$45,000 Total: \$90,000
Prin. Invest.: G BLAKE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10470 CALIFORNIA INST OF TECHNOLOGY 1725
 TEMPORAL VARIABILITY IN THE ACCRETION RATE OF INTERPLANETARY DUST USING 3HE AS A TRACER
 02/27/2001 - 03/31/2004 FY02: \$49,600 Total: \$98,500
Prin. Invest.: K A FARLEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10558 CALIFORNIA INST OF TECHNOLOGY 1726
 BROWN DWARFS: DISCOVERY AND DETAILED STUDIES
 03/13/2001 - 03/14/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: S KULKARNI
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10587 CALIFORNIA INST OF TECHNOLOGY 1727
 MARS INTERNAL EVOLUTION CONSTRAINED BY MGS DATA
 03/13/2001 - 03/14/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: D STEVENSON
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10602 CALIFORNIA INST OF TECHNOLOGY 1728
 SUPPORT FOR THE 2001 GORDON RESEARCH CONFERENCE ON THE ORIGINS OF SOLAR SYSTEMS
 03/21/2001 - 02/28/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: D STEVENSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10618 CALIFORNIA INST OF TECHNOLOGY 1729
 PALEOMAGNETIC CONSTRAINTS ON PANSPERMIA AND THE ALH84001 MAGNETOFOSSILS
 03/19/2001 - 03/31/2004 FY02: \$69,100 Total: \$141,100
Prin. Invest.: J L KIRSCHVINK
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10707 CALIFORNIA INST OF TECHNOLOGY 1730
 SOURCES OF LOW FREQUENCY GRAVITATIONAL WAVES (ATP 2000)
 04/23/2001 - 04/30/2004 FY02: \$138,900 Total: \$266,900
Prin. Invest.: E PHINNEY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 10724 CALIFORNIA INST OF TECHNOLOGY 1731
 CIRRUS CLOUDS ON MARS: DATA ANALYSIS AND GCM MODEL ING
 04/12/2001 - 04/14/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: Y YUNG
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10761 CALIFORNIA INST OF TECHNOLOGY 1732
 UNDERSTANDING GAMMA-RAY BURSTS (ATP 2000)
 04/23/2001 - 04/30/2004 FY02: \$36,544 Total: \$64,917
Prin. Invest.: R SARI
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10804 CALIFORNIA INST OF TECHNOLOGY 1733
 CONCEPT STUDY FOR THE "THE HEAVY NUCLEI EXPLORER" (HNX)
 MISSION AO-99-OSS-05
 04/30/2001 - 09/30/2002 FY02: \$0 Total: \$47,600
Prin. Invest.: D A MEWALDT
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10885 CALIFORNIA INST OF TECHNOLOGY 1734
 THE MULTI-WAVELENGTH EXTRAGALACTIC SKY (ADP 2000)
 05/03/2001 - 05/14/2002 FY02: \$0 Total: \$48,148
Prin. Invest.: R J BRUNNER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10901 CALIFORNIA INST OF TECHNOLOGY 1735
 A MECHANISM FOR SOLAR FORDING OF CLIMATE: DID THE MAUNDER
 MINIMUM CAUSE THE LITTLE ICE AGE?
 05/07/2001 - 05/14/2004 FY02: \$160,559 Total: \$327,327
Prin. Invest.: Y L YUNG
Tech. Officer: GSFC/J F SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10955 CALIFORNIA INST OF TECHNOLOGY 1736
 A STUDY OF EXTREMELY RED GALAXIES
 05/30/2001 - 05/31/2006 FY02: \$64,186 Total: \$129,065
Prin. Invest.: D THOMPSON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11157 CALIFORNIA INST OF TECHNOLOGY 1737
 LABORATORY STUDIES OF THE PHOTOCHEMISTRY OF PEROXY NITRIC
 ACID
 08/01/2001 - 07/31/2004 FY02: \$78,210 Total: \$95,210
Prin. Invest.: P O WENNINGBERG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11214 CALIFORNIA INST OF TECHNOLOGY 1738
 OBSERVATIONAL AND MODELING STUDIES OF THE SOUTH PO LAR
 RESIDUAL CAP
 08/13/2001 - 08/14/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: A P INGERSOLL
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11257 CALIFORNIA INST OF TECHNOLOGY 1739
 AEOLIAN TRANSPORT PROCESSES ON MARS: SURFACE OBSE RVATIONS
 AND MESOSCALEMODELING
 08/17/2001 - 08/31/2003 FY02: \$70,000 Total: \$140,000
Prin. Invest.: A ALBEE
Tech. Officer: HQ/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11273 CALIFORNIA INST OF TECHNOLOGY 1740
 THE EXPLORATION OF THE OUTER SOLAR SYSTEM
 08/22/2001 - 09/30/2004 FY02: \$0 Total: \$100,000
Prin. Invest.: M BROWN
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11288 CALIFORNIA INST OF TECHNOLOGY 1741
 DAILY WEATHER MAPS FROM MARS ORBITER IMAGES
 08/20/2001 - 08/31/2004 FY02: \$71,300 Total: \$143,200
Prin. Invest.: A INGERSOLL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11388 CALIFORNIA INST OF TECHNOLOGY 1742
 WIRE OBSERVATIONS OF THE CIRCUMSTELLAR REGIONS OF EVOLVED
 MASSIVE STARS.
 11/30/2001 - 02/14/2002 FY02: \$4,975 Total: \$4,975
Prin. Invest.: A MARSTON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11419 CALIFORNIA INST OF TECHNOLOGY 1743
 QUIESCENT EMISSION FROM TRANSIENT TYPE I X-RAY BUR STERS
 12/18/2001 - 12/31/2002 FY02: \$38,425 Total: \$38,425
Prin. Invest.: R E RUTLEDGE
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11423 CALIFORNIA INST OF TECHNOLOGY 1744
 TERAHERTZ (THZ) LABORATORY SPECTROSCOPY IN SUPPORT OF THE
 SOFIA AND FIRST/HERSCHEL HETERODYNE RECEIV
 12/03/2001 - 11/30/2004 FY02: \$69,000 Total: \$69,000
Prin. Invest.: G A BLAKE
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11488 CALIFORNIA INST OF TECHNOLOGY 1745
 SPECTROSCOPIC STUDIES OF PRE-BIOTIC CARBON CHEMIST RY
 12/31/2001 - 02/28/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: G A BLAKE
Tech. Officer: GSFC/M A MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 11549 CALIFORNIA INST OF TECHNOLOGY 1746
 AEROSOL AND CCN CHARACTERIZATION IN CRYSTAL-FACE
 01/14/2002 - 01/31/2004 FY02: \$105,482 Total: \$105,482
Prin. Invest.: R FLAGAN
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11640 CALIFORNIA INST OF TECHNOLOGY 1747
 EXPERIMENTAL AND ANALYTICAL STUDIES OF SOLAR SYSTEM CHEMISTRY
 01/22/2002 - 01/31/2005 FY02: \$137,000 Total: \$137,000
Prin. Invest.: D BURNETT
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11645 CALIFORNIA INST OF TECHNOLOGY 1748
 OPTICALLY THIN CIRCUMSTELLAR DUST AND GAS DISKS (L TSA 2001)
 01/29/2002 - 01/31/2007 FY02: \$80,780 Total: \$80,780
Prin. Invest.: L HILLENBRAND
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11657 CALIFORNIA INST OF TECHNOLOGY 1749
 IR CAVITY RINGDOWN STUDIES OF ATMOSPHERIC FREERADICAL CHEMISTRY
 01/25/2002 - 01/31/2005 FY02: \$74,948 Total: \$74,948
Prin. Invest.: M OKAMURA
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11725 CALIFORNIA INST OF TECHNOLOGY 1750
 APPLICATION OF ISOTOPIC AND CHEMICAL ANALYSES TO UNDERSTANDING THE ORIGIN OF EXTRATERRESTRIAL
 02/11/2002 - 02/14/2003 FY02: \$120,000 Total: \$120,000
Prin. Invest.: G WASSERBURG
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11739 CALIFORNIA INST OF TECHNOLOGY 1751
 RETRIEVAL OF ATMOSPHERIC CO₂ COLUMN FROM GROUND BASED NEAR IR SPECTRA OF THE SUN
 02/12/2002 - 02/28/2005 FY02: \$51,609 Total: \$51,609
Prin. Invest.: P WENNBEG
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11851 CALIFORNIA INST OF TECHNOLOGY 1752
 A COMPREHENSIVE TECHNOLOGY DEVELOPMENT PROGRAM FOR THE CONSTELLATION MISSION HARD X-RAY TELESCOPE
 03/15/2002 - 03/14/2006 FY02: \$284,000 Total: \$284,000
Prin. Invest.: F A HARRISON
Tech. Officer: GSFC/D NGUYEN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11932 CALIFORNIA INST OF TECHNOLOGY 1753
 A SUMMER RESEARCH PROGRAM ON SUMMER FACULTY FELLOW SHIPS AT THE JET PROPULSION LABORATORY.
 05/23/2002 - 04/30/2003 FY02: \$380,000 Total: \$380,000
Prin. Invest.: A ALBEE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11985 CALIFORNIA INST OF TECHNOLOGY 1754
 COSMOLOGY AND FUNDAMENTAL PHYSICS FROM SPACE: THEORETICAL INVESTIGATIONS OF INFLATION,
 04/12/2002 - 04/14/2005 FY02: \$77,273 Total: \$77,273
Prin. Invest.: M P KAMIONKOWSKI
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12000 CALIFORNIA INST OF TECHNOLOGY 1755
 DEVELOPMENT OF A DATA FEDERATION FACILITY FOR THE NVO.
 04/17/2002 - 04/14/2005 FY02: \$86,560 Total: \$86,560
Prin. Invest.: R BRUNNER
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12032 CALIFORNIA INST OF TECHNOLOGY 1756
 BLACK HOLE ASTROPHYSICS OF AGN, X-RAY BINARIES AND GAMMA RAY BURSTS
 04/12/2002 - 04/15/2005 FY02: \$93,100 Total: \$93,100
Prin. Invest.: R D BLANDFORD
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12037 CALIFORNIA INST OF TECHNOLOGY 1757
 PROCESSES IN THE FORMATION AND EVOLUTION OF EXTRA SOLAR PLANETS
 04/12/2002 - 04/14/2005 FY02: \$54,751 Total: \$54,751
Prin. Invest.: P M GOLDREICH
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12118 CALIFORNIA INST OF TECHNOLOGY 1758
 SUPPORT FOR THE ACTIVITIES RELATED TO THE NATIONAL VIRTUAL OBSERVATORY SCIENCE DEFINITION TEAM
 04/29/2002 - 04/30/2003 FY02: \$99,952 Total: \$99,952
Prin. Invest.: S G DJORGOVSKI
Tech. Officer: GSFC/P E HUNTER
CASE Category: 11 – ASTRONOMY

NAG 5 12156 CALIFORNIA INST OF TECHNOLOGY 1759
 WATER AND THE MARTIAN POLAR ATMOSPHERE
 05/13/2002 - 05/14/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: M RICHARDSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12247 CALIFORNIA INST OF TECHNOLOGY 1760
 MEASUREMENT OF COLUMN-AVERAGED CO₂
 06/26/2002 - 06/14/2005 FY02: \$329,069 Total: \$329,069
Prin. Invest.: P WENNBEG
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12384 CALIFORNIA INST OF TECHNOLOGY 1761
 PARTICIPATION OF D.O. MUHLEMAN AS A CO-INVESTIGATOR ON THE MARS OBSERVER LASER ALTIMETER (M
 07/17/2002 - 06/30/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D O MUHLEMAN
Tech. Officer: GSFC/D E SMITH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12492 CALIFORNIA INST OF TECHNOLOGY 1762
 FORECASTING SHOCKS AND ENERGETIC PARTICLE HAZARDS
 08/27/2002 - 08/31/2005 FY02: \$121,998 Total: \$121,998
Prin. Invest.: C S COHEN
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 12564 CALIFORNIA INST OF TECHNOLOGY 1763
 CONSTRAINING MODES OF CRUSTAL DEFORMATION USING IN TERFERO-
 METRIC SYNTHETIC APERTURE RADAR
 09/12/2002 - 09/14/2005 FY02: \$113,199 Total: \$113,199
Prin. Invest.: M SIMONS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1661 CALIFORNIA INST OF TECHNOLOGY 1764
 DISPERSION MICROSTRUCTURE AND PHEOLOGY IN CERAMICS PROCESS-
 ING
 05/16/2000 - 11/30/2003 FY02: \$85,000 Total: \$205,994
Prin. Invest.: J BRADY
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1743 CALIFORNIA INST OF TECHNOLOGY 1765
 MEASUREMENT OF THERMOPHYSICAL PROPERTIES OF MOLTEN SILICON
 AND GERMANIUM
 09/27/2000 - 09/30/2003 FY02: \$75,000 Total: \$272,500
Prin. Invest.: W K RHIM
Tech. Officer: MSFC/P DOTY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1744 CALIFORNIA INST OF TECHNOLOGY 1766
 MEASUREMENT OF THERMOPHYSICAL PROPERTIES OF MOLTEN SILLICON
 AND GERMANIUM
 09/27/2000 - 09/30/2002 FY02: \$300,000 Total: \$896,500
Prin. Invest.: W L JOHNSON
Tech. Officer: MSFC/P DOTY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1763 CALIFORNIA INST OF TECHNOLOGY 1767
 THE CQ EXPERIMENT ENHANCED HEAT CAPACITY OF SUPERFLUID HE-
 LIUM IN A HEAT FLUX
 05/01/2001 - 02/01/2006 FY02: \$150,000 Total: \$270,000
Prin. Invest.: D GOODSTEIN
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1785 CALIFORNIA INST OF TECHNOLOGY 1768
 BIOMIMETIC SELF-ASSEMBLY OF MESOSTRUCTURES IN MIRO MICRO-
 GRAVITY: THE NATURE OF CAPILLARY BOND
 04/30/2001 - 04/29/2005 FY02: \$75,000 Total: \$143,000
Prin. Invest.: A PONCE
Tech. Officer: MSFC/D S HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1013 CALIFORNIA INST OF TECHNOLOGY 1769
 GENESIS DISCOVERY MISSION PHASE B
 05/13/1998 - 05/31/2004 FY02: \$185,362 Total: \$699,872
Prin. Invest.: D S BURNETT
Tech. Officer: JSC/E K STANSBERRY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 5 98034 CALIFORNIA INST OF TECHNOLOGY 1770
 PHASE A STUDY FOR GALE X (GALAXY EVOLUTION EXPLORER) INVESTI-
 GATION
 12/05/1997 - 09/30/2004 FY02: \$10,400,758 Total: \$65,248,758
Prin. Invest.: C MARTIN
Tech. Officer: GSFC/F SNOW
CASE Category: 11 – ASTRONOMY

NCC 2 5431 CALIFORNIA INST OF TECHNOLOGY 1771
 ADJOINT ERROR ANALYSIS: IMPROVING THE ACCURACY & RELIABILITY OF
 LIFT & DRAG ESTIMATES
 03/28/2001 - 06/30/2003 FY02: \$50,664 Total: \$79,999
Prin. Invest.: N A PIERRE
Tech. Officer: ARC/J J RENTHER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 5 626 CALIFORNIA INST OF TECHNOLOGY 1772
 HIGHPERFORMANCE CORNERSTONE TECHNOLOGIES FOR THE NATIONAL
 VIRTUAL OBSERVATORY.
 02/26/2002 - 02/25/2008 FY02: \$396,000 Total: \$396,000
Prin. Invest.: T A PRINCE
Tech. Officer: GSFC/J FISCHER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NGT 5 30138 CALIFORNIA INST OF TECHNOLOGY 1773
 CRUCIAL DESERTIFICATION PROCESSES FOR MONITORING ARID LANDS
 08/27/1998 - 11/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: B C MURRAY, OKIN
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30393 CALIFORNIA INST OF TECHNOLOGY 1774
 VOLCANIC HAZARDS ASSESSMENT USING REMOTE SENSING, BAJA, CALI-
 FORNIA, MEXICO (STUDENT: JANE DMOCH
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J STOCK
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30407 CALIFORNIA INST OF TECHNOLOGY 1775
 THE SUBDUCTION ZONE EARTHQUAKE CYCLE AS CONSTRAINED BY
 SPACE GEODESY AND SEISMOLOGY/STUDENT: MATTHE
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M SIMONS
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30452 CALIFORNIA INST OF TECHNOLOGY 1776
 CO AND H2O ISOTOPE STUDIES USING CAVITY-ENHANCED, OPTICAL
 HETERODYNE SPECTROSCOPY. STUDENT: DAV
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M OKUMURA
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50215 CALIFORNIA INST OF TECHNOLOGY 1777
 FROM EARTH TO ORBIT: UTILIZING THE DIGITIZED PALOMAR SKY SURVEY
 IN NASA MISSIONS_ (STUDENT: ROY GAL
 07/22/1998 - 07/31/2001 FY02: -\$14,034 Total: \$51,966
Prin. Invest.: S G DJORGOVSKI
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 5 50231 CALIFORNIA INST OF TECHNOLOGY 1778
 CHEMICAL PROCESSES IN CIRCUMSTELLAR ACCRETION DISKS (STUDENT:
 JACQUELINE KESSLER
 05/27/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: G BLAKE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50249 CALIFORNIA INST OF TECHNOLOGY 1779
OBSERVATIONS OF CMB ANISOTROPIES WITH THE ARCMINUT E COSMOLOGY BOLOMETRICARRAY RECEIVER (STUDENT: MA
06/04/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: A LANGE
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50278 CALIFORNIA INST OF TECHNOLOGY 1780
BOLOMETRIC POLARIMETRY FOR COSMOLOGY
06/20/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: A LANGE
Tech. Officer: GSFC/L K SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50280 CALIFORNIA INST OF TECHNOLOGY 1781
INVESTIGATION OF VACUUM ARC ION THRUSTER FOR SPACE PROPULSION APPLICATIONS--STUDENT: MICHA
06/20/2000 - 06/30/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: F CULICK
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50308 CALIFORNIA INST OF TECHNOLOGY 1782
DEVELOPMENT OF SUPERCONDUCTING CAVITY STABILIZED OSCILLATORS (SCSO) FOR FREQUENCY STANDARDS & PREC
07/06/2000 - 09/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: N YEH
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50339 CALIFORNIA INST OF TECHNOLOGY 1783
GALAXY FORMATION AND EVOLUTION: MODELS FOR CURRENT AND FUTURE OBSERVATIONS (STUDENT: MICH
05/04/2001 - 08/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M KAMIONKOWSKI
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 60003 CALIFORNIA INST OF TECHNOLOGY 1784
A SUMMER RESEARCH PROGRAM OF NASA SUMMER FACULTY F
09/23/1997 - 08/31/2002 FY02: \$305,000 Total: \$1,670,527
Prin. Invest.: A ALBEE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2327 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1785
SUBSONIC GLIDEBACK ROCKET DEMONSTRATOR FLIGHT TESTING
09/08/2000 - 08/31/2001 FY02: \$0 Total: \$24,000
Prin. Invest.: D DETURRIS
Tech. Officer: LARC/T A TALAY
CASE Category: 42 – AERONAUTICAL ENGR

NAG 1 01099 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1786
CONFIGURATION STUDIES OF PERSONAL AIR VEHICLE EXPLORATION
06/14/2001 - 01/13/2002 FY02: \$0 Total: \$49,996
Prin. Invest.: D HALL
Tech. Officer: LARC/M D MOORE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1386 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1787
POTENTIAL BENEFITS FROM TMA AND SMS INTEGRATION
11/01/1999 - 12/31/2002 FY02: \$0 Total: \$118,758
Prin. Invest.: S HOCKADAY
Tech. Officer: ARC/L TOBIAS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 202 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1788
INTEGRATING NASA DRYDEN RESEARCH ENDEAVORS INTO THE TEACHING-LEARNING OF MATHEMATICS IN THE K-12 C
02/22/2000 - 01/03/2002 FY02: \$0 Total: \$28,909
Prin. Invest.: R A WARD
Tech. Officer: DFRC/S YEE
CASE Category: 21 – MATHEMATICS

NAG 4 228 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1789
INFLATABLE WING STRUCTURAL TEST, ANALYSIS, AND DESIGN
06/04/2002 - 09/30/2002 FY02: \$25,805 Total: \$25,805
Prin. Invest.: J D MELLO
Tech. Officer: DFRC/J MURRAY
CASE Category: 46 – MECHANICAL ENGR

NAG 5 8674 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1790
ADAPTIVE SAMPLING OF PHYTOPLANKTON RESPONSES TO EPISODIC PHYSICAL FORCING IN THE NEARSHORE COASTAL
07/08/1999 - 07/14/2002 FY02: \$0 Total: \$283,638
Prin. Invest.: M A MOLINE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 1 02012 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1791
STARBOOSTER DEMONSTRATOR CLUSTER CONFIGURATION ANALYSIS/VERIFICATION PROGRAM
02/20/2002 - 02/19/2003 FY02: \$49,951 Total: \$49,951
Prin. Invest.: D J DETURRIS
Tech. Officer: LARC/J W PAULSON
CASE Category: 42 – AERONAUTICAL ENGR

NCC 2 1149 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1792
DEVELOPMENT OF MULTIDISCIPLINARY FLIGHT CONTROL DESIGN PROCESSES USING CONDUIT
12/01/1999 - 12/31/2002 FY02: \$76,000 Total: \$318,343
Prin. Invest.: D J BIEZAD
Tech. Officer: ARC/M TISCHLER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5392 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1793
INNOVATIVE VERTICAL & SHORT TAKEOFF & LANDING CONCEPTS & SUPPORTING TECHNOLOGIES
08/16/2000 - 10/31/2002 FY02: \$0 Total: \$45,000
Prin. Invest.: D W HALL
Tech. Officer: ARC/J ZUK
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5464 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1794
MARS AIRPLANE MISSION AND TECHNOLOGY DEVELOPMENT
09/27/2001 - 12/31/2002 FY02: \$0 Total: \$71,980
Prin. Invest.: D W HALL, D J BIEZAD
Tech. Officer: ARC/L G LEMKE, ARC/A GONZALES
CASE Category: 42 – AERONAUTICAL ENGR

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NCC 2 5508 CALIFORNIA POLYTECHNIC STATE U-SAN LUIS 1795
 RUNWAY INDEPENDANT SHORT TAKEOFF AND LANDING (R/S TOL) RE-
 GIONAL JET PROJECT
 08/01/2002 - 01/31/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: D W HALL
Tech. Officer: ARC/D A WARDWELL, ARC/C E HANGE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 171 CALIFORNIA ST. POLYTECHNIC U-POMONA 1796
 ENHANCEMENT OF RESEARCH & DESIGN CAPABILITIES
 09/30/1999 - 09/30/2002 FY02: \$0 Total: \$195,028
Prin. Invest.: W E MORTENSEN
Tech. Officer: DFRC/K GUPTA, DFRC/L VOEKLER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 7 10 CALIFORNIA ST. POLYTECHNIC U-POMONA 1797
 ESTABLISHMENT OF A NEW BUSINESS INCUBATOR
 08/06/1998 - 11/04/2001 FY02: \$16,000 Total: \$846,000
Prin. Invest.: V H GARNER, E L BARNES
Tech. Officer: NMO/T J LLOYD
CASE Category: 49 – ENGINEERING, OTHER

NCC 7 11 CALIFORNIA ST. POLYTECHNIC U-POMONA 1798
 NEW BUSINESS INCUBATOR
 01/11/2002 - 01/11/2004 FY02: \$250,000 Total: \$250,000
Prin. Invest.: V GARNER
Tech. Officer: NMO/M BATTAGLIA
CASE Category: 49 – ENGINEERING, OTHER

NAG 4 225 CALIFORNIA ST. UNIV.-SAN BERNADINO 1799
 FINITE ELEMENT MODEL (FEM) STUDIES OF EXISTING HDA S AND THE
 DEVELOPMENT OF NEWHAD COMPOSITES
 04/29/2002 - 03/21/2005 FY02: \$74,665 Total: \$74,665
Prin. Invest.: D USHER
Tech. Officer: DFRC/D GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 153 CALIFORNIA STATE UNIV - FRESNO 1800
 THERMO-MECNANICAL CHARACTERISTICS OF COMPOSITE MATERIALS
 03/26/1998 - 09/30/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: S MAHANTY
Tech. Officer: DFRC/J BRADEN, DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 172 CALIFORNIA STATE UNIV - FRESNO 1801
 PARTNERSHIP PROJECT EXPLORE
 09/30/1999 - 10/31/2001 FY02: \$0 Total: \$184,914
Prin. Invest.: S MAHANTY, T MCCLANAHAN
Tech. Officer: DFRC/K GUPTA, DFRC/L VOEKLER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 207 CALIFORNIA STATE UNIV - FRESNO 1802
 REMOTE ACCESS TO NASA DRYDEN'S FLIGHT LOADS LABORATORY: A
 MIDDLE SCHOOL VIRTUAL LABORATORY
 08/16/2002 - 10/30/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: N BENGIAMIN
Tech. Officer: DFRC/L HUDSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9433 CALIFORNIA STATE UNIV - FULLERTON 1803
 SOLAR NEBULA THERMAL AND PHYSICAL EVOLUTION AS CON STRAINED
 BY PLANETARY, METEORITIC AND ASTRONOMICA
 04/21/2000 - 04/14/2002 FY02: \$0 Total: \$45,000
Prin. Invest.: D WOODLUM
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10312 CALIFORNIA STATE UNIV - FULLERTON 1804
 BETA PIC-LIKE CIRCUMSTELLAR GAS DISK AROUND 2 AND -- FUSE-00
 01/26/2001 - 01/31/2003 FY02: \$0 Total: \$20,000
Prin. Invest.: K CHEN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10695 CALIFORNIA STATE UNIV - FULLERTON 1805
 SOLAR NEBULA THERMAL AND PHYSICAL EVOLUTION AS CON STRAINED
 BY PLANETARY,METEORITIC AND ASTRONOMICAL
 04/16/2001 - 04/14/2004 FY02: \$0 Total: \$45,000
Prin. Invest.: D WOOLUM
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 9 1009 CALIFORNIA STATE UNIV - FULLERTON 1806
 GENESIS: DETECTORS CHARACTERIZATION/SELECTION AND EDUCA-
 TIONAL OUTREACH
 05/05/1998 - 07/01/2002 FY02: \$0 Total: \$157,244
Prin. Invest.: D S WOOLUM
Tech. Officer: JSC/E K STANSBERY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 1830 CALIFORNIA STATE UNIV - LONG BEACH 1807
 MAGNETHEOLOGICAL FLUIDS: RHEOLOGY AND NONEQUILBRI UM PAT-
 TERN FORMATION
 04/18/1996 - 05/16/2002 FY02: \$0 Total: \$844,550
Prin. Invest.: J LIU
Tech. Officer: GRC/K HSIEH
CASE Category: 13 – PHYSICS

NAG 5 9310 CALIFORNIA STATE UNIV - LONG BEACH 1808
 INTERNATIONAL, STATE & LOCAL WORKFORCE DEVELOPMENT & CAPAC-
 ITY BUILDING INSUPPORT OF NASA ESE PROGRA
 04/12/2000 - 04/14/2003 FY02: \$149,978 Total: \$399,964
Prin. Invest.: C T LEE
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12361 CALIFORNIA STATE UNIV - LONG BEACH 1809
 CSU/NASA EDUCATION COLLABORATIVE
 08/12/2002 - 06/30/2003 FY02: \$190,000 Total: \$190,000
Prin. Invest.: R WEST
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 329 CALIFORNIA STATE UNIV - LONG BEACH 1810
 AUGMENTED LEARNING ENVIRONMENT FOR RENEWABLE TEACH ING
 (ALERT)
 05/07/1998 - 08/14/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: E AMBOS
Tech. Officer: GSFC/B MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 4 173 CALIFORNIA STATE UNIV - LOS ANGELES 1811
 PARTNERSHIP AN INQUIRY AERONAUTICAL SCIENCE DISTANCE LEARNING
 ED PROJECT
 09/16/1999 - 09/17/2002 FY02: \$0 Total: \$199,998
Prin. Invest.: T ADENIKA-MORROW
Tech. Officer: DFRC/M MCCARTY, DFRC/J LARSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 4 174 CALIFORNIA STATE UNIV - LOS ANGELES 1812
 PARTNERSHIP INTEGRATION OF CONFIGURATION
 09/16/1999 - 12/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: C WU
Tech. Officer: DFRC/K GUPTA, DFRC/L VOELKER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 175 CALIFORNIA STATE UNIV - LOS ANGELES 1813
 PARTNERSHIP CONTROL HYPERSONIC VEHICLES
 09/15/1999 - 09/13/2002 FY02: \$0 Total: \$199,980
Prin. Invest.: M MIRMIRANI
Tech. Officer: DFRC/K GUPTA, DFRC/L VOELKER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 224 CALIFORNIA STATE UNIV - LOS ANGELES 1814
 CONTROL OF HIGH-PERFORMANCE FLIGHT VEHICLES: A MULTIDISCIPLINARY
 APPROACH
 05/02/2002 - 06/30/2003 FY02: \$79,999 Total: \$79,999
Prin. Invest.: M MIRMIRANI
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8889 CALIFORNIA STATE UNIV - LOS ANGELES 1815
 USE OF DECENTRALIZED CONTROL IN DESIGN OF A SEGMENTED SPACE
 01/03/2000 - 12/31/2002 FY02: \$500,000 Total: \$1,500,000
Prin. Invest.: H R BOUSSALIS
Tech. Officer: GSFC/J MALONE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8945 CALIFORNIA STATE UNIV - LOS ANGELES 1816
 ASYMMETRIES AND VARIATIONS IN JUPITER'S MAGNETOSPHERE
 01/28/2000 - 01/14/2003 FY02: \$0 Total: \$128,600
Prin. Invest.: K KHURANA
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9160 CALIFORNIA STATE UNIV - LOS ANGELES 1817
 UNIV PREPARATORY PROGRAM
 03/06/2000 - 06/30/2003 FY02: \$0 Total: \$200,000
Prin. Invest.: M EPSTEIN
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 439 CALIFORNIA STATE UNIV - LOS ANGELES 1818
 EXCELLENCE IN SCIENCE AND MATH EDUCATION FOR HARD TO STAFF
 URBAN SCHOOLS
 03/03/2000 - 02/28/2003 FY02: \$199,940 Total: \$599,820
Prin. Invest.: T ADENIKA-MORROW
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 6529 CALIFORNIA STATE UNIV - MONTEREY BAY 1819
 DEVELOPMENT OF A REGIONAL-SCALE ECOSYSTEM PROCESS MODEL
 FOR EVALUATING THE IMPACTS OF DEVELOPMENT
 12/08/1997 - 12/31/2001 FY02: -\$19,173 Total: \$680,827
Prin. Invest.: L PIERCE
Tech. Officer: GSFC/A JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99020 CALIFORNIA STATE UNIV - MONTEREY BAY 1820
 APPLICATION OF REMOTE SENSING AND ECOSYSTEM MODELING TO
 VINEYARD MANAGEMENT IN CALIFORNIA NAPA VALLEY
 08/13/1999 - 11/01/2002 FY02: \$162,053 Total: \$481,039
Prin. Invest.: L F JOHNSON
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1186 CALIFORNIA STATE UNIV - MONTEREY BAY 1821
 REMOTE SENSING, ECOSYSTEM MODELING, & GEOSPATIAL ANALYSIS
 FOR EARTH SYSTEMS SCIENCE & HEALTH
 06/28/2000 - 06/30/2003 FY02: \$727,251 Total: \$2,249,497
Prin. Invest.: S E ALEXANDER
Tech. Officer: ARC/J C COUGHLAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 4 162 CALIFORNIA STATE UNIV - NORTHRIDGE 1822
 NASA EXPLORERS
 02/24/1999 - 12/31/2001 FY02: -\$1,569 Total: \$256,581
Prin. Invest.: W FURUMOTO, M LIPSCHUTZ, G MASSEY
Tech. Officer: DFRC/M MCCARTHY, DFRC/J LARSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4973 CALIFORNIA STATE UNIV - NORTHRIDGE 1823
 PRECISE GROUND-BASED PHOTOMETRIC OBSERVATIONS AND SOLAR
 TOTAL AND SPECTRAL IRRADIANCE OBSERVATIONS B
 06/23/1997 - 10/31/2000 FY02: -\$4,522 Total: \$145,481
Prin. Invest.: G A CHAPMAN
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7191 CALIFORNIA STATE UNIV - NORTHRIDGE 1824
 ACQUISITION AND ANALYSIS OF PRECISE GROUND-BASED PHOTOMETRIC
 FULL-DISK IMAGES FOR THE UNDERSTANDING
 03/25/1998 - 07/31/2003 FY02: \$49,406 Total: \$193,005
Prin. Invest.: G A CHAPMAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7778 CALIFORNIA STATE UNIV - NORTHRIDGE 1825
 A PROPOSAL TO CHARACTERIZE AND UNDERSTAND THE SOURCES OF
 SOLAR TOTAL AND SPECTRAL IRRADIANCE VARIABILITY
 10/28/1998 - 01/31/2003 FY02: \$0 Total: \$114,487
Prin. Invest.: D A CHAPMAN
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 7878 CALIFORNIA STATE UNIV - NORTHRIDGE 1826
 A PROPOSAL TO COMPARE GROUND-BASED PHOTOMETRIC IMAGES WITH
 IRRADIANCE DATA FROM SOHO
 12/01/1998 - 12/14/2002 FY02: \$0 Total: \$35,810
Prin. Invest.: G A CHAPMAN
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9726 CALIFORNIA STATE UNIV - NORTHRIDGE 1827
 MICROSTRIP ANTENNA DEVELOPMENT FOR SPACECRAFT APPLICATIONS
 07/10/2000 - 08/31/2001 FY02: -\$69 Total: \$99,931
Prin. Invest.: S RENGARAJAN
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52280 Foothill-De Anza Com Coll System Off 1835
 EXPERIMENTAL INTERNSHIPS SUPPORTING ASTROBIOLOGY A EROSPACE
 TECHNOLOGY & INFORMATION TECHNOLOGY
 07/03/2001 - 06/30/2003 FY02: \$1,417,530 Total: \$2,253,854
Prin. Invest.: V K SERMON
Tech. Officer: ARC/G JAMES
CASE Category: 99 – MULTIINTERDISCIPL, OTHER

NAG 5 10880 CALIFORNIA STATE UNIV - NORTHRIDGE 1828
 STUDY OF THE POWER INPUT TO THE SOLAR CORONA FROM INTERMIT-
 TENT MAGNETIC FOOTPRINT MOTIONS
 05/14/2001 - 05/31/2004 FY02: \$63,173 Total: \$126,069
Prin. Invest.: A CADAVID
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9700 GLENDALE COMM COLL 1836
 CIMMARUSTI SCIENCE CENTER
 07/18/2000 - 08/14/2004 FY02: \$0 Total: \$3,831,000
Prin. Invest.: L SEROT
Tech. Officer: GSFC/H KASS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 489 CALIFORNIA STATE UNIV - NORTHRIDGE 1829
 ANALYZING DATA SETS
 04/06/2000 - 02/28/2004 FY02: \$299,698 Total: \$896,232
Prin. Invest.: C SHUBIN
Tech. Officer: GSFC/M MATTHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 5510 HARVEY MUDD COLL 1837
 A SAMPLE LOADING AND MANIPULATION SYSTEMS (SLIMS) FOR THE
 CHEMIN XRD/XRF INSTRUMENT
 09/11/2002 - 08/31/2003 FY02: \$41,490 Total: \$41,490
Prin. Invest.: J A KING
Tech. Officer: ARC/D F BLAKE
CASE Category: 12 – CHEMISTRY

NCC 5 513 CALIFORNIA STATE UNIV - NORTHRIDGE 1830
 FAILURE ANALYSIS PREVENTION, AND RELIABILITY MODEL ING FOR
 SUB-MICRON ELECTRONICS TECHNOLOGY, A RESE
 08/29/2000 - 08/31/2002 FY02: \$0 Total: \$998,380
Prin. Invest.: B BAVARIAN
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1452 LOMA LINDA UNIV 1838
 RESPONSE OF THYROID FUNCTIONAL TISSUE UNITS TO SPACE-LIKE
 RADIATION FIELDS
 08/15/2002 - 08/31/2005 FY02: \$54,311 Total: \$54,311
Prin. Invest.: L M GREEN
Tech. Officer: JSC/C LLOYD
CASE Category: 56 – MEDICL

NAG 4 200 CALIFORNIA STATE UNIV-BAKERSFIELD 1831
 METRIC ANALYSIS AND EVALUATION FOR NASA/DRYDEN FLI GHT RE-
 SEARCH
 01/31/2000 - 02/06/2003 FY02: \$0 Total: \$73,041
Prin. Invest.: K L NYBERG
Tech. Officer: DFRC/K S SHY
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 79 LOMA LINDA UNIV 1839
 PROTON SPACE RESEARCH
 01/13/1999 - 09/30/2000 FY02: \$0 Total: \$12,000,000
Prin. Invest.: G A NELSON
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 13 – PHYSICS

NAG 4 161 CALIFORNIA STATE UNIV, DOMINQUEZ HILLS 1832
 STEP PACE SCIENCE TECH PROJECT
 02/17/1999 - 12/31/2001 FY02: \$0 Total: \$299,869
Prin. Invest.: E KRINSKY
Tech. Officer: DFRC/M MC CARTHY, DFRC/J LARSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 118 LOMA LINDA UNIV 1840
 COOPERATIVE RESEARCH IN PROTON SPACE RADIATION
 02/02/2001 - 12/31/2001 FY02: \$0 Total: \$3,661,000
Prin. Invest.: G NELSON, J ARCHAMBEAU, J SLATER
Tech. Officer: JSC/F CUCINOTTA
CASE Category: 13 – PHYSICS

NAG13 99010 CALIFORNIA STATE UNIV, DOMINQUEZ HILLS 1833
 SOUTHERN CALIFORNIA CENTER FOR MANAGING FIRE HAZ- ARDS AT THE
 URBAN WILDLANDS INTERFACE
 03/03/1999 - 02/28/2003 FY02: \$0 Total: \$1,587,523
Prin. Invest.: C LEE
Tech. Officer: JSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 149 LOMA LINDA UNIV 1841
 COOPERATIVE RESEARCH IN PROTON SPACE RADIATION
 03/28/2002 - 12/31/2002 FY02: \$4,989,000 Total: \$4,989,000
Prin. Invest.: J SLATER, D GRIDLEY
Tech. Officer: JSC/F CUCINOTTA
CASE Category: 13 – PHYSICS

NGT 2 1001 FOOTHILL-DE ANZA COM COLL SYSTEM OFF 1834
 SCIENTIFIC-TECHNICAL & BUSINESS CAREERS TRAINING G RANT
 07/07/1993 - 08/31/2001 FY02: \$11,800 Total: \$9,800,448
Prin. Invest.: M CONWAY
Tech. Officer: ARC/M E LOPEZ, ARC/J M MCCULLOUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 6062 NATIONAL HISPANIC UNIV 1842
 PRE COLL ACHIEVEMENT OF EXCELLENCE IN MATHEMATI CS SCIENCE
 ENGINEERING AND TECHNOLOGY PROJECT DIS
 08/21/2002 - 08/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: J HAWKINS
Tech. Officer: ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1343 **NATIONAL HISPANIC UNIV** **1843**
 SCHOLARSHIP SUPPORT OF LATINO AND /OR NATIVE AMERI CAN HIGH
 SCHOOL STUDENTS AND LATINO COLL PREPA
 06/04/2002 - 05/31/2003 FY02: \$73,266 Total: \$73,266
Prin. Invest.: M PEREZ
Tech. Officer: ARC/A CARDENAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 6055 **NATIONAL HISPANIC UNIV** **1844**
 A PROPOSAL TO ESTABLISH A TEACHER ENHANCEMENT PROG RAM FOR
 RURAL ELEMENTARY TEACHERS SERVING LARGE P
 02/19/2002 - 02/28/2003 FY02: \$124,915 Total: \$124,915
Prin. Invest.: J S HAWKINS
Tech. Officer: ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 664 **NATIONAL HISPANIC UNIV** **1845**
 THE FUTURE MSET TEACHERS CENTER FOR EDUCATIONAL EX CELLENCE
 08/21/2002 - 08/31/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: J HAWKINS
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11197 **PASADENA CITY COLL** **1846**
 SMARTT: SCIENTISTS MENTORING ASTRONOMY RESEARCH T EAMS OF
 TOMORROW: A PROPOSAL FOR DOING RESEARCH
 09/13/2001 - 12/31/2003 FY02: \$114,000 Total: \$174,000
Prin. Invest.: J SEPIKAS
Tech. Officer: GSFC/P J SAKIMOTO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9618 **POMONA COLL** **1847**
 THERMAL AND MECHANICAL ANALYSIS OF SMALL, SHALLOW MAGMA
 RESERVOIRS ON MARS
 05/18/2000 - 09/30/2002 FY02: \$0 Total: \$38,400
Prin. Invest.: E GROSFILS
Tech. Officer: GSFC/J BOYCE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10157 **POMONA COLL** **1848**
 VOLCANIC & TECTONIC HISTORY OF THE NEMESIS TESSERA REGION ON
 VENUS
 12/18/2000 - 12/31/2003 FY02: \$25,200 Total: \$50,000
Prin. Invest.: E GROSFILS
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10498 **POMONA COLL** **1849**
 THERMOMECHANICAL ANALYSIS OF SMALL, SHALLOW MAGMA RESER-
 VOIRS ON MARS: IMPLICATONS FOR RESERVOIR FAIL
 03/09/2001 - 03/14/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: E GROSFILS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 2 6060 **SAN BERNARDINO VALLEY COLL** **1850**
 STUDENT SUCCESS IN MESA PROPOSAL
 08/14/2002 - 08/14/2003 FY02: \$59,030 Total: \$59,030
Prin. Invest.: D AVILA
Tech. Officer: ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 02082 **SAN DIEGO STATE UNIV** **1851**
 A DIFFUSION BASED APPROACH TO THERMAL TOMOGRAPHY
 04/08/2002 - 04/07/2004 FY02: \$65,000 Total: \$65,000
Prin. Invest.: R A KLINE
Tech. Officer: LARC/W P WINFREE, LARC/P A HOWELL
CASE Category: 13 – PHYSICS

NAG 5 8560 **SAN DIEGO STATE UNIV** **1852**
 ENVIRONMENTAL CHANGE AND NATURAL HAZARD ASSESSMENT IN WEST-
 ERN TURKMENIS-TAN USING INTERFEROMETRIC SY
 07/14/1999 - 06/30/2003 FY02: \$0 Total: \$127,864
Prin. Invest.: R MELLORS
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9301 **SAN DIEGO STATE UNIV** **1853**
 OPERATIONAL MONITORING OF ALTERATION IN REGIONAL FOREST COVER
 USING MULTITEMPORAL REMOTE SENSING
 03/20/2000 - 04/30/2003 FY02: \$115,915 Total: \$274,311
Prin. Invest.: J FRANKLIN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10376 **SAN DIEGO STATE UNIV** **1854**
 PROBING SHOCKS & WINDS IN THE PECULIAR BINARY STAR VSAGITTAE
 (FUSE 00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$44,100
Prin. Invest.: J WOOD
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11141 **SAN DIEGO STATE UNIV** **1855**
 FIRE, LAND COVER AND CLIMATE CHANGE: IMPACTS ON RIVER FLOWS IN
 SEMI-ARID SHRUBLAND WATERSHEDS
 07/26/2001 - 07/31/2004 FY02: \$134,766 Total: \$211,015
Prin. Invest.: A HOPE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12348 **SAN DIEGO STATE UNIV** **1856**
 ACCRETION DISK VISCOSITY (FUSE 2001)
 08/20/2002 - 08/31/2003 FY02: \$21,133 Total: \$21,133
Prin. Invest.: J WOOD
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12401 **SAN DIEGO STATE UNIV** **1857**
 PICOPLANKTON AND OTHER PHYTOPLANKTON FUNCTIONAL GROUPS:
 OPTICAL PROPERTIES AND REMOTE SENSING
 07/24/2002 - 07/14/2005 FY02: \$81,784 Total: \$81,784
Prin. Invest.: J MUELLER
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99017 **SAN DIEGO STATE UNIV** **1858**
 REGIONAL CHANGE MONITORING OF HABITAT RESERVE SYSTEMS WITH
 VERY HIGH RESOLUTION REMOTELY SENSED
 07/19/1999 - 10/31/2002 FY02: \$149,000 Total: \$579,000
Prin. Invest.: D STOW
Tech. Officer: JSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAS 5 00199 SAN DIEGO STATE UNIV 1859
 R & D TO SUPPORT GSFC'S SIMBIOS PROJECT
 01/26/2001 - 11/30/2002 FY02: \$116,284 Total: \$228,884
Prin. Invest.: J L MUELLER
Tech. Officer: GSFC/C R CRANE
CASE Category: 33 – OCEANOGRAPHY

NGT 5 30444 SAN DIEGO STATE UNIV 1867
 LONG-TERM IMPACTS OF FREQUENT FIRE AND URBANIZATION ON NATIVE
 VEGETATION IN CALIFORNIA MEDITERRANEAN-T
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J FRANKLIN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 00202 SAN DIEGO STATE UNIV 1860
 R & D TO SUPPORT GSFC'S SIMBIOS PROJECT
 02/07/2001 - 11/30/2002 FY02: \$179,638 Total: \$351,114
Prin. Invest.: C C TREES
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAG 2 1285 SAN FRANCISCO STATE UNIV 1868
 FREE FLIGHT INFORMATION & AUTOMATION ISSUES
 02/08/1999 - 02/14/2003 FY02: \$96,162 Total: \$362,499
Prin. Invest.: K L MOSIER, E A LYALL
Tech. Officer: ARC/J M ORASANU
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 3 842 SAN DIEGO STATE UNIV 1861
 DYNAMICS OF FLAME SPREAD IN MICROGRAVITY ENVIRONMENT
 01/05/2001 - 11/30/2004 FY02: \$94,500 Total: \$209,500
Prin. Invest.: S BHATTACHARJEE
Tech. Officer: GRC/S L OLSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 7511 SAN FRANCISCO STATE UNIV 1869
 THE SEASONAL AND INTERANNUAL VARIABILITY OF PHYTOPLANKTON IN
 THE BERING SEA AS INFLUENCED BY SEA ICE
 07/24/1998 - 07/31/2002 FY02: \$1,780 Total: \$328,643
Prin. Invest.: D H ROBINSON
Tech. Officer: GSFC/J W MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC13 00002 SAN DIEGO STATE UNIV 1862
 AFFILIATED RESEARCH CENTER (ARC) PROGRAM AT SAN DIEGO STATE
 UNIV
 02/11/2000 - 02/10/2005 FY02: \$149,351 Total: \$524,350
Prin. Invest.: D STOWE
Tech. Officer: SSC/A PEEK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8013 SAN FRANCISCO STATE UNIV 1870
 A COUPLED ICE-OCEAN MODEL OF MESOSCALE PHYSICAL/BIOLOGICAL
 INTERACTIONS IN THE SOUTHERN OCEAN
 01/20/1999 - 01/31/2002 FY02: \$0 Total: \$115,840
Prin. Invest.: D H ROBINSON
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 02018 SAN DIEGO STATE UNIV 1863
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 07/10/2002 - 06/30/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: P ETZEL, J L STOCKUM
Tech. Officer: LARC/D D MAZANEK
CASE Category: 11 – ASTRONOMY

NCC 2 1128 SAN FRANCISCO STATE UNIV 1871
 CONSTRUCTION OF A LONG-TERM CLIMATOLOGY OF ANTARCTIC & ARCTIC
 POLAR STRATOSPHERIC CLOUDS BY AN AUTOMATED
 07/01/1999 - 12/31/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: K L PAGAN
Tech. Officer: ARC/R S HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 30335 SAN DIEGO STATE UNIV 1864
 LONG-TERM IMPACTS OF FIRE ON STREAMFLOW IN CALIFORNIA
 MEDITERRANEAN-TYPE SHRUB LANDS: AN INTEGRATED
 08/21/2000 - 08/31/2003 FY02: \$18,000 Total: \$62,000
Prin. Invest.: A S HOPE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1277 SAN FRANCISCO STATE UNIV 1872
 EFFECTS OF CENTRIFUGATION ON THE IMMUNE RESPONSE OF MACROPHAGES &
 DIFFERENTIATION INTO OSTEOCLASTS
 08/15/2001 - 07/31/2003 FY02: \$0 Total: \$10,427
Prin. Invest.: S WEINSTEIN
Tech. Officer: ARC/N D SEARBY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 30367 SAN DIEGO STATE UNIV 1865
 ASSESSING THE EFFECTS OF VARIATIONS IN SOIL MOISTURE ON THE
 SURFACE ENERGY BALANCE AND CARBON/R
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A HOPE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1278 SAN FRANCISCO STATE UNIV 1873
 MODELING THE ONSET EXTENT & DURATION OF DEHYDRATION IN THE
 WINTER POLAR VORTEX, USING IMPACT, AVHRR
 08/15/2001 - 07/31/2003 FY02: \$50,000 Total: \$130,000
Prin. Invest.: P FOSCHI
Tech. Officer: ARC/S HIPSKIND, ARC/A TABAZADEH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 30439 SAN DIEGO STATE UNIV 1866
 HYDRO-ECOLOGICAL LINKAGES IN URBANIZING WATERSHEDS : A
 PROCESS-BASED ASSESSMENT OF LAND-USE CHANGE
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C TAGUE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 5301 SAN FRANCISCO STATE UNIV 1874
 AERONAUTICAL TELECOMMUNICATION NETWORK MODELING & SIMULATION
 12/04/1998 - 11/30/2001 FY02: \$0 Total: \$59,973
Prin. Invest.: H SHAHNASSER
Tech. Officer: ARC/P R GRAMS, ARC/J WANG
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 6059 **SAN FRANCISCO STATE UNIV** **1875**
 EDUCATIONAL OUTREACH TO ENCOURAGE AND INSPIRE THE PURSUIT OF
 CAREERS IN SCIENCE AND ENGINEERING TO D
 07/19/2002 - 07/31/2003 FY02: \$31,666 Total: \$31,666
Prin. Invest.: S UJLAKI, M SCOTT
Tech. Officer: ARC/M E DUENAS
CASE Category: 62 – PSYCHOLOGY SOCIAL ASPECTS

NAG 1 2205 **SAN JOSE STATE UNIV** **1876**
 CHARACTERIZ'G STRATOSPHERIC & TROPOSPHERIC AEROSOL: THEORETI-
 CAL STUDIES & ANAL OF SATELLITE DATA (NRA)
 06/15/1999 - 02/28/2003 FY02: \$42,584 Total: \$126,687
Prin. Invest.: P HAMILL
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1421 **SAN JOSE STATE UNIV** **1877**
 WEB-BASED INTEGRATION OF DATA BASES & APPLICATIONS FOR NA-
 TIONAL AIRSPACE SYSTEM ANALYSIS
 07/14/2000 - 07/14/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: G POUR, K CORKER
Tech. Officer: ARC/D KOZARSKY
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1435 **SAN JOSE STATE UNIV** **1878**
 SHARED CONTROL AMONG AIR TRAFFIC CONTROL, FLIGHT D ECK, &
 DECISION AIDING SYSTEMS: PERFORMANCE PARAM
 09/13/2000 - 08/31/2001 FY02: \$0 Total: \$150,943
Prin. Invest.: K CORKER
Tech. Officer: ARC/I C STATLER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1454 **SAN JOSE STATE UNIV** **1879**
 PROPOSAL STATEMENT OF WORK FOR THE MODELING & SYSTEM
 SAFETY & STABILITY SUB-ELEMENT-ELEMENT SYSTEM
 02/01/2001 - 02/28/2002 FY02: \$31,676 Total: \$126,704
Prin. Invest.: K CORKER
Tech. Officer: ARC/I STATLER, ARC/M M CONNORS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1528 **SAN JOSE STATE UNIV** **1880**
 THE VIRTUAL GLOVEBOX (VGX): A PROCEDURE IDENTIFICATION, TASK
 ANALYSIS & COMPUTER AIDED DESIGN
 10/22/2001 - 01/31/2003 FY02: \$97,029 Total: \$97,029
Prin. Invest.: K M CORKER
Tech. Officer: ARC/J D SMITH, ARC/R BOYLE
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 2 1550 **SAN JOSE STATE UNIV** **1881**
 REQUIREMENTS SPECIFICATION FOR REAL AND FAST TIME SCENARIOS
 FOR SIMULATED EVALUATION OF ADVANCED AIR
 04/12/2002 - 04/14/2003 FY02: \$132,000 Total: \$132,000
Prin. Invest.: K CORKER
Tech. Officer: ARC/S LOZITO, ARC/R ASHFORD
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1563 **SAN JOSE STATE UNIV** **1882**
 HUMAN SYSTEM PERFORMANCE MODELING FOR PREDICTION OF ER-
 RORNEOUS BEHAVIOR: ADVANCED AND INTEGRATED VI
 05/30/2002 - 09/30/2003 FY02: \$55,567 Total: \$55,567
Prin. Invest.: K CORKER
Tech. Officer: ARC/D FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 6056 **SAN JOSE STATE UNIV** **1883**
 DEVELOPMENT OF THE NASA AMES TEACHER INST
 06/05/2002 - 02/28/2003 FY02: \$35,347 Total: \$35,347
Prin. Invest.: E M LANDESMAN
Tech. Officer: ARC/L K COE, ARC/D G JAMES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4372 **SAN JOSE STATE UNIV** **1884**
 RADIO OCCULTATION INVESTIGATION OF THE RINGS OF SA
 04/25/1997 - 02/28/2002 FY02: \$0 Total: \$142,400
Prin. Invest.: D A MAROUF
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9500 **SAN JOSE STATE UNIV** **1885**
 NUMERICAL SIMULATION OF MARS' CONVECTIVE BOUNDARY LAYER AND
 DUST DEVILS
 05/09/2000 - 05/31/2003 FY02: \$27,000 Total: \$141,200
Prin. Invest.: S C RAFKIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9751 **SAN JOSE STATE UNIV** **1886**
 MESOSCALE & LES MODELING OF THE MARTIAN ATMOSPHERE WIND
 STREAKS AND DUST DEVILS
 06/27/2000 - 06/30/2003 FY02: \$0 Total: \$102,100
Prin. Invest.: S RAFKIN
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9766 **SAN JOSE STATE UNIV** **1887**
 LARGE-SCALE WAVE ACTIVITY IN A MARS GENERAL CIRCULATION MODEL:
 CHARACTERIZATION & COMPARISON WITH
 06/29/2000 - 06/30/2003 FY02: \$0 Total: \$62,900
Prin. Invest.: A BRIDGER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11184 **SAN JOSE STATE UNIV** **1888**
 CLIMATOLOGY AND NUMERICAL SIMULATION OF CONDENSATE CLOUDS
 DETECTED BY MGS
 09/05/2001 - 09/14/2004 FY02: \$49,410 Total: \$94,487
Prin. Invest.: S RAFKIN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11185 **SAN JOSE STATE UNIV** **1889**
 AVP GRADUATE STUDIES AND RESEARCH
 08/21/2001 - 08/31/2003 FY02: \$43,672 Total: \$77,972
Prin. Invest.: A BRIDGER
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12302 **SAN JOSE STATE UNIV** **1890**
 CONTINUED STUDIES OF STATIONARY PLANETARY-SCALE WAVES IN
 MARS' ATMOSPHERE
 06/20/2002 - 06/30/2004 FY02: \$38,487 Total: \$38,487
Prin. Invest.: A BRIDGER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 8 1735 **SAN JOSE STATE UNIV** **1891**
 URBAN EFFECT ON THUNDERSTORMS
 08/04/2000 - 12/31/2001 FY02: \$0 Total: \$50,000
Prin. Invest.: R BORNSTEIN
Tech. Officer: MSFC/D QUATTROCHI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1015 **SAN JOSE STATE UNIV** **1892**
 INTEGRATING LEGACY APPLICATIONS WITHIN A MIDDLEWARE ENVIRONMENT
 02/01/1998 - 07/31/2001 FY02: -\$1 Total: \$189,813
Prin. Invest.: R FATOOHI, D HARKEY
Tech. Officer: ARC/M E LIVINGSTON, ARC/D KAWAK
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1045 **SAN JOSE STATE UNIV** **1893**
 AIRBORNE MEASUREMENT RESEARCH
 06/30/1998 - 06/30/2003 FY02: \$0 Total: \$141,145
Prin. Invest.: J GOODMAN
Tech. Officer: ARC/PBUI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1060 **SAN JOSE STATE UNIV** **1894**
 SOLAR WIND STUDIES & AI TECHNOLOGIES
 08/11/1998 - 10/31/2001 FY02: \$0 Total: \$370,550
Prin. Invest.: P J HAMILL
Tech. Officer: ARC/A BARNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 1071 **SAN JOSE STATE UNIV** **1895**
 ASSESSMENT OF DISTRIBUTED OBJECT MIDDLEWARE
 11/16/1998 - 04/30/2001 FY02: \$0 Total: \$174,997
Prin. Invest.: R FATOOHI
Tech. Officer: ARC/T A LASINSKI
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1095 **SAN JOSE STATE UNIV** **1896**
 HUMAN FACTORS RESEARCH, TECHNOLOGY & SAFETY
 03/11/1999 - 04/30/2002 FY02: \$611,021 Total: \$7,289,707
Prin. Invest.: K P JORDAN
Tech. Officer: ARC/R K DISMUKES, ARC/C H NULL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1096 **SAN JOSE STATE UNIV** **1897**
 EFFECTS OF CHRONIC EXPOSURE TO HYPER GRAVITY ON DIFFERENT STRAINS OF YOUNG & MATURE RATS
 03/11/1999 - 07/31/2002 FY02: \$0 Total: \$169,868
Prin. Invest.: R A FOX
Tech. Officer: ARC/N G DAUNTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1097 **SAN JOSE STATE UNIV** **1898**
 FLIGHT MANAGEMENT & AIR TRAFFIC MODELING
 03/19/1999 - 10/31/2002 FY02: \$532,913 Total: \$2,376,686
Prin. Invest.: K P JORDAN
Tech. Officer: ARC/M B TISCHLER, ARC/B D MCNALLY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1106 **SAN JOSE STATE UNIV** **1899**
 EXPERIMENTAL STUDIES OF THE DISTRIBUTION OF & INTERACTION BETWEEN REACTIVE TRACE CHEMICALS WITH DYNAMICS
 04/12/1999 - 03/31/2003 FY02: \$186,697 Total: \$842,658
Prin. Invest.: J GOODMAN
Tech. Officer: ARC/P BUI, ARC/E P CONDON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1132 **SAN JOSE STATE UNIV** **1900**
 THE INFLUENCE OF THE ATMOSPHERE ON POLARIZED BIRINGENTIAL REFLECTANCE DATA OF BOREAL WETLANDS
 08/17/1999 - 12/31/2001 FY02: \$0 Total: \$31,000
Prin. Invest.: P A HAMILL, U BOTTGER
Tech. Officer: ARC/V VANDERBILT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1155 **SAN JOSE STATE UNIV** **1901**
 FLIGHT HUMAN FACTORS
 02/02/2000 - 01/31/2003 FY02: \$2,390,792 Total: \$5,425,709
Prin. Invest.: K JORDON
Tech. Officer: ARC/RJ DISMUKES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1168 **SAN JOSE STATE UNIV** **1902**
 PLANETARY ATMOSPHERIC STRUCTURE FROM SPACECRAFT DATA
 03/29/2000 - 12/31/2001 FY02: -\$10 Total: \$113,419
Prin. Invest.: A BRIDGER
Tech. Officer: ARC/R E YOUNG
CASE Category: 11 – ASTRONOMY

NCC 2 1248 **SAN JOSE STATE UNIV** **1903**
 RINGS NODE DATA ARCHIVE MANAGEMENT
 03/27/2001 - 03/31/2003 FY02: \$176,645 Total: \$273,005
Prin. Invest.: P J HAMIL
Tech. Officer: ARC/J N CUZZI
CASE Category: 11 – ASTRONOMY

NCC 2 1284 **SAN JOSE STATE UNIV** **1904**
 A PROPOSAL TO SUPPORT FUTURE FLIGHT RESEARCH AT NASA AMES RESEARCH CENTER
 09/17/2001 - 11/30/2002 FY02: \$10,000 Total: \$26,098
Prin. Invest.: M S PATANKAR
Tech. Officer: ARC/N S DORGHI, ARC/B SULLIVAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1285 **SAN JOSE STATE UNIV** **1905**
 ARTIFICIAL INTELLIGENCE STUDIES OF SPACE SCIENCE DATA
 09/27/2001 - 09/30/2003 FY02: \$193,294 Total: \$245,624
Prin. Invest.: P A HAMILL
Tech. Officer: ARC/T L ROUSH, ARC/J SCARGLE
CASE Category: 11 – ASTRONOMY

NCC 2 1286 **SAN JOSE STATE UNIV** **1906**
 RESEARCH COLLABORATIVE WITH COMPUTATIONAL SCIENCES DIVISION (CSD)
 09/28/2001 - 09/30/2002 FY02: \$140,100 Total: \$233,100
Prin. Invest.: J MURPHY
Tech. Officer: ARC/N MUSCETTOLA, ARC/D CLANCY
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1289 **SAN JOSE STATE UNIV** **1907**
 SYSTEMS SAFETY RESEARCH
 02/01/2002 - 01/31/2003 FY02: \$1,679,379 Total: \$1,679,379
Prin. Invest.: K JORDAN
Tech. Officer: ARC/K DISMUKES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1294 **SAN JOSE STATE UNIV** **1908**
 RESEARCH COLLABORATIVE WITH NASA - ARC
 11/01/2001 - 10/31/2002 FY02: \$190,008 Total: \$190,008
Prin. Invest.: N IBRAHIM
Tech. Officer: ARC/G S HUBBARD
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 2 1302 **SAN JOSE STATE UNIV** **1909**
 HUMAN INFORMATION MANAGEMENT
 02/01/2002 - 01/31/2003 FY02: \$839,985 Total: \$839,985
Prin. Invest.: K JORDAN
Tech. Officer: ARC/R K DISMUKES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1305 **SAN JOSE STATE UNIV** **1910**
 AVIATION MONITORING AND MODELING SUB ELEMENT SYSTEM WIDE
 ACCIDENT PREVENTION; NASA AVIATION SAFETY
 02/26/2002 - 02/28/2003 FY02: \$161,802 Total: \$161,802
Prin. Invest.: K CORKER
Tech. Officer: ARC/I STATLER, ARC/M M CONNORS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1307 **SAN JOSE STATE UNIV** **1911**
 SJSU/NASA COORDINATION OF AIR MIDAS SAFETY DEVELOPMENT HUMAN
 ERROR MODELING: NASA AVIATION SAFETY P
 02/26/2002 - 02/28/2003 FY02: \$100,491 Total: \$100,491
Prin. Invest.: K CORKER
Tech. Officer: ARC/D C FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1313 **SAN JOSE STATE UNIV** **1912**
 SYSTEM WIDE ACCIDENT PREVENTION HUMAN FACTORS ANALYSIS
 EVALUATION PROVIDED TO THE NASA AVIATION SAFETY
 02/28/2002 - 02/28/2003 FY02: \$86,650 Total: \$86,650
Prin. Invest.: K CORKER
Tech. Officer: ARC/B BEARD, ARC/D FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1314 **SAN JOSE STATE UNIV** **1913**
 DISTRIBUTION AND SOURCES OF REACTIVE TRACE GASES AND AEROSOLS
 IN THE TROPOSPHERE OF THE WESTERN PACIFIC
 02/20/2002 - 02/28/2003 FY02: \$53,680 Total: \$53,680
Prin. Invest.: P HAMILL, W VIEZEE
Tech. Officer: ARC/H SINGH, ARC/R S HIRSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1365 **SAN JOSE STATE UNIV** **1914**
 FLIGHT MANAGEMENT AND AIR - TRAFFIC MODELING
 09/12/2002 - 08/31/2003 FY02: \$136,969 Total: \$136,969
Prin. Invest.: K JORDAN
Tech. Officer: ARC/M TISCHLER
CASE Category: 41 – AERONAUTICAL ENGINEERING

NCC 2 1368 **SAN JOSE STATE UNIV** **1915**
 RESEARCH COLLABORATIVE WITH COMPUTATIONAL SCIENCES DIVISION
 09/24/2002 - 09/30/2004 FY02: \$152,977 Total: \$152,977
Prin. Invest.: N IBRAHIM
Tech. Officer: ARC/D CLANCY, ARC/S LAU
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 5311 **SAN JOSE STATE UNIV** **1916**
 EXTREME CORRHIZAE ECOLOGY IN YELLOWSTONE PARK
 03/17/1999 - 01/31/2002 FY02: \$0 Total: \$78,220
Prin. Invest.: C A BRINEGAR
Tech. Officer: ARC/K W CULLINGS, ARC/M L FONDA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIRONMENTAL)

NCC 2 5330 **SAN JOSE STATE UNIV** **1917**
 INVESTIGATION OF MARS' ATMOSPHERIC CONDITIONS IN CONNECTION
 WITH AEROBRAKING & AEROCAPTURE ACTIVITIES
 07/08/1999 - 06/30/2002 FY02: \$0 Total: \$41,002
Prin. Invest.: A C BRIDGER
Tech. Officer: ARC/R M HABERLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5336 **SAN JOSE STATE UNIV** **1918**
 AN INVESTIGATION OF CYCLO-FRONTOGENESIS MARS' ATMOSPHERE
 07/20/1999 - 07/14/2001 FY02: -\$2,780 Total: \$166,625
Prin. Invest.: J L HOLLINGSWORTH
Tech. Officer: ARC/R M HABERLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5338 **SAN JOSE STATE UNIV** **1919**
 FAR INFRARED EMISSION FROM GALACTIC & EXTRAGALACTIC INTERSTELLAR
 GAS
 07/23/1999 - 07/31/2001 FY02: -\$5 Total: \$48,429
Prin. Invest.: M J KAUFMAN
Tech. Officer: ARC/D J HOLLEN
CASE Category: 11 – ASTRONOMY

NCC 2 5344 **SAN JOSE STATE UNIV** **1920**
 ASTROBIOLOGY RAPID RATES OF CHANGE
 08/12/1999 - 07/31/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: E P METZGER
Tech. Officer: ARC/H L D'ANTONI
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 5347 **SAN JOSE STATE UNIV** **1921**
 VOLATILE OXYGENATED HYDROCARBONS - ANALYTICAL SYSTEM DEVELOPMENT
 & TROPOSPHERIC ATMOSPHERIC CHEMISTRY
 09/01/1999 - 01/31/2002 FY02: -\$2 Total: \$29,998
Prin. Invest.: P A HAMMILL
Tech. Officer: ARC/H B SINGH, ARC/E P CONDON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5402 **SAN JOSE STATE UNIV** **1922**
 IDENTIFICATION & CHARACTERIZATION OF NON-INVENTORIED TERRESTRIAL
 IMPACT CRATERS
 10/05/2000 - 09/30/2001 FY02: -\$20 Total: \$9,980
Prin. Invest.: P MESSINA
Tech. Officer: ARC/H L D'ANTONI, ARC/E P CONDON
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 2 5435 **SAN JOSE STATE UNIV** **1923**
 AVP GRADUATE STUDIES & RESEARCH
 05/15/2001 - 04/30/2002 FY02: \$0 Total: \$8,293
Prin. Invest.: P HAMILL
Tech. Officer: ARC/K ZAHNLE
CASE Category: 11 – ASTRONOMY

NCC 2 5450 **SAN JOSE STATE UNIV** **1924**
 ANALYSIS OF SATELLITE DATA AND PREPARATION OF REPORTS ON A
 STRATOSPHERIC AEROSOL CLIMATOLOGY
 07/30/2001 - 04/30/2002 FY02: \$0 Total: \$6,765
Prin. Invest.: P A HAMILL
Tech. Officer: ARC/P B RUSSELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5451 **SAN JOSE STATE UNIV** **1925**
 EXTREME ATMOSPHERIC ENVIRONMENTS AND HABITABLE CLI MATES
 07/30/2001 - 07/31/2003 FY02: \$68,010 Total: \$114,010
Prin. Invest.: J L HOLLINGSWORTH
Tech. Officer: ARC/R E YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5452 **SAN JOSE STATE UNIV** **1926**
 ANALYSIS OF THE INTERACTION OF HALOGENATED AND OR GANIC
 GASES WITH ATMOSPHERIC PARTICULATES
 08/03/2001 - 07/31/2003 FY02: \$10,228 Total: \$20,403
Prin. Invest.: P J HAMILL
Tech. Officer: ARC/L T IRACI, ARC/A TABAZADEH
CASE Category: 12 – CHEMISTRY

NCC 2 5460 **SAN JOSE STATE UNIV** **1927**
 IONIZED, NEUTRAL & MOLECULAR GAS DIAGNOSTICS IN GA LAXIES:
 MODELS FOR SIRT
 09/17/2001 - 08/31/2003 FY02: \$20,334 Total: \$40,000
Prin. Invest.: M J KAUFMAN
Tech. Officer: ARC/D J HOLLENBACH, ARC/R E YOUNG
CASE Category: 11 – ASTRONOMY

NCC 2 5465 **SAN JOSE STATE UNIV** **1928**
 COMPOSITION & DYNAMICS OF SATURN'S RINGS
 09/26/2001 - 08/14/2002 FY02: \$20,000 Total: \$30,000
Prin. Invest.: P A HAMILL
Tech. Officer: ARC/J N CUZZI, ARC/J J LISSAUER
CASE Category: 11 – ASTRONOMY

NCC 2 5468 **SAN JOSE STATE UNIV** **1929**
 THE RUNAWAY GREENHOUSE EFFECT ON EARTH & OTHER PLA NETS
 10/16/2001 - 09/30/2002 FY02: \$34,121 Total: \$34,121
Prin. Invest.: P A HAMILL
Tech. Officer: ARC/P PILEWSKIE, ARC/W J GORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5476 **SAN JOSE STATE UNIV** **1930**
 EARTH SCIENCE APPLICATIONS OF NEURAL NETWORKS
 11/23/2001 - 11/30/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: E F METZGER
Tech. Officer: ARC/H L D'ANTONIO, ARC/J BRASS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 5498 **SAN JOSE STATE UNIV** **1931**
 THE EFFECT OF CLOUD CRYSTALLIZATION PROCESSES ON C LIMATE
 CHANGE & OZONE
 07/01/2002 - 06/30/2003 FY02: \$16,368 Total: \$16,368
Prin. Invest.: P HAMILL
Tech. Officer: ARC/A TABAZADEH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5521 **SAN JOSE STATE UNIV** **1932**
 EJECTA FROM CRATERS IN THE SATURNIAN SYSTEM
 09/04/2002 - 09/30/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: P HAMILL
Tech. Officer: ARC/K ZAHNLE, ARC/J LISSAUER
CASE Category: 11 – ASTRONOMY

NCC 2 6042 **SAN JOSE STATE UNIV** **1933**
 STELLAR 2000
 03/03/2000 - 04/30/2001 FY02: -\$18,985 Total: \$176,515
Prin. Invest.: M M AVERNER
Tech. Officer: ARC/R D MACELROY
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 2 52262 **SAN JOSE STATE UNIV** **1934**
 SUMMER FACULTY RESEARCH FELLOWSHIP PROGRAM
 03/31/2000 - 04/30/2003 FY02: \$455,000 Total: \$1,229,968
Prin. Invest.: B STONE
Tech. Officer: ARC/M MOORE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12113 **SANTA ANA COLL-RANCHO SANTA COMM COLL** **1935**
 PARTNERSHIP OF THE DISCOVERY SCIENCE CENTER AND SA NTA ANA
 COLL
 05/03/2002 - 04/30/2003 FY02: \$1,497,000 Total: \$1,497,000
Prin. Invest.: P BOSTIC
Tech. Officer: HQ/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9736 **SANTA CLARA UNIV** **1936**
 DISTRIBUTED SPACE SYSTEM TECHNOLOGY DEMONSTRATIONS WITH THE
 EMERALD NANOSATELLITE
 06/22/2000 - 06/30/2003 FY02: \$0 Total: \$80,000
Prin. Invest.: C A KITTS
Tech. Officer: GSFC/K LUU
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1156 **SANTA CLARA UNIV** **1937**
 EVALUATING BEHAVIORAL-BASED APPROACHES TO CHANGING SAFETY
 CULTURE IN AVIATION MAINTENANCE
 02/25/2000 - 01/31/2002 FY02: \$45,000 Total: \$370,524
Prin. Invest.: J TAYLOR
Tech. Officer: ARC/B KANKI
CASE Category: 62 – PSYCHOLOGY SOCIAL ASPECTS

NCC 2 1195 **SANTA CLARA UNIV** **1938**
 SHARP DEMONSTRATION FLIGHT: VIDEO BROADCAST SYSTEM FOR RE-
 SEARCH IN INTELLIGENT FLIGHT CHARACTERIZAT
 08/24/2000 - 09/30/2001 FY02: \$0 Total: \$13,300
Prin. Invest.: C A KITTS
Tech. Officer: ARC/P KOLODZIEJ, ARC/S M JOHNSON
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 2 1320 **SANTA CLARA UNIV** **1939**
 CONSTRUCTIVE RESEARCH PROJECTS EVALUATING AVIATION MAINTEN-
 NANCE RESOURCE MANAGEMENT
 03/12/2002 - 02/28/2003 FY02: \$83,540 Total: \$83,540
Prin. Invest.: J C TAYLOR
Tech. Officer: ARC/B KANKI, ARC/M CONNORS
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 5 9495 **SONOMA STATE UNIV** **1940**
 SWIFT: A PANCHROMATIC GAMMA RAY BURST MIDEX MISSION
 04/19/2000 - 01/31/2007 FY02: \$209,000 Total: \$696,078
Prin. Invest.: L R COMINSKY
Tech. Officer: GSFC/A PARSONS
CASE Category: 11 – ASTRONOMY

NAG 5 9782 **SONOMA STATE UNIV** **1941**
 SWIFT PUBLIC RELATIONS - PART 1
 07/06/2000 - 02/28/2002 FY02: \$0 Total: \$39,970
Prin. Invest.: L R COMINSKY
Tech. Officer: GSFC/N GEHRELS
CASE Category: 11 – ASTRONOMY

NAG 5 11328 **SONOMA STATE UNIV** **1942**
 SWIFT AND GLAST PRESS OFFICER FUNDS- FY02
 09/18/2001 - 09/30/2006 FY02: \$6,500 Total: \$18,100
Prin. Invest.: L R COMINSKY
Tech. Officer: GSFC/A M PARSONS
CASE Category: 11 – ASTRONOMY

NCC 5 429 **SONOMA STATE UNIV** **1943**
 SPACE MYSTERIES: INQUIRY-DRIVEN WEB EXPLORATIONS THAT TEACH
 PHYSICAL SCIENCE & MATHEMATICS STANDARD
 09/29/1999 - 09/30/2003 FY02: \$137,761 Total: \$600,753
Prin. Invest.: L COMINSKY
Tech. Officer: GSFC/D GABRYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2144 **STANFORD UNIV** **1944**
 BLENDED-WING-BODY DESIGN FOR ENHANCED ENVIRONMENTAL AC-
 CEPTABILITY
 03/23/1999 - 12/31/2001 FY02: -\$118,891 Total: \$232,564
Prin. Invest.: I KROO
Tech. Officer: LARC/R R ANTCLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1079 **STANFORD UNIV** **1945**
 INFRARED SIGNATURE MASKING BY AIR PLASMA RADIATION
 08/23/1996 - 10/31/2000 FY02: -\$87 Total: \$221,632
Prin. Invest.: C H KRUGER, C O LAUX
Tech. Officer: ARC/W M HUO
CASE Category: 13 – PHYSICS

NAG 2 1219 **STANFORD UNIV** **1946**
 ACTIVE CONTROL OF COMBUSTION INSTABILITY IN AIR-BREATHING
 PROPULSION SYSTEMS - A COMPUTATIONAL & ...
 05/19/1998 - 04/30/2002 FY02: \$25,000 Total: \$1,914,910
Prin. Invest.: C T BOWMAN, C F EDWARDS, G RVETSCH
Tech. Officer: ARC/N N MANSOUR, ARC/A A WRAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1337 **STANFORD UNIV** **1947**
 ENVIRONMENTAL MONITORING FOR SITUATION ASSESSMENT USING MO-
 BILE & FIXED SENSORS
 07/13/1999 - 07/14/2003 FY02: \$0 Total: \$365,973
Prin. Invest.: R E FIKES
Tech. Officer: ARC/J A KURIEN, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1354 **STANFORD UNIV** **1948**
 ROLE OF ADRENERGIC RECEPTORS IN ADAPTATION TO MICROGRAVITY:
 GENE TARGETED MICE AS A MODEL OF MICROGRAVITY
 07/21/1999 - 07/14/2003 FY02: \$129,848 Total: \$771,019
Prin. Invest.: D BERSTEIN, B K KOBILKA
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1373 **STANFORD UNIV** **1949**
 HIGH SPEED JET NOISE PREDICTION USING LARGE EDDY SIMULATIONS
 08/11/1999 - 12/31/2001 FY02: \$0 Total: \$99,478
Prin. Invest.: S K LELE, B I VASHI
Tech. Officer: ARC/D KWAK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1397 **STANFORD UNIV** **1950**
 EVALUATION OF CHEMICAL KINETICS AND PHOTOCHEMICAL DATA FOR
 USE IN STRATOSPHERIC MODELING
 02/17/2000 - 12/31/2002 FY02: \$100,000 Total: \$222,532
Prin. Invest.: C T BOWMAN
Tech. Officer: ARC/E CONDON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1464 **STANFORD UNIV** **1951**
 2-D SELF-CALIBRATING PSEUDOLITE ARRAYS FOR COOPERATIVE
 ROVER/AERIAL VEHICLE NAVIGATION
 03/23/2001 - 03/14/2003 FY02: \$244,749 Total: \$404,898
Prin. Invest.: S M ROCK
Tech. Officer: ARC/R MORRIS, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1478 **STANFORD UNIV** **1952**
 COMPACT LASER-BASED SENSORS FOR MONITORING & CONTROL OF
 GAS TURBINE COMBUSTORS
 04/20/2001 - 04/30/2003 FY02: \$190,000 Total: \$370,000
Prin. Invest.: R K HANSON
Tech. Officer: ARC/N N MANSOUR, ARC/A A WRAY
CASE Category: 46 – MECHANICAL ENGR

NAG 2 1539 **STANFORD UNIV** **1953**
 INTELLIGENT DISTRIBUTED COMBUSTION FOR ADVANCED GAS TURBINE
 ENGINES
 02/22/2002 - 12/31/2002 FY02: \$286,069 Total: \$286,069
Prin. Invest.: C F EDWARDS, J C GERDES, C T BOWMAN
Tech. Officer: ARC/N MANSOUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1557 **STANFORD UNIV** **1954**
 AIR TRAFFIC POLLUTANT PREDICTION
 05/01/2002 - 05/30/2003 FY02: \$49,855 Total: \$49,855
Prin. Invest.: P A DURBIN
Tech. Officer: ARC/R M MIRAFLOR, ARC/L TOBIAS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1564 **STANFORD UNIV** **1955**
 HYBRID, HIERARCHICAL CONTROL MODELS OF THE NATIONAL AIRSPACE
 SYSTEM
 06/02/2002 - 05/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: C TOMLIN
Tech. Officer: ARC/L TOBIAS, ARC/C QUINN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 1843 **STANFORD UNIV** **1956**
 DROP BREAKUP IN FLOW THROUGH FLUID BEDS AS MODEL OF STOCHASTIC
 STRONG FLOWS
 05/20/1996 - 04/18/2001 FY02: -\$18,836 Total: \$461,164
Prin. Invest.: E G SHAQTEH
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 1943 **STANFORD UNIV** **1957**
 PROBLEMS IN MICROGRAVITY FLUID MECHANICS: THERMOCAPILLARY
 INSTABILITIES & G-JITTER CONVECTION
 09/03/1996 - 02/28/2001 FY02: -\$269 Total: \$384,731
Prin. Invest.: G M HOMSY
Tech. Officer: GRC/J C DUH
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 3 2398 **STANFORD UNIV** **1958**
 ANISOTROPIC COLLOIDAL SELF ASSEMBLY ANISOTROPIC COLLOIDAL
 SELF ASSEMBLY
 04/19/2000 - 11/30/2003 FY02: \$100,000 Total: \$270,000
Prin. Invest.: A P GAST
Tech. Officer: GRC/J H AGUI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2446 **STANFORD UNIV** **1959**
 MICROGRAVITY FLUID MECHANICS: G-JITTER CONVECTION AND THE
 MECHANICS OF FLUIDIZED BEDS
 05/26/2000 - 11/30/2003 FY02: \$0 Total: \$0
Prin. Invest.: G M HOMSY
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2579 **STANFORD UNIV** **1960**
 IP INFRASTRUCTURE FOR DISTRIBUTED SPACE SYSTEM
 04/13/2001 - 01/30/2004 FY02: \$131,000 Total: \$288,710
Prin. Invest.: A FOX
Tech. Officer: GRC/K BHASIN
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2615 **STANFORD UNIV** **1961**
 HIGH REGRESSION RATE HYBRID COMBUSTION HIGH REGRESSION RATE
 HYBRID COMBUSTION
 06/19/2001 - 12/31/2001 FY02: \$46,500 Total: \$93,000
Prin. Invest.: B J CANTWELL
Tech. Officer: GRC/D M VENTO
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 3 2724 **STANFORD UNIV** **1962**
 DROP BREAKUP AND DNA ADVECTION IN FIXED BEDS OF FI BERS: HAIRPIN
 DYNAMICS IN ORDERED AND DISORDERED
 03/07/2002 - 11/30/2005 FY02: \$93,500 Total: \$93,500
Prin. Invest.: D SHAQFEH
Tech. Officer: GRC/G ZIMMERLI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2738 **STANFORD UNIV** **1963**
 MEASUREMENT OF FLOWFIELD DISTORTION AND PARTICLE EQUATION OF
 MOTION IN TURBULENT GAS FLOWS.
 03/15/2002 - 11/30/2005 FY02: \$84,544 Total: \$84,544
Prin. Invest.: J K EATON
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2812 **STANFORD UNIV** **1964**
 AN INVESTIGATION OF THE AMBIENT NOISE FLOOR MEASUREMENTS AND
 TRENDS
 09/27/2002 - 12/31/2003 FY02: \$205,402 Total: \$205,402
Prin. Invest.: P ENGE
Tech. Officer: GRC/J E HOLLANSWORTH
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 3441 **STANFORD UNIV** **1965**
 DIGITAL TOPOGRAPHY PROPOSAL: LONG TERM MONITORING OF EARTH
 SURFACE CHANGE WITH ERS-1 AND ERS-2....
 01/11/1997 - 10/14/2001 FY02: \$0 Total: \$164,472
Prin. Invest.: H ZEBKER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3732 **STANFORD UNIV** **1966**
 TOPOGRAPHIC MAPPING IN THE ANTARCTIC ENVIRONMENT U INTERFER-
 OMETRY
 02/14/1997 - 02/28/2001 FY02: -\$802 Total: \$169,604
Prin. Invest.: D ZEBKER
Tech. Officer: GSFC/R H THOMAS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3906 **STANFORD UNIV** **1967**
 RADAR STUDIES OF LUNAR AND PLANETARY SURFACES
 02/21/1997 - 10/31/2003 FY02: \$63,900 Total: \$366,750
Prin. Invest.: G TYLER
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 5200 **STANFORD UNIV** **1968**
 INVESTIGATION OF THE CORONA/CHROMOSPHERE INTERFACE WITH THE
 CHROMOSPHERIC/CORONAL SPECTROHELIOGRAPH
 05/28/1998 - 05/31/2003 FY02: \$100,000 Total: \$566,460
Prin. Invest.: A B WALKER
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5300 **STANFORD UNIV** **1969**
 INVESTIGATION OF CHROMOSPHERIC AND CORONAL STRUCTURES WITH
 ADVANCED TECHNOLOGY SOLAR IMAGER
 07/18/2000 - 07/17/2003 FY02: \$0 Total: \$638,954
Prin. Invest.: B C WALKER
Tech. Officer: HQ/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6148 **STANFORD UNIV** **1970**
 SURFACE DEFORMATION AND TOPOGRAPHIC MEASUREMENTS FR Y IN THE
 PRESENCE OF VEGETATION
 08/21/1997 - 08/31/2001 FY02: \$0 Total: \$196,919
Prin. Invest.: H A ZEBKER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6167 **STANFORD UNIV** **1971**
 INVERSION OF TIME DEPENDENT SPACE GEODETIC DATA
 08/01/1997 - 06/30/2001 FY02: \$0 Total: \$306,043
Prin. Invest.: P SEGALL
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6615 **STANFORD UNIV** **1972**
 LAND-USE AND LAND-COVER CHANGE IN SONORA, MEXICO
 11/17/1997 - 05/14/2001 FY02: \$0 Total: \$334,383
Prin. Invest.: P MATSON
Tech. Officer: GSFC/A JANETOS
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 7144 **STANFORD UNIV** **1973**
 STUDIES OF THE IMPULSIVE PHASE OF SOLAR FLARE: BA SIC MECHANISM
 AND PARAMETER DISTRIBUTIONS
 04/20/1998 - 10/14/2001 FY02: -\$1 Total: \$229,183
Prin. Invest.: V PETROSIAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7208 **STANFORD UNIV** **1974**
 CHEMICAL AND ISOTOPIC ANALYSIS OF TRACE ORGANIC MATTER ON
 METEORITES AND INTERSTELLAR DUST USING
 03/25/1998 - 07/31/2001 FY02: -\$2,149 Total: \$236,851
Prin. Invest.: R ZARE
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7464 **STANFORD UNIV** **1975**
 A TRANSITION EDGE MICROCALORIMETER SPECTROMETER FOR THE
 EUV AND FUV
 11/30/1998 - 12/31/2002 FY02: \$0 Total: \$232,708
Prin. Invest.: A C WALKER, JR.
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 7835 **STANFORD UNIV** **1976**
 THE INTERFACE OF TRANSITION REGION AND CORONAL PLASMAS WITH
 THE CHROMOSPHERIC NETWORK
 12/14/1998 - 12/14/2002 FY02: \$0 Total: \$241,451
Prin. Invest.: D B GALARCE
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8025 **STANFORD UNIV** **1977**
 SEPS/CEPPAD SCIENCE INVESTIGATION
 01/12/1999 - 12/31/2001 FY02: \$0 Total: \$160,000
Prin. Invest.: M WALT
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8563 **STANFORD UNIV** **1978**
 URBANIZATION, LAND USE AND BIOLOGICAL RESOURCES
 05/24/1999 - 05/31/2002 FY02: \$0 Total: \$47,001
Prin. Invest.: M L IMHOFF
Tech. Officer: GSFC/M L IMHOFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8600 **STANFORD UNIV** **1979**
 X-RAY AND MICROWAVE MODELS IN SUPPORT OF HESSI SOLAR FLARE
 OBSERVATIONS
 06/14/1999 - 06/14/2003 FY02: \$0 Total: \$135,080
Prin. Invest.: V PETROSIAN
Tech. Officer: GSFC/G D HOLMAN
CASE Category: 11 – ASTRONOMY

NAG 5 8645 **STANFORD UNIV** **1980**
 STUDYING THE EFFECTS OF CA, MG, AND K ON AEROSOL SIZE &
 COMPOSITION, NOY & RADIATIVE TRANSFER
 07/13/1999 - 07/31/2002 FY02: \$0 Total: \$317,184
Prin. Invest.: M Z JACOBSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8714 **STANFORD UNIV** **1981**
 VARIATIONS OF THE SOLAR MAGNETIC FIELDS
 08/03/1999 - 02/28/2003 FY02: \$0 Total: \$70,500
Prin. Invest.: P H SCHERRER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8802 **STANFORD UNIV** **1982**
 "ORION: A LOW-COST DEMONSTRATION OF FORMATION FLYING"
 12/16/1999 - 07/31/2001 FY02: \$0 Total: \$654,512
Prin. Invest.: R BYER
Tech. Officer: GSFC/J O BRISTOW
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8866 **STANFORD UNIV** **1983**
 A COUPLED ICE-OCEAN MODEL OF MESOSCALE PHYSICAL/ BIOLOGICAL
 INTERACTIONS IN THE ROSS SEA
 12/08/1999 - 12/31/2001 FY02: \$0 Total: \$169,598
Prin. Invest.: K ARRIGO
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8878 **STANFORD UNIV** **1984**
 SOLAR OSCILLATIONS INVESTIGATION-MISSION OBSERVATIONS AND
 DATA ANALYSIS - CONTINUATION OF NAG5-3077
 01/04/2000 - 06/30/2001 FY02: -\$294 Total: \$4,499,702
Prin. Invest.: P SCHERRER
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9040 **STANFORD UNIV** **1985**
 VALIDATION & IMPROVEMENT OF SRTM PERFORMANCE OVER RUGGED
 TERRAIN.
 02/10/2000 - 02/14/2003 FY02: \$50,000 Total: \$150,000
Prin. Invest.: H A ZEBKER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9087 **STANFORD UNIV** **1986**
 SUPERCONDUCTING WIDE-BAND FAST SPECTROPHOTOMETERS
 02/17/2000 - 06/30/2002 FY02: \$0 Total: \$621,440
Prin. Invest.: B CABRERA
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9494 **STANFORD UNIV** **1987**
 UPLINK MICRO-RADIO INSTRUMENT DEVELOPMENT
 04/18/2000 - 04/30/2004 FY02: \$162,674 Total: \$310,356
Prin. Invest.: L TYLER
Tech. Officer: GSFC/B BETTS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9556 **STANFORD UNIV** **1988**
 RESEARCH INTO RADIO OCCULTATION METHODS FOR STUDY OF PLAN-
 ETARY ATMOSPHERES
 05/04/2000 - 04/30/2003 FY02: \$75,000 Total: \$225,000
Prin. Invest.: G TYLER
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9737 **STANFORD UNIV** **1989**
 DISTRIBUTED SPACE SYSTEM TECHNOLOGY DEMONSTRATIONS WITH THE
 EMERALD NANOSATELLITE
 06/22/2000 - 06/30/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: DEBRA
Tech. Officer: GSFC/K LUU
CASE Category: 41 – AERONAUTICAL ENGR

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9760 **STANFORD UNIV** **1990**
 MEASURING HUMAN IMPACTS ON BIODIVERSITY & CARRYING CAPACITY
 OF ECO-SYSTEMS: COMBINING REMOTELY-SENSE
 06/29/2000 - 08/31/2003 FY02: \$0 Total: \$102,105
Prin. Invest.: P EHRlich
Tech. Officer: GSFC/M L IMHOFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9784 **STANFORD UNIV** **1991**
 STRUCTURE OF SOLAR VELOCITY AND MAGNETIC FIELDS
 07/06/2000 - 06/30/2003 FY02: \$147,160 Total: \$316,904
Prin. Invest.: P T SCHERER
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9842 **STANFORD UNIV** **1992**
 COMPOSITION, PALEOENVIRONMENTAL DISTRIBUTION, AND PALEOECOL-
 OGY OF ARCHEAN BACTERIAL COMMUNITIE
 07/31/2000 - 07/31/2003 FY02: \$88,398 Total: \$260,071
Prin. Invest.: D R LOWE
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9853 **STANFORD UNIV** **1993**
 ANTARCTIC ICE SHEET PENETRATION DEPTHS, GRAIN SIZE & ACCUMULA-
 TION RATES FROM INSAR & SAR ANALYSIS OF
 07/31/2000 - 03/31/2003 FY02: \$91,626 Total: \$176,458
Prin. Invest.: H ZEBKER
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9887 **STANFORD UNIV** **1994**
 CHEMICAL AND ISOTOPIC SYSTEMATICS OF EARLY SOLAR SYSTEM
 PRECURSORS & PRODUCTS
 08/21/2000 - 08/31/2001 FY02: -\$569 Total: \$41,431
Prin. Invest.: T IRELAND
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10483 **STANFORD UNIV** **1995**
 SOLAR OSCILLATIONS INVESTIGATION - MICHELSON DOPPLER IMAGER
 FOR THE SOHO SOLAR MAXIMUM MISSION
 03/05/2001 - 03/14/2003 FY02: \$4,257,761 Total: \$6,500,000
Prin. Invest.: P H SCHERRER
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10519 **STANFORD UNIV** **1996**
 THE 15TH NATIONAL CONFERENCE OF THE BLACK PHYSICS STUDENTS
 03/09/2001 - 03/14/2002 FY02: \$0 Total: \$84,800
Prin. Invest.: B CABRERA
Tech. Officer: GSFC/D MENCHAN
CASE Category: 13 – PHYSICS

NAG 5 10534 **STANFORD UNIV** **1997**
 MONITORING & MODELING LAND-USE CHANGE: INTERGRA TING REMOTE
 SENSING WITH SOCIOECONOMIC DRIVERS
 03/12/2001 - 02/28/2004 FY02: \$123,806 Total: \$239,044
Prin. Invest.: K SETO
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10544 **STANFORD UNIV** **1998**
 UNDERSTANDING ORGANICS IN METEORITES & THE PRE-BIO TIC ENVI-
 RONMENT
 03/09/2001 - 07/31/2004 FY02: \$65,000 Total: \$110,000
Prin. Invest.: R ZARE
Tech. Officer: GSFC/J M BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10576 **STANFORD UNIV** **1999**
 INFERENCE OF SURFACE PROPERTIES FROM MARS GLOBAL SURVEYOR
 3.6 CM WAVELENGTH OBLIQUE SCATTERING
 03/21/2001 - 02/28/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: G TYLER
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10719 **STANFORD UNIV** **2000**
 ORION: A LOW-COST DEMONSTRATION OF FORMATION FLYING
 04/24/2001 - 10/31/2002 FY02: \$30,000 Total: \$328,830
Prin. Invest.: R L BYER
Tech. Officer: GSFC/S P HUGHES
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 10799 **STANFORD UNIV** **2001**
 CONCEPT STUDY FOR THE "SATELLITE TEST OF THE EQUIV ALENCE
 PRINCIPLE" (STEP) MISSION AO-99-OSS-0
 05/01/2001 - 05/31/2002 FY02: \$0 Total: \$285,990
Prin. Invest.: C EVERITT
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10976 **STANFORD UNIV** **2002**
 INVESTIGATION OF HELIOSEISMIC WAVES AND MAGNETIC VARIATIONS
 ASSOCIATED WITH SOLAR FLARES
 05/29/2001 - 05/31/2002 FY02: \$0 Total: \$27,684
Prin. Invest.: V PETROSIAN
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11264 **STANFORD UNIV** **2003**
 MODELLING CHANGE IN THE SOUTHERN OCEAN: BIOCHEMIS TRY OF
 CARBON UPTAKE AND EXPORT IN THE ROSS SEA,
 08/31/2001 - 09/30/2004 FY02: \$0 Total: \$80,683
Prin. Invest.: K ARRIGO
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11439 **STANFORD UNIV** **2004**
 DEVELOPMENT OF TRANSITION-EDGE SENSOR ARRAYS FOR I
 R/VISIBLE/UV IMAGING APPLICATIONS
 12/05/2001 - 12/31/2004 FY02: \$385,000 Total: \$385,000
Prin. Invest.: B CABRERA
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11573 **STANFORD UNIV** **2005**
 CONTINUED SCIENTIFIC ANALYSIS OF SEPS DATA DURING CY 2002, 2003 &
 2004
 01/07/2002 - 01/14/2005 FY02: \$30,000 Total: \$30,000
Prin. Invest.: M WALT
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11821 **STANFORD UNIV** **2006**
 PRECIPITATION OF ENERGETIC RADIATION BELT ELECTRON S BY
 LIGHTNING- GENERATED WHISTLERS
 03/01/2002 - 02/28/2005 FY02: \$83,715 Total: \$83,715
Prin. Invest.: U S INAN
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11918 **STANFORD UNIV** **2007**
 STUDIES OF PARTICLE ACCELERATION, TRANSPORT AND RADIATION IN
 THE IMPULSIVE PHASE OF SOLAR FLARES
 04/03/2002 - 03/14/2005 FY02: \$78,761 Total: \$78,761
Prin. Invest.: V PETROSIAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11955 **STANFORD UNIV** **2008**
 DESIGNS FOR A VIRTUAL SOLAR OBSERVATORY
 04/11/2002 - 04/30/2003 FY02: \$70,052 Total: \$70,052
Prin. Invest.: P H SCHERRER
Tech. Officer: GSFC/J GURMAN
CASE Category: 11 – ASTRONOMY

NAG 5 11972 **STANFORD UNIV** **2009**
 HIGH RESOLUTION X-RAY PROPERTIES OF BL LACS: AN XM M SURVEY
 04/26/2002 - 04/30/2003 FY02: \$7,266 Total: \$7,266
Prin. Invest.: G MADEJSKI
Tech. Officer: GSFC/R MUTSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 12111 **STANFORD UNIV** **2010**
 SPATIAL AND SPECTRAL STRUCTURE OF FLARES FROM HESS I
 04/29/2002 - 04/30/2005 FY02: \$68,847 Total: \$68,847
Prin. Invest.: V PETROSIAN
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12315 **STANFORD UNIV** **2011**
 DEVELOPMENT OF VETO FOR CONSTELLATION-X TES X-RAY DETECTOR
 ARRAY
 07/17/2002 - 06/30/2004 FY02: \$35,781 Total: \$35,781
Prin. Invest.: B CABRERA
Tech. Officer: GSFC/C K STAHL
CASE Category: 13 – PHYSICS

NAG 5 12452 **STANFORD UNIV** **2012**
 HELIOTOMOGRAPHY TOOLS FOR STUDYING INTERIOR SOURCE S OF
 SOLAR ACTIVITY
 08/15/2002 - 08/14/2005 FY02: \$364,628 Total: \$364,628
Prin. Invest.: P H SCHERRER
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1151 **STANFORD UNIV** **2013**
 LASER SCATTERING TEMOGRAPHY
 08/18/1995 - 04/30/2001 FY02: \$0 Total: \$730,000
Prin. Invest.: R S FEIGELSON
Tech. Officer: MSFC/D A REISS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1431 **STANFORD UNIV** **2014**
 R/S HIGH RESOLUTION STUDY OF THE CRITICAL REGION OF OXYGEN
 USING MAGNETIC LEVITATION
 03/05/1998 - 01/31/2003 FY02: \$150,000 Total: \$582,455
Prin. Invest.: J A LIPA
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1439 **STANFORD UNIV** **2015**
 R/S FUNDAMENTAL PHYSICS EXPERIMENTS WITH SUPER- CONDUCTING
 CAVITY-STABILIZED OSCILLATORS ON SPACE
 02/01/1998 - 01/31/2003 FY02: \$249,958 Total: \$1,077,500
Prin. Invest.: J A LIPA
Tech. Officer: MSFC/J W POE
CASE Category: 13 – PHYSICS

NAG 8 1457 **STANFORD UNIV** **2016**
 R/S INVESTIGATION OF THE CRYSTAL GROWTH OF DIELECTRIC MATERI-
 ALS BY THE BRIDGMAN TECHNIQUE
 02/01/1998 - 04/30/2002 FY02: \$22,000 Total: \$506,450
Prin. Invest.: R S FEIGELSON
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1692 **STANFORD UNIV** **2017**
 "SOLID STATE ELECTROCHEMICAL OXYGEN CONVERSION FOR MARTIAN
 & LUNAR ENVIRONMENTS..."
 06/02/2000 - 07/09/2002 FY02: -\$98,381 Total: \$1,619
Prin. Invest.: G M HOMSY
Tech. Officer: MSFC/P DOTY
CASE Category: 12 – CHEMISTRY

NAG 8 1772 **STANFORD UNIV** **2018**
 THE EFFECTS OF LARGE-SCALE ONE-DIMENSIONAL CONFINEMENT ON
 THE SPECIFIC HEAT OF HELIUM...
 05/04/2001 - 04/30/2003 FY02: \$150,000 Total: \$300,000
Prin. Invest.: J A LIPA
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1777 **STANFORD UNIV** **2019**
 TEST OF FUNDAMENTAL PHYSICS THROUGH STUDIES OF SUPERFLUID
 HELIUM THREE
 04/27/2001 - 09/30/2005 FY02: \$140,000 Total: \$240,000
Prin. Invest.: D D OSHEROFF
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1843 **STANFORD UNIV** **2020**
 PRODUCTION AND IN-FLIGHT REGENERATION OF ACTIVE BIOLOGICAL
 MEMBRANES
 10/04/2001 - 11/30/2004 FY02: \$612,000 Total: \$612,000
Prin. Invest.: C FRANK, G G FULLER, J R SWARTZ
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1864 **STANFORD UNIV** **2021**
 STUDY OF BIOCHEMICAL PROCESSES AT THE SINGULAR MOLECULAR
 LEVEL
 05/01/2002 - 01/31/2005 FY02: \$150,000 Total: \$150,000
Prin. Invest.: S CHU
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAS 1 00104 **STANFORD UNIV** **2022**
 AWARD CONTRACT RESULTING FROM NRA-99-OES-07
 05/25/2000 - 05/24/2003 FY02: \$292,054 Total: \$812,976
Prin. Invest.: R L BYER
Tech. Officer: LARC/F PERI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 98139 **STANFORD UNIV** **2023**
 SAL: SYMBOLIC ANALYSIS LABORATORY
 10/30/1998 - 10/29/2001 FY02: -\$110,748 Total: \$464,503
Prin. Invest.: D L DILL
Tech. Officer: LARC/P S MINER
CASE Category: 22 – COMPUTER SCIENCE

NAS 5 00147 **STANFORD UNIV** **2024**
 GAMMA RAY LARGE AREA SPACE TELESCOPE (GLAST)
 05/03/2000 - 03/31/2006 FY02: \$3,078,963 Total: \$5,125,515
Prin. Invest.: P MICHELSON
Tech. Officer: GSFC/S LAMBROSS
CASE Category: 11 – ASTRONOMY

NAS 8 39225 **STANFORD UNIV** **2025**
 GRAVITY PROBE B SCIENCE MISSION INTERIM CONTRACT
 01/18/1995 - 09/30/2004 FY02: \$48,295,743 Total: \$369,507,949
Prin. Invest.: C W EVERITT, B PARKINSON
Tech. Officer: MSFC/R S GEVEDEN, MSFC/B RANDOLPH
CASE Category: 13 – PHYSICS

NCC 2 721 **STANFORD UNIV** **2026**
 THE STRUCTURE, FACIES & DEPOSITION OF SILICEOUS S INTER AROUND
 THERMAL SPRINGS: IMPLICATIONS FOR...
 07/03/1991 - 12/31/2001 FY02: \$0 Total: \$539,229
Prin. Invest.: D R LOWE
Tech. Officer: ARC/D J DES MARAIS, ARC/S CHANG
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 2 908 **STANFORD UNIV** **2027**
 STUDIES OF PLANETARY RING SYSTEMS
 06/26/1995 - 05/31/2002 FY02: \$0 Total: \$839,827
Prin. Invest.: A L TYLER, M R SHOWALTER
Tech. Officer: ARC/J N CUZZI
CASE Category: 11 – ASTRONOMY

NCC 2 1010 **STANFORD UNIV** **2028**
 DECELOPMENT OF 3-D BIOMEDICAL COMPUTATION
 01/07/1998 - 05/31/2003 FY02: \$1,434,636 Total: \$5,021,360
Prin. Invest.: S A SCHENDEL
Tech. Officer: ARC/J W HINES, ARC/R D BOYLE
CASE Category: 56 – MEDICL

NCC 2 1151 **STANFORD UNIV** **2029**
 CENTER FOR TURBULENCE RESEARCH
 01/07/2000 - 01/31/2003 FY02: \$1,017,000 Total: \$3,587,000
Prin. Invest.: P MOIN
Tech. Officer: ARC/N N MANSOUR, ARC/M M ROGER
CASE Category: 46 – MECHANICAL ENGR

NCC 2 1154 **STANFORD UNIV** **2030**
 MULTIPLE COOPERATING ROBOTS
 01/20/2000 - 06/30/2003 FY02: \$0 Total: \$569,999
Prin. Invest.: S ROCK
Tech. Officer: ARC/M G BUALAT
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1175 **STANFORD UNIV** **2031**
 THE DEVELOPMENT OF A SOLID WASTE TREATMENT TECHNOL OGY FOR
 THE NEAR TERM HUMAN EXPLORATION OF MARS
 04/27/2000 - 09/30/2002 FY02: \$114,650 Total: \$343,360
Prin. Invest.: M REINHARD
Tech. Officer: ARC/M T FLYNN
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 2 1208 **STANFORD UNIV** **2032**
 DOES MECHANICAL STIMULATION ALTER GENE EXPRESION I N C.EL-
 EGANS
 11/24/2000 - 11/14/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: S K KIM
Tech. Officer: ARC/C A CONLEY, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1300 **STANFORD UNIV** **2033**
 HIGH REGRESSION RATE FUELS FOR HYBRID COMBUSTION
 01/29/2002 - 01/14/2003 FY02: \$200,853 Total: \$200,853
Prin. Invest.: B J CANTWELL
Tech. Officer: ARC/G ZILLAC
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 2 1345 **STANFORD UNIV** **2034**
 STUDIES OF PLANETARY RING SYSTEMS
 06/05/2002 - 05/31/2003 FY02: \$108,620 Total: \$108,620
Prin. Invest.: G L TYLER
Tech. Officer: ARC/J CUZZI, ARC/J LISSAUER
CASE Category: 11 – ASTRONOMY

NCC 2 5261 **STANFORD UNIV** **2035**
 INVESTIGATION OF ATTENTIONAL BOTTLENECKS USING FUN CTIONAL
 MAGNETIC RESONANCE IMAGING
 06/17/1998 - 02/28/2001 FY02: \$1,170 Total: \$77,428
Prin. Invest.: J E GABRIELI
Tech. Officer: ARC/R W REMINGTON, ARC/J C JOHNSTON
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NCC 2 5270 **STANFORD UNIV** **2036**
 EXPLORING CARBON NANOTUBES FOR FUTURE 1NM NANOOLIT HOGRA-
 PHY
 06/12/1998 - 05/31/2001 FY02: \$0 Total: \$70,000
Prin. Invest.: H DAI
Tech. Officer: ARC/T R GOVINDAN
CASE Category: 12 – CHEMISTRY

NCC 2 5278 **STANFORD UNIV** **2037**
 ARCHITECTURE FOR ACCESS & MUNIPULATION OF HETEROGE NEOUS
 INFORMATION
 07/16/1998 - 03/31/2002 FY02: -\$8,146 Total: \$181,854
Prin. Invest.: H GARCIA-MOLINA
Tech. Officer: ARC/M GERALD-YAMASAKI
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5335 **STANFORD UNIV** **2038**
 SHARP SOUNDING ROCKET EMPERIMENT & ENTRY SIMULATIO N
 07/23/1999 - 12/31/2000 FY02: \$0 Total: \$122,275
Prin. Invest.: B CANTWELL, R TWIGGS
Tech. Officer: ARC/P KOLODZIEJ, ARC/D J RASKY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5350 **STANFORD UNIV** **2039**
 SIMULATION-BASED PROTOTYPING OF SOLID-STATE QUANTUM COMPUTERS
 09/15/1999 - 03/31/2001 FY02: \$0 Total: \$60,000
Prin. Invest.: K CHO
Tech. Officer: ARC/T R GOVINDAN
CASE Category: 13 – PHYSICS

NCC 2 5359 **STANFORD UNIV** **2040**
 INVESTIGATION OF CONVOLUTION SEGMENT PAIR DYADS IN BACTERIAL GENOMES
 10/26/1999 - 10/14/2001 FY02: -\$464 Total: \$115,036
Prin. Invest.: R B LAUGHLIN
Tech. Officer: ARC/M L FONDA
CASE Category: 13 – PHYSICS

NCC 2 5363 **STANFORD UNIV** **2041**
 DEVELOPMENT OF FUNDAMENTAL TECHNOLOGIES FOR FLUID FLOW CALCULATIONS
 01/25/2000 - 03/31/2002 FY02: -\$2 Total: \$187,413
Prin. Invest.: T HUGHES
Tech. Officer: ARC/T J BARTH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 5371 **STANFORD UNIV** **2042**
 FABRICATION OF SILICON SUBSTRATES FOR CONTROLLED SYNTHESIS OF CARBON NANOTUBES
 03/23/2000 - 02/28/2001 FY02: -\$24,479 Total: \$20,571
Prin. Invest.: Z SHEN
Tech. Officer: ARC/M MEYYAPPAN
CASE Category: 13 – PHYSICS

NCC 2 5377 **STANFORD UNIV** **2043**
 DEVELOPMENT AND APPLICATION OF NOVEL DIAGNOSTICS FOR ARC-JET CHARACTERIZATION
 04/03/2000 - 09/30/2002 FY02: \$0 Total: \$189,896
Prin. Invest.: R K HANSON
Tech. Officer: ARC/G A RAICHE, ARC/J H GRINSTEAD
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5400 **STANFORD UNIV** **2044**
 SIMULATION-BASED DESIGN OF SMART NANOTUBE COMPOSITE MATERIALS
 09/25/2000 - 09/30/2002 FY02: \$44,012 Total: \$125,561
Prin. Invest.: K J CHO
Tech. Officer: ARC/H PARTIDGE, ARC/M MEYYAPPAN
CASE Category: 12 – CHEMISTRY

NCC 2 5422 **STANFORD UNIV** **2045**
 DESIGN OF PREDICTIVE MODELS OF NAS
 03/09/2001 - 02/28/2003 FY02: \$45,000 Total: \$90,000
Prin. Invest.: C TOMLIN
Tech. Officer: ARC/G MEYER, ARC/R BACH
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 5434 **STANFORD UNIV** **2046**
 NONINVASIVE INVESTIGATION OF BONE ADAPTATION IN HUMANS TO CUMULATIVE DAILY MECHANICAL LOADING
 04/26/2001 - 04/30/2003 FY02: \$34,115 Total: \$95,260
Prin. Invest.: N J PELC
Tech. Officer: ARC/R T WHALEN, ARC/S B ARNAUD
CASE Category: 56 – MEDICL

NCC 2 5439 **STANFORD UNIV** **2047**
 SIMULATION BASED PROTOTYPED OF SOLID-STATE QUANTUM COMPUTERS: A PATHWAY FOR REVOLUTIONARY COMPUTING
 07/17/2001 - 07/31/2002 FY02: \$0 Total: \$42,719
Prin. Invest.: K CHO
Tech. Officer: ARC/H PATRIDGE, ARC/T R GORINDAN
CASE Category: 13 – PHYSICS

NCC 2 5444 **STANFORD UNIV** **2048**
 THREE DIMENSIONAL NUMERICAL SIMULATION OF NASA STU DIED MFD-BYPASS SCRAMJET ENGINES
 07/12/2001 - 05/31/2003 FY02: \$40,000 Total: \$75,000
Prin. Invest.: R W MACCORMICK
Tech. Officer: ARC/U B MANTA
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5446 **STANFORD UNIV** **2049**
 FABRICATION OF SILICON SUBSTRATES FOR CONTROLLED SYNTHESIS OF CARBON NANOTUBES
 07/16/2001 - 05/14/2003 FY02: \$50,240 Total: \$99,360
Prin. Invest.: Z X SHEN
Tech. Officer: ARC/H PATRIDGE, ARC/M MEYYAPPAN
CASE Category: 12 – CHEMISTRY

NCC 2 5457 **STANFORD UNIV** **2050**
 DEVELOPMENT OF FUNDAMENTAL TECHNOLOGIES FOR COMPLEX MULTISCALE FLUID FLOW CALCULATIONS
 08/17/2001 - 08/14/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: T J HUGHES
Tech. Officer: ARC/N MANSOUR, ARC/T BARTH
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5467 **STANFORD UNIV** **2051**
 MOLECULAR DYNAMICS ON MASSIVELY PARALLEL COMPUTERS : TOWARDS BIOLOGICAL TIME SCALES
 09/28/2001 - 09/30/2003 FY02: \$61,947 Total: \$122,080
Prin. Invest.: E F DARVE
Tech. Officer: ARC/N N MANSOUR
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5475 **STANFORD UNIV** **2052**
 COMPUTATIONAL TECHNIQUES IN MULTIDIMENSIONAL NMR METHOD FOR HIGH-THROUGHPUT DETECTION OF METABOLITE
 11/19/2001 - 11/30/2003 FY02: \$111,171 Total: \$111,171
Prin. Invest.: R B LAUGHLIN
Tech. Officer: ARC/S LIANG
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5478 **STANFORD UNIV** **2053**
 MARS EXPLORATION ROVER (MER) WORK PRACTICE SUPPORT TOOL DESIGN
 01/31/2002 - 01/31/2003 FY02: \$55,000 Total: \$55,000
Prin. Invest.: L J LEIFER
Tech. Officer: ARC/J TRIMBLE
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5488 **STANFORD UNIV** **2054**
 NANOPORE SEQUENCING SOFTWARE DEVELOPMENT
 03/22/2002 - 03/14/2003 FY02: \$92,882 Total: \$92,882
Prin. Invest.: R W DAVIS
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYYAPPAN
CASE Category: 12 – CHEMISTRY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NCC 2 5489 **STANFORD UNIV** **2055**
 BREAST TISSUE PYHSIOLOGIC SIGNATURE CHARACTERIZATI ON USING
 THE NASA SMART PROBE
 07/11/2002 - 05/31/2003 FY02: \$20,733 Total: \$20,733
Prin. Invest.: S S JEFFREY
Tech. Officer: ARC/R MAH, ARC/R PAPASIN
CASE Category: 56 – MEDICL

NCC 2 5495 **STANFORD UNIV** **2056**
 COLLECTIVE CONTROL FOR AERONAUTICAL SYSTEMS
 06/06/2002 - 05/31/2003 FY02: \$74,999 Total: \$74,999
Prin. Invest.: I KROO
Tech. Officer: ARC/K TURNER, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5497 **STANFORD UNIV** **2057**
 FUNCTIONALITY AND EVOLUTIONARY HISTORY OF THE CHAP ERONINS IN
 THERMOPHILIC ARCHAEA A BIOINFORMATIONAL
 06/21/2002 - 06/30/2003 FY02: \$22,000 Total: \$22,000
Prin. Invest.: S KARLIN
Tech. Officer: ARC/J TRENT, ARC/M H KLISS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5502 **STANFORD UNIV** **2058**
 HIGH PERFORMANCE SCALABLE PARALLEL CODE FOR MOLECU ALR
 SIMULATION IN ASTROBIOLOGY AND FUNDAMENTAL BI
 07/17/2002 - 09/30/2003 FY02: \$80,098 Total: \$80,098
Prin. Invest.: E F DARVE
Tech. Officer: ARC/N MANSOUR, ARC/A WRAY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5522 **STANFORD UNIV** **2059**
 DIODE LASER SENSORS FOR ARC JET CHARACTERIZATION
 09/10/2002 - 08/31/2003 FY02: \$3,000 Total: \$3,000
Prin. Invest.: R K HANSON
Tech. Officer: ARC/G RAICHE
CASE Category: 46 – MECHANICAL ENGR

NCC 3 640 **STANFORD UNIV** **2060**
 ATTENUATION OF GAS TURBULENCE BY A NEARIT STATIONA RY DISPERSI
 ON OF FINE PARTICLES
 08/18/1998 - 12/31/2002 FY02: \$20,000 Total: \$395,000
Prin. Invest.: J K EATON
Tech. Officer: GRC/F CHARIMONTE
CASE Category: 46 – MECHANICAL ENGR

NCC 8 197 **STANFORD UNIV** **2061**
 ACTIVE SENSING MONITORING OF CRYOGENIC COMPOSITE STRUCTURES
 FOR SPACE TRANSPORTATION APPLICATIONS.
 03/09/2000 - 03/05/2002 FY02: \$0 Total: \$290,000
Prin. Invest.: F CHANG
Tech. Officer: MSFC/A KELLEY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 02021 **STANFORD UNIV** **2062**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 07/24/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R TWIGGS, F J LI
Tech. Officer: LARC/R BRAUN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 2 52246 **STANFORD UNIV** **2063**
 ADVANCED LIFE SUPPORT POWER REDUCTION
 08/20/1998 - 09/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: B LUSIGNAN
Tech. Officer: ARC/R T WHALEN
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 2 52267 **STANFORD UNIV** **2064**
 AN ALTERNATIVE TO PNEUMATIC CONTROL TECHNIQUES FOR ROLL-YAW
 CONTROL OF FLIGHT VEHICLES
 07/28/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S M ROCK
Tech. Officer: ARC/R D MEHTA, ARC/J C ROSS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 2 52282 **STANFORD UNIV** **2065**
 VESTIBULO-OCULAR REFLEXES IN NORMAL AND OTOCONIA-D EFICIENT
 HEAD TILT (HET) MICE
 08/09/2001 - 07/31/2002 FY02: \$0 Total: \$21,000
Prin. Invest.: J RAYMOND
Tech. Officer: ARC/R D BOYLE, ARC/T INTRAVAIA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 92 **STANFORD UNIV** **2066**
 RADIO DIAGNOSTICS OF AURORAL HISS AND ASSOCIATED PLASMA
 DENSITY STRUCTURES/STUDENT: MARIA SALVATI
 06/09/1999 - 09/14/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: U UMRAN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 45 – ELECTRICAL ENGR

NGT 5 30204 **STANFORD UNIV** **2067**
 LAND-USE CHANGE, AGRICULTURAL RUNOFF, & GREENHOUSE GASES IN
 TWO ESTUARIES OF SOUTHERN SONORA MEXICO
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P MATSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30216 **STANFORD UNIV** **2068**
 PHYSIO-CHEMICAL AND BIOLOGICAL CONTROL OVER THE FA TE OF
 NITROGEN AND PHOSPHORUS IN TROPICAL SOIL
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P M VITOUSEK
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30342 **STANFORD UNIV** **2069**
 HYDROIC APPLICATIONS OF SATELLITE RADAR INTERFERO METRY: LAND
 SUBSIDENCE OVER EXPLOITED AQUIFER SYS
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: H ZEBKER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30360 **STANFORD UNIV** **2070**
 THE COCCIDIODES IMMITS FUNGUS: EXPOSURE MODELING & PUBLIC
 POLICY THROUGH FAVORED SOIL HABITAT
 08/23/2000 - 08/31/2001 FY02: -\$12,931 Total: \$9,069
Prin. Invest.: G W ERNST
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30392 **STANFORD UNIV** **2071**
 RESOLVING THE RED SEA PARADOX: INTERANNUAL TO DEC ADAL VARI-
 ABILITY IN PRIMARY PRODUCTION AND CORA
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: K ARRIGO
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50254 **STANFORD UNIV** **2072**
 MULTI-SPECTRAL OBSERVATIONS OF THE SOLAR CORONA, CHROMO-
 SPHERE AND TRANSITION REGION
 06/10/1999 - 06/30/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: A B WALKER, JR.
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50351 **STANFORD UNIV** **2073**
 NONLINEAR BEAM-PLASMA COUPLING OF THUNDERSTORM- GENERATED
 RELATIVISTIC ELECTRONS TO THE MAGNETOSPHERE
 05/10/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: U S INAN
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50358 **STANFORD UNIV** **2074**
 IP INFRASTRUCTURE FOR DISTRIBUTED SPACE SYSTEMS
 05/14/2001 - 05/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A FOX
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 5191 **THE SCRIPPS REASERCH INST (TSRI) -LA JOLLA** **2075**
 SATELLITE REMOTE SENSING STUDIES OF BIOLOGICAL AND BIO-
 GEOCHEMICAL PROCESSES IN THE OCEAN
 04/21/1998 - 03/31/2001 FY02: \$0 Total: \$38,852
Prin. Invest.: M VERNET
Tech. Officer: GSFC/F E HOGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 9386 **THE SCRIPPS REASERCH INST (TSRI) -LA JOLLA** **2076**
 EVOLUTION OF CATALYTIC RNA IN THE LABORATORY
 04/07/2000 - 03/31/2003 FY02: \$288,600 Total: \$849,061
Prin. Invest.: G JOYCE
Tech. Officer: HQ/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 9604 **THE SCRIPPS REASERCH INST (TSRI) -LA JOLLA** **2077**
 A REGIONAL REAL-TIME, INTERACTIVE, GIS-BASED COMPUTATIONAL
 ENVIRONMENT FOR NASA'S DIRECT BROADCAST
 05/31/2000 - 05/31/2003 FY02: \$350,000 Total: \$800,000
Prin. Invest.: J J SIMPSON
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 12160 **THE SCRIPPS REASERCH INST (TSRI) -LA JOLLA** **2078**
 THE USE OF INSOLUBLE AGGREGATES IN TEMPLATE LIGATION
 05/10/2002 - 05/14/2005 FY02: \$217,476 Total: \$217,476
Prin. Invest.: M GHADIRI
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1834 **THE SCRIPPS REASERCH INST (TSRI) -LA JOLLA** **2079**
 CRYSTALLIZATION OF INTEGRAL MEMBRANE PROTEINS USING MOLECULAR
 BIOLOGY
 09/19/2001 - 11/30/2004 FY02: \$217,000 Total: \$269,000
Prin. Invest.: G A CHANG
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 1055 **THE SCRIPPS REASERCH INST (TSRI) -LA JOLLA** **2080**
 SELF-REPRODUCING MOLECULAR SYSTEMS & DARWINIAN CHEMISTRY
 08/27/1998 - 06/30/2003 FY02: \$1,062,497 Total: \$4,325,530
Prin. Invest.: R GHADIRI
Tech. Officer: ARC/L J CAROFF, ARC/S CHANG
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 11944 **UNIV. OF CALIFORNIA** **2081**
 PROPOSAL FOR OPERATION OF THE EFW INSTRUMENTS ON THE
 CLUSTER SATELLITES AND FOR DATA ANALYSES
 04/08/2002 - 03/31/2005 FY02: \$947,293 Total: \$947,293
Prin. Invest.: F S MOZER
Tech. Officer: GSFC/M GOLDSTEIN
CASE Category: 11 – ASTRONOMY

NAG 1 2191 **UNIV OF CALIFORNIA - BERKELEY** **2082**
 MODELING ISOTOPE FRACTIONATION IN STRATOSPHERIC CO₂/N₂O/
 CH₄&O₃, INVEST STRATOSPHERIC CHEM/TRANSPORT, STRATOSPHERIC
 05/17/1999 - 03/30/2003 FY02: \$0 Total: \$282,801
Prin. Invest.: K A BOERING
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02083 **UNIV OF CALIFORNIA - BERKELEY** **2083**
 MODELING ISOTOPE FRACTIONATION IN STRATOSPHERIC CO₂/N₂O/
 CH₄&O₃: INVEST STRATOSPHERIC CHEM/TRANSPORT, STRATOSPHERIC
 04/09/2002 - 04/08/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: K A BOERING
Tech. Officer: LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1351 **UNIV OF CALIFORNIA - BERKELEY** **2084**
 EARLY GRAVITROPIC EVENTS IN ROOTS OF ARABIDOPSIS: CA₂+ & H⁺
 FLUXES IN THE COLUMELLA CELLS
 07/21/1999 - 07/31/2003 FY02: \$70,597 Total: \$417,034
Prin. Invest.: L J FELDMAN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIRONMENTAL)

NAG 2 1359 **UNIV OF CALIFORNIA - BERKELEY** **2085**
 COMPARATIVE ANALYSIS OF SEGMENTATION, DURING EMBRYOGENESIS,
 POSTEMBRYONIC GROWTH & REGENERATION, AM
 07/23/1999 - 07/31/2003 FY02: \$117,769 Total: \$576,012
Prin. Invest.: D A WEISBLAT
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIRONMENTAL)

NAG 2 1361 **UNIV OF CALIFORNIA - BERKELEY** **2086**
 HEMICHORDATES & THE ORIGIN OF CHORDATES
 07/27/1999 - 08/31/2002 FY02: \$91,858 Total: \$538,726
Prin. Invest.: J C GERHART
Tech. Officer: ARC/M M AVERNER, ARC/G C JAHNS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIRONMENTAL)

NAG 2 1398 **UNIV OF CALIFORNIA - BERKELEY** **2087**
 SUPERCONDUCTING BOLOMETERS OF INFRARED AND MILLIMETER WAVELENGTHS
 03/16/2000 - 03/14/2003 FY02: \$65,000 Total: \$220,000
Prin. Invest.: P L RICHARDS
Tech. Officer: ARC/C MCCREIGHT
CASE Category: 13 – PHYSICS

NAG 2 1479 **UNIV OF CALIFORNIA - BERKELEY** **2088**
 DETERMINISTIC & PROBABILISTIC HYBRID CONTROL OF A TMs
 05/01/2001 - 04/30/2003 FY02: \$77,600 Total: \$117,600
Prin. Invest.: S S SASTRY
Tech. Officer: ARC/G MEYER, ARC/M J BONDI
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1483 **UNIV OF CALIFORNIA - BERKELEY** **2089**
 STABLE ISOTOPE MEASUREMENTS OF CO₂ & NO₂ FOR SOLVE : CONSTRAINTS ON OBSERVED OZONE CHANGES DUE TO CH
 06/04/2001 - 09/30/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: K A BOERING
Tech. Officer: ARC/R S HIPSKIN, ARC/C SCOFIELD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1523 **UNIV OF CALIFORNIA - BERKELEY** **2090**
 BIOGEOCHEMICAL MARS-LIKE ENVIRONMENTS (BIOMES)
 09/17/2001 - 08/31/2003 FY02: \$125,000 Total: \$375,000
Prin. Invest.: J F BANFIELD
Tech. Officer: ARC/R GRAYMES, ARC/W DOLCI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1567 **UNIV OF CALIFORNIA - BERKELEY** **2091**
 FROM LOW LEVEL PROTOCOLS TO MODELS OF THE NATIONAL AIRSPACE SYSTEM A HYBRID SYSTEMS APPROACH
 06/14/2002 - 06/14/2003 FY02: \$49,870 Total: \$49,870
Prin. Invest.: S S SASTRY, E A LEE
Tech. Officer: ARC/L TOBIAS, ARC/C QUINN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2026 **UNIV OF CALIFORNIA - BERKELEY** **2092**
 A FUNDAMENTAL STUDY OF SMOLDERING COMBUSTION IN MICROGRAVITY
 03/14/1997 - 09/15/2002 FY02: \$71,000 Total: \$751,526
Prin. Invest.: A C FERNANDEZ-PELLO
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2103 **UNIV OF CALIFORNIA - BERKELEY** **2093**
 LOW EMISSION, HIGH PERFORMANCE GAS TURBINE ENGINES EXPERIMENT AND MODEL RESEARCH AND DEVELOPMENT
 03/04/1998 - 05/31/2002 FY02: \$0 Total: \$386,026
Prin. Invest.: R DIBBLE
Tech. Officer: GRC/R R TACINA, GRC/N S LIU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2105 **UNIV OF CALIFORNIA - BERKELEY** **2094**
 MICROGRAVITY EFFECTS ON NEAR - BUBBLE MICROSCALE TRANSPORT DURING BOILING OF BINARY FLUID MIXTURES
 02/26/1998 - 12/31/2001 FY02: \$0 Total: \$279,761
Prin. Invest.: V P CAREY
Tech. Officer: GRC/B J MOTIL
CASE Category: 13 – PHYSICS

NAG 3 2152 **UNIV OF CALIFORNIA - BERKELEY** **2095**
 WEAKLY NONLINEAR DESCRIPTION OF PARAMETRIC INSTABILITIES
 06/09/1998 - 12/31/2002 FY02: \$0 Total: \$419,500
Prin. Invest.: E KNOBLOCK
Tech. Officer: GRC/J R SKARDA
CASE Category: 13 – PHYSICS

NAG 3 2221 **UNIV OF CALIFORNIA - BERKELEY** **2096**
 NUMERICAL STUDY OF BUOYANCY AND DIFFERENTIAL DIFFUSION EFFECTS ON THE STRUCTURE AND DYNAMICS OF TRAILS
 12/29/1998 - 11/11/2001 FY02: \$0 Total: \$173,490
Prin. Invest.: J CHEN
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 696 **UNIV OF CALIFORNIA - BERKELEY** **2097**
 A PROPOSAL TO FLY THE EUV/FUV SPECTROMETER ON ORFEUS FOR ASTRO-SPAS I & II
 12/18/1992 - 02/28/2001 FY02: -\$5,089 Total: \$2,834,589
Prin. Invest.: M V HURWITZ
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 3499 **UNIV OF CALIFORNIA - BERKELEY** **2098**
 COSMOLOGICAL STUDIES OF THE COSMIC MICROWAVE BACKGROUND
 11/27/1996 - 11/30/2001 FY02: \$0 Total: \$335,762
Prin. Invest.: M I DAVIS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3500 **UNIV OF CALIFORNIA - BERKELEY** **2099**
 ADDING THE MARS '96 GAMMA-RAY BURST EXPERIMENT TO RY NETWORK
 11/27/1996 - 11/30/2001 FY02: \$0 Total: \$176,650
Prin. Invest.: K C HURLEY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3556 **UNIV OF CALIFORNIA - BERKELEY** **2100**
 A MULTI-WAVELENGTH STUDY OF A COMPLETE SAMPLE OF NEARBY
 01/04/1997 - 12/14/2002 FY02: \$0 Total: \$636,000
Prin. Invest.: A V FILIPPENKO
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3596 **UNIV OF CALIFORNIA - BERKELEY** **2101**
 MISSION OPERATIONS AND DATA ANALYSIS FOR THE FAST AURORAL SNAPSHOT EXPLORER (FAST) MISSION
 01/25/1997 - 05/31/2002 FY02: \$903,500 Total: \$12,817,000
Prin. Invest.: C W CARLSON
Tech. Officer: GSFC/R F PFAFF, JR.
CASE Category: 12 – CHEMISTRY

NAG 5 3913 **UNIV OF CALIFORNIA - BERKELEY** **2102**
 PHOTOCATHODE, MICROCHANNEL PLATE AND DELAY LINE TELEVISION DETECTOR SYSTEMS
 02/21/1997 - 06/14/2001 FY02: \$0 Total: \$785,100
Prin. Invest.: D H SIEGMUND
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 3941 **UNIV OF CALIFORNIA - BERKELEY** **2103**
 DEVELOPMENT OF DATA ANALYSIS, COMPRESSION AND VISU LARGE DATA
 SETS IN ASTROPHYSICS AND COSMOLOGY
 03/03/1997 - 02/28/2001 FY02: \$0 Total: \$423,000
Prin. Invest.: G SMOOT
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 4194 **UNIV OF CALIFORNIA - BERKELEY** **2104**
 SILICON DIFFRACTION GRATINGS FOR ULTRAVIOLET APPLI
 03/25/1997 - 03/31/2003 FY02: \$0 Total: \$468,848
Prin. Invest.: D V HURWITZ
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 4992 **UNIV OF CALIFORNIA - BERKELEY** **2105**
 HISTORICAL STUDIES ON EXTRATERRESTRIAL MATERIALS
 06/27/1997 - 12/31/2002 FY02: \$160,000 Total: \$992,000
Prin. Invest.: D NISHIZUMI
Tech. Officer: GSFC/J F BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 5102 **UNIV OF CALIFORNIA - BERKELEY** **2106**
 ASTROPHYSICAL GAMMA-RAY SPECTROSCOPY WITH THE HIGH RESOLU-
 TION GAMMA-RAY (HIREGS)
 02/11/1997 - 10/31/2000 FY02: \$0 Total: \$1,492,600
Prin. Invest.: R W LIN
Tech. Officer: GSFC/H C NEEDLEMAN, GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5146 **UNIV OF CALIFORNIA - BERKELEY** **2107**
 DEVELOPMENT OF GAS MICROSTRUCTURE DETECTORS (GMSD) FOR
 GAMMA-RAY TELESCOPES
 07/02/1997 - 07/02/2001 FY02: \$0 Total: \$248,130
Prin. Invest.: C HAILEY
Tech. Officer: GSFC/H NEEDLEMAN
CASE Category: 13 – PHYSICS

NAG 5 5197 **UNIV OF CALIFORNIA - BERKELEY** **2108**
 PECASE PROGRAM FUNDING FOR THE FIRST YEAR OF RESEARCH;
 SELECTED
 05/21/1998 - 05/31/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: M V HURWITZ
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5213 **UNIV OF CALIFORNIA - BERKELEY** **2109**
 FUNDING FOR PHASE A OF THE CHIPS PROJECT P. I. - DR. M HURWITZ
 10/08/1998 - 10/31/2003 FY02: \$5,016,592 Total: \$13,794,400
Prin. Invest.: M HURWITZ
Tech. Officer: GSFC/D PIERCE
CASE Category: 13 – PHYSICS

NAG 5 5231 **UNIV OF CALIFORNIA - BERKELEY** **2110**
 TECHNOLOGY DEVELOPMENT FOR THE EXTREMELY-HEAVY GALACTIC
 COSMIC-RAY COMPOSITIONOBSERVER (ECCO)
 05/17/1999 - 11/30/2003 FY02: \$175,000 Total: \$894,900
Prin. Invest.: A J WESTPHAL
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5285 **UNIV OF CALIFORNIA - BERKELEY** **2111**
 DEVELOPMENT OF GERMANIUM DETECTORS WITH LESS THAN 3D SPATIAL
 RESOLUTION FOR NUCLEAR GAMMA-RAY ASTRO
 06/12/2000 - 09/30/2002 FY02: \$0 Total: \$373,500
Prin. Invest.: R P LIN
Tech. Officer: WFF/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5312 **UNIV OF CALIFORNIA - BERKELEY** **2112**
 SOUNDING ROCKET EXPERIMENT TO EXPLORE ELECTRODYNAMICS COU-
 PLING PULSATIONS IN THE CUSP
 02/06/2001 - 02/05/2003 FY02: -\$31,300 Total: \$10,700
Prin. Invest.: G T DELORY
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5350 **UNIV OF CALIFORNIA - BERKELEY** **2113**
 THE NUCLEAR COMPTON TELESCOPE A BALLOON-BORNE GAMM A-RAY
 SPECTROMETER, POLARIMETER, & IMAGER
 01/16/2002 - 11/30/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: S BOGGS
Tech. Officer: GSFC/B MERRIT
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 5355 **UNIV OF CALIFORNIA - BERKELEY** **2114**
 SPEAR-RESEARCH CARRIER: SPECTROSCOPY OF PLASMA EVO LUTION
 FROM ASTROPHYSICAL RADIATION
 02/05/2002 - 02/03/2005 FY02: \$649,993 Total: \$649,993
Prin. Invest.: J EDELSTEIN
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6103 **UNIV OF CALIFORNIA - BERKELEY** **2115**
 NEW DIRECTIONS IN COMETARY SPECTROSCOPY
 07/24/1997 - 07/31/2001 FY02: \$0 Total: \$83,000
Prin. Invest.: D SPINRAD
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 6551 **UNIV OF CALIFORNIA - BERKELEY** **2116**
 ORIGIN AND EVOLUTION OF WHITE DWARF STARS: THE EAR LY YEARS
 (L TSA)
 11/21/1997 - 11/30/2001 FY02: -\$119,738 Total: \$270,162
Prin. Invest.: S VENNES
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6552 **UNIV OF CALIFORNIA - BERKELEY** **2117**
 FOREGROUND ANALYSIS & REMOVAL FOR FUTURE CMB EXPER IMENTS
 (L TSA)
 11/21/1997 - 11/30/2002 FY02: \$113,700 Total: \$540,500
Prin. Invest.: G F SMOOT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 6748 **UNIV OF CALIFORNIA - BERKELEY** **2118**
 DETERMINATION OF THE PROPERTIES OF HE IN THE LOCAL INTERSTEL-
 LAR MEDIUM FROM THE EUVE ALL-SKY SURVE
 01/12/1998 - 12/31/2000 FY02: -\$1,066 Total: \$64,489
Prin. Invest.: B FLYNN
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 6890 UNIV OF CALIFORNIA - BERKELEY 2119
 VLA MONITORING OF JUPITER IN 3-D AT =6-90CM: 1981 - 1996
 01/21/1998 - 12/31/2002 FY02: \$0 Total: \$190,439
Prin. Invest.: I DE PATER
Tech. Officer: GSFC/J HILLMAN
CASE Category: 11 – ASTRONOMY

NAG 5 6928 UNIV OF CALIFORNIA - BERKELEY 2120
 ANALYSIS OF DATA FROM THE 3-D PLASMA AND ENERGETIC PARTICLE
 EXPERIMENT ON THE GGS WIND SPACECRAFT
 02/04/1998 - 01/31/2002 FY02: \$0 Total: \$2,408,000
Prin. Invest.: R P LIN
Tech. Officer: GSFC/K OBILVIE
CASE Category: 13 – PHYSICS

NAG 5 6932 UNIV OF CALIFORNIA - BERKELEY 2121
 GRANT
 01/29/1998 - 01/31/2001 FY02: -\$3 Total: \$86,997
Prin. Invest.: C W CARLSON
Tech. Officer: GSFC/M HESSE
CASE Category: 13 – PHYSICS

NAG 5 7265 UNIV OF CALIFORNIA - BERKELEY 2122
 GALACTIC BLACK HOLES AND POSITRON ANNIHILATION RAD IATION
 04/29/1998 - 11/30/2002 FY02: \$38,000 Total: \$140,000
Prin. Invest.: D M SMITH
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7457 UNIV OF CALIFORNIA - BERKELEY 2123
 CARBON IN THE UNIVERSE: PAHS AND CLUSTERS
 09/18/1998 - 06/30/2001 FY02: \$0 Total: \$335,940
Prin. Invest.: R SAYKALLY
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7580 UNIV OF CALIFORNIA - BERKELEY 2124
 "SEISMIC HAZARD ASSESSMENT OF THE HAYWARD FAULT, C A, FROM GPS
 AND INSAR MEASUREMENT" (SE
 08/04/1998 - 07/31/2002 FY02: \$0 Total: \$224,000
Prin. Invest.: R BURGMANN
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7615 UNIV OF CALIFORNIA - BERKELEY 2125
 ADVANCE THE STATE OF THE ART IN MICROCHANNEL PLATE TECHNOL-
 OGY TO SIGNIFICANTLY IMPROVE DETEC
 08/24/1998 - 08/31/2002 FY02: \$0 Total: \$265,206
Prin. Invest.: D SIEGMUND
Tech. Officer: GSFC/F S HERRERO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7755 UNIV OF CALIFORNIA - BERKELEY 2126
 DIRECT IMMERSION PROCESS FOR MCP PERFORMANCE IMPRO VEMENTS
 12/08/1998 - 12/31/2002 FY02: \$0 Total: \$293,258
Prin. Invest.: D EDELSTEIN
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 7833 UNIV OF CALIFORNIA - BERKELEY 2127
 STUDIES OF DUST EMISSION AS MEASURED BY DIRBE AND IRAS ADP 98
 12/14/1998 - 12/14/2001 FY02: \$0 Total: \$234,369
Prin. Invest.: M DAVIS
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7936 UNIV OF CALIFORNIA - BERKELEY 2128
 PROBING THE MORPHOLOGY, DYNAMICS AND INTERFACES OF THE
 INTERSTELLAR MEDIUM (L TSA 98)
 12/23/1998 - 12/31/2002 FY02: \$86,000 Total: \$316,000
Prin. Invest.: M COHEN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7951 UNIV OF CALIFORNIA - BERKELEY 2129
 CMES AND SOLAR MAGNETIC FIELD EVOLUTION: A SOHO G I PROPOSAL
 12/21/1998 - 12/31/2001 FY02: \$0 Total: \$248,800
Prin. Invest.: J G LUHMANN
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 8078 UNIV OF CALIFORNIA - BERKELEY 2130
 016LYSIS OF DAT FROM ELECTRIC FIELD EXPERIMENT ON POLAR 11
 01/22/1999 - 04/30/2002 FY02: \$0 Total: \$1,422,500
Prin. Invest.: F MOZER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8098 UNIV OF CALIFORNIA - BERKELEY 2131
 THE MAGNETIC FIELDS OF T TAURI STARS
 02/04/1999 - 02/14/2003 FY02: \$0 Total: \$115,000
Prin. Invest.: G H FISHER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8468 UNIV OF CALIFORNIA - BERKELEY 2132
 THE PHYSICS OF ACTIVE REGIONS
 05/04/1999 - 04/30/2002 FY02: \$62,450 Total: \$356,300
Prin. Invest.: G H FISHER
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8510 UNIV OF CALIFORNIA - BERKELEY 2133
 EVALUATING MODEL PREDICTIONS OF CO2 & WATER VAPOR EXCHANGE
 WITH FLUX MEASUREMENTS IN A PONDEROSA
 06/02/1999 - 06/30/2001 FY02: \$0 Total: \$84,090
Prin. Invest.: D BALDOCCHI
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8667 UNIV OF CALIFORNIA - BERKELEY 2134
 AN ADVANCED PHOTON COUNTING UV IMAGING DETECTOR
 07/08/1999 - 07/14/2002 FY02: \$0 Total: \$299,600
Prin. Invest.: O H SIEGMUND
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8737 UNIV OF CALIFORNIA - BERKELEY 2135
 THE ROLE OF MULTI-SCALE LAND SURFACE HETEROLGENEIT Y IN
 PRECIPITATION RECYCLING AND LAND ATMOSPHE
 08/17/1999 - 08/14/2002 FY02: \$0 Total: \$120,000
Prin. Invest.: X LIANG
Tech. Officer: GSFC/P T HOUSER
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 8753 **UNIV OF CALIFORNIA - BERKELEY** **2136**
 FLUXNET: UNIFYING A GLOBAL ARRAY OF TOWER FLUX NETWORKS FOR
 VALIDATING EOS TERRESTRIAL CARBON, WAT
 08/12/1999 - 04/30/2002 FY02: \$0 Total: \$552,574
Prin. Invest.: D BALDOCCHI
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8861 **UNIV OF CALIFORNIA - BERKELEY** **2137**
 DETECTING EXTRASOLAR PLANETS
 10/07/1999 - 06/30/2002 FY02: \$0 Total: \$466,247
Prin. Invest.: D W MARCY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8984 **UNIV OF CALIFORNIA - BERKELEY** **2138**
 CORONAL HEATING DURING STELLAR FLARES & THE SEARCH FOR
 PROTON BEAMS - FUSE
 02/03/2000 - 01/31/2002 FY02: \$0 Total: \$63,300
Prin. Invest.: G H FISHER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9091 **UNIV OF CALIFORNIA - BERKELEY** **2139**
 RESEARCH IN FUV INTERFEROMETRIC SPECTROSCOPY III
 02/17/2000 - 02/14/2003 FY02: \$100,000 Total: \$394,200
Prin. Invest.: J EDELSTEIN
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9115 **UNIV OF CALIFORNIA - BERKELEY** **2140**
 PHASE-A AND BRIDGE PHASE STUDY OF STEREO/WAVES ACCOMODATION
 03/02/2000 - 12/31/2002 FY02: \$130,000 Total: \$321,725
Prin. Invest.: S BALE
Tech. Officer: GSFC/M L KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 9130 **UNIV OF CALIFORNIA - BERKELEY** **2141**
 CORONAL STRUCTURE IN THE RS CVN BINARY AR LACERTAE ADP99
 02/28/2000 - 02/28/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: O H SIEGMUND
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9149 **UNIV OF CALIFORNIA - BERKELEY** **2142**
 ADVANCED MCP UV VISIBLE DETECTOR SYSTEMS
 03/03/2000 - 03/14/2003 FY02: \$297,000 Total: \$547,000
Prin. Invest.: O SIEGMUND
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9210 **UNIV OF CALIFORNIA - BERKELEY** **2143**
 SWIFT PHASE B AND C/D
 03/10/2000 - 08/14/2003 FY02: \$73,156 Total: \$208,156
Prin. Invest.: K HURLEY
Tech. Officer: GSFC/N GEHRELS
CASE Category: 11 – ASTRONOMY

NAG 5 9231 **UNIV OF CALIFORNIA - BERKELEY** **2144**
 DEVELOPMENT OF A LONG-TERM INVENTORY OF FIRE BURNE D AREAS &
 EMISSIONS OF NORTH AMERICA'S BOREAL AN
 03/22/2000 - 04/30/2003 FY02: \$75,274 Total: \$189,023
Prin. Invest.: P GONG
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9305 **UNIV OF CALIFORNIA - BERKELEY** **2145**
 DATA CALIBRATION AND SCIENTIFIC DEFINITION OF THE NEAR, LUNAR
 PROSPECTORAND MGS MAGNETOMETERS
 03/20/2000 - 02/28/2003 FY02: \$0 Total: \$65,641
Prin. Invest.: R LIN
Tech. Officer: GSFC/M H ACUNA
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 9317 **UNIV OF CALIFORNIA - BERKELEY** **2146**
 ENHANCEMENT OF THE GLOBAL SYSTEMS SCIENCE STUDENT GUIDE
 SERIES FOR THE DIGITAL EARTH INITIATIVE
 03/22/2000 - 03/31/2003 FY02: \$132,294 Total: \$352,250
Prin. Invest.: A GOULD
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9384 **UNIV OF CALIFORNIA - BERKELEY** **2147**
 MOLECULAR CARBON IN THE GALAXY
 04/04/2000 - 03/31/2003 FY02: \$160,000 Total: \$470,720
Prin. Invest.: R J SAYKALLY
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 13 – PHYSICS

NAG 5 9398 **UNIV OF CALIFORNIA - BERKELEY** **2148**
 BALLOON BORNE OBSERVATIONS OF THE POLARIZATION ANI SOTROPY
 OF THE COSMIC MICROWAVE BACKGROUND RADIAT
 04/06/2000 - 03/31/2003 FY02: \$168,000 Total: \$504,178
Prin. Invest.: P L RICHARDS
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9503 **UNIV OF CALIFORNIA - BERKELEY** **2149**
 ADDING NEAR TO THE 3RD INTERPLANETARY NETWORK OF GAMMA-RAY
 BURST DETECTORS
 04/24/2000 - 04/30/2001 FY02: -\$1 Total: \$64,999
Prin. Invest.: K C HURLEY
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9514 **UNIV OF CALIFORNIA - BERKELEY** **2150**
 BIOSPHERE-ATMOSPHERE INTERACTIONS
 04/25/2000 - 04/30/2003 FY02: \$310,000 Total: \$826,667
Prin. Invest.: I FUNG
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9523 **UNIV OF CALIFORNIA - BERKELEY** **2151**
 QTHE FEASABILITY OF DETECTING ELECTRIC FIELDS ON THE MARS 03
 PROMISE ELEELECTRICAL SUBPACKAGE
 07/31/2000 - 07/31/2001 FY02: \$0 Total: \$27,000
Prin. Invest.: G T DELORY
Tech. Officer: GSFC/W M FARRELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9626 **UNIV OF CALIFORNIA - BERKELEY** **2152**
 NEW SOLAR MAX GRANT STUDIES OF GEOTAIL ELECTRIC FIELDS &
 PLASMA FIELDS
 05/22/2000 - 09/30/2001 FY02: \$0 Total: \$95,034
Prin. Invest.: F MOZER
Tech. Officer: GSFC/D FAIRFIELD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9629 UNIV OF CALIFORNIA - BERKELEY 2153
 CASSANDRA: A STORM BASED MODEL FOR FORECASTING THE INITIATION
 & RUNOUT OF DEBRIS FLOWS
 05/30/2000 - 05/31/2003 FY02: \$130,000 Total: \$230,000
Prin. Invest.: W E DIETRICH
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9650 UNIV OF CALIFORNIA - BERKELEY 2154
 NEW ISTP SOLAR MAX GRANT: DUAL SPACECRAFT OBSERVATIONS OF
 DAYSIDE RECONNECTION
 05/30/2000 - 05/31/2002 FY02: \$0 Total: \$70,000
Prin. Invest.: C CARLSON
Tech. Officer: GSFC/M ACUNA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9864 UNIV OF CALIFORNIA - BERKELEY 2155
 GEOLOGICAL ANALYSIS OF MARTIAN CRUSTAL MAGNETIC ANOMALIES
 08/25/2000 - 08/14/2003 FY02: \$8,800 Total: \$30,453
Prin. Invest.: M RICHARDS
Tech. Officer: GSFC/P TAYLOR
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9975 UNIV OF CALIFORNIA - BERKELEY 2156
 CLUSTER ELECTRIC FIELD DATA ANALYSIS
 09/14/2000 - 03/31/2002 FY02: \$0 Total: \$783,773
Prin. Invest.: F MOZER
Tech. Officer: GSFC/M GOLDSTEIN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10131 UNIV OF CALIFORNIA - BERKELEY 2157
 CLUSTER ION COMPOSITION (CIS) EXPERIMENT
 12/27/2000 - 12/31/2003 FY02: \$950,400 Total: \$1,800,400
Prin. Invest.: G K PARKS
Tech. Officer: GSFC/M GOLDSTEIN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10300 UNIV OF CALIFORNIA - BERKELEY 2158
 ELECTRON DYNAMICS IS SHOCK RAMPS
 01/30/2001 - 01/14/2003 FY02: \$74,200 Total: \$148,000
Prin. Invest.: L MUSCHIETTI
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10314 UNIV OF CALIFORNIA - BERKELEY 2159
 THE SCIENCE EDUCATION GATEWAY II
 02/01/2001 - 01/31/2004 FY02: \$150,000 Total: \$300,000
Prin. Invest.: I HAWKINS
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10393 UNIV OF CALIFORNIA - BERKELEY 2160
 A SEARCH FOR TRACE ELEMENTS IN ULTRAMASSIVE WHITE DWARF
 PHOTOSPHERES (FUSE 00)
 02/12/2001 - 12/31/2001 FY02: -\$34,195 Total: \$5,605
Prin. Invest.: J DUPIUS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10411 UNIV OF CALIFORNIA - BERKELEY 2161
 DEVELOPMENT OF CALORIMETRIC AEROGEL FOR CAPTURE OF INTER-
 PLANETARY & INTERSTELLAR GRAINS IN LOW EARTH
 04/10/2001 - 04/15/2002 FY02: \$0 Total: \$52,500
Prin. Invest.: A WESTPHAL
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 10428 UNIV OF CALIFORNIA - BERKELEY 2162
 3-D PLASMA AND ENERGETIC PARTICLES INVESTIGATION ON THE WIND
 SPACECRAFT
 02/23/2001 - 02/28/2003 FY02: \$0 Total: \$788,000
Prin. Invest.: R P LIN
Tech. Officer: GSFC/K OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10433 UNIV OF CALIFORNIA - BERKELEY 2163
 CHONDRITIC METEORITES AND PLANETESMIALS
 02/16/2001 - 01/31/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: F SHU
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10466 UNIV OF CALIFORNIA - BERKELEY 2164
 UVI DATA ANALYSIS
 03/08/2001 - 03/14/2003 FY02: \$0 Total: \$448,000
Prin. Invest.: G PARKS
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10471 UNIV OF CALIFORNIA - BERKELEY 2165
 DUAL-SPACECRAFT INVESTIGATION OF SUBSTANTIAL SOLAR WIND
 PLASMA ENTRY ACROSS THE TAIL FLANK MAGNETOPA
 02/27/2001 - 02/28/2004 FY02: \$77,600 Total: \$154,100
Prin. Invest.: T PHAN
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10657 UNIV OF CALIFORNIA - BERKELEY 2166
 THE STRUCTURE AND SYNAMICS OF GIANT HERBIG-HARO FLOWS
 03/20/2001 - 03/31/2003 FY02: \$35,000 Total: \$70,000
Prin. Invest.: W WELCH
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10664 UNIV OF CALIFORNIA - BERKELEY 2167
 NUMERICAL SIMULATION OF 3D COMPACT EDDIES IN A PRO TOPLANETARY
 ACCRETION DISK; THEIR ROBUSTNESS AND
 03/21/2001 - 02/28/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: P MARCUS
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10673 UNIV OF CALIFORNIA - BERKELEY 2168
 ESTIMATING SOIL MOISTURE CHANGES USING RADARSAT & ITS APPLICA-
 TION IN HYDROLOGICAL MODELING
 03/27/2001 - 03/14/2003 FY02: \$63,668 Total: \$121,656
Prin. Invest.: X LIANG
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10710 UNIV OF CALIFORNIA - BERKELEY 2169
 BEPOSAX GRBS (ADP 2000)
 04/23/2001 - 04/30/2002 FY02: \$0 Total: \$33,880
Prin. Invest.: K C HURLEY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10713 UNIV OF CALIFORNIA - BERKELEY 2170
 ADVANCED ADIABATIC DEMAGNETIZATION REFRIGERATORS FOR CONTINUOUS COOLING FROM 10K TO 50MK
 04/20/2001 - 04/30/2004 FY02: \$36,200 Total: \$93,390
Prin. Invest.: P L RICHARDS
Tech. Officer: GSFC/P J SHIRRON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10715 UNIV OF CALIFORNIA - BERKELEY 2171
 MATADOR IDPU & DCE TESTS
 04/12/2001 - 03/14/2003 FY02: \$0 Total: \$124,000
Prin. Invest.: D T DELORY
Tech. Officer: GSFC/W M FARREL
CASE Category: 13 – PHYSICS

NAG 5 10800 UNIV OF CALIFORNIA - BERKELEY 2172
 CONCEPT STUDY FOR THE "STUDY OF GALACTIC PLASMA EVOLUTION WITH SPEAR" (SPEAR) MISSION AO-99-OSS-0
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$251,179
Prin. Invest.: D EDELSTEIN
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10803 UNIV OF CALIFORNIA - BERKELEY 2173
 CONCEPT STUDY FOR THE "THE HEAVY NUCLEI EXPLORER" (HNX) MISSION AO-99-OSS-05
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$57,700
Prin. Invest.: D WESTPHAL
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10839 UNIV OF CALIFORNIA - BERKELEY 2174
 3-D MHD TURBULENT DYNAMOS (ATP 2000)
 05/10/2001 - 06/30/2004 FY02: \$83,000 Total: \$163,000
Prin. Invest.: G H FISHER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10851 UNIV OF CALIFORNIA - BERKELEY 2175
 CONTINUING THE CHALLENGE OF EUV ASTRONOMY: CURRENT ANALYSIS AND PROSPECTS FOR THE FUTURE
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$30,003
Prin. Invest.: J DUPUIS
Tech. Officer: GSFC/D GOLOMBEK
CASE Category: 11 – ASTRONOMY

NAG 5 10866 UNIV OF CALIFORNIA - BERKELEY 2176
 ENRICHMENTS OF 3HE IN PLANETARY NEBULAE
 05/08/2001 - 05/14/2003 FY02: \$25,000 Total: \$49,000
Prin. Invest.: I ROTH
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10925 UNIV OF CALIFORNIA - BERKELEY 2177
 CORONAL MODELS AND APPLICATIONS FOR LWS
 05/11/2001 - 05/14/2004 FY02: \$82,020 Total: \$162,554
Prin. Invest.: J G LUHMANN
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11055 UNIV OF CALIFORNIA - BERKELEY 2178
 EFFECT OF IMF BY COMPONENT ON THERMOSPHERIC COMPOSITION
 06/18/2001 - 06/30/2004 FY02: \$94,585 Total: \$194,984
Prin. Invest.: T IMMEL
Tech. Officer: GSFC/M MELLOTT
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11179 UNIV OF CALIFORNIA - BERKELEY 2179
 ORIGINS OF RECENT EROSIONAL FEATURES ON MARS: QUANTITATIVE ANALYSIS OF MOC AND MOLA DATA, PHYSICAL
 08/14/2001 - 08/14/2004 FY02: \$55,000 Total: \$110,000
Prin. Invest.: W DIETRICH
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11200 UNIV OF CALIFORNIA - BERKELEY 2180
 INFERENCES OF REGIONAL CARBON EXCHANGE PROCESSES & THEIR VARIABILITY SINCE 1980
 08/10/2001 - 08/14/2004 FY02: \$113,058 Total: \$400,135
Prin. Invest.: I FUNG
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11333 UNIV OF CALIFORNIA - BERKELEY 2181
 X-RAY SPECTROSCOPY OF LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI WITH XMM
 10/26/2001 - 08/31/2003 FY02: \$8,610 Total: \$8,610
Prin. Invest.: E QUATAERT
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11394 UNIV OF CALIFORNIA - BERKELEY 2182
 HIGH RESOLUTION CROSS-STRIP DETECTOR READ-OUT TECHNOLOGIES FOR SPACE ASTROPHYSICS APPLICATIONS
 12/03/2001 - 11/30/2004 FY02: \$175,000 Total: \$175,000
Prin. Invest.: O H SIEGMUND
Tech. Officer: GSFC/P CRANE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11416 UNIV OF CALIFORNIA - BERKELEY 2183
 MO&DA OF THE ULTRA-VIOLET IMAGING (UVI) EXPERIMENT FOR THE POLAR EXTENDED MISSION.
 01/15/2002 - 12/31/2004 FY02: \$376,750 Total: \$376,750
Prin. Invest.: G PARKS
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11422 UNIV OF CALIFORNIA - BERKELEY 2184
 SQUID READOUT MULTIPLEXER FOR SUPERCONDUCTING TES BOLOMETER ARRAYS
 12/03/2001 - 11/30/2004 FY02: \$190,000 Total: \$190,000
Prin. Invest.: A LEE
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 11451 UNIV OF CALIFORNIA - BERKELEY 2185
 ADDING HETE-II AND '01 MARS ODYSSEY TO THE IPN
 12/27/2001 - 12/31/2004 FY02: \$60,000 Total: \$60,000
Prin. Invest.: K C HURLEY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11651 UNIV OF CALIFORNIA - BERKELEY 2186
 FLUXNET, A GLOBAL NETWORK OF CARBON, WATER AND ENE RGY FLUX
 MEASUREMENT SITES
 01/28/2002 - 01/31/2005 FY02: \$210,602 Total: \$210,602
Prin. Invest.: D BALDOCCHI
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11689 UNIV OF CALIFORNIA - BERKELEY 2187
 MULTI-EPOCH XMM OBSERVATIONS OF NGC4258
 02/13/2002 - 02/14/2003 FY02: \$13,132 Total: \$13,132
Prin. Invest.: A V FILIPPENKO
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11733 UNIV OF CALIFORNIA - BERKELEY 2188
 ANALYSIS OF DATA FROM THE ELECTRIC FIELD EXPERIMENT ON THE
 POLAR SATELLITE.
 02/25/2002 - 01/31/2005 FY02: \$333,000 Total: \$333,000
Prin. Invest.: F MOZER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11769 UNIV OF CALIFORNIA - BERKELEY 2189
 CHARTING PLANET FORMATION WITH DIRECT IMAGING AND STELLAR
 KINEMATICS
 02/26/2002 - 02/28/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: P KALAS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11781 UNIV OF CALIFORNIA - BERKELEY 2190
 ELECTRIC FIELD SENSORS FOR PLANETARY SUBSURFACE SOUNDING
 02/26/2002 - 02/29/2004 FY02: \$163,196 Total: \$163,196
Prin. Invest.: G DELORY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11804 UNIV OF CALIFORNIA - BERKELEY 2191
 3D PLASMA AND ENERGETIC PARTICLES INVESTIGATION ON THE WIND
 SPACECRAFT; OPERATIONS AND DATA ANALYSIS
 03/27/2002 - 03/31/2005 FY02: \$243,400 Total: \$243,400
Prin. Invest.: R LIN
Tech. Officer: GSFC/K OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11901 UNIV OF CALIFORNIA - BERKELEY 2192
 ADVANCED HIGH-SENSITIVE-COSMOGENIC NUCLIDE MEASUREMENTS
 FOR SAMPLE RETURN
 04/04/2002 - 03/31/2005 FY02: \$370,000 Total: \$370,000
Prin. Invest.: K NISHIZUMI
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11902 UNIV OF CALIFORNIA - BERKELEY 2193
 ROBUST EXTRACTION AND SUBSEQUENT HANDLING OF HYPER VELOCITY
 GRAINS CAPTURED IN AEROGEL COLLECT
 04/04/2002 - 03/31/2005 FY02: \$144,000 Total: \$144,000
Prin. Invest.: A J WESTPHAL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11910 UNIV OF CALIFORNIA - BERKELEY 2194
 AN ISOTOPIC APPROACH FOR DETERMINING THE INDUSTRIAL FRACTION
 OF TOTALCH3BR SOURCE TO THE A
 04/19/2002 - 04/30/2004 FY02: \$75,000 Total: \$75,000
Prin. Invest.: A GOLDSTEIN
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11914 UNIV OF CALIFORNIA - BERKELEY 2195
 THE PHYSICS OF ACTIVE REGIONS
 03/21/2002 - 04/30/2005 FY02: \$129,753 Total: \$129,753
Prin. Invest.: G H FISHER
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11987 UNIV OF CALIFORNIA - BERKELEY 2196
 CLUSTER-II/GEOTAIL INVESTIGATION OF THE LARGE-SCALE NATURE OF
 RECONNECTION
 04/18/2002 - 04/30/2005 FY02: \$77,916 Total: \$77,916
Prin. Invest.: T PHAN
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12004 UNIV OF CALIFORNIA - BERKELEY 2197
 CORRELATIVE STUDIES OF IONS AND FIELDS MEASURED BY THE CLUS-
 TER SPACECRAFT
 04/12/2002 - 04/14/2005 FY02: \$88,569 Total: \$88,569
Prin. Invest.: J P MCFADDEN
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12031 UNIV OF CALIFORNIA - BERKELEY 2198
 FORMATION AND COLLIMATION OF PULSAR WINDS
 04/12/2002 - 04/14/2005 FY02: \$85,030 Total: \$85,030
Prin. Invest.: J ARONS
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12039 UNIV OF CALIFORNIA - BERKELEY 2199
 A SURVEY OF THE SPATIAL, TEMPORAL, AND STATISTICAL PROPERTIES OF
 HIGH-ALTITUDEAURORAL ZONE ELECTRIC
 04/12/2002 - 04/14/2005 FY02: \$77,983 Total: \$77,983
Prin. Invest.: J BONNELL
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12042 UNIV OF CALIFORNIA - BERKELEY 2200
 THE FORMATION OF HIGH MASS STARS
 04/17/2002 - 04/14/2005 FY02: \$53,469 Total: \$53,469
Prin. Invest.: R I KLEIN
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12043 **UNIV OF CALIFORNIA - BERKELEY** **2201**
 ACCRETION ONTO MASSIVE BLACK HOLES IN LOW-LUMINOSITY GALACTIC NUCLEI
 04/17/2002 - 04/14/2005 FY02: \$85,830 Total: \$85,830
Prin. Invest.: E QUATAERT
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12047 **UNIV OF CALIFORNIA - BERKELEY** **2202**
 ELECTRODYNAMIC COUPLING OF FAST MAGNETOTAIL FLOWS AND THE HIGH LATITUDE NIGHTSIDE IONOSPHERE
 04/17/2002 - 08/30/2002 FY02: \$31 Total: \$31
Prin. Invest.: V ANGELOPOULOS
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12062 **UNIV OF CALIFORNIA - BERKELEY** **2203**
 THERMAL RADIO MAPS OF JUPITER
 04/18/2002 - 04/30/2005 FY02: \$97,775 Total: \$97,775
Prin. Invest.: I DEPATER
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12090 **UNIV OF CALIFORNIA - BERKELEY** **2204**
 JUPITER ANALOGS AND ROCKY PLANETS: TOWARD 1M/S PRECISION
 05/02/2002 - 06/30/2005 FY02: \$250,000 Total: \$250,000
Prin. Invest.: G W MARCY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12167 **UNIV OF CALIFORNIA - BERKELEY** **2205**
 CHONDRITIC METEORITES AND PLANETESIMALS
 05/14/2002 - 05/14/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: A GLASSGOLD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12173 **UNIV OF CALIFORNIA - BERKELEY** **2206**
 THE FORMATION AND EVOLUTION OF DARK MATTER HALOS
 05/15/2002 - 04/14/2005 FY02: \$80,611 Total: \$80,611
Prin. Invest.: C M MA
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12193 **UNIV OF CALIFORNIA - BERKELEY** **2207**
 MULTI-WAVELENGTH VISIBILITY OBSERVATIONS OF CIRCUM STELLAR MATERIAL WITH THE KECK INTERFEROMETER
 05/23/2002 - 05/31/2003 FY02: \$48,022 Total: \$48,022
Prin. Invest.: C TOWNES
Tech. Officer: GSFC/D DANCHI
CASE Category: 11 – ASTRONOMY

NAG 5 12232 **UNIV OF CALIFORNIA - BERKELEY** **2208**
 A FAR UV STUDY OF HV ATOMIC AND MOLECULAR GAS ASSOCIATED WITH THE EVOLVED SHALN 147 SNR.
 06/06/2002 - 06/14/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: B Y WELSH
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12324 **UNIV OF CALIFORNIA - BERKELEY** **2209**
 THE HALO'S O VI INTENSITY (FUSE 01)
 08/12/2002 - 09/30/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: O W SIEGMUND
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12424 **UNIV OF CALIFORNIA - BERKELEY** **2210**
 INVESTIGATING OVI EMISSION IN THE ERIDANUS SUPER BUBBLE (FUSE 2001)
 08/06/2002 - 08/14/2003 FY02: \$79,400 Total: \$79,400
Prin. Invest.: O W SIEGMUND
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12437 **UNIV OF CALIFORNIA - BERKELEY** **2211**
 THE SUNYAEV-ZEL'DOVICH EFFECT(S)
 08/05/2002 - 04/14/2005 FY02: \$94,145 Total: \$94,145
Prin. Invest.: M WHITE
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12453 **UNIV OF CALIFORNIA - BERKELEY** **2212**
 MULTI-SPACECRAFT AND SIMULATION STUDY OF ENERGY TRANSPORT BY ALFVEN WAVES IN THE HIGH-LATITUDE
 08/15/2002 - 08/14/2004 FY02: \$75,743 Total: \$75,743
Prin. Invest.: C CHASTON
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12483 **UNIV OF CALIFORNIA - BERKELEY** **2213**
 A MULTISPACECRAFT INVESTIGATION OF SHOCK STRUCTURE AND UPSTREAM WAVES
 08/26/2002 - 08/31/2004 FY02: \$60,796 Total: \$60,796
Prin. Invest.: S D BALE
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12541 **UNIV OF CALIFORNIA - BERKELEY** **2214**
 SUDDEN OAK DEATH IN CALIFORNIA: SPATIAL ANALYSIS FOR TESTING HYPOTHESES OF DISEASE SPREAD
 08/29/2002 - 08/31/2005 FY02: \$81,580 Total: \$81,580
Prin. Invest.: N KELLY
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12590 **UNIV OF CALIFORNIA - BERKELEY** **2215**
 SCIENCE OPERATION AND DATA ANALYSIS FOR THE FAST AURORAL SNAPSHOT EXPLORER (FAST) MISSION.
 09/20/2002 - 03/14/2004 FY02: \$219,235 Total: \$219,235
Prin. Invest.: D W CARLSON
Tech. Officer: GSFC/R PFAFF
CASE Category: 11 – ASTRONOMY

NAG 6 10 **UNIV OF CALIFORNIA - BERKELEY** **2216**
 SOUNDING ROCKET RESEARCH PROGRAM
 11/01/1980 - 12/31/2001 FY02: \$0 Total: \$3,619,476
Prin. Invest.: C W CARLSON, F S MOZER, K A ANDERSON
Tech. Officer: GSFC/W B JOHNSON, GSFC/R H PLESS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1432 **UNIV OF CALIFORNIA - BERKELEY** **2217**
 R/S SUPERFLUID GYROSCOPES FOR SPACE
 03/02/1998 - 01/31/2003 FY02: \$150,000 Total: \$555,750
Prin. Invest.: R E PACKARD
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1458 **UNIV OF CALIFORNIA - BERKELEY** **2218**
 R/S EXPLOITING THE TEMPERATURE DEPENDENCE OF MAGNETIC SUS-
 CEPTIBILITY TO CONTROL CONVECTION
 02/15/1998 - 08/31/2002 FY02: \$59,010 Total: \$340,010
Prin. Invest.: J W EVANS, F SZOFRAN
Tech. Officer: MSFC/P M DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1051 **UNIV OF CALIFORNIA - BERKELEY** **2219**
 GENESIS DISCOVERY MISSION
 08/19/1998 - 05/31/2004 FY02: \$26,300 Total: \$111,900
Prin. Invest.: K NISHIZUMI
Tech. Officer: JSC/K E CYR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 1 99053 **UNIV OF CALIFORNIA - BERKELEY** **2220**
 NEXT GENERATION TECHNOLOGIES FOR THE IN SITU DETECTION OF NOX
 RADICALS AND RESERVOIRS FROM AIRCRAFT
 02/10/1999 - 02/09/2002 FY02: \$0 Total: \$762,187
Prin. Invest.: R COHEN
Tech. Officer: LARC/J HILL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 00133 **UNIV OF CALIFORNIA - BERKELEY** **2221**
 STEREO PHASE A CONCEPT STUDY FOR INSITU_POP5-22-00 MEASURE-
 MENTS OF PARTICLES & CME TRANSIENTS (IMPACT)
 02/22/2000 - 11/30/2005 FY02: \$3,671,600 Total: \$5,377,585
Prin. Invest.: J LUHMAN, E STONE
Tech. Officer: GSFC/A HARPER
CASE Category: 13 – PHYSICS

NAS 5 02099 **UNIV OF CALIFORNIA - BERKELEY** **2222**
 TIME HISTORY OF EVENTS & MACROSCALE INTERACTIONS DURING
 SUBSTORMS (THEMIS) MISSION PHASE A EFFORT
 06/25/2002 - 03/31/2003 FY02: \$450,000 Total: \$450,000
Prin. Invest.: V ANGELOPOULOS
Tech. Officer: GSFC/C SAVINELL
CASE Category: 11 – ASTRONOMY

NAS 5 98033 **UNIV OF CALIFORNIA - BERKELEY** **2223**
 PHASE A CONCEPT STUDY FOR HESSI INVESTIGATION
 11/19/1997 - 10/19/2003 FY02: \$1,476,786 Total: \$44,423,000
Prin. Invest.: R P LIN
Tech. Officer: GSFC/F SNOW
CASE Category: 11 – ASTRONOMY

NAS 5 99242 **UNIV OF CALIFORNIA - BERKELEY** **2224**
 FAST FLIGHT OPERATIONS
 10/01/1999 - 08/02/2003 FY02: \$296,308 Total: \$786,200
Prin. Invest.: C W CARLSON
Tech. Officer: GSFC/R PFAFF
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1125 **UNIV OF CALIFORNIA - BERKELEY** **2225**
 THE EXTRACTION OF POINT SOURCES FROM THE NIRS SPEC TROMETER
 ABOARD THE INFRARED TELESCOPE IN SPACE
 06/14/1999 - 05/31/2003 FY02: \$0 Total: \$28,000
Prin. Invest.: M COHEN
Tech. Officer: ARC/D GOORVITCH
CASE Category: 11 – ASTRONOMY

NCC 2 1171 **UNIV OF CALIFORNIA - BERKELEY** **2226**
 3DOF HAPTIC SIMULATION AND PSYCHOPHYSICAL EXPERIMENTS
 04/11/2000 - 11/30/2001 FY02: \$0 Total: \$120,000
Prin. Invest.: H KAZEROONI
Tech. Officer: ARC/S R ELLIS
CASE Category: 46 – MECHANICAL ENGR

NCC 2 1255 **UNIV OF CALIFORNIA - BERKELEY** **2227**
 2-DOF HAPTIC SIMULATION & PSYCHOPHYSICAL EXPERIMENTS
 05/03/2001 - 03/31/2003 FY02: \$0 Total: \$70,000
Prin. Invest.: H KAZEROONI
Tech. Officer: ARC/B ADELSTEIN, ARC/S R ELLIS
CASE Category: 46 – MECHANICAL ENGR

NCC 2 1347 **UNIV OF CALIFORNIA - BERKELEY** **2228**
 ENHANCED NANOMANIPULATION THROUGH HAPTIC AUGMENTATION
 06/05/2002 - 05/31/2003 FY02: \$72,739 Total: \$72,739
Prin. Invest.: H KAZEROONI
Tech. Officer: ARC/B ADELSTEIN, ARC/S R ELLIS
CASE Category: 46 – MECHANICAL ENGR

NCC 2 5334 **UNIV OF CALIFORNIA - BERKELEY** **2229**
 A STUDY OF THE STATIC & DYNAMIC AERODYNAMICS CHARACTERISTICS
 OF BLUNT PLANETARY PROBES
 07/19/1999 - 06/30/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: G T CHAPMAN, M BROWN, A RAMSEY
Tech. Officer: ARC/P F WERCINSKI, ARC/T C TAM
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5388 **UNIV OF CALIFORNIA - BERKELEY** **2230**
 TOW-TANK STUDIES OF HELICOPTER VORTEX WAKE
 07/14/2000 - 09/30/2002 FY02: \$0 Total: \$65,000
Prin. Invest.: O SAVAS
Tech. Officer: ARC/F CARADONNA, ARC/C TUNG
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5416 **UNIV OF CALIFORNIA - BERKELEY** **2231**
 MASSIVE STAR FORMATION
 01/26/2001 - 02/14/2003 FY02: \$68,706 Total: \$126,706
Prin. Invest.: C F MCKEE
Tech. Officer: ARC/D J HOLLENBACH, ARC/G LAUGHLIN
CASE Category: 11 – ASTRONOMY

NCC 2 5455 **UNIV OF CALIFORNIA - BERKELEY** **2232**
 LONG TERM EXTREME ENVIRONMENT AND MARS ANALOG STUDIES IN
 THE ATACAMA DESERT
 08/09/2001 - 07/31/2003 FY02: \$52,814 Total: \$92,814
Prin. Invest.: R ADMUNDSON
Tech. Officer: ARC/C MCKAY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5461 **UNIV OF CALIFORNIA - BERKELEY** **2233**
 TOW-TANK STUDIES OF AIRCRAFT WAKE VORTEX INSTABILITIES
 09/26/2001 - 10/31/2003 FY02: \$5,400 Total: \$35,400
Prin. Invest.: O SAVAS
Tech. Officer: ARC/D A DURSTON
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5492 **UNIV OF CALIFORNIA - BERKELEY** **2234**
 EVOLUTION OF GAS AND DUST IN PROTOPLANETARY DISKS
 05/21/2002 - 05/31/2003 FY02: \$55,812 Total: \$55,812
Prin. Invest.: C F MCKEE
Tech. Officer: ARC/D HOLLENBACH, ARC/K R BELL
CASE Category: 11 – ASTRONOMY

NCC 2 5507 **UNIV OF CALIFORNIA - BERKELEY** **2235**
 MEASUREMENTS OF ROTOR FLOW FIELDS AND FORCES IN A WATER
 FACILITY AT LOW AND MODERATE REYNOLDS NUMBER
 08/01/2002 - 09/30/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: O SAVAS
Tech. Officer: ARC/F X CARADONNA
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 803 **UNIV OF CALIFORNIA - BERKELEY** **2236**
 FLAMMIBILITY DIAGRAMS OF COMBUSTIBLE MATERIALS IN MICROGRAVITY
 05/31/2000 - 04/30/2004 FY02: \$140,000 Total: \$267,000
Prin. Invest.: D FERNANDEZ-PELLO
Tech. Officer: GRC/H D ROSS
CASE Category: 46 – MECHANICAL ENGR

NCC 3 833 **UNIV OF CALIFORNIA - BERKELEY** **2237**
 MICROGRAVITY PRODUCTION OF NANOPARTICLES OF NOVEL MATERIALS
 USING PLASMA SYBNTHESES
 12/13/2000 - 10/31/2004 FY02: \$90,000 Total: \$170,000
Prin. Invest.: M FRENKLACH
Tech. Officer: GRC/N D PILTCH
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 874 **UNIV OF CALIFORNIA - BERKELEY** **2238**
 TWO DIMENSIONAL SMOLDERING & ITS TRANSITION TO FLAMING IN
 MICROGRAVITY
 03/14/2001 - 11/30/2004 FY02: \$120,000 Total: \$240,000
Prin. Invest.: C F PELLO
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 896 **UNIV OF CALIFORNIA - BERKELEY** **2239**
 CARBON MONOXIDE AND SOOT FORMATION IN INVERSE DIFFUSION
 FLAMES
 06/06/2001 - 04/30/2003 FY02: \$30,000 Total: \$60,000
Prin. Invest.: C FERNANDEZ-PELLO
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 138 **UNIV OF CALIFORNIA - BERKELEY** **2240**
 EXTENDED EUVE MISSION
 08/21/1996 - 10/01/2001 FY02: \$0 Total: \$8,784,582
Prin. Invest.: R MALINA
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NCC 5 253 **UNIV OF CALIFORNIA - BERKELEY** **2241**
 THE SUN-EARTH CONNECTION EDUCATION FORUM.
 10/30/1997 - 11/14/2002 FY02: \$1,366,833 Total: \$5,211,484
Prin. Invest.: I HAWKINS
Tech. Officer: GSFC/J THIEMAN
CASE Category: 13 – PHYSICS

NCC 5 352 **UNIV OF CALIFORNIA - BERKELEY** **2242**
 SOIL BIOGEOCHEMISTRY OF CARBON, NUTRIENTS, & TRACE GASES IN
 THE AMAZON REGION OF BRAZIL: FIELD & MOD
 07/28/1998 - 12/31/2002 FY02: \$8,511 Total: \$227,478
Prin. Invest.: W SILVER
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 492 **UNIV OF CALIFORNIA - BERKELEY** **2243**
 EO-1 & LANDSAT IMAGERY FOR MONITORING CALIFORNIA'S CONIFER
 FOREST & HARDWOOD RANGELAND
 04/12/2000 - 09/30/2003 FY02: \$53,378 Total: \$179,100
Prin. Invest.: P GONG
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 2 52233 **UNIV OF CALIFORNIA - BERKELEY** **2244**
 CHARACTERIZATION OF MICROBIAL DIVERSITY IN YELLOWSTONE FUMAR-
 OLES: THE SEARCH FOR PRIMITIVE LIFE IN.
 08/26/1997 - 07/31/2001 FY02: -\$83 Total: \$65,917
Prin. Invest.: N R PACE
Tech. Officer: ARC/D J DES MARAIS
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NGT 2 52258 **UNIV OF CALIFORNIA - BERKELEY** **2245**
 HIGH-RESOLUTION GROUND-BASED MAPPING OF TITAN'S SURFACE &
 HAZE LAYER
 08/11/1999 - 07/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: I DEPATER
Tech. Officer: ARC/C P MCKAY
CASE Category: 11 – ASTRONOMY

NGT 2 52278 **UNIV OF CALIFORNIA - BERKELEY** **2246**
 COMPUTATIONAL INVESTIGATIONS OF MASSIVE STAR FORMATION
 06/19/2001 - 06/14/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C F MCKEE
Tech. Officer: ARC/D J HOLLENBACH
CASE Category: 11 – ASTRONOMY

NGT 2 52290 **UNIV OF CALIFORNIA - BERKELEY** **2247**
 C AND N CYCLING AS INDICATORS OF BIOLOGICAL THRESHOLDS IN THE
 ATACAMA DESERT CHILE
 06/18/2002 - 06/14/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R G AMUNDSON
Tech. Officer: ARC/C MCKAY, ARC/B F SMITH
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 5 30110 **UNIV OF CALIFORNIA - BERKELEY** **2248**
 A STUDY OF MEV TERRESTRIAL X-RAY BURSTS
 05/11/1998 - 07/31/2001 FY02: -\$9 Total: \$65,991
Prin. Invest.: R P LIN, MILLAN
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NGT 5 30141 **UNIV OF CALIFORNIA - BERKELEY** **2249**
 PHOSPHORUS CYCLING OF LAND USE GRADIENT ON TWO SOIL TEX-
 TURES IN A LOWLAND TROPICAL FOREST
 08/27/1998 - 02/28/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: W L SILVER, MCGRODDY
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NGT 5 30183 UNIV OF CALIFORNIA - BERKELEY 2250
 MEASUREMENT & MODELING OF CARBON, WATER & ENERGY OVER A CALIFORNIA OAK SAVANNA: LINKING THE BIOPHYS
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: T L BENNING
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30219 UNIV OF CALIFORNIA - BERKELEY 2251
 ATMOSPHERIC NO2: LASER-INDUCED FLUORESCENCE DETECT ION AT THE PART PER TRILLION LEVEL FROM AIRCRAFT
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R C COHEN
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30351 UNIV OF CALIFORNIA - BERKELEY 2252
 THE IMPLICATIONS OF MICROBIAL DECOMPOSITION ON THE DISTRIBUTION OF STABLE C & N ISOTOPES IN TERRESTRIA
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: I CHAPELA
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30361 UNIV OF CALIFORNIA - BERKELEY 2253
 INTEGRATING REMOTELY SENSED AFFORESTATION POTENTIAL WITH CREDIT TRADING & TECHNICAL LEARNING IN MOD
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D M KAMMEN
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30380 UNIV OF CALIFORNIA - BERKELEY 2254
 THE GLOBAL IRON GEOCHEMICAL CYCLE: CHARACTERIZING AEOLIAN IRON SOURCES TO THE OCEAN AND THE EFFECT
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D DE PAOLO
Tech. Officer: GSFC/M WEI
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30383 UNIV OF CALIFORNIA - BERKELEY 2255
 GLOBAL TRENDS IN SOIL ORGANIC CARBON RESIDENCE TIME/JONATHAN SANDERMAN
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R AMUNDSON
Tech. Officer: GSFC/M WEI
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30403 UNIV OF CALIFORNIA - BERKELEY 2256
 ECOSYSTEM LEVEL IMPACTS OF CLIMATE WARMING & LOSS OF BIODIVERSITY IN MONTANE MEADOW HABITAT/STUDENT
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J HARTE
Tech. Officer: GSFC/M WEI
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30424 UNIV OF CALIFORNIA - BERKELEY 2257
 ANOMALOUS FRACTIONATION OF TROPOSPHERIC CO2 AS A POTENTIAL TRACER OF BIOSPHERE PRODUCTIVITY
 09/07/2001 - 09/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: K BOERING
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30463 UNIV OF CALIFORNIA - BERKELEY 2258
 INTERACTIONS OF IRON BIOGEOCHEMISTRY WITH NITROGEN CYCLING IN TROPICAL FOREST - STUDENT NAME: ERIC
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M FIRESTONE
Tech. Officer: GSFC/M WEI
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30473 UNIV OF CALIFORNIA - BERKELEY 2259
 QUANTIFYING EVAPOTRANSPIRATION IN CALIFORNIA FOREST ECOSYSTEMS: REMOTE SENSING VS. FLUX MEASUREMENTS
 08/27/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: Y QUI
Tech. Officer: GSFC/M WEI
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50061 UNIV OF CALIFORNIA - BERKELEY 2260
 ION OUTFLOW FROM THE AURORAL IONOSPHERE
 08/04/1997 - 12/31/2000 FY02: -\$22 Total: \$65,978
Prin. Invest.: CHARLES
Tech. Officer: HQ/A NURRIDIN
 CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 50157 UNIV OF CALIFORNIA - BERKELEY 2261
 THE COMPOSITION OF THE ACTINIDES IN GALACTIC COSMIC RAYS
 09/11/1997 - 09/30/2000 FY02: -\$1,949 Total: \$64,051
Prin. Invest.: P PRICE
Tech. Officer: HQ/A NURRIDIN
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50188 UNIV OF CALIFORNIA - BERKELEY 2262
 DIAMONDS IN GIANT PLANETS? EXPERIMENTS ON "PLANETARY ICES" AT HIGH PRESSURES AND TEMPERATURES
 05/27/1998 - 12/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R JEANLOZ
Tech. Officer: HQ/A NURRIDIN
 CASE Category: 13 – PHYSICS

NGT 5 50189 UNIV OF CALIFORNIA - BERKELEY 2263
 DETERMINATION OF COSMOLOGICAL PARAMETERS THROUGH COSMIC MICROWAVE BACKGROUND OBSERVATIONS WITH THE WMAP
 05/27/1998 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: G SMOOT
Tech. Officer: HQ/A NURRIDIN
 CASE Category: 13 – PHYSICS

NGT 5 50195 UNIV OF CALIFORNIA - BERKELEY 2264
 BALLOON-BORNE OBSERVATIONS OF THE ANISOTROPY OF THE COSMIC MICROWAVE BACKGROUND ON ANGULAR SCALES
 06/04/1998 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P L RICHARDS
Tech. Officer: HQ/A NURRIDIN
 CASE Category: 13 – PHYSICS

NGT 5 50196 UNIV OF CALIFORNIA - BERKELEY 2265
 FRAGMENTATION IN COLLAPSING NON-ISOTHERMAL MOLECULAR CLOUDS
 06/04/1998 - 09/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: C F MCKEE
Tech. Officer: HQ/A NURRIDIN
 CASE Category: 13 – PHYSICS

NGT 5 50216 **UNIV OF CALIFORNIA - BERKELEY** **2266**
 ABOVEGROUND AND BELOWGROUND PLANT SPECIES FUNCTIONAL AL
 TRAITS AND THEIR RELATION TO ECOSYSTEM FUNCT
 09/15/1998 - 08/31/2001 FY02: -\$4,004 Total: \$54,663
Prin. Invest.: F S CHAPIN, 111
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50223 **UNIV OF CALIFORNIA - BERKELEY** **2267**
 REGIONAL CHANGES IN EXTREME EVENT FREQUENCIES WITH IN THE
 UNITED STATES (STUDENT: DIANA DERUBERTIS)
 09/29/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: O E GRANGER, D DERUBERTIS
Tech. Officer: HQ/A NURRIDIN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50245 **UNIV OF CALIFORNIA - BERKELEY** **2268**
 INFRARED SPECTROSCOPY OF STAR FORMATION IN SUPER STAR CLUS-
 TERS WITH KECK/NIRSPEC (STUDENT: ANDRE
 06/02/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J GRAHAM
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50253 **UNIV OF CALIFORNIA - BERKELEY** **2269**
 X-RAY SPECTROSCOPY OF EVOLVED SUPERNOVA REMNANTS
 06/07/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C F MCKEE
Tech. Officer: GSFC/L SMITH
CASE Category: 11 – ASTRONOMY

NGT 5 50331 **UNIV OF CALIFORNIA - BERKELEY** **2270**
 EFFECTS OF OXIC-ANOXIC DYNAMICS ON METHANE EFFLUX & STABLE
 ISOTOPE COMPOSITION IN HUMID TROPICA
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: W SILVER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50338 **UNIV OF CALIFORNIA - BERKELEY** **2271**
 LUNAR MAGNETIC AND ELECTRIC FIELDS (STUDENT: JASPER HALEKAS)
 05/04/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R LIN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50342 **UNIV OF CALIFORNIA - BERKELEY** **2272**
 DETERMINATION OF EVOLUTIONARY PARAMETERS IN POPULA TIONS OF
 THERMOPHIC ARCHAEA/STUDENT: RACHEL WHITA
 05/14/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J TAYLOR
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50365 **UNIV OF CALIFORNIA - BERKELEY** **2273**
 AN ELECTRON EDM MEASUREMENT UTILIZING A SLOW-BEAM ATOMIC
 FOUNTAIN/STUDENT: JASON AMINI
 06/12/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S FREEDMAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50393 **UNIV OF CALIFORNIA - BERKELEY** **2274**
 SUPPORT FOR RESEARCH ON THE NUCLEAR COMPTON TELE-
 SCOPE/STUDENT: SUSAN AMROSE
 05/23/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S BOGGS
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50424 **UNIV OF CALIFORNIA - BERKELEY** **2275**
 VEGETATION CHANGE IN MONTANE MEADOWS ON THE KERN P LATEAU,
 SIERRA NEVADA,CA (STUDENT: HEATHER SWART
 08/14/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C M D'ANTONIO
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2215 **UNIV OF CALIFORNIA - DAVIS** **2276**
 AERO-MECHANICAL DESIGN METHODOLOGY FOR SUBSONIC CIVIL TRANS-
 PORT HIGH-LIFT SYSTEMS
 07/20/1999 - 12/31/2000 FY02: -\$1 Total: \$54,971
Prin. Invest.: C P VAN-DAM
Tech. Officer: LARC/P A GELHAUSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01045 **UNIV OF CALIFORNIA - DAVIS** **2277**
 FURTHER DEVELOPMENT IN AERO-MECHANICAL DESIGN METHODOLO-
 GIES FOR HIGH-LIFT SYSTEMS
 04/11/2001 - 09/30/2002 FY02: \$0 Total: \$77,593
Prin. Invest.: C P VAN DAM
Tech. Officer: LARC/P A GELHAUSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01116 **UNIV OF CALIFORNIA - DAVIS** **2278**
 MODELING AND DESIGN ANALYSIS METHODOLOGY FOR TAYLORED COM-
 POSITE AIRCRAFT STRUCTURES
 09/21/2001 - 01/20/2004 FY02: \$54,908 Total: \$73,714
Prin. Invest.: L W REHFELD
Tech. Officer: LARC/D R AMBUR
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 944 **UNIV OF CALIFORNIA - DAVIS** **2279**
 CNS CONTROL OF RHYTHMS & HOMEOSTASIS DURING SPACE FLIGHT
 12/21/1994 - 12/31/2000 FY02: -\$127 Total: \$624,355
Prin. Invest.: C A FULLER
Tech. Officer: ARC/W E HINDS, ARC/C M WINGET
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1404 **UNIV OF CALIFORNIA - DAVIS** **2280**
 EFFECTS OF GRAVITY ON INSECT CIRCADIAN RHYTHMICITY
 04/27/2000 - 06/30/2003 FY02: \$235,320 Total: \$654,889
Prin. Invest.: T M HOBAN-HIGGINS
Tech. Officer: ARC/R D MACELROY, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1451 **UNIV OF CALIFORNIA - DAVIS** **2281**
 EFFECTS OF HYPERGRAVITY ON RAT CIRCADIAN CLOCK GEN ES, REGU-
 LATION & EXPRESSION
 12/19/2000 - 12/14/2002 FY02: \$241,810 Total: \$480,117
Prin. Invest.: C A FULLER
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 2 1459 UNIV OF CALIFORNIA - DAVIS 2282
 FIRST INTERNATIONAL CONFERENCE ON COMPUTATIONAL FLUID DYNAMICS
 03/05/2001 - 01/31/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: J J CHATTOT
Tech. Officer: ARC/W R VAN DALSEM
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1494 UNIV OF CALIFORNIA - DAVIS 2283
 EFFECTS OF THE HYPERGRAVITY ON EXPRESSION OF GENES INVOLVED IN REGULATION OF FEEDING
 07/05/2001 - 06/30/2003 FY02: \$188,627 Total: \$277,325
Prin. Invest.: B A HORWITZ
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1558 UNIV OF CALIFORNIA - DAVIS 2284
 SECOND INTERNATIONAL CONFERENCE ON COMPUTATIONAL FLUID DYNAMICS
 05/07/2002 - 04/30/2003 FY02: \$35,000 Total: \$35,000
Prin. Invest.: J J CHATTOT
Tech. Officer: ARC/E TU, ARC/W R VANDALSEM
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2153 UNIV OF CALIFORNIA - DAVIS 2285
 EXPERIMENTAL STUDIES OF MULTIPHASE MATERIALS USING NUCLEAR MAGNETIC RESONANCE
 05/13/1998 - 06/30/2002 FY02: \$40,000 Total: \$282,250
Prin. Invest.: B L POWELL, S DUGAN, R PHILLIPS
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 43 – CHEMICAL ENGR

NAG 5 7441 UNIV OF CALIFORNIA - DAVIS 2286
 GEOMETRIC PARAMETERIZATION OF RAINFALL FIELDS
 06/02/1998 - 06/14/2002 FY02: \$0 Total: \$131,000
Prin. Invest.: C E PUENTE
Tech. Officer: GSFC/R W LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8258 UNIV OF CALIFORNIA - DAVIS 2287
 ION IMAGING STUDIES OF VUV PHOTODISSOCIATION OF CO METARY PARENT MOLECULES
 02/17/1999 - 03/31/2002 FY02: \$0 Total: \$309,885
Prin. Invest.: W JACKSON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8391 UNIV OF CALIFORNIA - DAVIS 2288
 X-RAY PROPERTIES OF DEEP-RADIO-SELECTED QUASARS (A DP98)
 03/05/1999 - 03/14/2002 FY02: \$0 Total: \$102,548
Prin. Invest.: R H BECKER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8430 UNIV OF CALIFORNIA - DAVIS 2289
 THE FORMATION OF GALAXY CLUSTERS (LTS 98)
 05/10/1999 - 05/14/2004 FY02: \$89,765 Total: \$359,060
Prin. Invest.: S STANFORD
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 9025 UNIV OF CALIFORNIA - DAVIS 2290
 "ERROR CONTROL CODING TECHNIQUES FOR SPACE & SATEL LITE COMMUNICATIONS"
 02/09/2000 - 02/28/2001 FY02: \$0 Total: \$70,000
Prin. Invest.: S LIN
Tech. Officer: GSFC/W H MILLER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9360 UNIV OF CALIFORNIA - DAVIS 2291
 NEW EOS DATA PRODUCTS TO IMPROVE BIOGEOCHEMICAL ESTIMATES
 04/06/2000 - 04/30/2003 FY02: \$201,294 Total: \$577,254
Prin. Invest.: S USTIN
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9540 UNIV OF CALIFORNIA - DAVIS 2292
 X-RAY PROPERTIES OF DEEP-RADIO-SELECTED QUASARS (A DP98)
 05/02/2000 - 05/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: N ARAV
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9947 UNIV OF CALIFORNIA - DAVIS 2293
 X-RAYS FROM RADIO-LOUD BROAD ABSORPTION LINE QSOs
 09/06/2000 - 09/14/2002 FY02: \$0 Total: \$30,500
Prin. Invest.: R H BECKER
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10480 UNIV OF CALIFORNIA - DAVIS 2294
 ERROR CONTROL CODING TECHNIQUES FOR SPACE AND SATE LLITE COMMUNICATIONS
 02/27/2001 - 02/28/2003 FY02: \$70,000 Total: \$140,000
Prin. Invest.: S LIN
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10591 UNIV OF CALIFORNIA - DAVIS 2295
 BIOGEOCHEMICAL CHARACTERIZATION OF LATE ARCHEAN FE NESTRATE MICROBIALITESFROM THEGAMOHAAN FORMATION
 03/20/2001 - 03/31/2004 FY02: \$94,100 Total: \$183,300
Prin. Invest.: D Y SUMNER
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 11098 UNIV OF CALIFORNIA - DAVIS 2296
 ANALYSIS & INTERPRETATION OF CMB DATA (LTS 2000)
 07/12/2001 - 07/14/2006 FY02: \$0 Total: \$76,646
Prin. Invest.: L KNOX
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11260 UNIV OF CALIFORNIA - DAVIS 2297
 WESTERN CENTER FOR ESTUARINE ECOSYSTEM INDICATOR RESEARCH
 08/20/2001 - 08/31/2005 FY02: \$76,055 Total: \$152,110
Prin. Invest.: S USTIN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11607 UNIV OF CALIFORNIA - DAVIS 2298
 UNIFICATION OF QUASAR AND SEYFERT OUTFLOWS (LTS 2 001)
 01/28/2002 - 01/31/2007 FY02: \$102,716 Total: \$102,716
Prin. Invest.: N ARAV
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 12124 **UNIV OF CALIFORNIA - DAVIS** **2299**
 VELOCITY IMAGING STUDIES OF COMETARY MOLECULES
 04/30/2002 - 04/30/2005 FY02: \$103,482 Total: \$103,482
Prin. Invest.: W M JACKSON
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12373 **UNIV OF CALIFORNIA - DAVIS** **2300**
 A DETAILED STUDY OF TWO OPTICALLY-SELECTED, HIGH-R EDSHIFT CLUSTERS OF GALAXIES
 08/07/2002 - 09/14/2003 FY02: \$22,243 Total: \$22,243
Prin. Invest.: L M LUBIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 9 1048 **UNIV OF CALIFORNIA - DAVIS** **2301**
 MESOSCOPIC INSTRUMENTATION MINITURE FTIR FOR ENVIRONMENTAL MONITORING
 08/13/1998 - 08/04/2002 FY02: \$0 Total: \$401,700
Prin. Invest.: S D COLLINS
Tech. Officer: HQ/D L JAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99023 **UNIV OF CALIFORNIA - DAVIS** **2302**
 USING REMOTE SENSING TO MONITOR THE IMPACTS OF FLOOD-IRRIGATION OF MEADOWS IN EAST WALKER RIVER
 08/25/1999 - 11/01/2002 FY02: \$198,298 Total: \$543,490
Prin. Invest.: K W TATE
Tech. Officer: SSC/R MCKELLIP
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 1 01007 **UNIV OF CALIFORNIA - DAVIS** **2303**
 SIMULATION OF FOREBODY FLOWS AT HIGH-ANGLE-OF-ATTACH DYNAMIC CONDITIONS
 12/27/2000 - 01/31/2002 FY02: \$0 Total: \$55,752
Prin. Invest.: C P VAN DAM
Tech. Officer: LARC/C M FREMAUX
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02010 **UNIV OF CALIFORNIA - DAVIS** **2304**
 DEVELOPMENT OF A DESIGN METHODOLOGY FOR RECONFIGURABLE FLIGHT CONTROL SYSTEMS
 02/12/2002 - 09/30/2002 FY02: \$31,020 Total: \$31,020
Prin. Invest.: R A HESS
Tech. Officer: LARC/J B DAVIDSON, LARC/J G BATTERSON
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02028 **UNIV OF CALIFORNIA - DAVIS** **2305**
 AERODYNAMIC SIMULATION OF AIRCRAFT AT DYNAMIC FLOW CONDITIONS
 06/19/2002 - 06/18/2004 FY02: \$20,000 Total: \$20,000
Prin. Invest.: C P VAN DAM
Tech. Officer: LARC/C M FREMAUX
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1011 **UNIV OF CALIFORNIA - DAVIS** **2306**
 EFFICIENT PARALLEL ALGORITHMS FOR INVISCID & VISCOUS FLOW SIMULATION
 01/27/1998 - 01/31/2002 FY02: \$0 Total: \$215,662
Prin. Invest.: M HAFEZ, J CHATTAT
Tech. Officer: ARC/D KWAK
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1131 **UNIV OF CALIFORNIA - DAVIS** **2307**
 EYE MOVEMENT VISUAL PERCEPTION & CONTROL
 07/23/1999 - 02/28/2002 FY02: \$0 Total: \$57,444
Prin. Invest.: R A HESS
Tech. Officer: ARC/L S SROUE, ARC/B SWEET
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1183 **UNIV OF CALIFORNIA - DAVIS** **2308**
 MODELING ROTORCRAFT INTERACTION WITH ATMOSPHERIC TURBULENCE IN LOW-SPEED AND HOVERING FLIGHT
 06/07/2000 - 07/31/2003 FY02: \$24,991 Total: \$110,108
Prin. Invest.: R HESS
Tech. Officer: ARC/M B TISCHER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1271 **UNIV OF CALIFORNIA - DAVIS** **2309**
 GRAVITATIONAL BIOLOGY: COMPARISON OF MAMMALIAN ADAPTATIONS TO GROUND-BASED MODELS
 07/31/2001 - 01/31/2003 FY02: \$242,414 Total: \$493,072
Prin. Invest.: C A FULLER, D M MURAKAMI
Tech. Officer: ARC/E M HOLTON, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1352 **UNIV OF CALIFORNIA - DAVIS** **2310**
 GRAVITY & THE INSECT CIRCADIAN TIMING SYSTEM
 07/01/2002 - 06/30/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: T M HOBAN-HIGGINS
Tech. Officer: ARC/B E GIRTIN, ARC/R BERHOLD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5313 **UNIV OF CALIFORNIA - DAVIS** **2311**
 DEVELOPING & VALIDATING ROTORCRAFT SIMULATION MODELS
 04/02/1999 - 12/31/2000 FY02: -\$735 Total: \$58,246
Prin. Invest.: J DONGARRA
Tech. Officer: ARC/S DAINI
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5387 **UNIV OF CALIFORNIA - DAVIS** **2312**
 DEVELOPMENT & APPLICATION OF A DATA MANAGEMENT TECHNIQUE WITHIN A DISTRIBUTED COMPUTING ENVIRONMENT
 06/23/2000 - 06/30/2002 FY02: \$0 Total: \$95,000
Prin. Invest.: M HAFEZ, J S DACLES-MARIANI
Tech. Officer: ARC/D KWAK
CASE Category: 22 – COMPUTERS SCIENCE

NCC 2 5406 **UNIV OF CALIFORNIA - DAVIS** **2313**
 PREDICTION OF THE AERODYNAMIC CHARACTERISTICS OF A HELICOPTER ROTOR AIRFOIL WITH ACTIVELY-CONTROLLED
 10/27/2000 - 10/31/2001 FY02: \$0 Total: \$17,879
Prin. Invest.: C P VANDAM
Tech. Officer: ARC/M V FULTON, ARC/C TUNG
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5425 **UNIV OF CALIFORNIA - DAVIS** **2314**
 COMPUTER AIDED FLIGHT SIMULATOR ASSESSMENT
 03/09/2001 - 02/28/2002 FY02: \$0 Total: \$30,870
Prin. Invest.: R A
Tech. Officer: ARC/D T TRAN, ARC/W B CLEVELAND
CASE Category: 41 – AERONAUTICAL ENGR

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NCC 2 5426 UNIV OF CALIFORNIA - DAVIS 2315
 METACOMPUTATIONS & SIMULATIONS OF SEPARATED FLOWS WITH AP-
 PPLICATIONS TO AEROSPACE & BIOFLUID DYNAMICS
 03/08/2001 - 02/28/2003 FY02: \$80,000 Total: \$170,000
Prin. Invest.: M HAFEZ, J J CHATTOT
Tech. Officer: ARC/D KWAK
 CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 2 5447 UNIV OF CALIFORNIA - DAVIS 2316
 DATA COMPRESSION VIA WAVELETS
 08/14/2001 - 07/31/2002 FY02: \$0 Total: \$95,000
Prin. Invest.: M HAFEZ
Tech. Officer: ARC/D KWAK, ARC/C KIRIS
 CASE Category: 21 – MATHEMATICS

NCC 2 5485 UNIV OF CALIFORNIA - DAVIS 2317
 A CFD BASED METHODOLOGY TO AUTOMATE THE GENERATION OF C81
 AIRFOIL TABLES
 03/01/2002 - 02/28/2003 FY02: \$40,456 Total: \$40,456
Prin. Invest.: C P VAN DAM
Tech. Officer: ARC/R STRAWN, ARC/C TUNG
 CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5512 UNIV OF CALIFORNIA - DAVIS 2318
 INTELLIGENT FLIGHT CONTROL
 08/08/2002 - 11/30/2002 FY02: \$15,000 Total: \$15,000
Prin. Invest.: M HAFEZ
Tech. Officer: ARC/K G BURLET, ARC/G POWER
 CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 353 UNIV OF CALIFORNIA - DAVIS 2319
 ELECTROHYDRODYNAMIC POOLING IN REDUCED GRAVITY
 06/29/1994 - 08/31/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: B D SHAW
Tech. Officer: GRC/F P CHIARAMONTE
 CASE Category: 46 – MECHANICAL ENGR

NCC 3 668 UNIV OF CALIFORNIA - DAVIS 2320
 THE IMPACT OF BUOYANCY AND FLAME STRUCTURE ON SOOT , RADIA-
 TION AND NOX EMISSIONS FROM A TURBULENT DI
 02/12/1999 - 11/30/2002 FY02: \$0 Total: \$203,033
Prin. Invest.: I M KENNEDY
Tech. Officer: GRC/K R SACKSTEDER
 CASE Category: 49 – ENGINEERING, OTHER

NCC 3 683 UNIV OF CALIFORNIA - DAVIS 2321
 COMBUSTION OF HAN-BASED MONOPROPELLANT IN REDUCED GRAVITY
 03/08/1999 - 01/03/2003 FY02: \$37,500 Total: \$338,750
Prin. Invest.: B D SHAW
Tech. Officer: GRC/D L DIETRICH
 CASE Category: 49 – ENGINEERING, OTHER

NCC 3 845 UNIV OF CALIFORNIA - DAVIS 2322
 FLAME PROPAGATION IN LOW INTENSITY TURBULENCE UNDE R MICRO-
 GRAVITY CONDITIONS
 01/05/2001 - 11/30/2004 FY02: \$85,500 Total: \$175,500
Prin. Invest.: R C ALDREDGE
Tech. Officer: GRC/K R SACKSTEDER
 CASE Category: 49 – ENGINEERING, OTHER

NCC 3 859 UNIV OF CALIFORNIA - DAVIS 2323
 MECHANISM OF CREEP OF CU-CR-NB ALLOYS MECHANISM OF CREEP OF
 CU-CR-NB ALLOYS
 02/08/2001 - 01/14/2003 FY02: \$50,000 Total: \$80,000
Prin. Invest.: J GIBELING
Tech. Officer: GRC/M NATHAL
 CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 872 UNIV OF CALIFORNIA - DAVIS 2324
 ELECTRIC FIELD EFFECTS IN SELF-PRO PAGATING HIGH T EMPERATURE
 COMBUSTION SYNTHESIS UNDER MICROGRAVIT
 03/19/2001 - 11/30/2004 FY02: \$99,000 Total: \$199,000
Prin. Invest.: Z A MUNIR
Tech. Officer: GRC/K R SACKSTEDER
 CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 890 UNIV OF CALIFORNIA - DAVIS 2325
 COMBUSTION EXPERIMENTS IN REDUCED GRAVITY WITH TWO COMPO-
 NENT MISCIBLE DROPLETS
 05/01/2001 - 02/28/2003 FY02: \$186,188 Total: \$356,838
Prin. Invest.: B D SHAW
Tech. Officer: GRC/D L DIETRICH
 CASE Category: 49 – ENGINEERING, OTHER

NCC 4 151 UNIV OF CALIFORNIA - DAVIS 2326
 SUPERSONIC FLIGHT EXPERIMENTATION USING INFRARED T HERMOGRA-
 PHY
 01/30/2001 - 02/28/2002 FY02: \$14,673 Total: \$41,472
Prin. Invest.: C VAN DAM
Tech. Officer: DFRC/D W BANKS
 CASE Category: 41 – AERONAUTICAL ENGR

NCC 4 155 UNIV OF CALIFORNIA - DAVIS 2327
 QUANTITATIVE VISUALIZATION OF AIRCRAFT SURFACE FLO WS USING
 INFRARED THERMOGRAPHY
 05/09/2002 - 11/30/2002 FY02: \$22,500 Total: \$22,500
Prin. Invest.: D VANDAM
Tech. Officer: DFRC/D W BANKS
 CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30187 UNIV OF CALIFORNIA - DAVIS 2328
 FORMATION, DETECTION & QUANTIFICATION OF OXIDIZED HALOGEN
 SPECIES IN AEROSOLS FROM THE MARINE BOUND
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C ANASTASIO
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30352 UNIV OF CALIFORNIA - DAVIS 2329
 ECOLOGICAL & ECONOMIC INFLUENCES ON SMALL-SCALE TROPICAL
 RAINFOREST SUCCESSION: AREMOTE SENSING
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S USTIN
Tech. Officer: GSFC/M WEI
 CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30373 UNIV OF CALIFORNIA - DAVIS 2330
 HYPERSPECTRAL REMOTE SENSING OF CORAL REEFS IN THE HAWAIIAN
 ISLANDS STUDENT: JAMES GOODMAN
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S USTIN
Tech. Officer: GSFC/M WEI
 CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30411 UNIV OF CALIFORNIA - DAVIS 2331
 EVALUATION BRDF MODELING STRATEGIES FOR BIOPHYSICAL PARAMETER RETRIEVAL THROUGH INVERSION, .../STUD
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S USTIN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30451 UNIV OF CALIFORNIA - DAVIS 2332
 EFFECTS OF GLOBAL CLIMATE CHANGE ON CALIFORNIA SAL T MARSHES: INTEGRATING REMOTE SENSING AND SPATIAL
 08/19/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S L USTIN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50230 UNIV OF CALIFORNIA - DAVIS 2333
 UTILIZING SCIGN VELOCITY SOLUTIONS TO MODEL LITHOSPHERIC PROCESSES IN THE WESTERN TRANSVERSE RANGE
 05/24/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: L H KELLOGG, GLASCO
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50281 UNIV OF CALIFORNIA - DAVIS 2334
 NEW APPROACHES TO CALCULATING GRAVITATIONAL RADIATION & RADIATION REACTION/STUDENT: JAMES R VAN MET
 06/20/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S CARLIP
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50388 UNIV OF CALIFORNIA - DAVIS 2335
 COSMOLOGY FROM GALAXY CLUSTER PECULIAR VELOCITIES (STUDENT: ALAN PEEL)
 06/03/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L KNOX
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2104 UNIV OF CALIFORNIA - IRVINE 2336
 EXPERIMENTAL INVESTIGATION OF SUPERSONIC COPLANAR JETS WITHIN EJECTORS
 09/02/1998 - 07/31/2001 FY02: -\$1 Total: \$103,889
Prin. Invest.: D PAPANOSCHOU
Tech. Officer: LARC/J M SEINER, LARC/M K PONTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2308 UNIV OF CALIFORNIA - IRVINE 2337
 DEVELOPMENT OF CHEMISTRY-TRANSPORT MODELS IN SUPPORT OF CLIMATE STUDIES AND ASSESSMENTS
 06/15/2000 - 03/14/2003 FY02: \$135,640 Total: \$318,619
Prin. Invest.: M J PRATHER
Tech. Officer: LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01001 UNIV OF CALIFORNIA - IRVINE 2338
 REGIONAL CHEMISTRY FROM GLOBAL CTMS W/EC-MODELED MET-FIELDS FOR THE TRACE-P MISSION
 03/08/2001 - 03/14/2003 FY02: \$45,000 Total: \$70,001
Prin. Invest.: M J PRATHER
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01006 UNIV OF CALIFORNIA - IRVINE 2339
 COMPACT AIRBORNE SYS FOR SO2 & DMS MEAS FOR USE OF FUTURE GTE MISSIONS ABOARD P-3 OR DC-8
 03/01/2001 - 03/31/2003 FY02: \$0 Total: \$81,988
Prin. Invest.: E S SALTZMAN
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02050 UNIV OF CALIFORNIA - IRVINE 2340
 EXTENDING THE CAPABILITY OF CAPTSD TO ACCURATELY AND RELIABLY PREDICT BUFFET AND NONLINEAR
 02/07/2002 - 01/31/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: F LIU
Tech. Officer: LARC/D M SCHUSTER, LARC/J W EDWARDS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02115 UNIV OF CALIFORNIA - IRVINE 2341
 MLPG FOR THE ANALYSIS OF BUILT-UP STRUCTURES
 09/16/2002 - 04/15/2003 FY02: \$65,000 Total: \$65,000
Prin. Invest.: S N ATLURI
Tech. Officer: LARC/I S RAJU, LARC/J B RANSOM
CASE Category: 46 – MECHANICAL ENGR

NAG 2 1555 UNIV OF CALIFORNIA - IRVINE 2342
 COLLABORATIVE SOFTWARE ENGINEERING TOLLS WORKSHOP AND FOLLOW UP
 04/19/2002 - 10/14/2002 FY02: \$92,796 Total: \$92,796
Prin. Invest.: D REDMIRE
Tech. Officer: ARC/J PENIX, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2024 UNIV OF CALIFORNIA - IRVINE 2343
 IGNITION AND FLAME SPREAD ABOVE LIQUID FUEL POOLS: GRAVITY EFFECTS
 03/01/1997 - 06/30/2002 FY02: \$46,509 Total: \$482,924
Prin. Invest.: W A SIRIGNANO
Tech. Officer: GRC/H D ROSS
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2226 UNIV OF CALIFORNIA - IRVINE 2344
 APPLICATIONS OF ELECTRIC FIELD IN MICROGRAVITY COMBUSTION
 02/01/1999 - 11/29/2002 FY02: \$79,200 Total: \$338,800
Prin. Invest.: D DUNN-RANKIN
Tech. Officer: GRC/H D ROSS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2345 UNIV OF CALIFORNIA - IRVINE 2345
 MIXING ENHANCEMENT AND NOISE REDUCTION IN HIGH-SPEED JETS
 03/07/2000 - 04/30/2003 FY02: \$64,430 Total: \$192,761
Prin. Invest.: D PAPANOSCHOU
Tech. Officer: GRC/K Q ZAMAN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2389 UNIV OF CALIFORNIA - IRVINE 2346
 SUPERFLUID CONTACT LINE DYNAMICS SUPERFLUID CONTACT LINE DYNAMICS
 04/13/2000 - 11/30/2003 FY02: \$95,000 Total: \$240,000
Prin. Invest.: P TABOREK
Tech. Officer: GRC/R WILKINSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2775 **UNIV OF CALIFORNIA - IRVINE** **2347**
 IGNITION AND FLAME SPREAD ABOVE LIQUID FUEL POOLS: GRAVITY EFFECTS
 05/02/2002 - 12/31/2002 FY02: \$43,500 Total: \$43,500
Prin. Invest.: D A SIRIGNANO
Tech. Officer: GRC/H D ROSS
CASE Category: 46 – MECHANICAL ENGR

NAG 4 217 **UNIV OF CALIFORNIA - IRVINE** **2348**
 ROBUST FLIGHT CONTROL WITH GOOD HANDLING QUALITIES ROBUST FLIGHT CONTROL WITH GOOD HANDLING QUALITIE
 01/17/2001 - 09/30/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: K D MEASE
Tech. Officer: DFRC/C O LEE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 5149 **UNIV OF CALIFORNIA - IRVINE** **2349**
 DEVELOPMENT OF EMPIRICAL MODE DECOMPOSITION METHOD & HILBERT SPECTRAL ANALYSIS FOR ENGR APPLICATIONS
 09/09/1997 - 02/28/2003 FY02: \$0 Total: \$160,924
Prin. Invest.: J N YANG, Z SHEN
Tech. Officer: GSFC/S R LONG, GSFC/N E HUANG
CASE Category: 33 – OCEANOGRAPHY

NAG 5 7301 **UNIV OF CALIFORNIA - IRVINE** **2350**
 ASSESSING ROLE OF FIRE & SOIL DRAINAGE IN DETERMINING NET C FLUXES IN BOREAL ECOSYSTEMS
 05/27/1998 - 04/30/2001 FY02: \$0 Total: \$162,372
Prin. Invest.: S TRUMBORE
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8685 **UNIV OF CALIFORNIA - IRVINE** **2351**
 PHOTOCHEMICAL APPLICATIONS OF AEROSOL CLIMATOLOGIE S
 07/16/1999 - 07/14/2002 FY02: \$0 Total: \$55,486
Prin. Invest.: M J PRATHER
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8935 **UNIV OF CALIFORNIA - IRVINE** **2352**
 CONTINUED MONITORING & TRENDS OF SELECTED TRACE GASES AT REMOTE LOCATIONS BETWEEN 71 DEGREES
 01/13/2000 - 02/28/2003 FY02: \$221,094 Total: \$641,094
Prin. Invest.: D R BLAKE
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9695 **UNIV OF CALIFORNIA - IRVINE** **2353**
 RESOURCE MANAGEMENT IN TIGHTLY COUPLED MULTIPROCES SORS.
 07/03/2000 - 07/14/2003 FY02: \$0 Total: \$99,999
Prin. Invest.: I SCHERSON
Tech. Officer: GSFC/J DORBAND
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9955 **UNIV OF CALIFORNIA - IRVINE** **2354**
 "STABLE ISOTOPES AND RADIOCARBON IN ATMOSPHERIC HYDROCARBONS AND THEIR SOURCES"
 09/21/2000 - 11/30/2001 FY02: \$0 Total: \$242,681
Prin. Invest.: S C TYLER
Tech. Officer: GSFC/D STARR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10147 **UNIV OF CALIFORNIA - IRVINE** **2355**
 EFFECTS OF LAND-USE ON CLIMATE AND WATER RESOURCES :APPLICATION OF A LAND-USE MANAGEMENT
 12/08/2000 - 09/30/2003 FY02: \$19,880 Total: \$39,370
Prin. Invest.: C ZENDER
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10546 **UNIV OF CALIFORNIA - IRVINE** **2356**
 INFLUENCE OF MINERAL DUST AEROSOL ON THE CHEMICAL COMPOSITION OF THE ATMOSPHERE
 03/14/2001 - 03/14/2004 FY02: \$117,324 Total: \$216,927
Prin. Invest.: ZENDER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10748 **UNIV OF CALIFORNIA - IRVINE** **2357**
 X-RAY ISOPHOTE SHAPES AND THE DARK MATTER HALO OF NGC 3923
 04/18/2001 - 09/30/2002 FY02: \$0 Total: \$32,700
Prin. Invest.: D BUOTE
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10758 **UNIV OF CALIFORNIA - IRVINE** **2358**
 FE K-ALPHA EMISSION IN THE BRIGHT ELLIPTICAL GALAXY NGC 1399
 04/18/2001 - 09/30/2002 FY02: \$0 Total: \$31,500
Prin. Invest.: D BUOTE
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11272 **UNIV OF CALIFORNIA - IRVINE** **2359**
 ADDING NEW CAPABILITY TO CHEMISTRY-CLIMATE ASSESSMENTS THROUGH THE GLOBAL MODELLING INITIATIVE
 08/22/2001 - 08/31/2004 FY02: \$0 Total: \$45,000
Prin. Invest.: M PRATHER
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11429 **UNIV OF CALIFORNIA - IRVINE** **2360**
 MEASUREMENTS AND INTERPRETATIONS OF MIXING AND STABLE ISOTOPE RATIOS OF ATMOSPHERIC TRACE GASES CH4
 12/03/2001 - 11/30/2004 FY02: \$223,078 Total: \$223,078
Prin. Invest.: S TYLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11646 **UNIV OF CALIFORNIA - IRVINE** **2361**
 OPTIMAL LAND INITIALIZATION FOR SEASONAL CLIMATE PREDICTIONS
 02/01/2002 - 02/28/2003 FY02: \$131,758 Total: \$131,758
Prin. Invest.: J S FAMIGLIETTI
Tech. Officer: GSFC/M RIENECKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11718 **UNIV OF CALIFORNIA - IRVINE** **2362**
 SOIL MOISTURE VARIABILITY AND ITS ROLE IN LAND-ATMOSPHERE INTERACTION DURING SGP97
 03/14/2002 - 06/14/2003 FY02: \$124,221 Total: \$124,221
Prin. Invest.: J S FAMIGLIETTI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11753 **UNIV OF CALIFORNIA - IRVINE** **2363**
 "A CATCHMENT-BASED GLOBAL RIVER ROUTING SCHEME FOR CLIMATE
 MODELS AND ASSIMILATION OF STEAMFLOW A
 02/25/2002 - 02/28/2005 FY02: \$55,000 Total: \$55,000
Prin. Invest.: J S FAMIGLIETTI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12344 **UNIV OF CALIFORNIA - IRVINE** **2364**
 INITIALIZATION OF NSIPP LAND SURFACE MODEL SOIL WA TER STATES
 FOR IMPROVED SEASONAL-TO-INTERANNUAL P
 07/29/2002 - 07/31/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: J FAMIGIETTI
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1437 **UNIV OF CALIFORNIA - IRVINE** **2365**
 RESEARCH/3HE-4HE MIXTURES AND DROPLETS STABILIZED IN CESIATED
 CONTAINERS
 03/23/1998 - 01/31/2003 FY02: \$100,000 Total: \$321,250
Prin. Invest.: P TABOREK, J RUTLEDGE
Tech. Officer: MSFC/D HUBBARD
CASE Category: 12 – CHEMISTRY

NAG 8 1569 **UNIV OF CALIFORNIA - IRVINE** **2366**
 GROWTH PROCESSES AND DEFECT STRUCTURE OF MACRO- MOLECULAR
 CRYSTALS.
 03/04/1999 - 11/30/2002 FY02: \$145,000 Total: \$513,900
Prin. Invest.: A J MALKIN
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1572 **UNIV OF CALIFORNIA - IRVINE** **2367**
 R/S STABILIZATION AND PRESERVATION OF CRYSTALS FOR X-RAY DIF-
 FRACTION EXPERIMENTS
 02/18/1999 - 11/30/2002 FY02: \$37,000 Total: \$444,150
Prin. Invest.: F JURNAK
Tech. Officer: MSFC/B GUYNES
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1149 **UNIV OF CALIFORNIA - IRVINE** **2368**
 MECHANISMS OF MICROACTIVITY EFFECT ON VASULAR FUNCTIONS
 09/15/1999 - 11/14/2002 FY02: \$220,209 Total: \$789,073
Prin. Invest.: R E PURDY
Tech. Officer: JSC/C W LLOYD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAS 8 00017 **UNIV OF CALIFORNIA - IRVINE** **2369**
 OPCGA PHASE C/D FLIGHT HARDWARE DEVELOPMENT
 02/16/2000 - 07/31/2004 FY02: \$2,952,924 Total: \$8,920,095
Prin. Invest.: A MCPHERSON
Tech. Officer: MSFC/S ROBBINS
CASE Category: 59 – LIFE SCIENCE, OTHER

NAS 8 00019 **UNIV OF CALIFORNIA - IRVINE** **2370**
 ENHANCED GASEOUS NITROGEN DEWAR
 03/30/2000 - 11/19/2004 FY02: \$627,000 Total: \$1,547,000
Prin. Invest.: A MCPHERSON
Tech. Officer: MSFC/S ROBBINS
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 1 413 **UNIV OF CALIFORNIA - IRVINE** **2371**
 WHOLE AIR SAMPLING FROM THE DC-8 AND P3-B AIRCRAFT DURING
 TRACE-P
 09/21/2000 - 06/30/2003 FY02: \$426,692 Total: \$1,043,385
Prin. Invest.: D R BLAKE
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5378 **UNIV OF CALIFORNIA - IRVINE** **2372**
 OPTIMIZATION OF PERCEPTUAL TRANSPARENCY IN SYNTHETIC VISION
 DISPLAYS
 04/05/2000 - 03/31/2002 FY02: \$0 Total: \$20,791
Prin. Invest.: T M DZMURA
Tech. Officer: ARC/J MULLIGAN
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 5404 **UNIV OF CALIFORNIA - IRVINE** **2373**
 LABORATORY MODELS OF PROTOCELLS
 10/17/2000 - 10/31/2002 FY02: \$60,000 Total: \$120,000
Prin. Invest.: J K LANYI
Tech. Officer: ARC/A POHORILLE, ARC/M FONDA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 5 280 **UNIV OF CALIFORNIA - IRVINE** **2374**
 MEASURING THE EFFECTS OF LOGGING ON THE CO2 AND EN ERGY
 EXCHANGE OF A PRIMARY FOREST IN TAPAJOS N
 06/24/1998 - 12/31/2002 FY02: \$314,888 Total: \$1,543,848
Prin. Invest.: M L GOULDEN
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 336 **UNIV OF CALIFORNIA - IRVINE** **2375**
 CARBON DYNAMICS IN VEGETATION AND SOILS ALONG THE EASTERN LBA
 TRANSECT
 06/16/1998 - 12/31/2002 FY02: \$282,978 Total: \$1,167,711
Prin. Invest.: S TRUMBORE
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30203 **UNIV OF CALIFORNIA - IRVINE** **2376**
 LOW LATITUDE NONLINEAR BEHAVIOR OF ROSSBY WAVES COMPOSED OF
 A SPECTRUM OF PHASE SPEEDS/STUDENT
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: G MAGNUSDOTTIR
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30409 **UNIV OF CALIFORNIA - IRVINE** **2377**
 AN INVESTIGATION OF THE RELATIONSHIP BETWEEN CARBO N STORAGE
 AND METHANE EMISSION IN RICE PADDIES/ST
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S TYLER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30443 **UNIV OF CALIFORNIA - IRVINE** **2378**
 UNCERTAINTY IN SOIL MOISTURE INITIALIZATION AND IMPACTS ON
 SEASONAL-TO- INTERANNUAL PREDICTION
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J FAMIGLIETTI
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NGT 5 50226 UNIV OF CALIFORNIA - IRVINE 2379
 SIGMA D MEASUREMENT OF METHANE AND MOLECULAR HYDRO GEN IN THE ATMOSPHERE
 09/29/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R J RICE, RICE
Tech. Officer: HQ/A NURRIDIN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50317 UNIV OF CALIFORNIA - IRVINE 2380
 SIMULATED MICROGRAVITY ALTERS VASCULAR CONTRACTILITY: ROLE OF CALCIUM DEPENDENT PKC-MEDIATED NON-
 07/11/2000 - 06/30/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: R E PURDY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50325 UNIV OF CALIFORNIA - IRVINE 2381
 METHYL HALIDE EMISSIONS: THE ATMOSPHERIC IMPACT OF AGRICULTURE
 08/17/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: R J CICERONE
Tech. Officer: GSFC/M W WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 1 1899 UNIV OF CALIFORNIA - LOS ANGELES 2382
 STRATOSPHERIC AEROSOL MICROPHYSICS AND PHYSICAL CHEMISTRY: MODELING AND OBSERVATIONS
 04/01/1997 - 03/31/2001 FY02: \$1 Total: \$356,961
Prin. Invest.: R P TURCO
Tech. Officer: LARC/G MADDERA, LARC/M M POTEAT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2097 UNIV OF CALIFORNIA - LOS ANGELES 2383
 AIRCRAFT AEROSOLS AND CONTRAILS: MICROPHYSICAL PROCESS AND EVOLUTION
 09/10/1998 - 09/09/2001 FY02: -\$1 Total: \$162,188
Prin. Invest.: R P TURCO
Tech. Officer: LARC/W L GROSE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2274 UNIV OF CALIFORNIA - LOS ANGELES 2384
 DEVELOPMENT OF MLPG AND LBIE METHODS FOR NONLINEAR PROBLEMS OF FRACTURE
 03/01/2000 - 12/14/2000 FY02: -\$114 Total: \$64,886
Prin. Invest.: S N ATLURI
Tech. Officer: LARC/I S RAJU
CASE Category: 46 – MECHANICAL ENGR

NAG 1 01082 UNIV OF CALIFORNIA - LOS ANGELES 2385
 MESHLESS (MLPG AND LBIE) METHODS FOR NONLINEAR ANALYSES
 05/22/2001 - 05/31/2002 FY02: \$0 Total: \$65,005
Prin. Invest.: S N ATTURE
Tech. Officer: LARC/J S RAJU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02036 UNIV OF CALIFORNIA - LOS ANGELES 2386
 ANAL OF ACOUSTIC EMISSION WAVES FROM IMPACT & FATIGUE DAMAGE COMPOSITES FOR INTEGRATED IVHM TECHNOLOGY
 01/14/2002 - 12/31/2004 FY02: \$51,346 Total: \$51,346
Prin. Invest.: A K MAL
Tech. Officer: LARC/W H PROSSER
CASE Category: 46 – MECHANICAL ENGR

NAG 1 02043 UNIV OF CALIFORNIA - LOS ANGELES 2387
 MLPG (MESHLESS LOCAL PETROV GALERKIN) FOR THE ANALYSIS OF BUILT-UP STRUCTURES
 01/31/2002 - 09/30/2002 FY02: \$0 Total: \$0
Prin. Invest.: S N ATLURI
Tech. Officer: LARC/I S RAJU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1193 UNIV OF CALIFORNIA - LOS ANGELES 2388
 MECHANICAL SIGNAL TRANSDUCTION IN COUNTERMEASURES OF PHYSIOLOGICAL SCIENCE
 03/25/1998 - 04/30/2002 FY02: \$0 Total: \$536,583
Prin. Invest.: T J TIDBALL
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1222 UNIV OF CALIFORNIA - LOS ANGELES 2389
 HYPERGRAVITY-INDUCED MODIFICATIONS IN SPATIO-TEMPORAL CODING AMONG UTRICULAR PRIMARY AFFERENT NEURONS
 05/22/1998 - 12/31/2002 FY02: \$0 Total: \$539,538
Prin. Invest.: L F HOFFMAN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1238 UNIV OF CALIFORNIA - LOS ANGELES 2390
 SCALABLE NUMERICAL ALGORITHMS ON NON-HETEROGENEOUS COMPUTING ENVIRONMENTS WITH DYNAMIC ROUTING & LOAD
 07/17/1998 - 06/30/2001 FY02: -\$283 Total: \$119,717
Prin. Invest.: T F CHAN
Tech. Officer: ARC/T J BARTH
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1484 UNIV OF CALIFORNIA - LOS ANGELES 2391
 MANAGEMENT OF AIRCRAFT SYSTEMS
 05/14/2001 - 05/14/2003 FY02: \$110,618 Total: \$176,618
Prin. Invest.: J L SPEYER
Tech. Officer: ARC/L TOBIAS, ARC/Y C JUNG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 1862 UNIV OF CALIFORNIA - LOS ANGELES 2392
 FINITE SIZE EFFECTS NEAR THE LIQUID-GAS CRITICAL POINT OF 3HE
 05/08/1996 - 05/22/2001 FY02: -\$10,446 Total: \$297,754
Prin. Invest.: J RUDNICK
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2108 UNIV OF CALIFORNIA - LOS ANGELES 2393
 DIFFUSING LIGHT PHOTOGRAPHY OF CONTAINERLESS RIBBON TURBULENCE
 03/01/1998 - 05/30/2002 FY02: \$0 Total: \$615,000
Prin. Invest.: S J PUTTERMAN
Tech. Officer: GRC/W M DUVAL
CASE Category: 13 – PHYSICS

NAG 3 2344 UNIV OF CALIFORNIA - LOS ANGELES 2394
 EVALUATION AND IMPROVEMENT OF JET NOISE MODELS AND EXPERIMENTAL TECHNIQUES USING HIGH FIDELITY SIMULATION
 03/07/2000 - 09/30/2001 FY02: \$0 Total: \$106,001
Prin. Invest.: J B FREUND
Tech. Officer: GRC/J BRIDGES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2397 UNIV OF CALIFORNIA - LOS ANGELES 2395
 TRANSITION FROM POOL TO FLOW BOILING - THE EFFECT OF REDUCED GRAVITY
 04/18/2000 - 11/30/2003 FY02: \$95,010 Total: \$240,009
Prin. Invest.: V K DHIR
Tech. Officer: GRC/D F CHAO
CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2467 UNIV OF CALIFORNIA - LOS ANGELES 2396
 A MECHANISTIC STUDY OF NUCLEATE BOILING HEAT TRANSFER UNDER MICROGRAVITY CONDITIONS
 06/21/2000 - 05/15/2005 FY02: \$125,000 Total: \$425,000
Prin. Invest.: V K DHIR
Tech. Officer: GRC/D F CHAO
CASE Category: 46 - MECHANICAL ENGR

NAG 3 2481 UNIV OF CALIFORNIA - LOS ANGELES 2397
 THE MELTING OF AQUEOUS FOAMS THE MELTING OF AQUEOUS FOAMS
 08/01/2000 - 05/31/2005 FY02: \$162,000 Total: \$490,000
Prin. Invest.: D J DURIAN
Tech. Officer: GRC/F P CHARIAMONTE
CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2735 UNIV OF CALIFORNIA - LOS ANGELES 2398
 DIFFUSING LIGHT PHOTGRAPHY OF CONTAINERLESS RIPPLE
 03/15/2002 - 01/07/2004 FY02: \$140,000 Total: \$140,000
Prin. Invest.: S J PUTTERMAN
Tech. Officer: GRC/W DUVAL
CASE Category: 49 - ENGINEERING, OTHER

NAG 5 3764 UNIV OF CALIFORNIA - LOS ANGELES 2399
 SOURCE DETERMINATION FOR SUBSTORM-RELATED ION INJE
 02/13/1997 - 04/14/2001 FY02: -\$2 Total: \$164,998
Prin. Invest.: R J STRANGWAY
Tech. Officer: GSFC/J BOHLIN
CASE Category: 13 - PHYSICS

NAG 5 3863 UNIV OF CALIFORNIA - LOS ANGELES 2400
 THERMAL AND DYNAMICAL PROCESSES IN THE EVOLUTION OF SATELLITES
 02/14/1997 - 11/30/2002 FY02: \$0 Total: \$396,000
Prin. Invest.: G SCHUBERT
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 3956 UNIV OF CALIFORNIA - LOS ANGELES 2401
 VENUS TECTONICS AND EVOLUTION
 03/12/1997 - 02/14/2003 FY02: \$0 Total: \$183,780
Prin. Invest.: W M KAULA
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 4117 UNIV OF CALIFORNIA - LOS ANGELES 2402
 DYNAMICAL STUDIES OF PLANETARY AND SATELLITE ATMOS
 02/28/1997 - 01/31/2002 FY02: \$0 Total: \$304,781
Prin. Invest.: P SCHUBERT
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 4215 UNIV OF CALIFORNIA - LOS ANGELES 2403
 PRISTINE IGNEOUS ROCKS AND THE EARLY DIFFERENTIATED MATERIALS
 03/19/1997 - 12/14/2001 FY02: \$0 Total: \$744,000
Prin. Invest.: D H WARREN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 - CHEMISTRY

NAG 5 4270 UNIV OF CALIFORNIA - LOS ANGELES 2404
 ELECTRON PRECIPITATION FROM THE INNER MAGNETOSPHERE THE MIDDLE ATMOSPHERE
 04/04/1997 - 04/30/2001 FY02: \$0 Total: \$216,557
Prin. Invest.: D M THORNE
Tech. Officer: GSFC/M M MELLOTT
CASE Category: 13 - PHYSICS

NAG 5 4339 UNIV OF CALIFORNIA - LOS ANGELES 2405
 THE ROLE OF THIN CURRENT SHEETS IN PLASMA SHEET CO DISRUPTION
 04/12/1997 - 10/31/2001 FY02: \$0 Total: \$324,270
Prin. Invest.: D L PRITCHETT
Tech. Officer: GSFC/J D BOHLIN
CASE Category: 13 - PHYSICS

NAG 5 4688 UNIV OF CALIFORNIA - LOS ANGELES 2406
 TOWARD OTHER SOLAR SYSTEMS: GAS, DUST, BROWN DWARF
 06/17/1997 - 04/30/2002 FY02: \$0 Total: \$147,000
Prin. Invest.: D M ZUCKERMAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 - ASTRONOMY

NAG 5 4766 UNIV OF CALIFORNIA - LOS ANGELES 2407
 CHONDRITIC METEORITES: NEBULAR AND PARENT-BODY FO
 06/05/1997 - 05/31/2002 FY02: \$0 Total: \$253,000
Prin. Invest.: D E RUBIN
Tech. Officer: GSFC/D NAVA
CASE Category: 11 - ASTRONOMY

NAG 5 6265 UNIV OF CALIFORNIA - LOS ANGELES 2408
 ASSYM. AURORAL PROCESSES
 08/21/1997 - 06/30/2001 FY02: -\$6 Total: \$246,905
Prin. Invest.: D M THORNE
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 6689 UNIV OF CALIFORNIA - LOS ANGELES 2409
 THEORETICAL TECHNOLOGY RESEARCH FOR THE INTERNATIONAL SOLAR TERRESTRIAL PHYSICS (ISTP) PROGRAM.
 12/01/1997 - 09/30/2001 FY02: \$0 Total: \$1,514,500
Prin. Invest.: M ABDALLA
Tech. Officer: GSFC/S CURTIS
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 6965 UNIV OF CALIFORNIA - LOS ANGELES 2410
 PICK-UP ION INSTABILITIES AT PLANETARY MAGNETOSPHERE RES
 03/03/1998 - 03/31/2001 FY02: -\$1 Total: \$96,967
Prin. Invest.: R J STRANGWAY
Tech. Officer: GSFC/D EVANS
CASE Category: 11 - ASTRONOMY

NAG 5 6975 UNIV OF CALIFORNIA - LOS ANGELES 2411
 THE ROLE OF COMPANION STARS IN PLANETARY FORMATION
 03/25/1998 - 06/30/2002 FY02: \$0 Total: \$116,600
Prin. Invest.: A GHEZ
Tech. Officer: HQ/J BOYCE
CASE Category: 11 - ASTRONOMY

NAG 5 7555 UNIV OF CALIFORNIA - LOS ANGELES 2412
 REAL-TIME FORECASTING AND RAPID POST-EVENT ASSESSMENT OF EROSIONAL AND DEPOSITIONAL FLOOD DAMAGE
 06/25/1998 - 08/31/2002 FY02: \$0 Total: \$330,915
Prin. Invest.: L C SMITH
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 - GEOLOGICALSCIENCE

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 7721 UNIV OF CALIFORNIA - LOS ANGELES 2413
 POLAR MAGNETIC FIELD EXPERIMENT
 09/23/1998 - 09/30/2001 FY02: \$0 Total: \$1,377,000
Prin. Invest.: C T RUSSELL
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7738 UNIV OF CALIFORNIA - LOS ANGELES 2414
 RADIATIVE TRANSFER AND REMOTE SENSING IN AEROSOL A TMSOPHERE.
 10/02/1998 - 09/30/2002 FY02: \$0 Total: \$245,000
Prin. Invest.: K LIOU
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7899 UNIV OF CALIFORNIA - LOS ANGELES 2415
 QUASI-CONTINUOUS ROSAT MONITORING OF THE EXTREME N ARROW-
 LINE SEYFERT 1 GALAXY IRAS 13224-3809 ADP 9
 01/03/1999 - 12/31/2000 FY02: -\$401 Total: \$37,599
Prin. Invest.: R A EDELSON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7907 UNIV OF CALIFORNIA - LOS ANGELES 2416
 STUDY OF TOTAL SOLAR AND SPECTRAL IRRADIANCE VARIA TIONS BASED
 ON THE SOHO/VIRGO AND MDI MEASUREM
 12/04/1998 - 05/14/2001 FY02: -\$25,359 Total: \$179,869
Prin. Invest.: J M PAP
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7924 UNIV OF CALIFORNIA - LOS ANGELES 2417
 EVOLUTION OF DUST AROUND MAIN SEQUENCE STARS (LTSA - 98)
 01/06/1999 - 12/14/2002 FY02: \$72,842 Total: \$274,196
Prin. Invest.: M A JURA
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7959 UNIV OF CALIFORNIA - LOS ANGELES 2418
 THE GALILEAN MOONS OF JUPITER: INFERRING INTERNAL PROPERTIES
 OF NEW WORLDS FROM THEIR INTERACTI
 01/08/1999 - 11/30/2001 FY02: \$0 Total: \$178,006
Prin. Invest.: D G KIVELSON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7962 UNIV OF CALIFORNIA - LOS ANGELES 2419
 DYNAMICS OF THE R=10-30 RE MAGNETOTAL DURING GEOM AGNETIC
 DISTURBANCES
 12/23/1998 - 12/14/2002 FY02: \$0 Total: \$247,000
Prin. Invest.: L R LYONS
Tech. Officer: GSFC/L ZANETTI
CASE Category: 11 – ASTRONOMY

NAG 5 7995 UNIV OF CALIFORNIA - LOS ANGELES 2420
 CALIBRATION AND COMPARISON BETWEEN MDI, GOLF, AND MT. WILSON
 DATA 11
 01/05/1999 - 12/31/2001 FY02: \$0 Total: \$751,562
Prin. Invest.: R K ULRICH
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8050 UNIV OF CALIFORNIA - LOS ANGELES 2421
 SOME STUDIES OF STRUCTURE AND DYNAMICS OF JUPITER' S MAGNETO-
 SPHERE
 01/15/1999 - 11/30/2001 FY02: \$0 Total: \$123,696
Prin. Invest.: D K KHURANA
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8059 UNIV OF CALIFORNIA - LOS ANGELES 2422
 MULTIPLE SCALE STRUCTURE OF AURORAL ARCS
 01/14/1999 - 01/31/2003 FY02: \$0 Total: \$207,418
Prin. Invest.: F V CORONITI
Tech. Officer: GSFC/M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 8060 UNIV OF CALIFORNIA - LOS ANGELES 2423
 THE PHYSICAL NATURE OF THE ELECTRON CYCLOTRON MASE R INSTA-
 BILITY IN THE AKR SOURCE REGION
 01/14/1999 - 01/31/2003 FY02: \$0 Total: \$177,301
Prin. Invest.: P L PRITCHETT
Tech. Officer: GSFC/M MELLOTT
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8065 UNIV OF CALIFORNIA - LOS ANGELES 2424
 NON-ADIABATIC PLASMA PROCESSES IN THE JOVIAN MAGNE TOSPHERE
 AND COUPLING TOTHE ATMOSPHERE
 01/11/1999 - 06/30/2002 FY02: \$0 Total: \$105,000
Prin. Invest.: D M THORNE
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8066 UNIV OF CALIFORNIA - LOS ANGELES 2425
 ANALYSIS AND INTERPRETATION OF JOVIAN ATMOSPHERE A ND SATEL-
 LITE DATA FROMTHE GALILEO MISSION
 01/12/1999 - 12/31/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: D SCHUBERT
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8085 UNIV OF CALIFORNIA - LOS ANGELES 2426
 ELECTRON DYNAMICS IN THE MAGNETOTAL
 01/21/1999 - 12/31/2001 FY02: \$0 Total: \$230,315
Prin. Invest.: D SCHRIVER
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 8335 UNIV OF CALIFORNIA - LOS ANGELES 2427
 EVOLUTION OF DUST AROUND YOUNG MAIN SEQUENCE STARS
 02/24/1999 - 02/28/2003 FY02: \$0 Total: \$65,400
Prin. Invest.: D JURA
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8470 UNIV OF CALIFORNIA - LOS ANGELES 2428
 BIOMARKERS FOR MARS EXPLORATION
 05/06/1999 - 07/31/2003 FY02: \$0 Total: \$84,287
Prin. Invest.: D F KERRIDGE
Tech. Officer: GSFC/M MEYER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8507 UNIV OF CALIFORNIA - LOS ANGELES 2429
 STUDY OF THE TERRESTRIAL EFFECTS OF SOLAR IRRADIANCE VARIATIONS FROM EUV TO INFRARED: A NEW APPROACH
 05/10/1999 - 04/30/2002 FY02: -\$74,614 Total: \$100,927
Prin. Invest.: J M PAP
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8530 UNIV OF CALIFORNIA - LOS ANGELES 2430
 MINING LUNAR PROSPECTOR'S GRAVITY DATA FOR INSIGHTS INTO THE MECHANICAL AND THERMAL EVOLUTION OF THE MOON
 06/15/1999 - 06/30/2002 FY02: \$0 Total: \$76,000
Prin. Invest.: G SCHUBERT
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8540 UNIV OF CALIFORNIA - LOS ANGELES 2431
 PRIOR GRANT NAG5-3252 CONTINUATION OF MAP SCIENCE SUPPORT ACTIVITIES BEING IMPLEMENTED BY THE MAP
 08/19/1999 - 08/14/2004 FY02: \$60,851 Total: \$277,114
Prin. Invest.: E L WRIGHT
Tech. Officer: GSFC/C BENNETT
CASE Category: 11 – ASTRONOMY

NAG 5 8694 UNIV OF CALIFORNIA - LOS ANGELES 2432
 DECENTRALIZED ESTIMATION & CONTROL OF DISTRIBUTED SPACECRAFT
 07/29/1999 - 07/31/2001 FY02: \$0 Total: \$253,525
Prin. Invest.: J SPEYER
Tech. Officer: GSFC/J CARPENTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8812 UNIV OF CALIFORNIA - LOS ANGELES 2433
 HIGH RESOLUTION SOLAR TRANSMISSION MEASUREMENTS FOR THE DETECTION OF AEROSOLS AND CLOUDS
 09/15/1999 - 09/30/2003 FY02: \$78,198 Total: \$276,524
Prin. Invest.: A ELDERING
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8879 UNIV OF CALIFORNIA - LOS ANGELES 2434
 PRECISE RELATIVE STATE ESTIMATION & CONTROL OF DISTRIBUTED SATELLITE NETWORKS
 11/15/1999 - 11/14/2001 FY02: \$0 Total: \$386,230
Prin. Invest.: J L SPEYER
Tech. Officer: GSFC/R CARPENTER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 8938 UNIV OF CALIFORNIA - LOS ANGELES 2435
 MAGNETIC FLUCTUATIONS IN THE JOVIAN MAGNETOSPHERE
 01/13/2000 - 01/14/2002 FY02: \$0 Total: \$137,900
Prin. Invest.: C T RUSSELL
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9014 UNIV OF CALIFORNIA - LOS ANGELES 2436
 INTERACTION OF LAND SURFACE COVER/CHARACTERISTICS & SURFACE HYDROCLIMATOLOGY AT SEASONAL/INTERANNUAL SCALES
 02/03/2000 - 07/31/2001 FY02: \$11,308 Total: \$229,127
Prin. Invest.: Y XUE
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9023 UNIV OF CALIFORNIA - LOS ANGELES 2437
 DETERMINING THE LONG TERM VARIABILITY AND CHARACTERISTIC TIME SCALES OF AGN - ADP 99
 02/22/2000 - 02/28/2001 FY02: \$0 Total: \$56,000
Prin. Invest.: R A EDELSON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9027 UNIV OF CALIFORNIA - LOS ANGELES 2438
 GLOBAL SURFACE GEOCHEMISTRY & THE DIFFERENTIATION, BULK COMPOSITION, & ORIGIN OF THE MOON
 02/04/2000 - 02/14/2003 FY02: \$23,000 Total: \$68,000
Prin. Invest.: P H WARREN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9071 UNIV OF CALIFORNIA - LOS ANGELES 2439
 CONSEQUENCES OF HIGH-LATITUDE RECONNECTION
 02/15/2000 - 02/14/2003 FY02: \$82,795 Total: \$236,623
Prin. Invest.: J P BERCHEM
Tech. Officer: GSFC/J SHARBER
CASE Category: 13 – PHYSICS

NAG 5 9074 UNIV OF CALIFORNIA - LOS ANGELES 2440
 PARTICLE TRANSPORT IN THE IO TORUS AND NEAR THE MOONS IO AND EUROPA
 02/15/2000 - 03/31/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: R THORNE
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9111 UNIV OF CALIFORNIA - LOS ANGELES 2441
 MHD TURBULENCE SIMULATION OF THE DYNAMICS OF THE MAGNETOTAIL
 02/23/2000 - 02/28/2003 FY02: \$49,476 Total: \$139,396
Prin. Invest.: C WU
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9207 UNIV OF CALIFORNIA - LOS ANGELES 2442
 ANALYSIS AND VALIDATION OF THE UARS/ACRIM II DATA
 03/10/2000 - 10/14/2001 FY02: \$0 Total: \$24,740
Prin. Invest.: J PAP
Tech. Officer: GSFC/R CAHALAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9255 UNIV OF CALIFORNIA - LOS ANGELES 2443
 THE INTERPLANETARY MAGNETIC FIELD AND THE MAGNETOSPHERIC CURRENT SYSTEMS
 03/15/2000 - 02/28/2003 FY02: \$81,869 Total: \$232,606
Prin. Invest.: M EL-ALAOUI
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9294 UNIV OF CALIFORNIA - LOS ANGELES 2444
 SEQUENTIAL ESTIMATION & PREDICTABILITY STUDIES FOR THE ATMOSPHERE & OCEANS
 04/10/2000 - 04/14/2003 FY02: \$118,800 Total: \$338,800
Prin. Invest.: M GHIL
Tech. Officer: GSFC/S COHN
CASE Category: 31 – ATMOSPHERIC SCIENCE

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9358 UNIV OF CALIFORNIA - LOS ANGELES 2445
 SENSITIVITY OF PRECIPITATION IN COUPLED LAND-ATMOS PHERE MOD-
 ELS
 04/06/2000 - 06/30/2003 FY02: \$100,000 Total: \$250,000
Prin. Invest.: D J NEELIN
Tech. Officer: GSFC/K BERGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9441 UNIV OF CALIFORNIA - LOS ANGELES 2446
 THE METEORITIC COMPONENT IN IMPACT DEPOSITS
 04/13/2000 - 04/14/2003 FY02: \$60,000 Total: \$170,000
Prin. Invest.: F T KYTE
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 9546 UNIV OF CALIFORNIA - LOS ANGELES 2447
 DEVELOPMENT OF GLOBAL MAGNETOSPHERIC FIELD MODELS OF JUPI-
 TER
 05/15/2000 - 05/14/2003 FY02: \$86,677 Total: \$247,205
Prin. Invest.: K K KHURANA
Tech. Officer: GSFC/J SHARBER
CASE Category: 13 – PHYSICS

NAG 5 9573 UNIV OF CALIFORNIA - LOS ANGELES 2448
 TOWARD OTHER PLANETARY SYSTEMS: IMAGING OF MASSIVE PLANETS
 AND DUSTY DEBRISDISKS
 05/08/2000 - 04/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: B ZUCKERMAN
Tech. Officer: HQ/J M BOYCE
CASE Category: 13 – PHYSICS

NAG 5 9667 UNIV OF CALIFORNIA - LOS ANGELES 2449
 REMOTE SENSING OF THE OPTICAL & MICROPHYSICAL PROPERTIES OF
 CIRRUS CLOUDS USING MODIS CHANNELS
 05/30/2000 - 08/31/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: K N LIOU
Tech. Officer: GSFC/M KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9713 UNIV OF CALIFORNIA - LOS ANGELES 2450
 INFLUENCE OF LAND SURFACE PROCESSES/LAND COVER CHANGES IN
 AMAZON ON REGIONAL HYDROLMETEOROLOGY
 07/06/2000 - 03/14/2003 FY02: \$104,146 Total: \$350,572
Prin. Invest.: Y XUE
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9772 UNIV OF CALIFORNIA - LOS ANGELES 2451
 SOLAR MAX EXTENDED SCIENCE PROGRAM
 06/30/2000 - 06/30/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: M ASHOUR-ABDOLLA
Tech. Officer: GSFC/S CURTIS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9789 UNIV OF CALIFORNIA - LOS ANGELES 2452
 ISOTOPIC INVESTIGATIONS OF NEBULAR AND PARENT BODY PROCESSES
 WITH HIGH SENSITIVITY ION MICROPROBE
 07/11/2000 - 07/14/2003 FY02: \$154,001 Total: \$372,001
Prin. Invest.: K D MCKEEGAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9826 UNIV OF CALIFORNIA - LOS ANGELES 2453
 THE LOCAL DISTANCE SCALE: APPLICATION OF THE TIP OF THE RED
 GIANT BRANCH DISTANCE INDICATOR - LTSA
 08/23/2000 - 08/31/2003 FY02: \$0 Total: \$159,900
Prin. Invest.: S SAKAI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9860 UNIV OF CALIFORNIA - LOS ANGELES 2454
 OCEAN CARBON FLUX: TRANSPORT, & BURIAL WITHIN THE WESTERN &
 EASTERN U.S.COASTAL ZONES
 08/07/2000 - 06/30/2003 FY02: \$131,000 Total: \$339,200
Prin. Invest.: J MCWILLIAMS
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 10032 UNIV OF CALIFORNIA - LOS ANGELES 2455
 AN XMM LONG-LOOK AT NGC5548
 09/26/2000 - 09/30/2002 FY02: \$0 Total: \$46,500
Prin. Invest.: R EDELSON
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10282 UNIV OF CALIFORNIA - LOS ANGELES 2456
 MAGNETOHYDRODYNAMIC MODELING OF THE JOVIAN MAGNETO SPHERE
 01/23/2001 - 01/31/2004 FY02: \$92,299 Total: \$182,070
Prin. Invest.: R WALKER
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10287 UNIV OF CALIFORNIA - LOS ANGELES 2457
 KINETIC PHYSICS OF THE STRESSED NEAR-EARTH PLASMA SHEET
 01/23/2001 - 01/31/2004 FY02: \$92,540 Total: \$183,324
Prin. Invest.: P L PRITCHETT
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10351 UNIV OF CALIFORNIA - LOS ANGELES 2458
 SEARCH FOR MOLECULAR HYDROGEN AROUND VEGA-TYPE STARS
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$69,500
Prin. Invest.: M A JURA
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10354 UNIV OF CALIFORNIA - LOS ANGELES 2459
 UCLA CLUSTER-II MISSION PARTICIPATION
 02/15/2001 - 03/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: D G KIVELSON
Tech. Officer: GSFC/M ACUNA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10421 UNIV OF CALIFORNIA - LOS ANGELES 2460
 COSMOCHEMICAL STUDIES: METEORITES AND THEIR PARENT ASTEROIDS
 02/15/2001 - 01/31/2002 FY02: \$0 Total: \$155,000
Prin. Invest.: J WASSON
Tech. Officer: GSFC/D NAVA
CASE Category: 12 – CHEMISTRY

NAG 5 10473 UNIV OF CALIFORNIA - LOS ANGELES 2461
 MAGNETOSPHERE-IONOSPHERE COUPLING IN THE AURORAL ZONE
 02/27/2001 - 02/28/2003 FY02: \$78,515 Total: \$153,922
Prin. Invest.: D SCHRIVER
Tech. Officer: GSFC/J SPANN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10490 UNIV OF CALIFORNIA - LOS ANGELES 2462
 ACQUISITION OF A NEW ELECTRON MICROSCOPE AT UCLA
 03/01/2001 - 02/28/2003 FY02: \$168,000 Total: \$336,000
Prin. Invest.: P WARREN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10609 UNIV OF CALIFORNIA - LOS ANGELES 2463
 DETECTION AND MODELING OF MECHANICAL ICE BREAKUP IN LARGE
 POLAR RIVERS WITH SAR INTERFEROMETRY
 03/15/2001 - 03/14/2004 FY02: \$70,500 Total: \$141,832
Prin. Invest.: L SMITH
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10615 UNIV OF CALIFORNIA - LOS ANGELES 2464
 LOCAL INVERSIONS OF THE MARTIAN GRAVITY FIELD AND INTERPRETA-
 TIONS OF REGIONAL TECTONICS
 03/16/2001 - 03/14/2003 FY02: \$0 Total: \$49,000
Prin. Invest.: W MOORE
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10663 UNIV OF CALIFORNIA - LOS ANGELES 2465
 ADAPTIVE OPTICS IMAGING OF MASSIVE PLANETARY COMPANIONS TO
 YOUNG STARS
 03/22/2001 - 06/30/2004 FY02: \$40,000 Total: \$80,000
Prin. Invest.: B ZUCKERMAN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10685 UNIV OF CALIFORNIA - LOS ANGELES 2466
 APPLICATIONS AND VALIDATION OF THE SRTM DEM IN THE AMAZON
 BASIN: HYDROLOGICAL AND GEOMORPHOLOGICAL
 03/30/2001 - 02/28/2003 FY02: \$150,000 Total: \$300,000
Prin. Invest.: D E ALSDORF
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10834 UNIV OF CALIFORNIA - LOS ANGELES 2467
 SOLAR CYCLE VARIATION AND MULTI-POINT STUDIES OF ICME PROPER-
 TIES
 04/27/2001 - 04/30/2004 FY02: \$79,899 Total: \$157,769
Prin. Invest.: C T RUSSELL
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10905 UNIV OF CALIFORNIA - LOS ANGELES 2468
 TIME DEPENDENCE OF SOLAR MAGNETIC FIELDS
 05/22/2001 - 05/31/2004 FY02: \$74,998 Total: \$170,498
Prin. Invest.: R K ULRICH
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 10973 UNIV OF CALIFORNIA - LOS ANGELES 2469
 MARS POLAR PROPERTIES AND CLIMATE HISTORY
 05/24/2001 - 06/30/2004 FY02: \$75,000 Total: \$150,000
Prin. Invest.: D PAIGE
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10986 UNIV OF CALIFORNIA - LOS ANGELES 2470
 SOLAR EFFECTS ON GLOBAL CLIMATE DUE TO COSMIC RAYS AND SOLAR
 ENERGETIC PARTICLES
 05/15/2001 - 05/14/2004 FY02: \$109,288 Total: \$211,355
Prin. Invest.: J RAEDER
Tech. Officer: GSFC/J F SPANN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11102 UNIV OF CALIFORNIA - LOS ANGELES 2471
 TECTONICS AND VOLCANISM IN AFAR USING RADARSAT INTERFEROM-
 ETRY DATA
 07/10/2001 - 06/30/2004 FY02: \$86,962 Total: \$171,247
Prin. Invest.: G PELTZER
Tech. Officer: GSFC/W ABDALATI
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11210 UNIV OF CALIFORNIA - LOS ANGELES 2472
 DYNAMICAL STUDIES OF PLANETARY AND SATELLITE ATMOSPHERES
 08/09/2001 - 08/14/2003 FY02: \$75,000 Total: \$145,000
Prin. Invest.: G SCHUBERT
Tech. Officer: GSFC/D J BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11216 UNIV OF CALIFORNIA - LOS ANGELES 2473
 MAGNETOSPHERE-IONOSPHERE COUPLING IN THE JOVIAN AUORAL
 ZONE
 08/13/2001 - 08/31/2004 FY02: \$0 Total: \$80,000
Prin. Invest.: R THORNE
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11324 UNIV OF CALIFORNIA - LOS ANGELES 2474
 POLAR MAGNETIC FIELD EXPERIMENT
 11/20/2001 - 11/30/2004 FY02: \$439,965 Total: \$439,965
Prin. Invest.: C RUSSELL
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11363 UNIV OF CALIFORNIA - LOS ANGELES 2475
 APPLICATIONS OF REMOTELY SENSED LAND SURFACE DATA FOR SEA-
 SONAL AND LONG-TERM HYDROCLIMATE PREDICTION
 09/28/2001 - 09/30/2003 FY02: \$320,000 Total: \$526,667
Prin. Invest.: J KIM
Tech. Officer: GSFC/M JACKSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11384 UNIV OF CALIFORNIA - LOS ANGELES 2476
 FAULT-TOLERANT NAVIGATION AND GUIDANCE OF SATELLITE CLUSTERS
 11/20/2001 - 11/30/2004 FY02: \$336,000 Total: \$336,000
Prin. Invest.: J L SPEYER
Tech. Officer: GSFC/R CARPENTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11541 UNIV OF CALIFORNIA - LOS ANGELES 2477
 SUPPORT FOR 65TH ANNUAL MEETING OF THE METEORITICAL SOCIETY,
 LOS ANGELES JULY 2002
 01/04/2002 - 12/31/2002 FY02: \$25,000 Total: \$25,000
Prin. Invest.: P WARREN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 11556 UNIV OF CALIFORNIA - LOS ANGELES 2478
 PRISTINE IGNEOUS ROCKS & EARLY DIFFERENTIATION OF PLANETARY MATERIALS
 01/09/2002 - 01/14/2003 FY02: \$125,000 Total: \$125,000
Prin. Invest.: P WARREN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11583 UNIV OF CALIFORNIA - LOS ANGELES 2479
 ICME'S TESTING THE FLUXROPE PARADIGM
 01/16/2002 - 01/31/2005 FY02: \$72,768 Total: \$72,768
Prin. Invest.: C T RUSSELL
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11691 UNIV OF CALIFORNIA - LOS ANGELES 2480
 PLANETARY AND SATELLITE STRUCTURE, DYNAMICS AND EVOLUTION
 01/31/2002 - 01/31/2005 FY02: \$81,200 Total: \$81,200
Prin. Invest.: G SCHUBERT
Tech. Officer: GSFC/D SENSKA
CASE Category: 11 – ASTRONOMY

NAG 5 11704 UNIV OF CALIFORNIA - LOS ANGELES 2481
 THEORETICAL INVESTIGATIONS FOR THE INTERNATIONAL SOLAR-TERRRESTRIAL PHYSICS PROGRAM.
 02/06/2002 - 02/14/2003 FY02: \$219,799 Total: \$219,799
Prin. Invest.: A ABDALLA
Tech. Officer: GSFC/S A CURTIS
CASE Category: 13 – PHYSICS

NAG 5 11708 UNIV OF CALIFORNIA - LOS ANGELES 2482
 GLOBAL SOLAR OSCILLATIONS AND MAGNETISM FROM SOHO.
 02/14/2002 - 02/28/2005 FY02: \$124,984 Total: \$124,984
Prin. Invest.: R ULRICH
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11823 UNIV OF CALIFORNIA - LOS ANGELES 2483
 QUIET EVENING AURORAL ARC AS AN EXEMPLAR OF AN ARC-CURRENT SYSTEM
 03/07/2002 - 03/14/2005 FY02: \$103,254 Total: \$103,254
Prin. Invest.: P L PRITCHETT
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11826 UNIV OF CALIFORNIA - LOS ANGELES 2484
 MECHANISMS RESPONSIBLE FOR THE EARTH'S DIFFUSE AURORA
 03/07/2002 - 03/14/2005 FY02: \$80,982 Total: \$80,982
Prin. Invest.: R M THORNE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11858 UNIV OF CALIFORNIA - LOS ANGELES 2485
 OCCURRENCE CHARACTERISTICS OF AURORAL POLEWARD BOUNDARY INTENSIFICATIONS
 03/08/2002 - 03/14/2005 FY02: \$95,367 Total: \$95,367
Prin. Invest.: L R LYONS
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11859 UNIV OF CALIFORNIA - LOS ANGELES 2486
 INTERACTIONS OF ICY GALILEAN SATELLITES WITH JUPITER'S MAGNETOSPHERE
 03/08/2002 - 03/14/2005 FY02: \$80,410 Total: \$80,410
Prin. Invest.: K K KHURANA
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11898 UNIV OF CALIFORNIA - LOS ANGELES 2487
 STATISTICAL EXAMINATION OF THE SIGNIFICANCE OF THE APPARENT ASSOCIATION BETWEEN SOLAR WIND TRIGGERS
 03/25/2002 - 03/31/2005 FY02: \$82,000 Total: \$82,000
Prin. Invest.: R L MCPHERRON
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11922 UNIV OF CALIFORNIA - LOS ANGELES 2488
 RELATIVISTIC ELECTRON VARIABILITY DURING GEOMAGNETIC STORMS
 03/26/2002 - 04/30/2005 FY02: \$85,080 Total: \$85,080
Prin. Invest.: R M THORNE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11923 UNIV OF CALIFORNIA - LOS ANGELES 2489
 ON THE CONSEQUENCES OF THIN CURRENT SHEETS IN THE MAGNETOTAIL
 03/26/2002 - 03/31/2005 FY02: \$102,408 Total: \$102,408
Prin. Invest.: M ASHOUR-ABDALLA
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11960 UNIV OF CALIFORNIA - LOS ANGELES 2490
 PHOTOCHEMICAL PROCESSES IN COSMIC ICY SYSTEMS
 04/04/2002 - 04/14/2005 FY02: \$70,047 Total: \$70,047
Prin. Invest.: C R WU
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11989 UNIV OF CALIFORNIA - LOS ANGELES 2491
 CONSEQUENCES OF ALFVEN WAVES & PARALLEL POTENTIAL DROPS IN THE AURORAL ZONE
 04/10/2002 - 03/31/2003 FY02: \$40,000 Total: \$40,000
Prin. Invest.: D SCHRIVER
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12006 UNIV OF CALIFORNIA - LOS ANGELES 2492
 RING CURRENT MODELING AND ION PRECIPITATION DURING SOLAR MAXIMUM STORMS
 04/11/2002 - 04/14/2005 FY02: \$96,231 Total: \$96,231
Prin. Invest.: R M THORNE
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12007 UNIV OF CALIFORNIA - LOS ANGELES 2493
 THE GEO-EFFECTIVENESS OF SOLAR WIND PRESSURE FRONT SURFACES
 04/11/2002 - 04/14/2005 FY02: \$85,234 Total: \$85,234
Prin. Invest.: E ZESTAV
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12022 UNIV OF CALIFORNIA - LOS ANGELES 2494
 ION CYCLOTRON WAVE MASS SPECTROMETRY OF THE IO ATM OSPHERE.
 04/18/2002 - 04/30/2005 FY02: \$69,880 Total: \$69,880
Prin. Invest.: C T RUSSELL
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12058 UNIV OF CALIFORNIA - LOS ANGELES 2495
 COSMOCHEMICAL STUDIES: METEORITES AND THEIR PARENT ASTEROIDS
 04/19/2002 - 04/30/2003 FY02: \$85,000 Total: \$85,000
Prin. Invest.: J WASSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12106 UNIV OF CALIFORNIA - LOS ANGELES 2496
 MAGNETOSPHERIC CURRENT SYSTEM DURING DISTURBED TIMES
 05/09/2002 - 05/14/2005 FY02: \$134,714 Total: \$134,714
Prin. Invest.: M EL-ALAOUI
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12107 UNIV OF CALIFORNIA - LOS ANGELES 2497
 GEOSPACE MODELING WITH ADAPTIVE MESH REFINEMENT
 05/09/2002 - 05/14/2005 FY02: \$114,476 Total: \$114,476
Prin. Invest.: J RAEDER
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12131 UNIV OF CALIFORNIA - LOS ANGELES 2498
 UCLA CLUSTER II MISSION PARTICIPATION
 04/30/2002 - 03/31/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: D G KIVELSON
Tech. Officer: GSFC/M ACUNA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12177 UNIV OF CALIFORNIA - LOS ANGELES 2499
 THE IMPORTANCE OF SOLAR ENERGETIC ION
 05/13/2002 - 05/14/2005 FY02: \$94,261 Total: \$94,261
Prin. Invest.: R RICHARD
Tech. Officer: GSFC/J SPANN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12215 UNIV OF CALIFORNIA - LOS ANGELES 2500
 PARENT-BODY MODIFICATION OF CHONDRITIC METEORITES
 05/16/2002 - 05/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: A E RUBIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12357 UNIV OF CALIFORNIA - LOS ANGELES 2501
 PALEOBIOCHEMICAL STUDIES OF ANCIENT LIFE
 07/02/2002 - 06/30/2005 FY02: \$69,180 Total: \$69,180
Prin. Invest.: W J SCHOPF
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12528 UNIV OF CALIFORNIA - LOS ANGELES 2502
 CONSTRAINING OCEANIC SOURCES & SINKS OF CO2 BY INVERSE
 MODELING: A FIRSTSTEP TOWARD ASSIMILATION OF
 08/26/2002 - 08/31/2005 FY02: \$76,998 Total: \$76,998
Prin. Invest.: N GRUBER
Tech. Officer: GSFC/C TREES
CASE Category: 33 – OCEANOGRAPHY

NAG 9 1020 UNIV OF CALIFORNIA - LOS ANGELES 2503
 GENESIS DISCOVERY MISSION
 07/16/1998 - 03/04/2002 FY02: \$0 Total: \$213,600
Prin. Invest.: K D MCKEEGAN
Tech. Officer: JSC/E K STANSBERY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1252 UNIV OF CALIFORNIA - LOS ANGELES 2504
 OPTICAL BIOSENSORS FOR IN FLIGHT MEASUREMENT OF HORMONES
 LEVELS
 08/15/2000 - 07/31/2003 FY02: \$88,977 Total: \$176,721
Prin. Invest.: B
Tech. Officer: JSC/C W LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 4 00051 UNIV OF CALIFORNIA - LOS ANGELES 2505
 FORMATION FLIGHT TECHNOLOGY
 09/18/2000 - 09/30/2003 FY02: \$68,589 Total: \$528,589
Prin. Invest.: J L SPEYER
Tech. Officer: DFRC/G L SPEYER
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 00247 UNIV OF CALIFORNIA - LOS ANGELES 2506
 DESIGN, FABRICATION, & DELIVERY OF MAGNETOMETER SYSTEM FOR
 THE ST-5 MISSION.
 02/13/2001 - 08/01/2002 FY02: \$264,511 Total: \$494,511
Prin. Invest.: R J STRANGWAY
Tech. Officer: GSFC/A RUSSO
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 02100 UNIV OF CALIFORNIA - LOS ANGELES 2507
 TIME HISTORY OF EVENTS & MACROSCALE INTERACTION DURING SUB-
 STORMS (THEMIS) MISSION PHASE A EFFORT
 07/03/2002 - 03/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: E WRIGHT
Tech. Officer: GSFC/C SAVINELLI
CASE Category: 11 – ASTRONOMY

NAS 9 02036 UNIV OF CALIFORNIA - LOS ANGELES 2508
 ADVANCED SECONDARY ION MASS SPECTROMETER FOR SOLAR WIND
 ANALYSIS
 04/09/2002 - 09/30/2004 FY02: \$3,532,161 Total: \$3,532,161
Prin. Invest.: K D MCKEEGAN
Tech. Officer: JSC/E STANSBERY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1050 UNIV OF CALIFORNIA - LOS ANGELES 2509
 ASTROBIOLOGY UCLA AN INTEGRATED MULTIDISCIPLINARY APPROACH
 TO RESEARCH & EDUCATION
 08/19/1998 - 06/30/2003 FY02: \$1,105,461 Total: \$3,628,834
Prin. Invest.: B RUNNEGAR
Tech. Officer: ARC/R A GRYMES, ARC/W W DOLCI
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1364 UNIV OF CALIFORNIA - LOS ANGELES 2510
 CENTER FOR CELL MIMETIC SPACE EXPLORATION CMISE
 09/23/2002 - 08/31/2007 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: C HO
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYAPPAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NCC 3 690 UNIV OF CALIFORNIA - LOS ANGELES 2511
 ACOUSTICALLY FORCED CONDENSED PHASE FUEL COMBUSTION UNDER
 MICROGRAVITY CONDITIONS
 03/22/1999 - 12/29/2002 FY02: \$79,200 Total: \$438,259
Prin. Invest.: O I SMITH
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 4 121 UNIV OF CALIFORNIA - LOS ANGELES 2512
 FLIGHT SYSTEMS RESEARCH CENTER
 02/17/1999 - 10/30/2002 FY02: \$20,000 Total: \$3,889,530
Prin. Invest.: A V BALAKRISHNAN
Tech. Officer: SSC/K W IIIFF, SSC/R R MEYER
CASE Category: 49 – ENGINEERING, OTHER

NCC 4 153 UNIV OF CALIFORNIA - LOS ANGELES 2513
 FLIGHT SYSTEMS RESEARCH CENTER FLIGHT SYSTEMS RESEARCH
 CENTER
 02/28/2002 - 10/31/2002 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: A BALAKRISHNAN
Tech. Officer: DFRC/K ILIFF
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 301 UNIV OF CALIFORNIA - LOS ANGELES 2514
 EARTH PARTNERS' PRIVATE NETWORK
 04/03/1998 - 12/31/2002 FY02: \$70,000 Total: \$2,513,600
Prin. Invest.: R MUNTZ
Tech. Officer: GSFC/M MAIDEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 385 UNIV OF CALIFORNIA - LOS ANGELES 2515
 REMOTE SENSING OF CIRRUS CLOUDS AND RADIATION EFFECTS IN THE
 EVOLUTION OF CIRRUS CLOUDS
 04/01/1999 - 04/14/2002 FY02: \$0 Total: \$75,000
Prin. Invest.: K N LIOU
Tech. Officer: GSFC/W LAU
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 624 UNIV OF CALIFORNIA - LOS ANGELES 2516
 HIGH-PERFORMANCE ADAPTIVE SIMULATION FRAMEWORK FOR SPACE-
 WEATHER MODELING (SWMF)
 04/30/2002 - 04/29/2005 FY02: \$240,000 Total: \$240,000
Prin. Invest.: C MECHOSO
Tech. Officer: GSFC/J FISCHER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NGT 1 01039 UNIV OF CALIFORNIA - LOS ANGELES 2517
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) YR.2
 08/29/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: G CARMEN
Tech. Officer: LARC/R G BRYANT
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52240 UNIV OF CALIFORNIA - LOS ANGELES 2518
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/10/2000 - 06/30/2001 FY02: -\$1 Total: \$22,000
Prin. Invest.: G P CARMEN
Tech. Officer: LARC/R G BRYANT, LARC/J S HARRISON
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 2 52265 UNIV OF CALIFORNIA - LOS ANGELES 2519
 EFFECT OF SIMULATED MICROGRAVITY ON NT-3 EXPRESSION IN PROP-
 RIOCEPTIVE AFFERENT NEURONS IN RATS
 07/14/2000 - 08/31/2002 FY02: \$24,000 Total: \$68,000
Prin. Invest.: V R EDGERTON, A J BIGBEE
Tech. Officer: ARC/R E GRINDELAND, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 2 52289 UNIV OF CALIFORNIA - LOS ANGELES 2520
 MARTIAN IMPACT CRATER LAKES: GEOPHYSICAL MODELING AND IN SITU
 INVESTIGATION OF TERRESTRIAL ANALOGS
 06/13/2002 - 06/14/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D A PAIGE
Tech. Officer: ARC/C P MCKAY
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 5 112 UNIV OF CALIFORNIA - LOS ANGELES 2521
 DECENTRALIZED CONTROL OF DISTRIBUTED SATELLITE NET WORKS,
 GSRP TRAINING GRANT. STUDENT: GENE BELAN
 08/18/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J L SPEYER
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 117 UNIV OF CALIFORNIA - LOS ANGELES 2522
 COMBINING SPACE AND GROUND BASED PLASMASPHERIC OBSERVA-
 TIONS FOR UNDERSTANDING PLASMA MASS DENSITY
 06/04/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M MOLDWIN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 30338 UNIV OF CALIFORNIA - LOS ANGELES 2523
 ESTIMATION OF THE TERRESTRIAL CARBON POOL & HYDROLOGIC
 SENSITIVITY OF THE WEST SIBERIAN LOWLAND/STU
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: L SMITH
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30372 UNIV OF CALIFORNIA - LOS ANGELES 2524
 AN INVEST. OF CLOUD FEATURES IN HIGH-RESOL. INFRARED EMISSION
 SPECTRA: UNDERSTANDING RADIATIVE EFF
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A ELDERING
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30435 UNIV OF CALIFORNIA - LOS ANGELES 2525
 MODELING OF ARCTIC RIVER ICE BREAKUP USING SAR IMAGERY.
 STUDENT: TAMLIN M. PAVELSKY
 08/16/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L SMITH
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50187 UNIV OF CALIFORNIA - LOS ANGELES 2526
 A SEARCH FOR GIANT PLANETS ORBITING NEARBY STARS
 05/27/1998 - 06/30/2001 FY02: \$0 Total: \$65,625
Prin. Invest.: B ZUCKERMAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 11 – ASTRONOMY

NGT 5 50220 UNIV OF CALIFORNIA - LOS ANGELES 2527
 HEALTH MGMT SYSTEM DESIGN & INTELLIGENT CONTROL OF FUTURE
 MINIATURE AUTONOMOUS SPACECRAFTS UTIL
 09/23/1998 - 09/30/2001 FY02: -\$76 Total: \$65,924
Prin. Invest.: P WANG, ESHAGHI
Tech. Officer: HQ/S MCGEE
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50310 UNIV OF CALIFORNIA - LOS ANGELES 2528
 PROXIMO-DISTAL PATTERNING IN MOLLUSCS AND ANNELIDS: IMPLICATIONS
 FOR LIMB EVOLUTION-STUDENT: SHANNON
 07/07/2000 - 06/30/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: D K JACOBS
Tech. Officer: GSFC/L SMITH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50332 UNIV OF CALIFORNIA - LOS ANGELES 2529
 A STUDY OF UNRESOLVED ISSUES REGARDING STRATOSPHERIC AERO-
 SOL FORMATION, EVOLUTION & COMPOSITION BY
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R TURCO
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 50359 UNIV OF CALIFORNIA - LOS ANGELES 2530
 CASSINI MEASUREMENT OF MAGNETIC FIELDS WITHIN 2 SOLAR RADII
 STUDENT: ELIZABETH JENSEN
 05/23/2001 - 08/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C RUSSELLI
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50395 UNIV OF CALIFORNIA - LOS ANGELES 2531
 DETECTION OF YOUNG SUBSTELLAR OBJECTS USING FLITECAM STU-
 DENT: AMANDA MAINZER
 06/05/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: I MCLEAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 5116 UNIV OF CALIFORNIA - RIVERSIDE 2532
 THE TIGRE INSTRUMENT FOR INTERMEDIATE - ENERGY GAMMA-RAY
 ASTRONOMY FROM 0.3 TO 100MEV
 04/09/1997 - 04/30/2002 FY02: \$395,000 Total: \$2,156,528
Prin. Invest.: A D ZYCH
Tech. Officer: GSFC/H C NEEDLEMAN, GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5118 UNIV OF CALIFORNIA - RIVERSIDE 2533
 AN ARCSECOND RESOLUTION: AXGAM
 04/09/1997 - 06/30/2001 FY02: \$0 Total: \$600,000
Prin. Invest.: O T TUMER
Tech. Officer: GSFC/H C NEEDLEMAN, GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5211 UNIV OF CALIFORNIA - RIVERSIDE 2534
 ULDB COMPTON TELESCOPE MISSION ULDB COMPTON TELESCOPE MIS-
 SION
 09/17/1998 - 06/30/2002 FY02: \$0 Total: \$70,067
Prin. Invest.: A D ZYCHE
Tech. Officer: WFF/A B MERRITT
CASE Category: 11 - ASTRONOMY

NAG 5 5288 UNIV OF CALIFORNIA - RIVERSIDE 2535
 A HIGH RESOLUTION ALL-SKY X-RAY & GAMMA-RAY MONITOR (AXGAM)
 05/31/2000 - 05/17/2003 FY02: \$0 Total: \$119,400
Prin. Invest.: T O TUMER
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 8682 UNIV OF CALIFORNIA - RIVERSIDE 2536
 SPACE-TIME DYNAMICS OF SOIL MOISTURE & TEMPERATURE -SCALE
 ISSUES
 07/15/1999 - 11/30/2001 FY02: -\$104,082 Total: \$166,258
Prin. Invest.: B P MOHANTY
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 9812 UNIV OF CALIFORNIA - RIVERSIDE 2537
 NON-ENZYMATIC OLIGOMERIZATION OF MONONUCLEOTIDES USING NON-
 STANDARD OLIGONUCLEOTIDE TEMPLATES
 07/19/2000 - 07/14/2003 FY02: \$70,000 Total: \$205,940
Prin. Invest.: C Y SWITZER
Tech. Officer: GSFC/M MEYER
CASE Category: 11 - ASTRONOMY

NAG 5 10932 UNIV OF CALIFORNIA - RIVERSIDE 2538
 PARTICLE ACCELERATION AND TRANSPORT
 05/30/2001 - 06/30/2004 FY02: \$128,367 Total: \$251,678
Prin. Invest.: G ZANK
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 - PHYSICAL SCIENCE, OTHER

NAG 5 11393 UNIV OF CALIFORNIA - RIVERSIDE 2539
 COMPOSITION AND ABUNDANCE RATIOS OF ANOMALOUS AND GALACTIC
 COSMIC RAYS: IMPLICATIONS OF ACE OBSERVAT
 11/13/2001 - 12/31/2001 FY02: \$47,502 Total: \$47,502
Prin. Invest.: G P ZANK
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 - ASTRONOMY

NAG 5 11604 UNIV OF CALIFORNIA - RIVERSIDE 2540
 THE HELIOSPHERIC TERMINATION SHOCK STRUCTURE
 01/22/2002 - 01/31/2005 FY02: \$77,000 Total: \$77,000
Prin. Invest.: J LE ROUX
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 - PHYSICAL SCIENCE, OTHER

NAG 5 11621 UNIV OF CALIFORNIA - RIVERSIDE 2541
 THE INTERACTION OF THE SUN AND THE GALAXY
 01/22/2002 - 01/31/2005 FY02: \$106,628 Total: \$106,628
Prin. Invest.: G ZANK
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 - PHYSICAL SCIENCE, OTHER

NAG 5 12382 UNIV OF CALIFORNIA - RIVERSIDE 2542
 OUTREACH PROJECT FOR XMM
 07/25/2002 - 03/31/2004 FY02: \$110,000 Total: \$110,000
Prin. Invest.: C FOSTER
Tech. Officer: GSFC/N WHITE
CASE Category: 11 - ASTRONOMY

NAG 5 12390 UNIV OF CALIFORNIA - RIVERSIDE 2543
 POSTLAUNCH: STATEMENT OF WORK U.S. OPTICAL MONITOR TEAM
 07/25/2002 - 07/31/2004 FY02: \$556,894 Total: \$556,894
Prin. Invest.: F CORDOVA
Tech. Officer: GSFC/N WHITE
CASE Category: 11 - ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 1 2044 UNIV OF CALIFORNIA - SAN DIEGO 2544
 RADIATIVE CHARACTER'S OF THE SURFACE & CLOUDS IN THE ARCTIC
 USING RESEARCH AIRCRAFT-NRA-94-MTPE-04
 04/03/1998 - 03/31/2003 FY02: \$0 Total: \$418,823
Prin. Invest.: F P VALERO, S K POPE, P J FLATAU
Tech. Officer: LARC/D S MCDUGAL, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02028 UNIV OF CALIFORNIA - SAN DIEGO 2545
 MODELING COMPRESSIBILITY EFFECTS IN HIGH-SPEED TURBULENT
 FLOWS
 12/27/2001 - 11/30/2003 FY02: \$38,500 Total: \$38,500
Prin. Invest.: S SARKA
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02092 UNIV OF CALIFORNIA - SAN DIEGO 2546
 ULTRASONIC MEASUREMENT OF INTRACRANIAL PRESSURE WAVEFORMS
 05/01/2002 - 05/14/2004 FY02: \$50,000 Total: \$50,000
Prin. Invest.: A R HARGENS, T UENO
Tech. Officer: LARC/F H FARMER, LARC/W T YOST
CASE Category: 56 – MEDICL

NAG 2 1313 UNIV OF CALIFORNIA - SAN DIEGO 2547
 THE DEVELOPMENT OF PILOT EXPERTISE IN THE AIRBUS A 320 AIRCRAFT
 04/01/1999 - 06/30/2002 FY02: \$0 Total: \$297,084
Prin. Invest.: E L HUTCHINS
Tech. Officer: ARC/S M CASNER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1376 UNIV OF CALIFORNIA - SAN DIEGO 2548
 EVOLUTION OF NEURAL CREST & PLACODES: AMPHIOXUS A S A MODEL
 FOR THE ANCESTROOF THE VERTEBRATES
 08/17/1999 - 06/30/2003 FY02: \$40,482 Total: \$229,114
Prin. Invest.: L Z HOLLAND
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2117 UNIV OF CALIFORNIA - SAN DIEGO 2549
 DYNAMICS OF ACCELERATED INTERFACES: PARAMETRIC EXC ITATION
 AND FLUID SLOSHINGIN CLOSED CONTAINERS A
 01/28/1998 - 12/18/2002 FY02: \$0 Total: \$233,000
Prin. Invest.: C POZRIKIDIS
Tech. Officer: GRC/J R SKARDA
CASE Category: 13 – PHYSICS

NAG 3 2465 UNIV OF CALIFORNIA - SAN DIEGO 2550
 VIBRATORY DYNAMICS AND TRANSPORT OF GRANULAR MEDIA AT VARI-
 OUS G LEVELS
 06/19/2000 - 11/30/2003 FY02: \$80,000 Total: \$206,000
Prin. Invest.: J D GODDARD
Tech. Officer: GRC/M E HILL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2554 UNIV OF CALIFORNIA - SAN DIEGO 2551
 STRETCHED DIFFUSION FLAMES IN VON KARMAN SWIRLING FLOWS
 03/15/2001 - 11/30/2004 FY02: \$10,066 Total: \$19,966
Prin. Invest.: F WILLIAMS
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4023 UNIV OF CALIFORNIA - SAN DIEGO 2552
 ADVANCED GLOBAL ATMOSPHERIC GASES EXPERIMENT (AGAG
 03/25/1997 - 12/31/2002 FY02: \$509,687 Total: \$2,847,606
Prin. Invest.: R F WEISS
Tech. Officer: GSFC/M J KURYLO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4546 UNIV OF CALIFORNIA - SAN DIEGO 2553
 NASA SPECIALIZED CENTER OF RESEARCH AND TRAINING I THE CHEM-
 ISTRY OF EARLY SELF-REPLICATING SYSTEMS
 05/06/1997 - 03/31/2003 FY02: \$0 Total: \$4,716,000
Prin. Invest.: P L BADA
Tech. Officer: HQ/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 4574 UNIV OF CALIFORNIA - SAN DIEGO 2554
 METEORITIC SULFUR ISOTOPIC ANALYSIS
 07/07/1997 - 02/28/2002 FY02: \$0 Total: \$172,000
Prin. Invest.: D H THIEMENS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4775 UNIV OF CALIFORNIA - SAN DIEGO 2555
 AN INTEGRATED SYSTEM FOR WATER BUDGET CLOSURE OVER MASS: A
 TRMM VALIDATION EFFORT
 07/15/1997 - 06/30/2001 FY02: -\$38 Total: \$172,962
Prin. Invest.: J O ROADS
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4938 UNIV OF CALIFORNIA - SAN DIEGO 2556
 MICRO-DETECTION SYSTEM FOR DETERMINATION OF THE BI OF AMINO
 ACIDS
 06/23/1997 - 05/31/2001 FY02: \$0 Total: \$130,000
Prin. Invest.: P L BADA
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 5266 UNIV OF CALIFORNIA - SAN DIEGO 2557
 CRYOGENIC WHOLE AIR SAMPLING OF CARBON DIOXIDE IN THE UPPER
 ATMOSPHERE
 06/01/2000 - 05/24/2003 FY02: \$58,000 Total: \$164,600
Prin. Invest.: M H THIEMENS
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5287 UNIV OF CALIFORNIA - SAN DIEGO 2558
 BALLOON-BORNE HIGH ENERGY X-RAY IMAGING SPECTROMETER (HEXIS)
 BASED ON CZT TECHNOLOGY
 05/31/2000 - 05/17/2003 FY02: \$200,000 Total: \$345,000
Prin. Invest.: J L MATTESON
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5332 UNIV OF CALIFORNIA - SAN DIEGO 2559
 FULL FUNDING FOR THE 1ST YEAR, GRANT AMOUNT IS 70K , PI:LINGEN-
 FELTER TITLE: NEW THEORETICAL STUD
 05/30/2001 - 02/28/2004 FY02: \$70,000 Total: \$140,000
Prin. Invest.: D LINGENFELTER
Tech. Officer: WFF/B MERRITT
CASE Category: 11 – ASTRONOMY

NAG 5 5349 UNIV OF CALIFORNIA - SAN DIEGO 2560
 POSITION-SENSITIVE CZT DETECTORS FOR GAMMA-RAY ASTROPHYSICS
 01/16/2002 - 01/07/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: J MATTESON
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5386 UNIV OF CALIFORNIA - SAN DIEGO 2561
 IDENTIFICATION OF THE IMPORTANT PARAMETERS DESCRIBING THE
 SHEAR STRESS ACTING ON THE BLOOD VESSEL
 09/12/2002 - 12/31/2003 FY02: \$28,000 Total: \$28,000
Prin. Invest.: D HUANG
Tech. Officer: WFF/S LONG
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6149 UNIV OF CALIFORNIA - SAN DIEGO 2562
 OCEAN TIDE LOADING COMPUTATION
 08/21/1997 - 08/31/2001 FY02: \$0 Total: \$41,810
Prin. Invest.: D C AGNEW
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6202 UNIV OF CALIFORNIA - SAN DIEGO 2563
 EFFECTS OF WHITECAPS ON SATELLITE-DERIVED OCEAN COLOR
 10/02/1997 - 12/31/2000 FY02: \$0 Total: \$490,000
Prin. Invest.: R FROUIN
Tech. Officer: GSFC/J A YODER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6375 UNIV OF CALIFORNIA - SAN DIEGO 2564
 BIOGEOCHEMICAL RESPONSE TO MESOSCALE PHYSICAL FORCING IN
 THE CALIFORNIA CURRENT SYSTEM
 10/03/1997 - 03/31/2001 FY02: \$0 Total: \$424,978
Prin. Invest.: P MILLER
Tech. Officer: GSFC/J A YODER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 6414 UNIV OF CALIFORNIA - SAN DIEGO 2565
 MODELING UV-B EFFECTS ON PRIMARY PRODUCTION THROUGHOUT THE
 SOUTHERN OCEAN USING MULTI-SENSOR SA
 10/29/1997 - 10/31/2001 FY02: \$0 Total: \$396,868
Prin. Invest.: D LUBIN
Tech. Officer: GSFC/K ARRIGO
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 5 6466 UNIV OF CALIFORNIA - SAN DIEGO 2566
 OPTICAL AND ANCILLARY MEASUREMENTS AT HIGH LATITUDES IN
 SUPPORT OF THE MODIS OCEAN VALIDATION
 11/04/1997 - 09/30/2002 FY02: \$0 Total: \$224,288
Prin. Invest.: D STRAMSKI
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6497 UNIV OF CALIFORNIA - SAN DIEGO 2567
 PREDICTABILITY OF THE CALIFORNIA CURRENT SYSTEM
 10/08/1997 - 10/14/2001 FY02: \$0 Total: \$633,198
Prin. Invest.: D MILLER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6559 UNIV OF CALIFORNIA - SAN DIEGO 2568
 SEASONAL TO DECADEAL-SCALE VARIABILITY IN SATELLITE OCEAN COLOR
 AND SEA SURFACE TEMPERATURE FOR THE
 10/27/1997 - 04/30/2001 FY02: \$0 Total: \$352,860
Prin. Invest.: B MITCHELL
Tech. Officer: GSFC/J YODER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6668 UNIV OF CALIFORNIA - SAN DIEGO 2569
 SOUTHERN OCEAN SEASONAL NET PRODUCTION FROM ATMOSPHERE
 AND OCEAN DATASETS
 11/26/1997 - 06/30/2001 FY02: \$0 Total: \$311,173
Prin. Invest.: R F KEELING
Tech. Officer: GSFC/J CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6931 UNIV OF CALIFORNIA - SAN DIEGO 2570
 EQUATOR-S: MISSION OPERATIONS & DATA ANALYSIS PHASE
 02/02/1998 - 01/31/2001 FY02: \$0 Total: \$120,202
Prin. Invest.: C E MCILWAIN
Tech. Officer: GSFC/M HESSE
CASE Category: 13 – PHYSICS

NAG 5 6947 UNIV OF CALIFORNIA - SAN DIEGO 2571
 NUMERICAL AND ANALYTICAL STUDIES OF THE SHOCKED SOLAR WIND
 INTERACTION WITH THE DAYSIDE MANTLE OF V
 02/26/1998 - 03/31/2002 FY02: \$0 Total: \$235,914
Prin. Invest.: K QUEST
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7096 UNIV OF CALIFORNIA - SAN DIEGO 2572
 ANOMALOUS HEAT BUDGETS IN INTERIOR PACIFIC OCEAN ON SEASONAL
 TO INTERANNUAL TIMESCALES
 05/27/1998 - 09/30/2002 FY02: \$0 Total: \$379,886
Prin. Invest.: W WHITE
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 7100 UNIV OF CALIFORNIA - SAN DIEGO 2573
 OPTICAL MEASUREMENTS AND MODELING TO ESTIMATE CONCENTRATIONS
 AND FLUXES OF ORGANIC MATTER IN THE SOUTHERN OCEAN
 06/04/1998 - 05/31/2001 FY02: -\$109 Total: \$469,755
Prin. Invest.: D STRAMSKI
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7119 UNIV OF CALIFORNIA - SAN DIEGO 2574
 ANALYSIS OF SKY FLUCTUATIONS FROM HEXTE III; EXAMINATION OF THE
 CYCLOTRON LINES IN THE SPECTRUM OF
 04/16/1998 - 03/31/2001 FY02: \$0 Total: \$26,128
Prin. Invest.: D E GRIBER
Tech. Officer: GSFC/K SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 7362 UNIV OF CALIFORNIA - SAN DIEGO 2575
 ASCA PROPOSAL - ASCA AND HST OBSERVATIONS OF BL LA C 0236+164
 AND THE INTERVENING SYSTEM
 05/05/1998 - 04/30/2002 FY02: \$0 Total: \$14,000
Prin. Invest.: R D COHEN
Tech. Officer: GSFC/N WHITE
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 7612 UNIV OF CALIFORNIA - SAN DIEGO 2576
 IMPROVED SPECTRAL CHARACTERIZATION OF THE GEOMAGNETIC FIELD
 (SENH98-0124)
 07/24/1998 - 05/31/2002 FY02: \$0 Total: \$224,000
Prin. Invest.: R L PARKER
Tech. Officer: GSFC/H B FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7614 UNIV OF CALIFORNIA - SAN DIEGO 2577
 FUNDING FOR "EARTH CONDUCTIVITY FROM SATELLITE MAGNETIC
 DATA" (SENH98-0123)
 07/24/1998 - 07/14/2002 FY02: \$0 Total: \$254,000
Prin. Invest.: C G CONSTABLE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7637 UNIV OF CALIFORNIA - SAN DIEGO 2578
 CO2 BUDGET AND ATMOSPHERIC RECTIFICATION OVER NORTH AMERICA
 (CO2BAR)
 11/30/1998 - 11/30/2002 FY02: \$0 Total: \$65,000
Prin. Invest.: R F KEELING
Tech. Officer: GSFC/D E WICKLANS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7653 UNIV OF CALIFORNIA - SAN DIEGO 2579
 QUANTITATIVE ASSESSMENT OF THE INTEGRATED RESPONSE IN GLOBAL
 HEAT AND MOISTURE BUDGETS TO CHANGING
 08/25/1998 - 08/31/2001 FY02: \$0 Total: \$210,000
Prin. Invest.: W WHITE
Tech. Officer: HQ/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 8167 UNIV OF CALIFORNIA - SAN DIEGO 2580
 FRAGMENTARY SOLAR SYSTEM HISTORY
 02/10/1999 - 01/31/2003 FY02: \$0 Total: \$359,000
Prin. Invest.: D MARTI
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8172 UNIV OF CALIFORNIA - SAN DIEGO 2581
 ISOTOPIC, CHEMICAL AND MINERALOGICAL INVESTIGATIONS OF EXTRA-
 TERRESTRIAL MATERIALS
 02/24/1999 - 02/28/2003 FY02: \$0 Total: \$775,000
Prin. Invest.: G W LUNGMAIR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8180 UNIV OF CALIFORNIA - SAN DIEGO 2582
 ADVANCED GLOBAL ATMOSPHERIC GASES EXPERIMENT (AGAGE)
 02/12/1999 - 12/31/2002 FY02: \$88,202 Total: \$352,394
Prin. Invest.: R F WEISS
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8252 UNIV OF CALIFORNIA - SAN DIEGO 2583
 ANTARCTIC ULTRAVIOLET RADIATION CLIMATOLOGY FROM THE TOTAL
 ZONE MAPPING SPECTROMETER
 02/19/1999 - 02/28/2003 FY02: \$0 Total: \$285,000
Prin. Invest.: D LUBIN
Tech. Officer: GSFC/J R HERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8272 UNIV OF CALIFORNIA - SAN DIEGO 2584
 A SEARCH FOR EXTRASOLAR PLANETS IN OPEN CLUSTERS
 03/05/1999 - 02/28/2002 FY02: \$0 Total: \$133,400
Prin. Invest.: D GUIRRENBACH
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8292 UNIV OF CALIFORNIA - SAN DIEGO 2585
 SEASONAL ATMOSPHERIC AND OCEANIC PREDICTIONS
 02/25/1999 - 02/28/2003 FY02: \$0 Total: \$420,000
Prin. Invest.: J O ROADS
Tech. Officer: GSFC/M REINECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8322 UNIV OF CALIFORNIA - SAN DIEGO 2586
 BAYESIAN HIERARCHICAL AIR-SEA INTERACTION MODELING: APPLICATION
 TO THE LABRADOR SEA
 04/13/1999 - 05/31/2002 FY02: \$0 Total: \$62,574
Prin. Invest.: P NILER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8351 UNIV OF CALIFORNIA - SAN DIEGO 2587
 THE APPLICATION OF JASON-1 MEASUREMENTS TO ESTIMATE THE
 GLOBAL NEAR SURFACE OCEAN CIRCULATION
 03/01/1999 - 03/31/2003 FY02: \$75,000 Total: \$429,000
Prin. Invest.: P P NILER
Tech. Officer: GSFC/C KOBLINSKY
CASE Category: 33 – OCEANOGRAPHY

NAG 5 8498 UNIV OF CALIFORNIA - SAN DIEGO 2588
 THE HIGH ENERGY X-RAY IMAGING SURVEY (HEXIS)
 05/27/1999 - 05/31/2002 FY02: \$0 Total: \$755,000
Prin. Invest.: R E ROTHSCHILD
Tech. Officer: GSFC/L KALUZIENSKI
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8504 UNIV OF CALIFORNIA - SAN DIEGO 2589
 RECONSTRUCTION OF THE PLASMA DISTRIBUTION IN CORONA AND
 HELIOSPHERER
 05/11/1999 - 04/30/2003 FY02: \$0 Total: \$249,053
Prin. Invest.: B V JACKSON
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8551 UNIV OF CALIFORNIA - SAN DIEGO 2590
 ORGANIC CONSTITUENTS OF SHORT-PERIOD COMETS
 06/04/1999 - 05/31/2003 FY02: \$76,330 Total: \$221,052
Prin. Invest.: M N FOMENKOVA
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8623 UNIV OF CALIFORNIA - SAN DIEGO 2591
 NUMERICAL CLIMATE OBSERVING NETWORK DESIGN STUDY
 08/09/1999 - 08/31/2003 FY02: \$98,176 Total: \$439,898
Prin. Invest.: D STAMMER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8731 **UNIV OF CALIFORNIA - SAN DIEGO** **2592**
 ADVANCED CADMIUM-ZINC-TELLURIDE DETECTORS FOR RESE ARCH IN
 ASTROPHYSICS
 08/17/1999 - 08/14/2003 FY02: \$0 Total: \$260,577
Prin. Invest.: J L MATTESON
Tech. Officer: GSFC/F A HERRERO
CASE Category: 11 – ASTRONOMY

NAG 5 8768 **UNIV OF CALIFORNIA - SAN DIEGO** **2593**
 DYNAMIC HUMAN-CENTERED INTERFACES: MONITORING ATTE NTIONAL
 PROCESSES IN CONTROL OF CRITICAL SYSTEMS
 08/26/1999 - 08/31/2001 FY02: \$0 Total: \$315,345
Prin. Invest.: T JUNG
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8780 **UNIV OF CALIFORNIA - SAN DIEGO** **2594**
 ROUTINE HIGH-RESOLUTION, ATMOSPHERIC FORCAST/ANALYSIS MODEL-
 ING SYSTEMS FOR THE PACIFIC DISASTER CE
 08/30/1999 - 08/31/2001 FY02: \$0 Total: \$575,555
Prin. Invest.: J ROADS
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8901 **UNIV OF CALIFORNIA - SAN DIEGO** **2595**
 ESTIMATING THE OCEAN FLOW FIELD FROM COMBINED SEA SURFACE
 TEMPERATURE AND SEASURFACE HEIGHT DATA
 01/04/2000 - 01/14/2002 FY02: \$0 Total: \$161,672
Prin. Invest.: D STAMMER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 9005 **UNIV OF CALIFORNIA - SAN DIEGO** **2596**
 ANALYSIS AND INTERPRETATION OF NEAR XGRS DATA
 01/27/2000 - 01/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: J R ARNOLD
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9036 **UNIV OF CALIFORNIA - SAN DIEGO** **2597**
 MEASUREMENT OF ELECTRIC FIELDS WITH MULTIPLE SPREAD ELECTRON
 BEAMS
 02/10/2000 - 02/14/2002 FY02: \$0 Total: \$92,500
Prin. Invest.: C MCILWAIN
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 9122 **UNIV OF CALIFORNIA - SAN DIEGO** **2598**
 PROBING THE SPECTRAL EVOLUTION OF PARTICLES IN THE BLAZAR MKN
 421_ ADP99
 03/07/2000 - 10/31/2001 FY02: -\$35,401 Total: \$14,191
Prin. Invest.: D FOSSATI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9224 **UNIV OF CALIFORNIA - SAN DIEGO** **2599**
 COSMOLOGICAL PARAMETERS FROM THE LYMAN-ALPHA FOREST (L TSA
 99)
 03/14/2000 - 03/14/2003 FY02: \$179,920 Total: \$267,893
Prin. Invest.: D TYTLER
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9247 **UNIV OF CALIFORNIA - SAN DIEGO** **2600**
 THERMAL & NONTHERMAL COMPONENTS IN THE SPECTRA OF A2319 &
 A1367 FROM RXTE & SAX OBSERVATIONS (ADP 99
 03/14/2000 - 03/14/2002 FY02: \$0 Total: \$49,739
Prin. Invest.: Y REPHAELI
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9314 **UNIV OF CALIFORNIA - SAN DIEGO** **2601**
 3-D GLOBAL KINETIC SIMULATIONS OF SOLAR WIND INTER ACTION WITH
 ASTEROIDS: DETERMINATION OF MAGNETIC P
 03/23/2000 - 09/14/2001 FY02: \$0 Total: \$89,723
Prin. Invest.: N OMIDI
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9423 **UNIV OF CALIFORNIA - SAN DIEGO** **2602**
 TOMOGRAPHIC ANALYSIS AND VISUALIZATION OF REMOTELY -SENSED
 HELIOSPHERIC DATA
 04/13/2000 - 04/30/2003 FY02: \$99,600 Total: \$297,000
Prin. Invest.: B V JACKSON
Tech. Officer: GSFC/P HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9506 **UNIV OF CALIFORNIA - SAN DIEGO** **2603**
 THE PIXON METHOD FOR DATA COMPRESSION, IMAGE CLASS I FICATION,
 AND IMAGE RECONSTRUCTION
 04/26/2000 - 04/30/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: R P PUETTER
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9566 **UNIV OF CALIFORNIA - SAN DIEGO** **2604**
 EMERGENCE OF RNA AND EARLY LIFE; EXPERIMENTAL MODE LING AND
 GEOCHEMICAL CONSTRAINTS
 05/05/2000 - 05/14/2001 FY02: \$0 Total: \$80,000
Prin. Invest.: G ARRHENIUS
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9623 **UNIV OF CALIFORNIA - SAN DIEGO** **2605**
 TOPOGRAPHIC RECOVERY FROM SPACEBORN RADAR & LASED RANGING:
 VALIDATION & INVESTIGATION OF PLATE BOUN
 06/12/2000 - 05/31/2003 FY02: \$40,000 Total: \$120,000
Prin. Invest.: D T SANDWELL
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9659 **UNIV OF CALIFORNIA - SAN DIEGO** **2606**
 MICRO-DETECTION SYSTEM FOR DETERMINATION OF THE BIOTIC OR
 ABIOTIC ORIGIN OF AMINO ACIDS
 05/31/2000 - 05/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: J L BADA
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 9679 **UNIV OF CALIFORNIA - SAN DIEGO** **2607**
 ISOTOPIC FRACTIONATION PROCESSES DURING PRE-SOLAR GRAIN FOR-
 MATION
 06/15/2000 - 06/14/2001 FY02: \$0 Total: \$35,000
Prin. Invest.: M H THIEMENS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9721 UNIV OF CALIFORNIA - SAN DIEGO 2608
 A PHYSICALLY BASED APPROACH TO CONSTRUCTION OF A CLIMATE-
 QUALITY SST RECORD FROM COMPLEMENTARY SP
 06/22/2000 - 06/30/2003 FY02: \$171,250 Total: \$441,250
Prin. Invest.: J J SIMPSON
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9788 UNIV OF CALIFORNIA - SAN DIEGO 2609
 OCEAN CARBON FLUX: TRANSPORTS & BURIAL WITHIN THE WESTERN &
 EASTERN U.S. COASTAL ZONES
 07/28/2000 - 07/31/2003 FY02: \$101,250 Total: \$292,500
Prin. Invest.: A MILLER
Tech. Officer: GSFC/E LINSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9825 UNIV OF CALIFORNIA - SAN DIEGO 2610
 RXTE OBSERVATIONS OF AGN (ADP 99)
 08/15/2000 - 08/14/2001 FY02: \$0 Total: \$20,000
Prin. Invest.: P R BLANCO
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10065 UNIV OF CALIFORNIA - SAN DIEGO 2611
 INVESTIGATING THE GROUNDING ZONE & TIDAL RESPONSE OF THE
 AMERY ICE SHELF, EAST ANTARCTICA, USING
 11/20/2000 - 11/30/2003 FY02: \$64,021 Total: \$127,640
Prin. Invest.: D SANDWELL
Tech. Officer: GSFC/K PARTINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10276 UNIV OF CALIFORNIA - SAN DIEGO 2612
 SEASONAL TO DECADEAL-SCALE VARIABILITY IN SATELLITE OCEAN COLOR
 & SEA SURFACE TEMPERATURE FOR CALIFOR
 01/19/2001 - 04/30/2002 FY02: \$0 Total: \$111,000
Prin. Invest.: B MITCHELL
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10487 UNIV OF CALIFORNIA - SAN DIEGO 2613
 ISOTOPIC FRACTIONATION PROCESSES DURING PRE-SOLAR GRAIN FOR-
 MATION
 02/27/2001 - 04/30/2004 FY02: \$35,000 Total: \$70,000
Prin. Invest.: M H THIEMENS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10644 UNIV OF CALIFORNIA - SAN DIEGO 2614
 PENETRATION OF UV RADIATION IN THE EARTH'S OCEANS (YR 1 OF 3)
 03/21/2001 - 03/31/2004 FY02: \$90,586 Total: \$178,140
Prin. Invest.: G MITCHELL
Tech. Officer: GSFC/J R HERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10667 UNIV OF CALIFORNIA - SAN DIEGO 2615
 NITROGEN, CARBON AND PHOSPHATE IN THE OLDEST PRESERVED
 CRUST OF THE EARTH
 03/21/2001 - 03/31/2004 FY02: \$139,400 Total: \$264,900
Prin. Invest.: G ARRHENIUS
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10669 UNIV OF CALIFORNIA - SAN DIEGO 2616
 NATIONAL SUMMIT ON INNOVATION WEBCAST
 03/23/2001 - 03/31/2002 FY02: \$0 Total: \$94,285
Prin. Invest.: E FURTEK
Tech. Officer: GSFC/J GASCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10691 UNIV OF CALIFORNIA - SAN DIEGO 2617
 A UNIFORM STUDY OF X-RAY PULSAR MAGNETIC FIELDS
 04/09/2001 - 04/14/2003 FY02: \$42,712 Total: \$110,381
Prin. Invest.: W HEINDL
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10737 UNIV OF CALIFORNIA - SAN DIEGO 2618
 TIME SERIES OF CONTINUOUS MEASUREMENTS OF ATMOSPHERIC O₂
 AND CO₂ CONCENTRATIONS FOR ELUCIDATING
 04/20/2001 - 04/30/2004 FY02: \$284,800 Total: \$523,108
Prin. Invest.: R KEELING
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10871 UNIV OF CALIFORNIA - SAN DIEGO 2619
 NONTHERMAL PHENOMENA IN CLUSTERS OF GALAXIES (LTSA 2000)
 05/10/2001 - 05/31/2006 FY02: \$102,834 Total: \$161,788
Prin. Invest.: Y REPHAELI
Tech. Officer: GSFC/R OLIVERSON
CASE Category: 11 – ASTRONOMY

NAG 5 10874 UNIV OF CALIFORNIA - SAN DIEGO 2620
 SOLAR WIND FLOWS FROM ACTIVE REGIONS
 05/14/2001 - 02/28/2003 FY02: \$0 Total: \$80,102
Prin. Invest.: P HICK
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10886 UNIV OF CALIFORNIA - SAN DIEGO 2621
 STATE TRANSITIONS AND QPOS IN X-RAY TRANSIENTS (ADP 00)
 05/03/2001 - 11/30/2002 FY02: \$0 Total: \$37,558
Prin. Invest.: J TOMSICK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10968 UNIV OF CALIFORNIA - SAN DIEGO 2622
 THE RESPONSE TO CZT DETECTORS TO X-RAYS
 06/06/2001 - 06/14/2002 FY02: \$0 Total: \$51,827
Prin. Invest.: R E ROTHSCCHILD
Tech. Officer: GSFC/F HERRERO
CASE Category: 11 – ASTRONOMY

NAG 5 10993 UNIV OF CALIFORNIA - SAN DIEGO 2623
 KINETIC INTERACTION OF THE PLASMA MANTLES OF UNMAGNETIZED
 PLANETS WITH THE SOLAR WIND
 05/31/2001 - 05/31/2002 FY02: \$0 Total: \$39,000
Prin. Invest.: K QUEST
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11123 UNIV OF CALIFORNIA - SAN DIEGO 2624
 MODEL HELIOSPHERIC DISTURBANCE PROPAGATION USING REMOTE
 SENSING OBSERVATIONS
 07/18/2001 - 07/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: B V JACKSON
Tech. Officer: GSFC/W J WAGNER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11217 UNIV OF CALIFORNIA - SAN DIEGO 2625
 USE OF ATMOSPHERIC CO₂, VEGETATIVE INDEX, AND DAILY CLIMATIC
 DATA IN A COORDINATED DIAGNOSTIC INVE
 08/13/2001 - 08/31/2004 FY02: \$82,483 Total: \$323,665
Prin. Invest.: C KEELING
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11554 UNIV OF CALIFORNIA - SAN DIEGO 2626
 FRAGMENTARY SOLAR SYSTEM HISTORY
 01/09/2002 - 01/14/2003 FY02: \$120,000 Total: \$120,000
Prin. Invest.: K MARTI
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11563 UNIV OF CALIFORNIA - SAN DIEGO 2627
 GEOPHYSICAL INVESTIGATIONS OF THE TERRESTRIAL PLANETS
 01/17/2002 - 02/28/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: C L JOHNSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11599 UNIV OF CALIFORNIA - SAN DIEGO 2628
 EVALUATION OF HYDROLOGIC REMOTE SENSING OBSERVATIONS FOR
 IMPROVED WEATHER PREDICTION.
 01/28/2002 - 01/31/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: J ROADS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11637 UNIV OF CALIFORNIA - SAN DIEGO 2629
 RADIATION STUDIES IN SUPPORT OF THE CRYSTAL-FACE PROJECT
 01/23/2002 - 01/31/2004 FY02: \$218,451 Total: \$218,451
Prin. Invest.: F P VALERO
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11660 UNIV OF CALIFORNIA - SAN DIEGO 2630
 METEORITIC SULPHUR AND OXYGEN ISOTOPIC ANALYSIS
 02/05/2002 - 02/28/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: M H THIEMENS
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 11682 UNIV OF CALIFORNIA - SAN DIEGO 2631
 ORBITAL, ROTATIONAL, AND CLIMATIC INTERACTIONS ON MARS.
 01/31/2002 - 02/14/2005 FY02: \$41,000 Total: \$41,000
Prin. Invest.: J A ORCUTT
Tech. Officer: GSFC/B BILLS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11716 UNIV OF CALIFORNIA - SAN DIEGO 2632
 PARAMETERIZATION OF CLOUD WATER VARIABILITY FROM EOS OBSER-
 VATIONS AND ITS IMPACT ON GCM CLIMATE
 02/28/2002 - 02/28/2005 FY02: \$154,815 Total: \$154,815
Prin. Invest.: A VOGELMANN
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11731 UNIV OF CALIFORNIA - SAN DIEGO 2633
 "IMPACT OF SYNOPTIC FORCING ON EXTRATROPICAL CLOUDINESS AND
 CLIMATE VARIABILITY"
 02/14/2002 - 02/28/2005 FY02: \$110,000 Total: \$110,000
Prin. Invest.: J NORRIS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11738 UNIV OF CALIFORNIA - SAN DIEGO 2634
 A GLOBAL RAPID INTEGRATED MONITORING SYSTEM FOR WATER CYCLE
 AND WATER RESOURCE ASSESSMENT (GLOBAL
 02/12/2002 - 02/14/2005 FY02: \$37,700 Total: \$37,700
Prin. Invest.: J ROADS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11754 UNIV OF CALIFORNIA - SAN DIEGO 2635
 COLLISIONLESS INTERACTION OF THE SOLAR WIND WITH THE EARTH'S
 MAGNETOSPHERE: THE GLOBAL NATURE
 02/27/2002 - 03/31/2005 FY02: \$175,000 Total: \$175,000
Prin. Invest.: H KARIMABADI
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 11765 UNIV OF CALIFORNIA - SAN DIEGO 2636
 STUDYING THE OCEAN FLOW FIELD FROM COMBINED ANALYSIS OF SEA
 SURFACE HEIGHT, SEA SURFACE TEMPERA
 02/21/2002 - 02/28/2005 FY02: \$142,013 Total: \$142,013
Prin. Invest.: D STAMMER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11768 UNIV OF CALIFORNIA - SAN DIEGO 2637
 ISOTOPIC, CHEMICAL & MINERALOGICAL INVESTIGATIONS OF EXTRATER-
 RESTRIAL MATERIALS
 02/22/2002 - 02/28/2005 FY02: \$280,000 Total: \$280,000
Prin. Invest.: G W LUGMAIR
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11824 UNIV OF CALIFORNIA - SAN DIEGO 2638
 THREE DIMENSIONAL HYBRID SIMULATION OF RECONNECTION AT THE
 DAYSIDE MAGNETOPAUSE
 03/07/2002 - 03/14/2005 FY02: \$93,818 Total: \$93,818
Prin. Invest.: K B QUEST
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11906 UNIV OF CALIFORNIA - SAN DIEGO 2639
 DETERMINATION OF THE MASS AND ENERGY CONTENT OF CMES IN THE
 INNER HELIOSPHERE
 04/12/2002 - 04/14/2005 FY02: \$91,834 Total: \$91,834
Prin. Invest.: P P HICK
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 12139 UNIV OF CALIFORNIA - SAN DIEGO 2640
 INTEGRATION OF A MICRO-CHIP ACID CHIRALITY DETECTOR INTO THE
 MOD INSTRUMENT CONCEPT
 05/06/2002 - 04/30/2004 FY02: \$149,900 Total: \$149,900
Prin. Invest.: J L BADA
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 12190 UNIV OF CALIFORNIA - SAN DIEGO 2641
 MEASUREMENT OF ELECTROMAGNETIC FIELDS VIA FLIGHT TIMES FROM
 SPREAD-BEAM ELECTRON SOURCES
 05/14/2002 - 05/14/2003 FY02: \$93,376 Total: \$93,376
Prin. Invest.: C E MCIWAIN
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12281 UNIV OF CALIFORNIA - SAN DIEGO 2642
 LITHOSPHERIC THICKNESS ON VENUS FROM MAGELLAN GRAVITY AND
 TOPOGRAPHY DATA
 06/10/2002 - 03/31/2003 FY02: \$120,752 Total: \$120,752
Prin. Invest.: C L JOHNSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12312 UNIV OF CALIFORNIA - SAN DIEGO 2643
 SOFTWARE FOR CONSTRAINED OPTIMIZATION
 06/26/2002 - 08/31/2003 FY02: \$22,817 Total: \$22,817
Prin. Invest.: P E GILL
Tech. Officer: GSFC/S P HUGHES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12345 UNIV OF CALIFORNIA - SAN DIEGO 2644
 VARIATIONS IN THE HOT ISM (FUSE 00)
 08/06/2002 - 09/30/2003 FY02: \$74,447 Total: \$74,447
Prin. Invest.: C HOWK
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12388 UNIV OF CALIFORNIA - SAN DIEGO 2645
 TOPOGRAPHY, TOPEX AND TIDES
 07/17/2002 - 07/14/2005 FY02: \$56,571 Total: \$56,571
Prin. Invest.: S G LLEWELLYN SMITH
Tech. Officer: GSFC/S HAKKINEN
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12397 UNIV OF CALIFORNIA - SAN DIEGO 2646
 REMOTE SENSING OF PARTICULATE ORGANIC CARBON POOLS IN THE
 HIGH-LATITUDE OCEANS
 07/23/2002 - 07/31/2005 FY02: \$29,864 Total: \$29,864
Prin. Invest.: D STRAMSKI
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12465 UNIV OF CALIFORNIA - SAN DIEGO 2647
 QUANTITATIVE ASSESSMENT OF THE INTEGRATED RESPONSE IN GLOBAL
 HEAT AND MOISTURE BUDGETS TO CHANGING
 08/15/2002 - 08/14/2005 FY02: \$119,530 Total: \$119,530
Prin. Invest.: W B WHITE
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12535 UNIV OF CALIFORNIA - SAN DIEGO 2648
 INFLUENCE OF IRON AVAILABILITY ON PHYTOPLANKTON PRODUCTIVITY
 AND COMMUNITY STRUCTURE IN THE SOUTHERN
 09/11/2002 - 09/14/2005 FY02: \$89,383 Total: \$89,383
Prin. Invest.: K BARBEAU
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1516 UNIV OF CALIFORNIA - SAN DIEGO 2649
 VARIABILITY AND PREDICTABILITY OF LAND-ATMOSPHERE OBSERVA-
 TIONAL AND MODELING STUDIES
 05/12/1998 - 04/30/2002 FY02: \$0 Total: \$161,023
Prin. Invest.: J ROADS
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1571 UNIV OF CALIFORNIA - SAN DIEGO 2650
 CARTILAGE TISSUE ENGINEERING: CIRCUMFERENTIAL SEEDING OF
 CHONDROCYTES USING ROTATING BIOREACTORS
 01/12/1999 - 11/30/2002 FY02: \$153,000 Total: \$555,550
Prin. Invest.: R L SAH
Tech. Officer: JSC/D RISEN
CASE Category: 56 – MEDICAL

NAG 8 1589 UNIV OF CALIFORNIA - SAN DIEGO 2651
 NOVEL STRATEGY FOR TRI-DIMENSIONAL IN VITRO BONE INDUCTION
 02/25/1999 - 11/30/2002 FY02: \$29,000 Total: \$362,650
Prin. Invest.: J A FRANGOS
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1875 UNIV OF CALIFORNIA - SAN DIEGO 2652
 FEEDBACK MECHANISMS AFFECTING INTERANNUAL VARIABILITY OF THE
 TROPICAL ENERGY BALANCE
 07/16/2002 - 07/31/2005 FY02: \$48,000 Total: \$48,000
Prin. Invest.: J O ROADS
Tech. Officer: MSFC/P ROBERTSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 9 1002 UNIV OF CALIFORNIA - SAN DIEGO 2653
 DETERMINING OXYGEN BLANK & SUITABILITY CVD DIAMOND
 04/30/1998 - 05/31/2002 FY02: \$0 Total: \$394,000
Prin. Invest.: M H THIEMENS
Tech. Officer: JSC/E K STANSBERRY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1425 UNIV OF CALIFORNIA - SAN DIEGO 2654
 EXERCISE WITHIN LBNP AS AN ARTIFICIAL GRAVITY COUNTER MEASURE
 05/24/2002 - 05/31/2005 FY02: \$126,547 Total: \$126,547
Prin. Invest.: A HARGENS
Tech. Officer: JSC/C LLYOD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 98141 UNIV OF CALIFORNIA - SAN DIEGO 2655
 A STUDY OF CLOUD RADIATIVE FORCING AND FEEDBACK (CERES)
 10/30/1998 - 10/29/2003 FY02: \$66,258 Total: \$767,837
Prin. Invest.: V RAMANATHAN
Tech. Officer: LARC/B A WIELICKI, LARC/R L HUFFMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 00194 UNIV OF CALIFORNIA - SAN DIEGO 2656
 SIMBIOS II - SATELLITE OCEAN COLOR VALIDATION USING
 01/23/2001 - 11/30/2002 FY02: \$272,591 Total: \$473,333
Prin. Invest.: R FROUIN
Tech. Officer: GSFC/C R MCCAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 01002 **UNIV OF CALIFORNIA - SAN DIEGO** **2657**
 SIMBIOS II-BIO OPTICAL MEASUREMENT AND MODELING OF THE NORTH
 PACIFIC & SOUTHERN OCEANS
 01/23/2001 - 11/30/2002 FY02: \$219,297 Total: \$495,916
Prin. Invest.: B G MITCHELL
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 30720 **UNIV OF CALIFORNIA - SAN DIEGO** **2658**
 HIGH ENERGY X-RAY TIMING EXPERIMENT FOR XTE PROJECT
 11/01/1989 - 12/15/2002 FY02: \$593,242 Total: \$31,081,564
Prin. Invest.: R E ROTHSCCHILD
Tech. Officer: GSFC/W D DAVIS
CASE Category: 11 – ASTRONOMY

NAS 5 97121 **UNIV OF CALIFORNIA - SAN DIEGO** **2659**
 PULSE SHAPE DISCRIMINATOR FOR INTEGRAL SPECTROMETER (LETTER
 CONTRACT)
 01/24/1997 - 01/31/2003 FY02: \$568,027 Total: \$6,274,095
Prin. Invest.: J L MATTESON, R P LIN
Tech. Officer: GSFC/J P MURPHY
CASE Category: 11 – ASTRONOMY

NAS 5 99006 **UNIV OF CALIFORNIA - SAN DIEGO** **2660**
 GLAS SCIENCE TEAM LEADER.
 11/25/1998 - 12/01/2002 FY02: \$293,000 Total: \$1,193,000
Prin. Invest.: J B MINSTER
Tech. Officer: GSFC/G SMITH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 99120 **UNIV OF CALIFORNIA - SAN DIEGO** **2661**
 TRIANA SCIENCE INVESTIGATION
 12/09/1998 - 04/30/2003 FY02: \$1,806,798 Total: \$27,392,322
Prin. Invest.: F VALCRO
Tech. Officer: GSFC/J WATZIM, GSFC/C TOOLEY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 9 98124 **UNIV OF CALIFORNIA - SAN DIEGO** **2662**
 EFFECT OF EVA & LONG-TERM EXPOSURE TO MICROGRAVITY ON PUL-
 MONARY FUNCTION
 03/02/1999 - 06/30/2003 FY02: \$466,541 Total: \$1,810,953
Prin. Invest.: J B WEST
Tech. Officer: JSC/S M MCCULLUM
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1133 **UNIV OF CALIFORNIA - SAN DIEGO** **2663**
 LOWER BODY NEGATIVE PRESSURE AS A COUNTERMEASURE F OR
 SPACEFLIGHT DECONDITIONING
 08/02/1999 - 09/30/2002 FY02: \$72,213 Total: \$704,576
Prin. Invest.: A R HARGENS
Tech. Officer: ARC/E M HOLTON
CASE Category: 56 – MEDICL

NCC 2 1196 **UNIV OF CALIFORNIA - SAN DIEGO** **2664**
 NON-INVASIVE INTRACRANIAL PRESSURE MEASUREMENT FOR SPACE
 FLIGHT - SPACE PHYSIOLOGY & COUNTERMEASURE
 09/29/2000 - 04/30/2003 FY02: \$37,000 Total: \$154,000
Prin. Invest.: C ROGERS
Tech. Officer: ARC/E M HOLTON, ARC/B P DALTON
CASE Category: 56 – MEDICL

NCC 2 5448 **UNIV OF CALIFORNIA - SAN DIEGO** **2665**
 ADVANCE ALGORITHMS FOR MOLECULAR-LEVEL COMPUTER MO DELING
 OF PROTOCELLULAR SYSTEMS
 08/03/2001 - 01/31/2002 FY02: -\$47,304 Total: \$352
Prin. Invest.: V GALLINSKY
Tech. Officer: ARC/M H NEW
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 2 5520 **UNIV OF CALIFORNIA - SAN DIEGO** **2666**
 DUST PROPERTIES IN COMETS AND PROTOPLANETARY DISKS
 08/29/2002 - 08/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D E HARKER
Tech. Officer: ARC/D H WOODEN, ARC/K R BELL
CASE Category: 11 – ASTRONOMY

NCC 3 693 **UNIV OF CALIFORNIA - SAN DIEGO** **2667**
 HIGH-PRESSURE COMBUSTION OF BINARY FUEL SPRAYS HIGH-
 PRESSURE COMBUSTION OF BINARY FUEL SPRAYS
 03/25/1999 - 01/03/2003 FY02: \$42,907 Total: \$166,929
Prin. Invest.: F A WILLIAMS
Tech. Officer: GRC/D L DIETRICH
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 695 **UNIV OF CALIFORNIA - SAN DIEGO** **2668**
 DYNAMICS OF DROPLETS EXTINCTION IN SLOW CONVECTIVE FLOWS
 03/25/1999 - 01/13/2003 FY02: \$8,590 Total: \$31,793
Prin. Invest.: F A WILLIAMS
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 741 **UNIV OF CALIFORNIA - SAN DIEGO** **2669**
 EXPERIMENTAL SPIN TESTING OF INTEGRALLY DAMPED COM POSITE FAN
 BLADES
 11/15/1999 - 10/17/2000 FY02: -\$73 Total: \$9,066
Prin. Invest.: J KOSMATKA
Tech. Officer: GRC/O MEHMED
CASE Category: 13 – PHYSICS

NCC 3 769 **UNIV OF CALIFORNIA - SAN DIEGO** **2670**
 SCIENTIFIC SUPPORT FOR A PROPOSED SPACE SHUTTLE DR OPLET
 BURNING EXPERIMENT
 02/08/2000 - 12/13/2002 FY02: \$98,900 Total: \$341,337
Prin. Invest.: F A WILLIAMS
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 819 **UNIV OF CALIFORNIA - SAN DIEGO** **2671**
 INTEGRAL DAMPING OF A TRAILING EDGE BLOWING FAN BL ADE
 07/31/2000 - 02/28/2001 FY02: -\$31 Total: \$39,969
Prin. Invest.: D KOSMATKA
Tech. Officer: GRC/O MEHMED
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 902 **UNIV OF CALIFORNIA - SAN DIEGO** **2672**
 STRUCTURAL ANALYSIS OF AN INTEGRAL DAMPED FAN STRUCTURAL
 ANALYSIS OF AN INTEGRAL DAMPED FAN
 07/13/2001 - 04/30/2002 FY02: \$0 Total: \$79,194
Prin. Invest.: D KOSMATKA
Tech. Officer: GRC/O MEHMED
CASE Category: 46 – MECHANICAL ENGR

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NCC 5 230 UNIV OF CALIFORNIA - SAN DIEGO 2673
 CORRELATED NOISE IN GPS TIME SERIES AND ITS EFFECT MODELS
 08/22/1997 - 08/31/2001 FY02: \$0 Total: \$92,292
Prin. Invest.: D C AGNEW
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 5 257 UNIV OF CALIFORNIA - SAN DIEGO 2674
 EARTHKAM (EARTH KNOWLEDGE ACQUIRED BY MIDDLE SCHOOL STUDENTS)
 11/25/1997 - 10/31/2001 FY02: \$0 Total: \$2,274,999
Prin. Invest.: D K RIDE
Tech. Officer: HQ/P MOUNTJOY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 540 UNIV OF CALIFORNIA - SAN DIEGO 2675
 EARTHKAM BRIDGE FUNDING REQUEST
 02/20/2001 - 01/31/2002 FY02: \$0 Total: \$500,000
Prin. Invest.: S RIDE
Tech. Officer: GSFC/P L MOUNTJOY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 585 UNIV OF CALIFORNIA - SAN DIEGO 2676
 INTERNATIONAL SPACE STATION MIDDLE SCHOOL EDUC./ ISS EARTHKAM
 08/31/2001 - 08/31/2006 FY02: \$758,696 Total: \$1,078,892
Prin. Invest.: S RIDE
Tech. Officer: GSFC/P MOUNTJOY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 105 UNIV OF CALIFORNIA - SAN DIEGO 2677
 CHARACTERIZATION OF AUTONOMIC FUNCTION
 02/28/2000 - 02/20/2003 FY02: \$14,000 Total: \$56,668
Prin. Invest.: P J MILLS
Tech. Officer: JSC/J MECK
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 9 106 UNIV OF CALIFORNIA - SAN DIEGO 2678
 CHARACTERIZATION OF AUTOMIC FUNCTION
 04/07/2000 - 03/31/2003 FY02: \$92,000 Total: \$335,188
Prin. Invest.: M G ZEIGLER
Tech. Officer: JSC/J MECK
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 2 52251 UNIV OF CALIFORNIA - SAN DIEGO 2679
 ACHIEVING APPLICATION PERFORMANCE ON THE INFORMATION POWER GRID
 09/18/1998 - 03/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: F BERMAN
Tech. Officer: ARC/C H SCHULBACK
CASE Category: 22 – COMPUTER SCIENCE

NGT 4 52429 UNIV OF CALIFORNIA - SAN DIEGO 2680
 CONTROL ORIENTED MODELING AND VALIDATION OF AEROSPACE VEHICLES
 07/20/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R D CALLAFON
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 106 UNIV OF CALIFORNIA - SAN DIEGO 2681
 THE INFLUENCES OF LIGHT ON PHYTOPLANKTON FLUORESCENCE AND PRODUCTIVITY (STUDENT: JESSICA NOLAN)
 05/30/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: B G MITCHELL
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 33 – OCEANOGRAPHY

NGT 5 30368 UNIV OF CALIFORNIA - SAN DIEGO 2682
 NEAR-FIELD FAULT DEFORMATION IN SOUTHERN CALIFORNIA AND BAJA, MEXICO FROM THE GLOBAL POSITIONING
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M A TOLBERT
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30446 UNIV OF CALIFORNIA - SAN DIEGO 2683
 CONCEPTUAL MODELING OF THE CLIMATIC ROLE OF AIRBORNE MINERAL DUST (STUDENT: KAREN M. SHELL)
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R SOMERVILLE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40007 UNIV OF CALIFORNIA - SAN DIEGO 2684
 SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATIONAL COLLEGE AND FELLOWSHIP PROGRAM.
 01/24/1997 - 01/31/2001 FY02: \$0 Total: \$1,836,750
Prin. Invest.: J A ARNOLD
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40085 UNIV OF CALIFORNIA - SAN DIEGO 2685
 CALIFORNIA SPACE GRANT COLLEGE & FELLOWSHIP PROGRAM
 02/12/2001 - 04/30/2005 FY02: \$460,750 Total: \$921,500
Prin. Invest.: J ARNOLD
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50183 UNIV OF CALIFORNIA - SAN DIEGO 2686
 THREE ASTROPHYSICAL GRAILS: THE ORIGINS OF DARK MATTER, GAMMA-RAY BURSTS, AND HEAVY ELEMENTS
 05/27/1998 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: G M FULLER
Tech. Officer: HQ/A NURRIDIN
CASE Category: 13 – PHYSICS

NAG 9 1261 UNIV OF CALIFORNIA - SAN FRANCISCO 2687
 TELOMERE REPAIR & CHROMOSOME INSTABILITY AFTER HIGH LINEAR ENERGY TRANSFER PARTICLE RADIATION
 09/25/2000 - 07/31/2003 FY02: \$243,375 Total: \$534,800
Prin. Invest.: J P MURNANE, B FOULADI
Tech. Officer: JSC/C W LLOYD
CASE Category: 56 – MEDICAL

NAS 9 99055 UNIV OF CALIFORNIA - SAN FRANCISCO 2688
 LIFE SCIENCE FLIGHT EXPERIMENT
 01/29/1999 - 12/31/2002 FY02: \$58,410 Total: \$413,410
Prin. Invest.: T LANG
Tech. Officer: JSC/D BAUMANN
CASE Category: 56 – MEDICAL

NCC 2 1126 UNIV OF CALIFORNIA - SAN FRANCISCO 2689
 MEMBRANE-BASED FUNCTIONS IN THE ORIGINS OF CELLULAR LIFE
 06/14/1999 - 12/31/2002 FY02: \$104,961 Total: \$302,075
Prin. Invest.: M A WILSON
Tech. Officer: ARC/M H NEW, ARC/M L FONDA
CASE Category: 12 – CHEMISTRY

NCC 2 1194 UNIV OF CALIFORNIA - SAN FRANCISCO 2690
DO INTEGRINS MEDIATE THE SKELETAL RESPONSES TO ALT ERED
LOADING IN VIVI? (SBUPROJECT A)
08/28/2000 - 09/30/2003 FY02: \$86,890 Total: \$286,312
Prin. Invest.: C H DAMSKY
Tech. Officer: ARC/R K GLOBUS, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5294 UNIV OF CALIFORNIA - SAN FRANCISCO 2691
MOLECULAR MODELING IN BIO-NANOTECHNOLOGY: COMPUTE R AIDED
GENETIC ENGINEERING OF A PROTEIN-BASED ..
09/21/1998 - 09/30/2000 FY02: \$0 Total: \$147,817
Prin. Invest.: M A WILSON
Tech. Officer: ARC/R L JAFFE
CASE Category: 12 – CHEMISTRY

NCC 2 5295 UNIV OF CALIFORNIA - SAN FRANCISCO 2692
TOWARDS A PHYLOGENY OF BIOLOGICAL FUNCTIONS
09/25/1998 - 03/31/2001 FY02: -\$1,001 Total: \$174,532
Prin. Invest.: M A WILSON
Tech. Officer: ARC/M H NEW, ARC/M L FONDA
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 5389 UNIV OF CALIFORNIA - SAN FRANCISCO 2693
RESEARCH IN COMPUTATIONAL ASTROBIOLOGY
07/07/2000 - 06/30/2001 FY02: -\$654 Total: \$42,202
Prin. Invest.: M A WILSON
Tech. Officer: ARC/M H NEW, ARC/A POHORILLE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 5412 UNIV OF CALIFORNIA - SAN FRANCISCO 2694
COMPUTER MODELING OF NUCLEIC ACID INTERACTIONS FOR IN VIVA DNA
SEQUENCE DETECTION
11/30/2000 - 11/30/2001 FY02: \$0 Total: \$61,496
Prin. Invest.: M A WILSON, A HERMONE
Tech. Officer: ARC/R L JAFFE, ARC/H PARTRIDGE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5453 UNIV OF CALIFORNIA - SAN FRANCISCO 2695
RESEARCH IN COPUTATIONAL ASTROBIOLOGY
08/08/2001 - 07/31/2002 FY02: \$0 Total: \$56,780
Prin. Invest.: M A WILSON
Tech. Officer: ARC/M NEW, ARC/A POHORILLO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 5509 UNIV OF CALIFORNIA - SAN FRANCISCO 2696
RESEARCH IN COMPUTATIONAL ASTROBIOLOGY
08/02/2002 - 07/31/2003 FY02: \$59,718 Total: \$59,718
Prin. Invest.: M A WILSON
Tech. Officer: ARC/M H NEW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01003 UNIV OF CALIFORNIA - SANTA BARBARA 2697
BIOMIMETIC, SELF-HEALING NANOCOMPOSITES FOR AEROSPACE APPLI-
CATIONS: 1.UCSB COMPONENTS
12/29/2000 - 09/30/2003 FY02: \$125,000 Total: \$270,833
Prin. Invest.: D E MORSE
Tech. Officer: LARC/E J SIOCHI
CASE Category: 12 – CHEMISTRY

NAG 2 1140 UNIV OF CALIFORNIA - SANTA BARBARA 2698
MODELING & PREDICTION OF WILDFIRE HAZARD IN SOUTHE RN CALIFOR-
NIA, INTEGRATION OF MODELS WITH.....
07/21/1997 - 06/30/2001 FY02: -\$86 Total: \$244,914
Prin. Invest.: D A ROBERTS, S L USTIN, R CHURCH
Tech. Officer: ARC/G A SHELTON, ARC/J A BRASS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2115 UNIV OF CALIFORNIA - SANTA BARBARA 2699
INTERACTION FORCES AND THE FLOW-INDUCED COALESCENC E OF
DROPS AND BUBBLES
02/19/1998 - 12/31/2002 FY02: \$20,000 Total: \$636,250
Prin. Invest.: L G LEAL
Tech. Officer: GRC/B S SINGH
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2119 UNIV OF CALIFORNIA - SANTA BARBARA 2700
POOL BOILING CIRSIS FROM FLAT PLATES: MECHANISM(S) AND EN-
HANCEMENT
02/26/1998 - 12/31/2001 FY02: \$0 Total: \$481,850
Prin. Invest.: T G THEOFANOUS, Y BUYEVIAH
Tech. Officer: GRC/J B MCQUILLEN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2414 UNIV OF CALIFORNIA - SANTA BARBARA 2701
DIRECT NUMERICAL SIMULATION OF TURBULENT FLOWS WIT H PHASE
CHANGE IN MICROGRAVITY
06/02/2000 - 11/30/2003 FY02: \$73,150 Total: \$160,650
Prin. Invest.: P BANERJEE
Tech. Officer: LARC/J H AGUI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2439 UNIV OF CALIFORNIA - SANTA BARBARA 2702
GRADIENT DRIVEN FLUCTUATIONS GRADIENT DRIVEN FLUCTUATIONS
04/20/2000 - 11/30/2003 FY02: \$133,000 Total: \$316,000
Prin. Invest.: D S CANNELL
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2466 UNIV OF CALIFORNIA - SANTA BARBARA 2703
THE DYNAMICS OF PARTICULATE DEPOSITIONED RESUSPENS ION PRO-
CESSES AT MODERATE TO HIGH REYNOLDS NUMBER
06/20/2000 - 11/30/2003 FY02: \$27,735 Total: \$76,580
Prin. Invest.: E MEIBURG
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2493 UNIV OF CALIFORNIA - SANTA BARBARA 2704
THE DYNAMICS OF MISCIBLE INTERFACES: SIMULATIONS THEY DYNAMICS
OF MISCIBLE INTERFACES: SIMULATIONS
10/11/2000 - 12/31/2001 FY02: \$0 Total: \$107,500
Prin. Invest.: E H MEIBURG
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2513 UNIV OF CALIFORNIA - SANTA BARBARA 2705
PROBLEMS IN MICROGRAVITY FLUID MECHANICS: G-JITTE R CONVECTION
12/19/2000 - 11/30/2003 FY02: \$95,000 Total: \$245,250
Prin. Invest.: G M HOMSY
Tech. Officer: GRC/F P CHIARAMONTE III
CASE Category: 49 – ENGINEERING, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 3 2761 UNIV OF CALIFORNIA - SANTA BARBARA 2706
 THE LIMITS OF COOLABILITY IN THERMAL SYSTEMS FOR SPACE APPLICATIONS
 04/03/2002 - 11/30/2005 FY02: \$85,000 Total: \$85,000
Prin. Invest.: D THEOFANOUS
Tech. Officer: GRC/J B MCQUILLIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2785 UNIV OF CALIFORNIA - SANTA BARBARA 2707
 THE DYNAMICS OF MISCIBLE INTERFACES: A SPACE FLIGHT EXPERIMENT
 06/07/2002 - 12/31/2003 FY02: \$106,000 Total: \$106,000
Prin. Invest.: E H MEIBURG
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3620 UNIV OF CALIFORNIA - SANTA BARBARA 2708
 REMOTE SENSING INFORMATION SCIENCES RESEARCH GROUP
 02/07/1997 - 06/30/2001 FY02: \$0 Total: \$2,384,434
Prin. Invest.: D C CLARKE
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3646 UNIV OF CALIFORNIA - SANTA BARBARA 2709
 SOLAR SYSTEM PHYSICS
 02/25/1997 - 04/30/2003 FY02: \$0 Total: \$335,750
Prin. Invest.: S J PEALE
Tech. Officer: GSFC/D G SENSEK
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4629 UNIV OF CALIFORNIA - SANTA BARBARA 2710
 PARAMETERIZATION OF CLOUD 3-D EFFECTS ON SURFACE SWEET ESTIMATED FROM SATELLITE MEASUREMENTS
 05/21/1997 - 11/30/2001 FY02: \$0 Total: \$380,000
Prin. Invest.: C GAUTHIER
Tech. Officer: GSFC/R CAHALAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4814 UNIV OF CALIFORNIA - SANTA BARBARA 2711
 HYDROLOGY, HYDROCHEMICAL MODELING AND REMOTE SENSING SNOW-COVERED ALPINE DRAINAGE BASINS
 06/19/1997 - 12/31/2001 FY02: \$0 Total: \$2,394,535
Prin. Invest.: J C DOZIER
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4963 UNIV OF CALIFORNIA - SANTA BARBARA 2712
 PROGRAM IS PART OF A LONG TERM EFFORT TO DEVELOP UNDERGRADUATE STUDENTS, EARLY ON IN THEIR ACADEMIC LIFE
 06/27/1997 - 12/31/2000 FY02: -\$4 Total: \$224,996
Prin. Invest.: C GAUTIER
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6120 UNIV OF CALIFORNIA - SANTA BARBARA 2713
 THE EOS AMAZON PROJECT
 08/13/1997 - 06/30/2003 FY02: \$0 Total: \$623,394
Prin. Invest.: T DUNNE
Tech. Officer: GSFC/T JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6288 UNIV OF CALIFORNIA - SANTA BARBARA 2714
 DEVELOPMENT AND APPLICATION OF THE NEXT GENERATION FOR THE UNDERSTANDING OF MARINE PROCESSES ON REGIONS
 09/10/1997 - 08/31/2001 FY02: \$0 Total: \$579,515
Prin. Invest.: D SIEGEL
Tech. Officer: GSFC/J YODER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6434 UNIV OF CALIFORNIA - SANTA BARBARA 2715
 BIO-OPTICS IN THE WESTERN ANTARCTIC PENINSULA REGION
 10/16/1997 - 06/30/2002 FY02: \$0 Total: \$492,438
Prin. Invest.: R C SMITH
Tech. Officer: GSFC/J A MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6465 UNIV OF CALIFORNIA - SANTA BARBARA 2716
 INVESTIGATION OF SNOW PROPERTIES USING MODIS AND ASTER DATA
 10/24/1997 - 09/30/2001 FY02: \$0 Total: \$310,053
Prin. Invest.: J SHI
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6911 UNIV OF CALIFORNIA - SANTA BARBARA 2717
 A REQUEST FOR SCIENCE READINESS FUNDS FOR THE OPTICAL MONITOR PROGRAM OF THE X-RAY MULTI-MIRROR MISS
 01/28/1998 - 10/31/2001 FY02: \$0 Total: \$201,479
Prin. Invest.: D CORDOVA
Tech. Officer: GSFC/R DONNELLY
CASE Category: 11 – ASTRONOMY

NAG 5 7075 UNIV OF CALIFORNIA - SANTA BARBARA 2718
 DETAILED THEORETICAL MODELING OF THE SPECTRUM AND POLARIZATION OF ACCRETION DISKS IN ACTIVE GALAXIES
 02/25/1998 - 02/28/2003 FY02: \$0 Total: \$223,024
Prin. Invest.: O M BLAES
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7177 UNIV OF CALIFORNIA - SANTA BARBARA 2719
 PROBABILITY OF DETECTING PLANETS WITH MICROLENSING
 03/16/1998 - 03/14/2003 FY02: \$0 Total: \$121,100
Prin. Invest.: S J PEALE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7714 UNIV OF CALIFORNIA - SANTA BARBARA 2720
 POSTLAUNCH: STATEMENT OF WORK U.S. OPTICAL MONITOR TEAM
 10/05/1998 - 07/31/2002 FY02: -\$102,369 Total: \$891,694
Prin. Invest.: D A CORDOVA
Tech. Officer: GSFC/N E WHITE
CASE Category: 11 – ASTRONOMY

NAG 5 7940 UNIV OF CALIFORNIA - SANTA BARBARA 2721
 OUTREACH PROJECT
 01/19/1999 - 07/31/2002 FY02: \$25,230 Total: \$279,080
Prin. Invest.: D FOSTER
Tech. Officer: GSFC/N E WHITE
CASE Category: 11 – ASTRONOMY

NAG 5 7981 UNIV OF CALIFORNIA - SANTA BARBARA 2722
 ATMOSPHERIC EXCITATION OF PLANETARY NORMAL MODES
 01/13/1999 - 12/31/2001 FY02: \$0 Total: \$68,250
Prin. Invest.: D TANIMOTO
Tech. Officer: GSFC/J A GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 8319 UNIV OF CALIFORNIA - SANTA BARBARA 2723
 PLUMES AND BLOOMS: MODELING THE CASE II WATERS OF THE SANTA BARBARA CHANNEL
 04/01/1999 - 03/31/2001 FY02: \$0 Total: \$180,000
Prin. Invest.: D A SIEGEL
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8396 UNIV OF CALIFORNIA - SANTA BARBARA 2724
 MESOSCALE EFFECTS OF CLIMATE AND LAND-COVER CHANGE ON RIVER-BASIN HYDROLOGY IN AMAZONIA
 04/01/1999 - 03/31/2003 FY02: \$0 Total: \$300,000
Prin. Invest.: T DUNNE
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8616 UNIV OF CALIFORNIA - SANTA BARBARA 2725
 EVALUATING USAGE OF SAR IN MEASURING SNOW PROPERTIES
 06/14/1999 - 06/30/2002 FY02: \$43,923 Total: \$364,100
Prin. Invest.: J SHI
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8658 UNIV OF CALIFORNIA - SANTA BARBARA 2726
 ROTATIONAL INSTABILITIES AND NUCLEOSYNTHESIS IN ACCRETING NEUTRON STARS.
 08/31/1999 - 06/30/2003 FY02: \$0 Total: \$117,680
Prin. Invest.: L BILDSTEN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8669 UNIV OF CALIFORNIA - SANTA BARBARA 2727
 NANOSCALE BOLOMETERS AND EVAPORATIVE ELECTRONIC REFRIGERATION
 07/09/1999 - 07/14/2002 FY02: \$0 Total: \$432,592
Prin. Invest.: A CLELAND
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 13 – PHYSICS

NAG 5 8680 UNIV OF CALIFORNIA - SANTA BARBARA 2728
 ATMOSPHERIC MINERAL DUST AND CHLOROPHYLL BLOOMS
 07/19/1999 - 07/14/2002 FY02: \$0 Total: \$350,379
Prin. Invest.: N M MAHOWALD
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9055 UNIV OF CALIFORNIA - SANTA BARBARA 2729
 APPLICATIONS AND VALIDATION OF THE SRTM DEM IN THE AMAZON: HYDROLOGICAL AND GEOMORPHOLOGICAL ANALYSIS
 02/14/2000 - 05/31/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: D E ALSDORF
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9073 UNIV OF CALIFORNIA - SANTA BARBARA 2730
 BALLOON BORNE MILLIMETER WAVELENGTH SKY STUDIES & TECHNOLOGY DEVELOPMENT
 02/15/2000 - 02/14/2002 FY02: \$0 Total: \$738,482
Prin. Invest.: P LUBIN
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9251 UNIV OF CALIFORNIA - SANTA BARBARA 2731
 BALLOON BORNE OBSERVATIONS OF THE POLARIZATION OF THE COSMIC MICROWAVE BACKGROUND
 03/31/2000 - 03/31/2003 FY02: \$200,518 Total: \$551,048
Prin. Invest.: J E RUHL
Tech. Officer: GSFC/J FROGEL
CASE Category: 11 – ASTRONOMY

NAG 5 9671 UNIV OF CALIFORNIA - SANTA BARBARA 2732
 THE ROLE OF NORTH AFRICAN MINERAL AEROSOLS IN CLIMATE AND BIOGEOCHEMISTRY
 06/12/2000 - 05/31/2003 FY02: \$270,000 Total: \$693,333
Prin. Invest.: N M MAHOWALD
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9811 UNIV OF CALIFORNIA - SANTA BARBARA 2733
 GLOBALLY CONSISTENT TOPOGRAPHIC CHARACTERIZATION OF LARGE RIVER FLOODPLAINS BASED ON THE SRT
 07/21/2000 - 07/31/2003 FY02: \$102,000 Total: \$236,998
Prin. Invest.: L K MERTES
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9818 UNIV OF CALIFORNIA - SANTA BARBARA 2734
 DEVELOPMENT AND APPLICATION OF THE NEXT GENERATION OF OCEAN COLOR MODELS FOR THE UNDERSTANDING OF MA
 07/26/2000 - 08/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: D A SIEGEL
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9844 UNIV OF CALIFORNIA - SANTA BARBARA 2735
 HYDROLOGY, HYDROCHEMICAL MODELING & REMOTE SENSING IN SEASONALLY SNOW-COVERED ALPINE DRAINAGE
 08/07/2000 - 07/31/2003 FY02: \$0 Total: \$750,000
Prin. Invest.: J C DOZIER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9941 UNIV OF CALIFORNIA - SANTA BARBARA 2736
 DISTORTIONS OF THE CMB FROM VARIOUS PROCESSES OF THE EARLY UNIVERSE
 09/08/2000 - 09/30/2001 FY02: \$0 Total: \$40,791
Prin. Invest.: P M LUBIN
Tech. Officer: GSFC/A J KOGUT
CASE Category: 13 – PHYSICS

NAG 5 9971 UNIV OF CALIFORNIA - SANTA BARBARA 2737
 SPECTROSCOPY OF DIPS AND FLARES IN CIR X-1
 09/13/2000 - 09/14/2003 FY02: \$0 Total: \$43,800
Prin. Invest.: R E SHIREY
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10146 UNIV OF CALIFORNIA - SANTA BARBARA 2738
 REMOTE SENSING ASSESSMENT OF BIOGEOCHEMICAL PROCESSES IN THE SARGASSO SEA
 01/04/2001 - 05/30/2002 FY02: \$0 Total: \$97,934
Prin. Invest.: N NELSON
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 10299 UNIV OF CALIFORNIA - SANTA BARBARA 2739
 QUANTUM LTD.-TERAHERTZ DETECTION WITHOUT LIQUID CRYOGENS
 PROPOSAL #1138
 01/31/2001 - 01/31/2004 FY02: \$187,778 Total: \$433,029
Prin. Invest.: M SHERWIN
Tech. Officer: GSFC/T DOIRON
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10457 UNIV OF CALIFORNIA - SANTA BARBARA 2740
 REMOTE SENSING INFORMATON SCIENCE RESEARCH
 02/26/2001 - 09/30/2002 FY02: \$0 Total: \$390,000
Prin. Invest.: J E ESTES
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10520 UNIV OF CALIFORNIA - SANTA BARBARA 2741
 TECTONIC-CLIMATE INTERACTIONS IN ACTIVE OROGENIC BELTS: QUANTIFICATION OF DYNAMIC TOPOGRAPHY WITH
 03/30/2001 - 02/14/2003 FY02: \$93,923 Total: \$240,455
Prin. Invest.: D W BURBANK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10671 UNIV OF CALIFORNIA - SANTA BARBARA 2742
 ESTIMATING SOIL MOISTURE CHANGES USING RADARSAT & ITS APPLICATION IN HYDROLOGICAL MODELING
 03/27/2001 - 03/14/2004 FY02: \$78,959 Total: \$150,241
Prin. Invest.: J SHI
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11249 UNIV OF CALIFORNIA - SANTA BARBARA 2743
 MULTI-MEDIA FLUID MECHANICS: FLUIDS IN MICROGRAVIT Y
 08/16/2001 - 08/31/2003 FY02: \$0 Total: \$150,000
Prin. Invest.: G HOMSY
Tech. Officer: GSFC/D SPEARS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11385 UNIV OF CALIFORNIA - SANTA BARBARA 2744
 FULLERENES: A NEW CARRIER-PHASE FOR NOBLE GASES IN METEORITES
 11/05/2001 - 10/31/2003 FY02: \$46,139 Total: \$46,139
Prin. Invest.: L BECKER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11426 UNIV OF CALIFORNIA - SANTA BARBARA 2745
 NANOBOLOMETERS AND SINGLE-ELECTRON READOUT AMPLIFICATION
 12/03/2001 - 01/31/2005 FY02: \$254,999 Total: \$254,999
Prin. Invest.: A CLELAND
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11560 UNIV OF CALIFORNIA - SANTA BARBARA 2746
 INTERSTELLAR ORGANIC MOLECULES AND THE ORIGIN OF LIFE: THE ROLE OF EXOGENOUS DELIVERY
 01/15/2002 - 11/30/2003 FY02: \$90,000 Total: \$90,000
Prin. Invest.: L R BECKER
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11666 UNIV OF CALIFORNIA - SANTA BARBARA 2747
 PLANETARY SYSTEM PHYSICS
 01/25/2002 - 04/30/2005 FY02: \$86,300 Total: \$86,300
Prin. Invest.: S J PEALE
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11709 UNIV OF CALIFORNIA - SANTA BARBARA 2748
 MULTI-SCALE CONVERGENCE OF COLD-LAND PROCESS REPRESENTATION IN LAND-SURFACE MODELS MICROWAVE RE
 02/06/2002 - 02/14/2005 FY02: \$77,764 Total: \$77,764
Prin. Invest.: J SHI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11887 UNIV OF CALIFORNIA - SANTA BARBARA 2749
 UCSB ARCADE BALLOON PROGRAM.
 04/03/2002 - 04/14/2003 FY02: \$93,715 Total: \$93,715
Prin. Invest.: P M LUBIN
Tech. Officer: GSFC/A J KOGUT
CASE Category: 13 – PHYSICS

NAG 5 12053 UNIV OF CALIFORNIA - SANTA BARBARA 2750
 LARGE APERTURE BALLOON BORNE MILLIMETER AND SUBMILLIMETER OBSERVATIONS AND TECHNOLOGY DEVELOPMENT
 04/22/2002 - 02/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: P LUBIN
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12087 UNIV OF CALIFORNIA - SANTA BARBARA 2751
 DYNAMICS & ORIGIN OF EXTRA-SOLAR PLANETARY SYSTEMS & MICROLensing DETECTION OF EXTRA-SOLAR PLANETS
 04/30/2002 - 04/30/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: S PEALE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12150 UNIV OF CALIFORNIA - SANTA BARBARA 2752
 UNBIASED, IN-SITU LIFE DETECTION TECHNOLOGY BASED ON TERAHERTZ CIRCULAR DICHROISM SPECTROSCOPY
 05/10/2002 - 05/14/2003 FY02: \$181,080 Total: \$181,080
Prin. Invest.: K PLAXCO
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12400 UNIV OF CALIFORNIA - SANTA BARBARA 2753
 BEYOND CHLOROPHYLL: USING OCEAN TO STUDY ORGANIC MATTER CYCLING IN THE OCEAN
 07/23/2002 - 07/14/2005 FY02: \$109,958 Total: \$109,958
Prin. Invest.: N NELSON
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1429 UNIV OF CALIFORNIA - SANTA BARBARA 2754
 R/S BOUNDARY EFFECTS ON TRANSPORT PROPERTIES AND DYNAMIC FINITE-SIZE SCALING NEAR THE SUPERFLUID
 02/23/1998 - 01/31/2003 FY02: \$166,649 Total: \$794,770
Prin. Invest.: G AHLERS, V DOHM, F C LIU
Tech. Officer: MSFC/J POE, JPL/D STRAYER
CASE Category: 13 – PHYSICS

NAG 8 1757 UNIV OF CALIFORNIA - SANTA BARBARA 2755
 RESEARCH ENTITLED, THE SUPERFLUID TRANSITION OF HE UNDER UNUSUAL CONDITIONS
 04/26/2001 - 04/29/2005 FY02: \$105,000 Total: \$205,000
Prin. Invest.: G AHLERS
Tech. Officer: GSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 9 1329 UNIV OF CALIFORNIA - SANTA BARBARA 2756
 QUANTITATIVE MODELING OF HUMAN SACADIC TARGETING DURING VISUAL RESEARCH
 06/29/2001 - 12/23/2002 FY02: \$145,925 Total: \$313,071
Prin. Invest.: M ECKSTIEN
Tech. Officer: JSC/C LLOYD
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG13 99025 UNIV OF CALIFORNIA - SANTA BARBARA 2757
 IMPLEMENTATION OF PREDICTIVE SOIL MODELING IN THE NATIONAL COOPERATIVE SOIL SURVEY
 08/27/1999 - 11/01/2002 FY02: \$151,502 Total: \$386,651
Prin. Invest.: O CHADWICK
Tech. Officer: JSC/R MCKELLIP
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 5 00196 UNIV OF CALIFORNIA - SANTA BARBARA 2758
 SIMBIOS II-OPTIMIZATION OF OCEAN COLOR ALGORITHMS: APPLICATION TO SATELLITE & IN SITU DATA MERGING.
 01/10/2001 - 11/30/2002 FY02: \$141,415 Total: \$275,050
Prin. Invest.: S MARITORENA
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 00200 UNIV OF CALIFORNIA - SANTA BARBARA 2759
 SIMBIOS II - THE BERMUDA BIO-OPTICS PROJECT (BBPO) YEARS 9 THRU 11.
 01/26/2001 - 11/30/2002 FY02: \$240,003 Total: \$477,562
Prin. Invest.: D A SIEGEL
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 00201 UNIV OF CALIFORNIA - SANTA BARBARA 2760
 SIMBIOS II - PLUMES & BLOOMS: OBSERVATIONS, ANALYSIS & MODELING FOR SIMBIOS.
 01/26/2001 - 11/30/2002 FY02: \$203,023 Total: \$411,310
Prin. Invest.: D A SIEGEL
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 31370 UNIV OF CALIFORNIA - SANTA BARBARA 2761
 EOS INVESTIGATION
 12/23/1991 - 06/14/2003 FY02: \$561,000 Total: \$4,864,402
Prin. Invest.: Z WAN
Tech. Officer: GSFC/H OSEROFF
CASE Category: 33 – OCEANOGRAPHY

NAS 5 31374 UNIV OF CALIFORNIA - SANTA BARBARA 2762
 EOS INVESTIGATION - ATMOSPHERIC INFRARED SOUNDER (AIRS) TEAM MEMBER INVESTIGATION
 03/04/1992 - 06/14/2003 FY02: \$250,000 Total: \$1,945,000
Prin. Invest.: C GAUTIER
Tech. Officer: GSFC/E KRIENS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 31710 UNIV OF CALIFORNIA - SANTA BARBARA 2763
 EOS INVESTIGATION/HIRIS TEAM MEMBER
 09/17/1992 - 12/14/2001 FY02: \$1,377 Total: \$138,838
Prin. Invest.: D DOZLER
Tech. Officer: GSFC/T BRAKKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 5 31713 UNIV OF CALIFORNIA - SANTA BARBARA 2764
 EOS INVESTIGATION/HIRIS TEAM MEMBER
 02/25/1992 - 12/14/2001 FY02: \$516 Total: \$332,299
Prin. Invest.: J M MELACK
Tech. Officer: GSFC/T BRAKE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1290 UNIV OF CALIFORNIA - SANTA BARBARA 2765
 MECHANICAL PROPERTIES OF LIGHTWEIGHT CERAMIC ABLATOR MATERIALS
 10/25/2001 - 10/14/2003 FY02: \$112,067 Total: \$112,067
Prin. Invest.: F MILSTEIN
Tech. Officer: ARC/C CZALAI
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 2 5368 UNIV OF CALIFORNIA - SANTA BARBARA 2766
 INTRA-AND INTERSUBBAND ELECTRON-ELECTRON-PHONON SCATTERINGS IN QUANTUM CONFINED STRUCTURES FOR ...
 02/28/2000 - 02/28/2001 FY02: -\$7,360 Total: \$51,944
Prin. Invest.: M W WU
Tech. Officer: ARC/T R GOVINDAN
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 281 UNIV OF CALIFORNIA - SANTA BARBARA 2767
 MULTI-SCALE ANALYSIS OF INUNDATION WITH MICROWAVE AND OPTICAL REMOTE SENSING IN THE AMAZON BASIN:
 06/16/1998 - 12/31/2002 FY02: \$199,241 Total: \$888,013
Prin. Invest.: J MELACK
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 282 UNIV OF CALIFORNIA - SANTA BARBARA 2768
 LAND-COVER CONVERSION IN AMAZONIA, THE ROLE OF ENVIRONMENT AND SUBSTRATE COMPOSITION IN MODIFYING SO
 06/12/1998 - 12/31/2002 FY02: \$137,577 Total: \$844,019
Prin. Invest.: O A CHADWICK
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 302 UNIV OF CALIFORNIA - SANTA BARBARA 2769
 THE EARTH SYSTEM SCIENCE WORKBENCH: A SCALABLE INFRASTRUCTURE FOR ESIP'S
 04/09/1998 - 12/31/2002 FY02: \$188,952 Total: \$3,586,952
Prin. Invest.: J FREW
Tech. Officer: GSFC/M MAIDEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 496 UNIV OF CALIFORNIA - SANTA BARBARA 2770
 HYPERION APPLICATIONS & VALIDATION FOR FIRE HAZARD ASSESSMENT IN THE SANTA MONICA MOUNTAINS, CALIF
 04/19/2000 - 09/30/2002 FY02: \$30,146 Total: \$104,489
Prin. Invest.: D A ROBERTS
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 589 UNIV OF CALIFORNIA - SANTA BARBARA 2771
 HYPERSPECTRAL ANALYSIS OF LAND-COVER IN RONDONIA
 09/20/2001 - 09/30/2004 FY02: \$62,590 Total: \$83,454
Prin. Invest.: D A ROBERTS
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 4 52407 UNIV OF CALIFORNIA - SANTA BARBARA 2772
 GSRP ANALYSIS OF ADAPTIVE CONTROL OF AEROELASTIC STRUCTURES
 USING MULTIDISCIPLINARY STARS PROGRAMS
 06/18/1998 - 07/31/2001 FY02: -\$2,661 Total: \$63,339
Prin. Invest.: J C BRUCH, DR., JTARANTINO
Tech. Officer: SSC/K GUPTA, SSC/L S VOELKER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52423 UNIV OF CALIFORNIA - SANTA BARBARA 2773
 DEVELOPMENT OF THE EIGENVECTOR ORIENTATION METHOD FOR FLUT-
 TER PREDICTIONS
 06/02/2000 - 07/01/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: H T YANG
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52427 UNIV OF CALIFORNIA - SANTA BARBARA 2774
 DETERMINING MECHANICAL PROPERTIES OF NANO MATERIAL S USING
 NANOINDENTATION AND A FINITE ELEMENT METH
 06/20/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: H T YANG
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52428 UNIV OF CALIFORNIA - SANTA BARBARA 2775
 DETERMINING MECHANICAL PROPERTIES OF NANO MATERIAL S USING
 NANOINDENTATION AND A FINITE ELEMENT METH
 07/20/2001 - 06/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: H YANG
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30173 UNIV OF CALIFORNIA - SANTA BARBARA 2776
 MASS BALANCE OF SEDIMENT TRANSPORT ACROSS COASTAL MARGIN
 FILTERS AT THE BASE OF THE TRANSVERSE RANGE
 09/22/1998 - 08/31/2001 FY02: -\$9 Total: \$65,991
Prin. Invest.: MERTES, WARRICK
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30194 UNIV OF CALIFORNIA - SANTA BARBARA 2777
 A TOP-DOWN APPROACH TO UNDERSTANDING & PREDICTING DIMETHYL-
 SULFIDE VARIABILITY IN THE SARGASSO SEA
 08/18/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: D A SIEGEL, TOOLE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NGT 5 30201 UNIV OF CALIFORNIA - SANTA BARBARA 2778
 MONITORING POPULATION AND THE EXTENT OF HUMAN SETTLEMENT IN
 THE BRAZILIAN AMAZON WITH SYNTH
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: K C CLARKE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30225 UNIV OF CALIFORNIA - SANTA BARBARA 2779
 REGIONAL BIOGEOCHEMISTRY OF LAND USE CHANGE IN THE HUMID
 TROPICS: DETECTION & MODELING OF THE
 08/14/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: T DUNNE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30332 UNIV OF CALIFORNIA - SANTA BARBARA 2780
 INTERACTIONS OF LAND COVER CHANGE & TOPOGRAPHY IN THE HYDRO-
 LOGIC RESPONSE OF MESOSCALE TROPIC
 08/14/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: T DUNNE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30357 UNIV OF CALIFORNIA - SANTA BARBARA 2781
 THE ROLE OF TOPOGRAPHY & PROXIMITY TO BEDROCK IN DETERMINING
 NUTRIENT SUPPLY TO A SEASONAL AMAZONI
 08/22/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: O CHADWICK
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30400 UNIV OF CALIFORNIA - SANTA BARBARA 2782
 REMOTE SENSING OF ANTHROPOGENIC BIOMASS BURNING & FOREST
 DEGRADATION IN MADAGASCAR: THE DEVELOPMENT
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D ROBERTS
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30406 UNIV OF CALIFORNIA - SANTA BARBARA 2783
 SATELLITE DETECTION OF TRICHODESMIUM SPP. AND ITS RELATION TO
 ATMOSPHERIC DUST DEPOSITIONS
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D SIEGEL
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30413 UNIV OF CALIFORNIA - SANTA BARBARA 2784
 ROLES OF REGIONAL CLIMATOLOGY IN THE NORTH AFRICAN DESERT
 DUST. STUDENT: MASARU YOSHIOKA
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: N MAHOWALD
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30436 UNIV OF CALIFORNIA - SANTA BARBARA 2785
 ASSESSMENT OF AIRBORNE FINE SPATIAL RESOLUTION HYPERSPEC-
 TRAL IMAGERY FOR THE MONITORING OF TROPICAL
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D M CLARK
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30440 UNIV OF CALIFORNIA - SANTA BARBARA 2786
 SATELLITE MEASUREMENT OF SURFACE OCEAN MIXING AND VENTILA-
 TION USING OPEN OCEAN COLORED DISSOLVED ORGANIC
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S A SIEGEL
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50269 UNIV OF CALIFORNIA - SANTA BARBARA 2787
 B2K, AN EXPERIMENT TO MEASURE THE POLARIZATION OF THE CMB
 06/22/2000 - 06/30/2003 FY02: \$8,000 Total: \$52,000
Prin. Invest.: J RUHL
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50327 UNIV OF CALIFORNIA - SANTA BARBARA 2788
 MAPPING WILDLAND FUELS USING COMBINED HYPERSPEC TRAL & SYN-
 THETIC APERTURERADAR FOR FIRE HAZARD
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D A ROBERTS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 2 1580 UNIV OF CALIFORNIA - SANTA CRUZ 2789
 NANO/BIO/INFO TECHNOLOGY FUSION/ COLLABORATIVE RES EARCH PRO-
 POSAL
 09/04/2002 - 10/31/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: W E BERRY
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYYAPPAN
CASE Category: 12 – CHEMISTRY

NAG 5 4445 UNIV OF CALIFORNIA - SANTA CRUZ 2790
 PHOTON-WEIGHTED MIDPOINT EXPOSURE METER FOR KECK/H RE-
 SEARCH
 04/25/1997 - 04/30/2001 FY02: -\$1,164 Total: \$204,330
Prin. Invest.: D S VOGT
Tech. Officer: GSFC/S HOWARD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4494 UNIV OF CALIFORNIA - SANTA CRUZ 2791
 FORMATION AND EARLY EVOLUTION OF SOLAR AND EXTRA-S
 04/30/1997 - 03/31/2001 FY02: -\$156 Total: \$112,620
Prin. Invest.: D H BODENHEIMER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8128 UNIV OF CALIFORNIA - SANTA CRUZ 2792
 THREE DIMENSIONAL MODELS FOR GAMMA-RAY BURSTS AND SUPERNO-
 VAE_ (ATP98)
 02/05/1999 - 02/14/2003 FY02: \$0 Total: \$273,606
Prin. Invest.: S E WOOSLEY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8196 UNIV OF CALIFORNIA - SANTA CRUZ 2793
 THE GROWTH OF PROTOGIANT PLANETS IN PROTOSTELLAR D ISKS
 02/04/1999 - 01/31/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: D N LIN
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8218 UNIV OF CALIFORNIA - SANTA CRUZ 2794
 TESTING INFLATION AND DARK MATTER WITH NEW DATA, M ODELS, AND
 METHODS (ATP98)
 02/08/1999 - 08/14/2002 FY02: \$0 Total: \$665,901
Prin. Invest.: J R PRIMACK
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8348 UNIV OF CALIFORNIA - SANTA CRUZ 2795
 THE PROPERTIES OF INTERSTELLAR DUST GRAINS IN IRAS 'CIRRUS'
 CLOUDS (ADP98)
 03/01/1999 - 04/30/2002 FY02: \$0 Total: \$159,572
Prin. Invest.: P GUHATHAKURTA
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8409 UNIV OF CALIFORNIA - SANTA CRUZ 2796
 EVOLUTION OF HOT GAS IN ELLIPTICAL GALAXIES (ATP 9 8)
 03/15/1999 - 03/31/2003 FY02: \$0 Total: \$121,622
Prin. Invest.: W G MATHEWS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8750 UNIV OF CALIFORNIA - SANTA CRUZ 2797
 MONITORING ECOSYSTEM CONDITION AND STRESS IN THE SAN PABLO
 BAY, CA REGION
 09/08/1999 - 09/14/2002 FY02: \$0 Total: \$190,492
Prin. Invest.: R KUDELA
Tech. Officer: GSFC/J W MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8855 UNIV OF CALIFORNIA - SANTA CRUZ 2798
 COMPOUND REMOTE SENSING FOR THE DETERMINATION OF NEW PRI-
 MARY PRODUCTION IN COASTAL WATERS
 11/23/1999 - 11/30/2002 FY02: \$0 Total: \$157,149
Prin. Invest.: R KUDELA
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8914 UNIV OF CALIFORNIA - SANTA CRUZ 2799
 SMALL BODIES ANE PLANETARY COLLISIONS
 01/27/2000 - 12/31/2002 FY02: \$115,700 Total: \$338,000
Prin. Invest.: E ASPHAUG
Tech. Officer: GSFC/J A GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 9403 UNIV OF CALIFORNIA - SANTA CRUZ 2800
 STRUCTURE AND FUNCTION OF ENCAPSULATED REPLICATING SYSTEMS
 04/06/2000 - 03/31/2003 FY02: \$117,000 Total: \$344,214
Prin. Invest.: D DEAMER
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9526 UNIV OF CALIFORNIA - SANTA CRUZ 2801
 MULTIDIMENSIONAL MODELING OF THE SOLAR NEBULA: A BETTER TOOL
 FOR UNDERSTANDING OBSERVATIONS
 04/28/2000 - 05/31/2003 FY02: \$0 Total: \$45,000
Prin. Invest.: P BODENHEIMER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9661 UNIV OF CALIFORNIA - SANTA CRUZ 2802
 FORMATION AND EARLY EVOLUTION OF SOLAR AND EXTRA- SOLAR GIANT
 PLANETS
 06/01/2000 - 06/14/2003 FY02: \$38,000 Total: \$104,000
Prin. Invest.: P BODENHEIMER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9711 UNIV OF CALIFORNIA - SANTA CRUZ 2803
OBSERVATIONS OF ROTATION POWERED PULSARS IN SUPPORT OF GLAST
06/15/2000 - 06/14/2003 FY02: \$107,831 Total: \$158,734
Prin. Invest.: D E THORSETT
Tech. Officer: GSFC/S LAMBROS
CASE Category: 11 – ASTRONOMY

NAG 5 9956 UNIV OF CALIFORNIA - SANTA CRUZ 2804
HOT GAS ENRICHMENT BY DRAWF GALAXIES IN THE 5044 GALAXY GROUP
09/13/2000 - 09/14/2003 FY02: \$14,000 Total: \$30,000
Prin. Invest.: W G MATHEWS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10053 UNIV OF CALIFORNIA - SANTA CRUZ 2805
THE X-RAY HALOS OF EXTREMELY LUMINOUS GIANT LSB & HSB DISK
GALAXIES
12/06/2000 - 12/14/2002 FY02: \$0 Total: \$13,526
Prin. Invest.: B J WEINER
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10232 UNIV OF CALIFORNIA - SANTA CRUZ 2806
THE IONIZATION HISTORY OF THE INTERGALACTIC MEDIUM
01/24/2001 - 11/30/2002 FY02: \$0 Total: \$67,957
Prin. Invest.: P MADAU
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10612 UNIV OF CALIFORNIA - SANTA CRUZ 2807
GROWTH OF PLANETESIMALS IN A PROTOSTELLAR DISK ENVIRONMENT
03/17/2001 - 03/14/2004 FY02: \$55,000 Total: \$110,000
Prin. Invest.: D LIN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10676 UNIV OF CALIFORNIA - SANTA CRUZ 2808
BEOWULF CLUSTER FOR SMALL BODIES AND PLANETARY COLLISIONS
03/30/2001 - 03/31/2002 FY02: \$0 Total: \$51,700
Prin. Invest.: E ASPHAUG
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10683 UNIV OF CALIFORNIA - SANTA CRUZ 2809
PHYSICAL PROPERTIES OF A Z << 1 LYMAN LIMIT SYSTEM - FUSE 2000
03/29/2001 - 03/31/2003 FY02: \$0 Total: \$2,250
Prin. Invest.: B J WEINER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10727 UNIV OF CALIFORNIA - SANTA CRUZ 2810
TIDAL INTERACTION BETWEEN SHORT-PERIOD PLANETS AND THEIR HOST
STARS
04/09/2001 - 04/14/2003 FY02: \$40,000 Total: \$80,000
Prin. Invest.: D LIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11220 UNIV OF CALIFORNIA - SANTA CRUZ 2811
CONVECTION AND MAGNETIC FIELD GENERATION IN GIANT AND EXTRA-
SOLAR PLANETS: NUMERICAL SIMULATI
08/13/2001 - 08/31/2004 FY02: \$0 Total: \$107,000
Prin. Invest.: G A GLATZMAIER
Tech. Officer: GSFC/D J BOGAN
CASE Category: 99 – MULTIIINTERDISCIPL, OTHER

NAG 5 11513 UNIV OF CALIFORNIA - SANTA CRUZ 2812
EARLY GALAXIES
01/03/2002 - 12/31/2005 FY02: \$109,013 Total: \$109,013
Prin. Invest.: P MADAU
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11521 UNIV OF CALIFORNIA - SANTA CRUZ 2813
POST IMPACT ASTOIDS: GRAVIATIONAL INTERACTIONS, SPIN STATED, AND
SHAPES
12/31/2001 - 01/14/2004 FY02: \$25,200 Total: \$25,200
Prin. Invest.: D KORYCANSKY
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11779 UNIV OF CALIFORNIA - SANTA CRUZ 2814
ORIGIN OF DYNAMICAL DIVERSITY IN EXTRASOLAR MULTIPLE PLANETARY
SYSTEMS
02/26/2002 - 02/28/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: D LIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12036 UNIV OF CALIFORNIA - SANTA CRUZ 2815
MULTI-DIMENSIONAL MODELS FOR GAMMA-RAY BURSTS, X-RAY BURSTS,
AND SUPERNOVAE
04/12/2002 - 04/14/2005 FY02: \$121,560 Total: \$121,560
Prin. Invest.: S E WOOSLEY
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12151 UNIV OF CALIFORNIA - SANTA CRUZ 2816
EVOLUTION OF MULTI-PHASE INTERSELLAR MEDIUM IN YOUNG GALAXIES
05/10/2002 - 05/14/2005 FY02: \$86,031 Total: \$86,031
Prin. Invest.: D C LIN
Tech. Officer: GSFC/M SALOMON
CASE Category: 11 – ASTRONOMY

NAG 5 12326 UNIV OF CALIFORNIA - SANTA CRUZ 2817
STUDYING GALAXY FORMATION AND EVOLUTION WITH NEW DATA, MOD-
ELS, AND METHODS
06/27/2002 - 06/30/2005 FY02: \$186,940 Total: \$186,940
Prin. Invest.: J R PRIMACK
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12379 UNIV OF CALIFORNIA - SANTA CRUZ 2818
POSSIBLE NEAR-FUTURE RETREAT OF THE ROSS ICE SHELF DUE TO
DECREASING ICE DISCHARGE FROM THE ROSS ICE
07/12/2002 - 07/14/2005 FY02: \$25,428 Total: \$25,428
Prin. Invest.: S TULACZK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12496 UNIV OF CALIFORNIA - SANTA CRUZ 2819
IDENTIFYING THE PHYSICAL NATURE OF LOW Z OVI ABSORBERS.
08/29/2002 - 08/31/2003 FY02: \$93,900 Total: \$93,900
Prin. Invest.: J X PROCHASKA
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12574 **UNIV OF CALIFORNIA - SANTA CRUZ** **2820**
 DECELERATION OF ICE STREAM A AND WHILLANS ICE STREAM (B), WEST ANTARCTICA
 09/16/2002 - 09/14/2005 FY02: \$50,322 Total: \$50,322
Prin. Invest.: S TULACZYK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

NCC 2 1037 **UNIV OF CALIFORNIA - SANTA CRUZ** **2821**
 (NAS) AMES EDUCATION ASSOCIATES PROGRAM
 05/08/1998 - 06/30/2002 FY02: \$320,430 Total: \$3,668,475
Prin. Invest.: D L STANSBURY
Tech. Officer: ARC/S . PARKHUST, ARC/R G O'BRIEN III
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1081 **UNIV OF CALIFORNIA - SANTA CRUZ** **2822**
 STAR & PLANET FORMATION
 01/15/1999 - 02/28/2002 FY02: -\$86 Total: \$365,165
Prin. Invest.: P H BODENHEIMER
Tech. Officer: ARC/D J HOLLENBACH, ARC/P CASSEN
CASE Category: 11 – ASTRONOMY

NCC 2 1260 **UNIV OF CALIFORNIA - SANTA CRUZ** **2823**
 COMPARING & UNDERSTANDING DATA DISTRIBUTIONS IN EOS APPLICATIONS
 04/26/2001 - 02/28/2003 FY02: \$140,000 Total: \$207,301
Prin. Invest.: A PANG
Tech. Officer: ARC/D L KAO, ARC/V R WATSON
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5339 **UNIV OF CALIFORNIA - SANTA CRUZ** **2824**
 COLLABORATIVE RESEARCH IN STABLE ISOTOPE BIOGEOCHEMISTRY
 07/30/1999 - 07/31/2001 FY02: -\$3 Total: \$89,765
Prin. Invest.: G H RAU
Tech. Officer: ARC/D J DES MARAIS, ARC/L JAHNKE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 5351 **UNIV OF CALIFORNIA - SANTA CRUZ** **2825**
 SEARCH FOR THE UPPER TEMPERATURE LIMIT FOR EUKARYA - IS THERE COMPLEX LIFE BEYOND EARTH?
 09/03/1999 - 08/31/2001 FY02: -\$3 Total: \$19,997
Prin. Invest.: J PEARSE, J TRENT
Tech. Officer: ARC/M FONDA
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 5358 **UNIV OF CALIFORNIA - SANTA CRUZ** **2826**
 THE MOLECULAR BASIS OF HYPERTHEMPHILY
 10/18/1999 - 10/14/2001 FY02: -\$897 Total: \$64,643
Prin. Invest.: G MILLHAUSER, R A BOGOMOLNI, J D TRENT
Tech. Officer: ARC/M KLISS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5370 **UNIV OF CALIFORNIA - SANTA CRUZ** **2827**
 COLLABORATIVE RESEARCH ON MICROBIAL MAT NITROGEN CYCLING
 03/16/2000 - 09/14/2002 FY02: \$6,145 Total: \$190,000
Prin. Invest.: J P ZEHR
Tech. Officer: ARC/B N BEBOUT
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5418 **UNIV OF CALIFORNIA - SANTA CRUZ** **2828**
 GIANT MOLECULAR CLOUD STRUCTURE & EVOLUTION
 02/01/2001 - 02/28/2003 FY02: \$56,660 Total: \$118,110
Prin. Invest.: P BODENHEIMER
Tech. Officer: ARC/D J HOLLENBACH, LARC/G LAUGHLIN
CASE Category: 11 – ASTRONOMY

NCC 2 5428 **UNIV OF CALIFORNIA - SANTA CRUZ** **2829**
 THREE-DIMENSIONAL MODELING OF ASTEROID & CORNET IMPACTS INTO PLANETARY ATMOSPHERES
 03/14/2001 - 08/31/2001 FY02: -\$1 Total: \$30,221
Prin. Invest.: E I ASPHAUGH
Tech. Officer: ARC/K J ZAHNLE, ARC/R E YOUNG
CASE Category: 11 – ASTRONOMY

NCC 2 5436 **UNIV OF CALIFORNIA - SANTA CRUZ** **2830**
 ORIGINS & STRUCTURES OF PLANETARY & SATELLITE SYSTEMS
 05/18/2001 - 04/30/2003 FY02: \$50,865 Total: \$100,248
Prin. Invest.: P BODENHEIMER, A R DOBROVOLSKI
Tech. Officer: ARC/J N CUZZI
CASE Category: 11 – ASTRONOMY

NCC 2 5456 **UNIV OF CALIFORNIA - SANTA CRUZ** **2831**
 C/C VARIATIONS IN AQUATIC PHOTOAUTOTROPHS: THE POSSIBLE CONTRIBUTION OF PHOTORESPIRATORY CARBON EXCHANGE
 08/15/2001 - 07/31/2003 FY02: \$39,421 Total: \$60,844
Prin. Invest.: G H RAU
Tech. Officer: ARC/D DESMARAIS, ARC/L JAHNKE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 5480 **UNIV OF CALIFORNIA - SANTA CRUZ** **2832**
 METEOROID AIRBURSTS AND IMPACT GENERATED TSUNAMIS
 02/08/2002 - 01/31/2003 FY02: \$84,560 Total: \$84,560
Prin. Invest.: E ASPHAUGH
Tech. Officer: ARC/K ZAHNLE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 5483 **UNIV OF CALIFORNIA - SANTA CRUZ** **2833**
 MOLECULAR APPROACHES TO THE IDENTIFICATION OF NITROGEN FIXING MICROORGANISMS IN MICROBIAL MATS
 02/20/2002 - 02/14/2003 FY02: \$90,836 Total: \$90,836
Prin. Invest.: J ZEHR
Tech. Officer: ARC/B BEBOUT, ARC/L BEBOUT
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5501 **UNIV OF CALIFORNIA - SANTA CRUZ** **2834**
 THE EVOLUTION & DESPERAL OF PROTOSTELLAR DISKS
 07/16/2002 - 06/30/2003 FY02: \$13,333 Total: \$13,333
Prin. Invest.: G LAUGHLIN
Tech. Officer: ARC/D HOLLENBACH, ARC/K R BELL
CASE Category: 11 – ASTRONOMY

NGT 2 52260 **UNIV OF CALIFORNIA - SANTA CRUZ** **2835**
 VIOLENT VAGABONDS: THE EFFECT OF LARGE IMPACTS & MIGRATION ON GIANT PLANET EVOLUTION
 10/26/1999 - 10/14/2001 FY02: -\$3,287 Total: \$40,713
Prin. Invest.: P H
Tech. Officer: ARC/K J ZAHNLE
CASE Category: 11 – ASTRONOMY

NGT 5 43 **UNIV OF CALIFORNIA - SANTA CRUZ** **2836**
 MULTIWAVELENGTH STUDY OF THE EVOLUTION OF GALAXIES
 06/23/1997 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: P GUHATHAKURTA
Tech. Officer: GSFC/M S BURRELL
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NGT 5 108 UNIV OF CALIFORNIA - SANTA CRUZ 2837
 MULTI-WAVELENGTH STUDY OF GRBS USING BATSE, HETE II & MILAGRO
 (STUDENT: MIGUEL MORALES)
 06/12/2000 - 06/30/2003 FY02: \$6,000 Total: \$50,000
Prin. Invest.: D A WILLIAMS
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 13 – PHYSICS

NGT 5 30112 UNIV OF CALIFORNIA - SANTA CRUZ 2838
 EROSION AND SEDIMENT FLUXES BY VALLEY GLACIERS THROUGH THE
 CLIMATE CYCLE: LINKS BETWEEN ALPINE
 08/28/1998 - 03/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R S ANDERSON
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30415 UNIV OF CALIFORNIA - SANTA CRUZ 2839
 MODELING REEF ACCRETION RATES USING HYPERSPECTRAL REMOTE
 SENSING AND FIELD MEASUREMENTS IN THE NO
 08/16/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D POTTS
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11366 UNIV OF REDLANDS 2840
 SCIENCE AND MATHEMATICS BUILDING PROJECT
 09/28/2001 - 09/30/2003 FY02: \$0 Total: \$1,831,000
Prin. Invest.: J R APPLETON
Tech. Officer: GSFC/M V PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12538 UNIV OF REDLANDS 2841
 SCIENCE AND MATHEMATICS BUILDING PROJECT
 09/19/2002 - 09/14/2003 FY02: \$2,990,000 Total: \$2,990,000
Prin. Invest.: J R APPLETON
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10049 UNIV OF SAN DIEGO 2842
 INNOVATIVE CURRICULAR REVISION & RESEARCH IN FIELD OF EARTH-
 SYSTEM & SPACE SCIENCE
 10/13/2000 - 06/30/2003 FY02: \$0 Total: \$458,000
Prin. Invest.: S LOWERY
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11590 UNIV OF SAN DIEGO 2843
 BUILDING SUPPORT OF INNOVATIVE CURRICULAR REVISION AND RE-
 SEARCH IN THE FIELDS OF EARTH-SYSTEM AND
 01/28/2002 - 12/31/2003 FY02: \$961,132 Total: \$961,132
Prin. Invest.: F M LAZARUS
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1354 UNIV OF SAN DIEGO 2844
 FABRICATION AND GROWTH OF ENGINEERED TISSUES: ARTICULAR CAR-
 TILAGE W/BIOLOGICAL FUNCTIONAL STRAT
 08/17/2001 - 09/30/2004 FY02: \$208,000 Total: \$267,000
Prin. Invest.: R SAH, A HOGER, S N BHATIA
Tech. Officer: JSC/D RISIN
CASE Category: 56 – MEDICAL

NCC 5 308 UNIV OF SAN DIEGO 2845
 CREATIVE & INNOVATIVE WORKING PHOTOTYPE EARTH SCIENCE INFOR.
 PARTNERSHIP IN SUPPORT OF EARTH
 01/15/1998 - 12/31/2002 FY02: \$65,000 Total: \$1,440,000
Prin. Invest.: J J SIMPSON
Tech. Officer: GSFC/M MAIDEN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1282 UNIV OF SAN FRANCISCO 2846
 DOES GRAVITY INFLUENCE MATRIX SURVIVAL SIGNALING
 09/10/2001 - 09/30/2002 FY02: \$0 Total: \$13,021
Prin. Invest.: C H DAMSKY
Tech. Officer: ARC/E A ALMEIDA, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 1 1996 UNIV OF SOUTHERN CALIFORNIA 2847
 TURBULENCE EFFECTS ON VERY LARGE FLIGHT VEHICLES.
 01/23/1998 - 01/31/2002 FY02: -\$5,480 Total: \$220,520
Prin. Invest.: P B LISSAMAN
Tech. Officer: LARC/J R CURZ
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1489 UNIV OF SOUTHERN CALIFORNIA 2848
 INVESTIGATING TEAMWORK AMONG SPACECRAFT (NEWAMES)
 06/28/2001 - 04/30/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: M TAMBE
Tech. Officer: ARC/C J PLAUNT, ARC/J BRESINA
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2124 UNIV OF SOUTHERN CALIFORNIA 2849
 STRUCTURE OF FLAME BALLS IN LOW LEWIS NUMBER STRUCTURE OF
 FLAME BALLS IN LOW LEWIS NUMBER
 02/10/1998 - 04/30/2003 FY02: \$190,000 Total: \$1,033,809
Prin. Invest.: P D RONNEY
Tech. Officer: GRC/K J WEILAND
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2125 UNIV OF SOUTHERN CALIFORNIA 2850
 THE DYNAMICS OF MISCIBLE INTERFACES: A SPACE FLIGHT EXPERIMENT
 02/25/1998 - 12/31/2002 FY02: \$30,000 Total: \$605,847
Prin. Invest.: T MAXWORTHY, E H MEIBURG
Tech. Officer: GRC/B SIGH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2478 UNIV OF SOUTHERN CALIFORNIA 2851
 THE DYNAMICS OF PARTICULATE DEPOSITION AND RESUSPENSION
 PROCESSES AT MODERATE TO HIGH REYNOLDS NUMBER
 08/09/2000 - 11/30/2003 FY02: \$72,070 Total: \$164,096
Prin. Invest.: D MAXWORTHY
Tech. Officer: GRC/F P CHARIAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2559 UNIV OF SOUTHERN CALIFORNIA 2852
 INTEGRATED MICROPHONIC RECEIVER FOR KA-BAND INTEGRATED MICRO-
 PHONIC RECEIVER FOR KA-BAND
 03/10/2001 - 03/09/2004 FY02: \$196,875 Total: \$459,375
Prin. Invest.: A LEVI
Tech. Officer: GRC/J POUCH
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2776 **UNIV OF SOUTHERN CALIFORNIA** **2853**
 THE DYNAMICS OF MISCIBLE INTERFACES: A SPACE FLIGHT EXPERIMENT
 05/07/2002 - 12/31/2003 FY02: \$94,000 Total: \$94,000
Prin. Invest.: T MAXWORTHY
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3429 **UNIV OF SOUTHERN CALIFORNIA** **2854**
 THE ABUNDANCES OF THE IRON GROUP ELEMENTS IN EARLY B STARS
 10/21/1996 - 10/31/2001 FY02: -\$101 Total: \$65,199
Prin. Invest.: G J PETERS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 5018 **UNIV OF SOUTHERN CALIFORNIA** **2855**
 ROCKET UNDERFLIGHTS FOR SOHO CROSS-CALIBRATION AND SOLAR
 ATMOSPHERE INVESTIGATIONS
 02/28/1994 - 08/31/2001 FY02: -\$149 Total: \$1,669,236
Prin. Invest.: D J JUDGE
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5333 **UNIV OF SOUTHERN CALIFORNIA** **2856**
 FIRST OF 3 YEAR EFFORT IN BASIC SCIENTIFIC RESEARCH WITH USC
 06/25/2001 - 06/18/2004 FY02: \$295,147 Total: \$585,116
Prin. Invest.: D JUDGE
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6512 **UNIV OF SOUTHERN CALIFORNIA** **2857**
 OPTICAL AND ANCILLARY MEASUREMENTS AT HIGH LATITUDES IN
 SUPPORT OF THE MODIS OCEAN VALIDATION PROGRAM
 12/05/1997 - 09/30/2002 FY02: \$0 Total: \$310,372
Prin. Invest.: M STRAMSKA
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6696 **UNIV OF SOUTHERN CALIFORNIA** **2858**
 AN INVESTIGATION OF THE HIGH TEMPERATURE CIRCUMSTELLAR
 PLASMA IN ALGOL-TYPE INTERACTING BINARIES
 12/17/1997 - 12/31/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: G J PETERS
Tech. Officer: GSFC/R POLIDAN
CASE Category: 11 – ASTRONOMY

NAG 5 6966 **UNIV OF SOUTHERN CALIFORNIA** **2859**
 PHYSICAL PROCESSES AT THE HELIOSPHERIC BOUNDARY AND THEIR
 DETECTABLE SIGNATURES AT 1 AU. A THEORETICAL STUDY
 03/05/1998 - 12/31/2001 FY02: -\$947 Total: \$67,353
Prin. Invest.: M A GRUNTMAN
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7117 **UNIV OF SOUTHERN CALIFORNIA** **2860**
 EUV OBSERVATIONS OF EARLY B STARS: EUV FLUX VARIABILITY IN BETA
 CYCLES THROUGHOUT ITS BEAT PERIOD
 04/13/1998 - 04/14/2001 FY02: -\$35 Total: \$11,485
Prin. Invest.: G J PETERS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7147 **UNIV OF SOUTHERN CALIFORNIA** **2861**
 MINIATURIZED OPTICS FREE EUV ARRAY SPECTROMETER TO PROVIDE
 STABLE SOLAR EUV SPECTRA
 03/23/1998 - 04/14/2001 FY02: -\$115 Total: \$228,140
Prin. Invest.: D L JUDGE
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8021 **UNIV OF SOUTHERN CALIFORNIA** **2862**
 STUDIES OF SOLAR INTERNAL STRUCTURE AND DYNAMICS USING HIGH
 DEGREE P-MODE OBSERVATIONS FROM THEMIS
 01/22/1999 - 03/31/2002 FY02: \$0 Total: \$203,000
Prin. Invest.: E J RHODES
Tech. Officer: GSFC/J GURMAN
CASE Category: 11 – ASTRONOMY

NAG 5 8274 **UNIV OF SOUTHERN CALIFORNIA** **2863**
 PHOTON ABSORPTION STUDIES OF ATMOSPHERIC GASES UNDER
 VARIOUS CONDITIONS
 04/06/1999 - 12/31/2001 FY02: \$0 Total: \$154,455
Prin. Invest.: D JUDGE
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8367 **UNIV OF SOUTHERN CALIFORNIA** **2864**
 THE ABUNDANCES OF THE IRON GROUP ELEMENTS IN EARLY B STARS
 (ADP98)
 03/01/1999 - 02/28/2002 FY02: -\$87 Total: \$38,802
Prin. Invest.: G PETERS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8545 **UNIV OF SOUTHERN CALIFORNIA** **2865**
 STUDIES OF TEMPORAL CHANGES IN SOLAR INTERNAL STRUCTURE &
 DYNAMICS USING OBSERVATIONS OF INTERMEDIATE
 WAVELLENGTHS
 05/13/1999 - 04/30/2003 FY02: \$81,982 Total: \$505,430
Prin. Invest.: E J RHODES
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8884 **UNIV OF SOUTHERN CALIFORNIA** **2866**
 MODELING N₂ AND CO₂ FIXATION BY THE OCEAN DIAZOTROPHIC
 CYANOBACTERIUM, TRICHODESMIUM
 11/24/1999 - 09/30/2001 FY02: \$0 Total: \$59,027
Prin. Invest.: D CAPONE
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8939 **UNIV OF SOUTHERN CALIFORNIA** **2867**
 OUTER PLANET UPPER ATMOSPHERE/MAGNETOSPHERE RESEARCH
 01/14/2000 - 01/14/2003 FY02: \$75,000 Total: \$220,650
Prin. Invest.: D SHEMANSKY
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8978 **UNIV OF SOUTHERN CALIFORNIA** **2868**
 OBSERVATION OF THE ACCRETION-DRIVEN BIPOLAR FLOWS IN THE
 INTERACTING BINARIES THYIA & V356 SGR FUSE
 01/24/2000 - 01/31/2003 FY02: \$0 Total: \$29,000
Prin. Invest.: G J PETERS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

CALIFORNIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9124 UNIV OF SOUTHERN CALIFORNIA 2869
 CIRCUMSTELLAR MATERIAL & STELLAR COMPONENTS IN HR 2142, A
 MASSIVE INTERACTING BINARY IN A LATE EVOLU
 03/07/2000 - 03/14/2003 FY02: \$0 Total: \$29,378
Prin. Invest.: G PETERS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9740 UNIV OF SOUTHERN CALIFORNIA 2870
 VALIDATION OF THE SEMI-DIURNAL TITAL FLUCTUATIONS IN THE COMPU-
 TATIONS OF WATER LEAVING RADIANCE FROM
 08/31/2000 - 08/31/2001 FY02: -\$308 Total: \$26,817
Prin. Invest.: R ITURRIAGA
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10399 UNIV OF SOUTHERN CALIFORNIA 2871
 MICROSCALE, MILLIWATT VACUUM PUMPS FOR SAMPLING INSTRUMENTA-
 TION
 02/13/2001 - 02/29/2004 FY02: \$177,408 Total: \$351,680
Prin. Invest.: G SHIFLETT
Tech. Officer: GSFC/M DUTTA
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10930 UNIV OF SOUTHERN CALIFORNIA 2872
 INVESTIGATING THE EXCITATION MECHANISM FOR COMETARY X-RAY, EUV,
 & FUV EMISSIONS (FUSE 2000)
 05/17/2001 - 06/30/2002 FY02: \$0 Total: \$10,000
Prin. Invest.: D E SHEMANSKY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10989 UNIV OF SOUTHERN CALIFORNIA 2873
 EXPLORATION OF THE HELIOSPHERIC INTERFACE BY SOLAR BACKSCAT-
 TERED LYMAN ALPHA RADIATION: INTERPREATIO
 06/05/2001 - 05/31/2003 FY02: \$98,703 Total: \$174,744
Prin. Invest.: P K GANGOPADHAY
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11001 UNIV OF SOUTHERN CALIFORNIA 2874
 IMPLEMENTATION OF A NEW METHOD FOR THE COMPUTATION OF THE
 FREQUENCIES & FREQUENCY SPLITTINGS OF THE
 06/06/2001 - 05/31/2004 FY02: \$99,000 Total: \$187,000
Prin. Invest.: E J RHODES
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11042 UNIV OF SOUTHERN CALIFORNIA 2875
 TEMPERATURE-DEPENDENT CROSS SECTION MEASUREMENT OF LIGHT
 HYDROCARBONS, IN SUPPORT OF OUTER PLANET
 06/13/2001 - 06/14/2004 FY02: \$57,000 Total: \$110,000
Prin. Invest.: C WU
Tech. Officer: GSFC/D J BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11218 UNIV OF SOUTHERN CALIFORNIA 2876
 IMPROVE ESTIMATE OF GAS TRANSFER USING SCATTEROMET ER
 08/13/2001 - 10/31/2001 FY02: -\$103,971 Total: \$0
Prin. Invest.: D BOGUCKI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11304 UNIV OF SOUTHERN CALIFORNIA 2877
 MICROGRAVITY TRANSPORT PROCESSES IN FLUID, THERMAL MATERIALS
 AND BIOLO- GICAL SCIENCES CONFERENCE
 08/30/2001 - 08/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: S SADHAL
Tech. Officer: GSFC/D SPEARS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11582 UNIV OF SOUTHERN CALIFORNIA 2878
 HIGH-DEGREE P-MODE STRUCTURE AND DYNAMIC STUDIES
 01/17/2002 - 03/31/2005 FY02: \$79,000 Total: \$79,000
Prin. Invest.: E J RHODES
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11802 UNIV OF SOUTHERN CALIFORNIA 2879
 HEAVY ELEMENT ABUNDANCES IN EARLY B STARS
 02/28/2002 - 03/31/2004 FY02: \$48,498 Total: \$48,498
Prin. Invest.: G PETERS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11807 UNIV OF SOUTHERN CALIFORNIA 2880
 MICRO-LIGHT XRAY TO FAR ULTRAVIOLET(FUV) SPECTRO- METER FOR
 ATMOSPHERE SCIENCE
 02/28/2002 - 02/28/2004 FY02: \$206,000 Total: \$206,000
Prin. Invest.: D L JUDGE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12239 UNIV OF SOUTHERN CALIFORNIA 2881
 HEAVY ELEMENT ABUNDANCES IN TWO B0-B0.5 MAIN SEQUE NCE STARS
 IN THE SMALLMAGELLANIC CLOUD
 06/04/2002 - 06/14/2003 FY02: \$41,100 Total: \$41,100
Prin. Invest.: G J PETERS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12253 UNIV OF SOUTHERN CALIFORNIA 2882
 A STUDY OF THE HIGH TEMPERATURE POLAR PLASMA IN B- TYPE
 INTERACTING BINARIES
 06/12/2002 - 06/14/2003 FY02: \$22,900 Total: \$22,900
Prin. Invest.: G J PETERS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12396 UNIV OF SOUTHERN CALIFORNIA 2883
 REMOTE SENSING OF PARTICULATE ORGANIC CARBON POOLS IN THE
 HIGH LATITUDES
 07/23/2002 - 07/31/2005 FY02: \$49,028 Total: \$49,028
Prin. Invest.: M STRAMSKA
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1663 UNIV OF SOUTHERN CALIFORNIA 2884
 NON-INTRUSIVE MEASUREMENT OF THERMOPHYSICAL PROPERTIES OF
 LIQUIDS BY ELETROSTATIC LEVITATION
 06/16/2000 - 11/30/2003 FY02: \$90,000 Total: \$390,500
Prin. Invest.: S SADHAL
Tech. Officer: MSFC/P DOTY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1701 **UNIV OF SOUTHERN CALIFORNIA** **2885**
 EXTINCTION AND INSTABILITY MECHANISMS OF POLYMERIZATION
 FRONTS
 07/19/2000 - 11/30/2003 FY02: \$100,000 Total: \$235,000
Prin. Invest.: P RONNEY
Tech. Officer: MSFC/P DOTY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1165 **UNIV OF SOUTHERN CALIFORNIA** **2886**
 AUGMENTED REALITY FOR SPACE FLIGHT
 12/07/1999 - 03/09/2003 FY02: \$173,645 Total: \$587,204
Prin. Invest.: U NEUMANN
Tech. Officer: JSC/B J WOOLFORD
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1444 **UNIV OF SOUTHERN CALIFORNIA** **2887**
 SKILL LEARNING BY PRIMITIVES - BASED DEMONSTRATION AND IMITATIONS
 08/05/2002 - 07/31/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: M J MATARIC
Tech. Officer: JSC/R T SAVELY
CASE Category: 22 – COMPUTER SCIENCE

NAS 2 00091 **UNIV OF SOUTHERN CALIFORNIA** **2888**
 OPERATION / MGMT OF NASA FAR WEST RTTC
 12/21/2000 - 12/31/2002 FY02: \$1,204,800 Total: \$2,407,645
Prin. Invest.: K DOZIER
Tech. Officer: ARC/E ROBINSON, ARC/C CASTELLANO
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 8 97115 **UNIV OF SOUTHERN CALIFORNIA** **2889**
 USC RTTC
 01/30/1997 - 12/31/2000 FY02: \$0 Total: \$5,333,164
Prin. Invest.: G BEKEY
Tech. Officer: ARC/C CASTELLANO
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 2 1224 **UNIV OF SOUTHERN CALIFORNIA** **2890**
 BIOLOGICAL ASPECTS OF COMPUTATION
 04/05/2001 - 02/28/2003 FY02: \$147,303 Total: \$397,303
Prin. Invest.: L ADLEMAN
Tech. Officer: ARC/T R GOVINDAN, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1242 **UNIV OF SOUTHERN CALIFORNIA** **2891**
 ROBUST SPEECH RECOGNITION USING DYNAMIC SYNAPSE NE URAL NETWORKS
 04/25/2001 - 02/28/2003 FY02: \$139,000 Total: \$264,000
Prin. Invest.: T W BERGER
Tech. Officer: ARC/L STONE, ARC/M SHAFTO
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5420 **UNIV OF SOUTHERN CALIFORNIA** **2892**
 CARBON NANOTUBE MOLECULAR ELECTROCIENS
 02/09/2001 - 02/28/2003 FY02: \$94,999 Total: \$189,998
Prin. Invest.: C ZHOU
Tech. Officer: ARC/M MEYYAPPAN, ARC/H PARTRIDGE
CASE Category: 13 – PHYSICS

NCC 2 5454 **UNIV OF SOUTHERN CALIFORNIA** **2893**
 MOLECULAR WIRES AND TRANSISTORS
 08/08/2001 - 07/31/2003 FY02: \$75,000 Total: \$115,000
Prin. Invest.: C ZHOU
Tech. Officer: ARC/M MEYYAPPAN, ARC/H PARRISAGE
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 671 **UNIV OF SOUTHERN CALIFORNIA** **2894**
 TRANSPORT AND CHEMICAL EFFECTS ON CONCURRENT AND O PPOSED-
 FLOW FLAME SPREAD AT MICROGRAVITY
 02/12/1999 - 01/03/2003 FY02: \$120,000 Total: \$606,500
Prin. Invest.: P D RONNEY
Tech. Officer: GRC/S A GOKOGLU
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 678 **UNIV OF SOUTHERN CALIFORNIA** **2895**
 QUANTITATIVE STUDIE SON THE PROPAGATION AND EXTINC TION OF
 NEAR-LIMIT FLAMES UNDER NORMAL AND MICROG
 03/01/1999 - 11/29/2002 FY02: \$90,000 Total: \$390,000
Prin. Invest.: F N EGOLFOPOLUOS
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 827 **UNIV OF SOUTHERN CALIFORNIA** **2896**
 ACOUSTIC BUBBLE REMOVAL FROM BOILING SURFACES AND ITS OPTIMI-
 ZATION
 09/29/2000 - 11/30/2003 FY02: \$55,000 Total: \$135,249
Prin. Invest.: K OHSAKA
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 834 **UNIV OF SOUTHERN CALIFORNIA** **2897**
 DETAILED STUDIES ON THE STRUCTURE AND DYNAMICS OF REACTING
 DUSTY FLOWS AT NORMAL- AND MICRO-GRAVITY
 12/18/2000 - 10/31/2004 FY02: \$99,999 Total: \$199,998
Prin. Invest.: P N EGOLFOPOULOS
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 841 **UNIV OF SOUTHERN CALIFORNIA** **2898**
 HIGH PRESSURE TRANSPORT PROPERTIES OF FLUIDS: THE ORY AND
 DATA FROM LEVITATED DROPS AT COMBUSTION-R
 12/22/2000 - 11/30/2003 FY02: \$45,000 Total: \$90,000
Prin. Invest.: K OHSAKA
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 854 **UNIV OF SOUTHERN CALIFORNIA** **2899**
 DETERMINATION OF COOL FLAME QUENCHING DISTANCES AT MICRO-
 GRAVITY
 01/24/2001 - 11/30/2004 FY02: \$10,734 Total: \$58,201
Prin. Invest.: H PEARLMAN
Tech. Officer: GRC/J E BROOKER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 871 **UNIV OF SOUTHERN CALIFORNIA** **2900**
 THE HIGH-LEWIS NUMBER DIFFUSIVE-THERMAL INSTABILTY IN PREMIXED
 GAS COMBUSTION AND LOW TEMPERATURE
 03/01/2001 - 11/30/2004 FY02: \$83,928 Total: \$193,413
Prin. Invest.: H PEARLMAN
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

COLORADO

NAG 5 9684 **COLORADO SCHOOL OF MINES** **2901**
 LUNAR DATA ANALYSIS PROGRAM PROPOSAL: ECONOMIC EVALUATION
 OF POLAR REGIONS USING LUNAR PROSPECT
 06/29/2000 - 06/30/2003 FY02: \$35,000 Total: \$99,000
Prin. Invest.: M B DUKE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 9 1207 **COLORADO SCHOOL OF MINES** **2902**
 EXTRACTION OF VOLATILES FROM LUNAR AND MARTIAN REGOLITHS
 03/01/2000 - 02/28/2003 FY02: \$0 Total: \$229,997
Prin. Invest.: M B DUKE
Tech. Officer: JSC/D MCKAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1364 **COLORADO SCHOOL OF MINES** **2903**
 A NOVEL COLLOIDAL MICROFULVIDES PLATFORM FOR SPACE BORNE
 MICRO TOTAL
 07/27/2001 - 09/30/2004 FY02: \$154,000 Total: \$235,000
Prin. Invest.: D W. M. MARR
Tech. Officer: JSC/D RISIN
CASE Category: 56 – MEDICAL

NCC 3 659 **COLORADO SCHOOL OF MINES** **2904**
 A FUNDAMENTAL STUDY OF THE COMBUSTION SYNTHESIS OF CERAMIC-
 METAL COMPOSITE MATERIALS UNDER MICROGRA
 01/05/1999 - 11/11/2002 FY02: \$117,000 Total: \$475,750
Prin. Invest.: D J MOORE
Tech. Officer: GRC/S A GOKOGLU
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 238 **COLORADO SCHOOL OF MINES** **2905**
 PROMOTE COMMERCIALY FUNDED RESEARCH AND TECH DEV. IN THE
 FIELD OF SPACE COMBUSTION
 02/05/2002 - 10/31/2002 FY02: \$4,300,000 Total: \$4,300,000
Prin. Invest.: F D SCHOWENGERDT
Tech. Officer: MSFC/J SAMS
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2045 **COLORADO STATE UNIV** **2906**
 LARGE EDDY SIMULATION OF CIRRUS CLOUDS
 04/02/1998 - 10/31/2001 FY02: -\$171 Total: \$142,292
Prin. Invest.: W COTTON
Tech. Officer: LARC/D S MCDUGAL, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2247 **COLORADO STATE UNIV** **2907**
 RETRIEVAL OF PROPERTIES OF HIGH CLOUDS FROM LITE DATA
 10/21/1999 - 09/30/2002 FY02: \$1 Total: \$218,144
Prin. Invest.: G STEPHENS
Tech. Officer: LARC/V DELNORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02008 **COLORADO STATE UNIV** **2908**
 COMPARISON OF CLOUD RESOLVING MODEL SIMULATIONS TO REMOTE
 SENSING DATA
 11/19/2001 - 11/30/2003 FY02: \$84,225 Total: \$84,225
Prin. Invest.: D A RANDALL
Tech. Officer: LARC/G G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 1801 **COLORADO STATE UNIV** **2909**
 ADVANCED ELECTRIC PROPULSION RESEARCH
 01/23/1996 - 09/30/2003 FY02: \$61,040 Total: \$266,147
Prin. Invest.: P J WILBUR
Tech. Officer: GRC/V K RAWLIN
CASE Category: 13 – PHYSICS

NAG 5 4646 **COLORADO STATE UNIV** **2910**
 TITLE: USING MULTI-SENSOR DATA TO MODEL FACTORS IN GLOBAL ARID
 & SEMIARID LANDS
 06/17/1997 - 05/31/2002 FY02: \$0 Total: \$2,212,780
Prin. Invest.: D OJIMA
Tech. Officer: GSFC/G C GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6228 **COLORADO STATE UNIV** **2911**
 VEMAP PHASE II
 09/11/1997 - 06/30/2001 FY02: -\$799 Total: \$377,113
Prin. Invest.: D OJIMA
Tech. Officer: GSFC/J RANSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6637 **COLORADO STATE UNIV** **2912**
 ASSESSING THE IMPACT OF REMOTE SENSING DATA ON CLIMATOL
 PREDICTION IN SHORT-TERM FORECASTS
 11/18/1997 - 04/30/2001 FY02: \$0 Total: \$544,049
Prin. Invest.: P L STEPHENS
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7717 **COLORADO STATE UNIV** **2913**
 IMPROVING TRMM GV & FC GOALS USING POLARIMETRIC RADAR
 ANALYSES W/IN-SITU GROUND-BASED AND AIRCRAFT P
 10/27/1998 - 10/31/2002 FY02: \$0 Total: \$306,488
Prin. Invest.: V N BRINGI
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7719 **COLORADO STATE UNIV** **2914**
 TOWARDS A MULTISENSOR APPROACH TO IMPROVE CURRENT TRMM
 RETRIEVALS OF CLOUDS AND PRECIPITATION
 10/27/1998 - 10/31/2001 FY02: \$0 Total: \$257,201
Prin. Invest.: G L STEPHENS
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7783 **COLORADO STATE UNIV** **2915**
 MODELED AEROSOL OPTICAL PROPERTIES FROM MEASUREMENT-BASED
 MIXTURES OF CHEMICAL SPECIES-ASSESSING TH
 11/03/1998 - 12/31/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: S M KREIDENWEIS
Tech. Officer: GSFC/M MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9308 **COLORADO STATE UNIV** **2916**
 FUNDING FOR THE CLOSEOUT OF "FREEZING CHARACTERISTICS OF
 SOOT/SULFATE AEROSOLS IN RESPONSE TO NATURAL
 03/28/2000 - 09/30/2002 FY02: \$0 Total: \$73,040
Prin. Invest.: D J DEMOTT
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9642 **COLORADO STATE UNIV** **2917**
ANALYSIS OF DATA FROM TRMM/LBA TO VALIDATE TRMM SATELLITE
ALGORITHMS & MODELS
06/19/2000 - 11/30/2002 FY02: \$160,000 Total: \$515,984
Prin. Invest.: S A RUTLEDGE
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9647 **COLORADO STATE UNIV** **2918**
USE OF TRMM DATA TO TEST AN IMPROVED PARAMETERIZATION OF
STRATIFORM PRECIPITATION
06/20/2000 - 11/30/2003 FY02: \$261,000 Total: \$597,432
Prin. Invest.: D A RANDALL
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9655 **COLORADO STATE UNIV** **2919**
TRMM PRECIPITATION RADAR AND MICROPHYSICS: INTERPRETATION AND
PRECIPITATION ESTIMATION
06/09/2000 - 11/30/2003 FY02: \$136,000 Total: \$329,239
Prin. Invest.: V CHANDRASEKAR
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9665 **COLORADO STATE UNIV** **2920**
TRMM SOUNDING STUDIES
06/06/2000 - 06/14/2003 FY02: \$156,500 Total: \$332,000
Prin. Invest.: R H JOHNSON
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10076 **COLORADO STATE UNIV** **2921**
TWO-BEAM SODIUM LIDAR OBSERVATION OF TEMPERATURE & WINDS &
PASSIVE OPTICAL MEASUREMENT CLUSTER IN TH
10/24/2000 - 04/30/2003 FY02: \$68,600 Total: \$270,600
Prin. Invest.: C SHE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10482 **COLORADO STATE UNIV** **2922**
THE EFFECTS OF CLIMATE REGIME ON TRMM RETRIEVALS
03/01/2001 - 05/31/2003 FY02: \$70,000 Total: \$221,000
Prin. Invest.: W K BERG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10593 **COLORADO STATE UNIV** **2923**
AN INTEGRATED MULTI-SCALE INVESTIGATION OF GRASSLAND MAN-
AGEMENT: IMPLICATIONS FOR CARBON CYCLING
03/22/2001 - 02/28/2004 FY02: \$129,284 Total: \$245,150
Prin. Invest.: R CONANT
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11010 **COLORADO STATE UNIV** **2924**
OBSERVATIONAL, THEORETICAL, AND MODELING RESEARCH IN SUPPORT
OF CAMEX
06/06/2001 - 06/14/2004 FY02: \$89,100 Total: \$174,100
Prin. Invest.: W H SCHUBERT
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11018 **COLORADO STATE UNIV** **2925**
VALIDATE SATELLITE MEASUREMENTS OF UV RADIATION BY TOMS
06/21/2001 - 06/14/2003 FY02: \$72,799 Total: \$142,527
Prin. Invest.: J SLUSSER
Tech. Officer: GSFC/J R HERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11073 **COLORADO STATE UNIV** **2926**
LAND-USE CHANGE IN TEMPERATE EAST ASIA: LAND COVER CHANGES
IMPACTS ON CARBON FLUXES AND LAND PRODUCT
07/19/2001 - 08/14/2004 FY02: \$130,931 Total: \$174,156
Prin. Invest.: D OJIMA
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11109 **COLORADO STATE UNIV** **2927**
VALIDATION AND ENHANCEMENT OF AMSR-E CLOUD AND PRECIPITATION
PRODUCTS AQUA-0070-0047
07/13/2001 - 08/31/2004 FY02: \$161,721 Total: \$218,540
Prin. Invest.: G L STEPHENS
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11140 **COLORADO STATE UNIV** **2928**
ENERGY & WATER CYCLES WITHIN HURRICANES DETERMINED FROM
HIGH-RESOLUTIONS SIMULATIONS
08/08/2001 - 08/14/2004 FY02: \$46,747 Total: \$91,746
Prin. Invest.: M T MONTGOMERY
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11189 **COLORADO STATE UNIV** **2929**
THE EXTENSION OF THE TRMM MICROWAVE RAINFALL AND VERTICAL
STRUCTURE ALGORITHM TO OTHER RADIOMETER
08/07/2001 - 08/14/2004 FY02: \$240,000 Total: \$553,617
Prin. Invest.: C D KUMMEROW
Tech. Officer: GSFC/R L LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11280 **COLORADO STATE UNIV** **2930**
MARS SOIL MECHANICS INVESTIGATION
08/20/2001 - 12/31/2002 FY02: \$0 Total: \$59,200
Prin. Invest.: H PERKON
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11370 **COLORADO STATE UNIV** **2931**
ENSEMBLE SIMULATIONS OF REGIONAL CLIMATE INCORPORATING EX-
PLICIT VEGETATION DYNAMICS & TERRESTRIAL
10/18/2001 - 10/31/2004 FY02: \$213,333 Total: \$213,333
Prin. Invest.: R A PIELKE
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11475 **COLORADO STATE UNIV** **2932**
TOWARD UNDERSTANDING THE LIFE-CYCLE OF TROPICAL CIRRUS
12/19/2001 - 12/31/2003 FY02: \$110,000 Total: \$110,000
Prin. Invest.: G L STEPHENS
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 11476 COLORADO STATE UNIV 2933
 UPPER TROPOSPHERIC ICE NUCLEI MEASUREMENTS IN CRYSTAL-FACE
 12/19/2001 - 12/31/2003 FY02: \$141,974 Total: \$141,974
Prin. Invest.: P J DEMOTT
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11507 COLORADO STATE UNIV 2934
 CUMULONIMBUS/CIRRUS INTERACTIONS IN THE SUB-TROPIC S
 01/03/2002 - 12/31/2003 FY02: \$110,000 Total: \$110,000
Prin. Invest.: W R COTTON
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11710 COLORADO STATE UNIV 2935
 MULTI-SCALE COVERGENCE OF COLD-LAND PROCESS REPRESENTATION
 IN LAND-SURFACE MODELS, MICROWAVE R
 02/06/2002 - 02/14/2005 FY02: \$89,886 Total: \$89,886
Prin. Invest.: G LISTON
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11737 COLORADO STATE UNIV 2936
 VARIATIONS OF CAPE ON DECADEAL TIME SCALES
 02/12/2002 - 02/14/2005 FY02: \$140,000 Total: \$140,000
Prin. Invest.: D RANDALL
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11816 COLORADO STATE UNIV 2937
 RISK MITIGATION STUDIES FOR EVOLVING DATA AND INFORMATION
 SYSTEMS RELATED TO RAINFALL MISSION
 03/08/2002 - 03/14/2005 FY02: \$181,834 Total: \$181,834
Prin. Invest.: C KUMMEROW
Tech. Officer: GSFC/E F STOCKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12105 COLORADO STATE UNIV 2938
 FELLOWSHIPS FOR GRADUATE STUDENTS AS PART OF THE CENTER FOR
 EARTH ATMOSPHERE STUDIES
 05/06/2002 - 06/30/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: C KUMMEROW
Tech. Officer: GSFC/V V SALOMONSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12273 COLORADO STATE UNIV 2939
 RAINFALL AND CONVECTIVE RAIN SYSTEM STRUCTURE DEDUCED FROM
 AMSR OBSERVATIONS
 06/07/2002 - 06/14/2005 FY02: \$190,000 Total: \$190,000
Prin. Invest.: C D KUMMEROW
Tech. Officer: GSFC/R ADLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12275 COLORADO STATE UNIV 2940
 CIRA DEVELOPMENT OF A PARALLEL COUPLED OCEAN-ICE FORECAST
 MODEL
 06/14/2002 - 09/14/2002 FY02: \$30,000 Total: \$30,000
Prin. Invest.: C MATSUMOTO
Tech. Officer: GSFC/S HAKKINEN
CASE Category: 33 – OCEANOGRAPHY

NAG 8 1801 COLORADO STATE UNIV 2941
 MINI-MAGNETOSPHERIC PLASMA PROPULSION FOR PLANT-ETARY EXPLO-
 RATION
 04/25/2001 - 02/14/2004 FY02: \$71,814 Total: \$172,915
Prin. Invest.: P J WILBUR
Tech. Officer: GRC/V K RAWLIN
CASE Category: 13 – PHYSICS

NAG10 234 COLORADO STATE UNIV 2942
 GRAVITY INDUCED CHANGES IN GENE EXPRESSION
 09/22/1997 - 12/31/2000 FY02: \$0 Total: \$353,340
Prin. Invest.: A N REDDY
Tech. Officer: KSC/W M KNOTT
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG13 02005 COLORADO STATE UNIV 2943
 APPLICATION OF REMOTELY SENSED IMAGERY TO ASSESING PROBABILI-
 TIES AND CARBON CONSEQUENCES OF FIRE
 12/03/2001 - 12/02/2005 FY02: \$110,544 Total: \$110,544
Prin. Invest.: I BURKE
Tech. Officer: SSC/C DEL CASTILLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 1 98125 COLORADO STATE UNIV 2944
 CLOUDS AND THE EARTH'S ENERGY SYSTEM (CERES) SCIENTIFIC INVE-
 TIGATION
 10/28/1998 - 10/31/2002 FY02: \$323,177 Total: \$1,017,584
Prin. Invest.: D A
Tech. Officer: LARC/B A WIELICKI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99103 COLORADO STATE UNIV 2945
 ALGORITHM AND INSTRUMENT SUPPORT ACTIVITIES FOR PICASSO-CENA
 05/17/1999 - 05/16/2003 FY02: \$204,175 Total: \$337,425
Prin. Invest.: G L STEPHENS, C PLATT
Tech. Officer: LARC/G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 99237 COLORADO STATE UNIV 2946
 CLOUDSAT MISSION AS A PART OF EARTH SYSTEM SCIENCE PATHFINDER
 (ESSP) PROJECT.
 12/17/1999 - 03/31/2005 FY02: \$797,200 Total: \$1,923,527
Prin. Invest.: G STEPHENS
Tech. Officer: GSFC/D LEWIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 8 97082 COLORADO STATE UNIV 2947
 A STUDY OF THE ROLE OF CLOUDS IN THE RELATIONSHIP BETWEEN LAND
 USE/LAND COVER AND THE CLIMATE
 11/21/1996 - 03/20/2001 FY02: \$0 Total: \$172,624
Prin. Invest.: S Q KIDDER
Tech. Officer: MSFC/T MILLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1099 COLORADO STATE UNIV 2948
 AN EXTENDED ANALYSIS OF SCIENCE OUTREACH PROGRAMS IN THE
 SPACE LIFE SCIENCES IMPLEMENTED NASA IN PAR
 03/16/1999 - 01/31/2003 FY02: \$527,685 Total: \$2,409,201
Prin. Invest.: G VOGT
Tech. Officer: ARC/S POTTER, ARC/M M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1268 **COLORADO STATE UNIV** **2949**
 NASA WORKSHOP: WHEN ECOLOGIES COLLIDE? PLANETARY PROTECTION ISSUES IN THE HUMAN EXPLORATION OF MARS
 05/31/2001 - 02/28/2002 FY02: \$0 Total: \$53,050
Prin. Invest.: M CRISWELL
Tech. Officer: ARC/M FONDA, ARC/M L FONDA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 5 284 **COLORADO STATE UNIV** **2950**
 SPATIAL INTEGRATION OF REGIONAL CARBON BALANCE IN AMAZONIA
 06/25/1998 - 12/31/2002 FY02: \$233,441 Total: \$1,194,803
Prin. Invest.: A DENNING
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 288 **COLORADO STATE UNIV** **2951**
 JOINT RESEARCH STUDIES ON EARTH-ATMOSPHERIC PROBLEMS
 06/05/1998 - 03/31/2002 FY02: -\$43 Total: \$992,391
Prin. Invest.: G L STEPHENS
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 621 **COLORADO STATE UNIV** **2952**
 GLOBAL AND REGIONAL CARBON FLUX ESTIMATION USING ATMOSPHERIC CO2 MEASUREMENTS FROM SPACEBORNE
 01/09/2002 - 12/31/2004 FY02: \$417,665 Total: \$417,665
Prin. Invest.: A DENNING
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30218 **COLORADO STATE UNIV** **2953**
 LIGHTNING & RADAR OBSERVATIONS FROM GROUND-BASED & SPACEBORNE PLATFORMS: APPLICATIONS FOR TRMM
 08/24/1999 - 02/28/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: S A RUTLEDGE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30344 **COLORADO STATE UNIV** **2954**
 THE RESPONSE OF THE NORTH AMERICAN MONSOON TO BOUNDARY AND REGIONAL FORCING MECHANISMS AS SIMILAR
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R PIELKE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30421 **COLORADO STATE UNIV** **2955**
 SPACEBORNE OBSERVATIONS OF PRECIPITATION USING NASA/TRMM AND GPM MISSION (STUDENT: KONRAD GOJARA)
 09/07/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: V CHANDRAEKAR
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30438 **COLORADO STATE UNIV** **2956**
 ENVIRONMENTAL AND LAND-USE CONTROLS OF CHEATGRASS INVASION (STUDENT: JOHN BRADFORD)
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W LAUENROTH
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30458 **COLORADO STATE UNIV** **2957**
 DETERMINATION OF THE ROLES OF TROPICAL THIN CIRRUS CLOUDS IN CLIMATE FEEDBACKS THROUGH AN IMPROVED
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: G STEPHENS
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50164 **COLORADO STATE UNIV** **2958**
 PROPERTIES OF COMET MANTLE DUST
 06/03/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J NELSON
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 49 **COLORADO STATE UNIV** **2959**
 EVALUATION OF GRAVITY-INDEPENDENT CONSTANT FORCE RESISTIVE EXERCISE UNIT
 06/29/2000 - 09/30/2001 FY02: -\$340 Total: \$21,646
Prin. Invest.: S P JAMES
Tech. Officer: JSC/M C GREENNISEN
CASE Category: 46 – MECHANICAL ENGR

NAG 1 2165 **UNIV OF COLORADO - BOULDER** **2960**
 COMPARISONS OF THREE DIMENSIONAL NUMERICAL SIMULATIONS OF AMBIENT AND VOLCANIC STRATOSPHERIC
 04/28/1999 - 11/30/2002 FY02: \$31,472 Total: \$256,472
Prin. Invest.: O B TOON
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2187 **UNIV OF COLORADO - BOULDER** **2961**
 IMPACT OF DESCENDING POLAR MESOSPHERIC NOX ON STRATOSPHERIC OZONE, NRA-98-OES-04
 04/27/1999 - 01/31/2002 FY02: -\$211 Total: \$114,789
Prin. Invest.: C E RANDALL
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01053 **UNIV OF COLORADO - BOULDER** **2962**
 APPLICATION OF LES TO UNDERSTANDING AND PARAMETERIZING THE ARCTIC CLOUDY BOUNDARY LAYER
 03/30/2001 - 04/30/2002 FY02: \$0 Total: \$155,000
Prin. Invest.: J A CURRY, C A GELLILAN, R R REEDER
Tech. Officer: LARC/V E DELNORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01074 **UNIV OF COLORADO - BOULDER** **2963**
 ADVANCED CROSS ENTERPRISE TECHNOLOGY DEVELOPMENT FOR NASA MISSIONS
 06/07/2001 - 01/31/2004 FY02: \$285,000 Total: \$556,000
Prin. Invest.: A BETY
Tech. Officer: LARC/C MOORE
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 01081 **UNIV OF COLORADO - BOULDER** **2964**
 ESTIMATES OF NUMBER OF YEARS TO DETECT FUTURE CHANGES IN CLOUDS AND RADIATION
 05/15/2001 - 04/30/2003 FY02: \$65,258 Total: \$130,672
Prin. Invest.: E C
Tech. Officer: LARC/B A WIELICKI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 1 02009 UNIV OF COLORADO - BOULDER 2965
 NUM:INTEGRATED MEMBRANOUS-MICROELEMENT STRUCTURES TECHNOLOGY
 11/26/2001 - 11/25/2004 FY02: \$82,706 Total: \$82,706
Prin. Invest.: K C PARK
Tech. Officer: LARC/W K BELVIN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 02046 UNIV OF COLORADO - BOULDER 2966
 TERRAIN AWARENESS FOR SMALL AIRCRAFT USING GPS BISTATIC RADAR, DIGITAL ELEVATION MAPS, AND GIS
 01/31/2002 - 01/31/2005 FY02: \$62,596 Total: \$62,596
Prin. Invest.: C AXELROD
Tech. Officer: LARC/K SUTTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02079 UNIV OF COLORADO - BOULDER 2967
 ELECTRONICALLY ACTUATED ARTIFICIAL MUSCLE COMPOSED OF A MEMBRANOUS LIQUID CRYSTAL ELASTOMER
 04/12/2002 - 05/31/2003 FY02: \$24,904 Total: \$24,904
Prin. Invest.: D M WALBA
Tech. Officer: LARC/D L THOMSEN
CASE Category: 12 – CHEMISTRY

NAG 1 02116 UNIV OF COLORADO - BOULDER 2968
 AIRFRAME NOISE MODELING AND CONTROL
 09/30/2002 - 09/30/2006 FY02: \$50,327 Total: \$50,327
Prin. Invest.: O V VASILYEV
Tech. Officer: LARC/M R KHORRANI, LARC/C L STREETT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02118 UNIV OF COLORADO - BOULDER 2969
 SUPERSONIC AIRCRAFT SHAPING TECHNOLOGY FOR A CONSTANT MAINED SHOCK PRESSURE RISE
 09/30/2002 - 09/30/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: C FARHAT, K MAUTE, B ARGROW
Tech. Officer: LARC/P G COEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1124 UNIV OF COLORADO - BOULDER 2970
 MEASUREMENTS OF LONG LIVED TRACE GASES FROM COMMERCIAL AIRCRAFT PLATFORMS: INSTRUMENT DEVELOPMENT
 04/08/1997 - 02/28/2002 FY02: \$0 Total: \$730,343
Prin. Invest.: L M AVALLONE
Tech. Officer: ARC/E P CONDON, ARC/S S WEGENER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1307 UNIV OF COLORADO - BOULDER 2971
 IN SITU MEASUREMENTS OF HALOGEN OXIDES FROM THE DC -8 FOR SOLVE
 03/19/1999 - 03/31/2002 FY02: \$0 Total: \$174,603
Prin. Invest.: D W TOOHEY
Tech. Officer: ARC/E P CONDON, ARC/S R HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1315 UNIV OF COLORADO - BOULDER 2972
 THEORETICAL STUDIES OF STRATOSPHERIC CLOUDS & AEROSOLS IN SUPPORT OF SOLVE
 04/01/1999 - 03/31/2002 FY02: \$0 Total: \$100,400
Prin. Invest.: O B TOON
Tech. Officer: ARC/E P CONDON, ARC/R S HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1445 UNIV OF COLORADO - BOULDER 2973
 APPLICATION OF AEROSONDE, CLUSTERS TO EVALUATING THE MESOSCALE VARIABILITY IN TROPICAL STORMS
 09/28/2000 - 03/14/2001 FY02: -\$5,538 Total: \$84,462
Prin. Invest.: P J WEBSTER
Tech. Officer: ARC/S S WEGENER, ARC/R S HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1506 UNIV OF COLORADO - BOULDER 2974
 APPLICATIONS OF THE AEROSONDE TO CAMEX-4
 07/17/2001 - 06/30/2002 FY02: \$0 Total: \$566,807
Prin. Invest.: G J HOLLAND
Tech. Officer: ARC/C P SCOFIELD, ARC/R S HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1561 UNIV OF COLORADO - BOULDER 2975
 STRESS AND COGNITION: A COGNITIVE PSYCHOLOGICAL PERSPECTIVE
 05/24/2002 - 11/30/2002 FY02: \$25,000 Total: \$25,000
Prin. Invest.: L E BOURNE
Tech. Officer: ARC/I BARSHI, ARC/R DISMUKES
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1575 UNIV OF COLORADO - BOULDER 2976
 BALLOON BORNE SOUNDINGS OF WATER VAPOR OZONE AND TEMPERATURE IN THE UPPER TROPOSPHERE AND LOWER STRATOSPHERE
 08/06/2002 - 11/30/2003 FY02: \$112,963 Total: \$112,963
Prin. Invest.: H VOEMEL, S J OLTMANS
Tech. Officer: ARC/C P SCOFIELD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2116 UNIV OF COLORADO - BOULDER 2977
 THERMOCAPILLARY-INDUCED PHASE SEPARATION OF DISPERSED SYSTEMS WITH COALESCENCE
 01/28/1998 - 12/31/2002 FY02: \$15,000 Total: \$296,250
Prin. Invest.: R H DAVIS
Tech. Officer: GRC/B S SINGH
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2136 UNIV OF COLORADO - BOULDER 2978
 DUSTY PLASMA DYNAMICS NEAR SURFACES IN SPACE. DUSTY PLASMA DYNAMICS NEAR SURFACES IN SPACE.
 03/05/1998 - 09/05/2002 FY02: \$40,000 Total: \$395,000
Prin. Invest.: J E COLWELL, S ROBERTSON, M HORANYI
Tech. Officer: GRC/H K NAHRA
CASE Category: 13 – PHYSICS

NAG 3 2220 UNIV OF COLORADO - BOULDER 2979
 COMBUSTION OF METALS IN REDUCED-GRAVITY AND EXTRATERRESTRIAL ENVIRONMENTS
 12/29/1998 - 11/11/2002 FY02: \$112,004 Total: \$415,005
Prin. Invest.: M C BRANCH
Tech. Officer: GRC/R FRIEDMAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2267 UNIV OF COLORADO - BOULDER 2980
 COLLISIONS INTO DUST EXPERIMENT II COLLISIONS INTO DUST EXPERIMENT II
 05/14/1999 - 04/30/2003 FY02: \$0 Total: \$113,579
Prin. Invest.: J E COLWELL
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2400 UNIV OF COLORADO - BOULDER 2981
 PHYSICS OF REGOLITH IMPACTS IN MICROGRAVITY EXPERIMENT (PRIME)
 04/19/2000 - 11/30/2003 FY02: \$95,000 Total: \$230,500
Prin. Invest.: J E COLWELL
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2402 UNIV OF COLORADO - BOULDER 2982
 STRATIFIED TAYLOR-COUETTE FLOW WITH RADIAL BUOYANCY
 04/19/2000 - 11/30/2003 FY02: \$95,000 Total: \$220,000
Prin. Invest.: J E HART
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2457 UNIV OF COLORADO - BOULDER 2983
 STRUCTURE AND DYNAMICS OF FREELY SUSPENDED LIQUID CRYSTALS
 06/07/2000 - 11/30/2003 FY02: \$113,693 Total: \$303,846
Prin. Invest.: N A CLARK
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2587 UNIV OF COLORADO - BOULDER 2984
 MULTI-BEAM ANTENNA ARRAYS FOR SATELITE COMMUNICATIONS
 04/04/2001 - 04/14/2003 FY02: \$85,000 Total: \$185,000
Prin. Invest.: Z POPOVIC
Tech. Officer: GRC/R Q LEE
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2643 UNIV OF COLORADO - BOULDER 2985
 VIRTUAL MISSION OPERATIONS USING INTERNET PROTOCOLS
 08/23/2001 - 07/31/2004 FY02: \$150,000 Total: \$188,000
Prin. Invest.: E HANSEN
Tech. Officer: GRC/D CAREK
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2651 UNIV OF COLORADO - BOULDER 2986
 NEW MATERIALS FOR PROTON-CONDUCTING MEMBRANES NEW MATERIALS FOR PROTON-CONDUCTING MEMBRANES
 09/27/2001 - 08/31/2002 FY02: \$98,608 Total: \$118,608
Prin. Invest.: J MICHL
Tech. Officer: GRC/P L LOYSELLE
CASE Category: 12 – CHEMISTRY

NAG 3 2716 UNIV OF COLORADO - BOULDER 2987
 DYNAMICS OF CHARGED DUST NEAR SURFACES IN SPACE DYNAMICS OF CHARGED DUST NEAR SURFACES IN SPACE
 02/27/2002 - 11/30/2005 FY02: \$86,975 Total: \$86,975
Prin. Invest.: D E COLWELL
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2783 UNIV OF COLORADO - BOULDER 2988
 MASS AND MOMENTUM TRANSPORT IN CELL SUSPENSION CULTURES
 05/24/2002 - 09/30/2004 FY02: \$32,495 Total: \$32,495
Prin. Invest.: P KLAUS
Tech. Officer: GRC/D S NELSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3226 UNIV OF COLORADO - BOULDER 2989
 THE FUNDAMENTAL PHYSICAL PROCESSES PRODUCING AND CONTROLLING STELLAR CORONAL/TRANSITION
 05/07/1996 - 04/30/2002 FY02: \$0 Total: \$553,000
Prin. Invest.: T A AYRES
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3394 UNIV OF COLORADO - BOULDER 2990
 CHARACTERIZING AND QUANTIFYING THE X-RAY VARIABLE SKY
 09/06/1996 - 09/14/2003 FY02: \$0 Total: \$205,188
Prin. Invest.: G S STRINGFELLOW
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3437 UNIV OF COLORADO - BOULDER 2991
 LAND AND LAND-USE CHANGE IN THE CLIMATE SENSITIVE HIGH PLAINS: AN AUTOMATED APPROACH WITH LANDSAT
 10/07/1996 - 12/31/2001 FY02: -\$48 Total: \$863,149
Prin. Invest.: A GOETZ
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3438 UNIV OF COLORADO - BOULDER 2992
 ENHANCED ANTARCTIC RESEARCH WITH LANDSAT: ICE SHEET DYNAMICS, HISTORY AND CARTOGRAPHY
 10/07/1996 - 06/30/2002 FY02: \$0 Total: \$263,523
Prin. Invest.: T SCAMBOS
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3794 UNIV OF COLORADO - BOULDER 2993
 LIQUID CRYSTAL FOCAL-PLANE SHUTTERS
 03/25/1997 - 07/31/2002 FY02: \$0 Total: \$58,941
Prin. Invest.: P T STOCKE
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 3949 UNIV OF COLORADO - BOULDER 2994
 LOWER IONOSPHERE THERMOSPHERE EXPLORER
 02/21/1997 - 12/31/2001 FY02: \$0 Total: \$199,777
Prin. Invest.: D C SOLOMON
Tech. Officer: GSFC/R HOWARD
CASE Category: 13 – PHYSICS

NAG 5 3967 UNIV OF COLORADO - BOULDER 2995
 INTEGRATED ANALYSIS OF COLUMELLA CELL STRUCTURE AND
 03/03/1997 - 05/31/2002 FY02: \$0 Total: \$499,236
Prin. Invest.: A STAEHELIN
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 4063 UNIV OF COLORADO - BOULDER 2996
 ASTROPHYSICS AT THE DISK-HALO INTERFACE
 03/18/1997 - 03/31/2002 FY02: \$0 Total: \$293,400
Prin. Invest.: M J SHULL
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4095 UNIV OF COLORADO - BOULDER 2997
 EVENT RATE FOR LISA GRAVITATIONAL WAVE SIGNALS FROM BLACK HOLE COALESCENCES
 03/12/1997 - 03/31/2002 FY02: -\$252 Total: \$192,248
Prin. Invest.: D L BENDER
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 4248 UNIV OF COLORADO - BOULDER 2998
 GREENLAND ICE SHEET CLIMATOLOGY AND SURFACE ENERGY GREEN-
 LAND CLIMATE NETWORK (GCNET)
 03/26/1997 - 03/31/2001 FY02: -\$3,744 Total: \$849,495
Prin. Invest.: D STEFFEN
Tech. Officer: GSFC/R THOMAS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5096 UNIV OF COLORADO - BOULDER 3006
 HIGH RESOLUTION SPECTROSCOPY IN THE FAR AND EXTREME ULTRA-
 VIOLET
 12/02/1996 - 05/31/2003 FY02: \$450,000 Total: \$2,775,978
Prin. Invest.: E WILKINSON
Tech. Officer: GSFC/W JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 4343 UNIV OF COLORADO - BOULDER 2999
 DUST PLASMA INTERACTION
 04/17/1997 - 05/14/2001 FY02: \$0 Total: \$236,500
Prin. Invest.: D HORANYI
Tech. Officer: GSFC/J BOHLIN
CASE Category: 13 – PHYSICS

NAG 5 5274 UNIV OF COLORADO - BOULDER 3007
 FUNDING FOR PHASE 1 AWARD OF THE OWLS/MARE PROJECT UNES
 COLORADO FOR X-RAY
 06/21/2000 - 04/13/2006 FY02: \$0 Total: \$370,000
Prin. Invest.: W EMERY
Tech. Officer: WFF/D L PIERCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4440 UNIV OF COLORADO - BOULDER 3000
 RADARSAT ANTARCTIC MAPPING PROJECT
 05/13/1997 - 06/30/2002 FY02: -\$61 Total: \$50,878
Prin. Invest.: R G BARRY
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5331 UNIV OF COLORADO - BOULDER 3008
 YEAR 1 OF A 3 YEAR GRANT IN BASIC SCIENTIFIC RESEARCH WITH U OF
 COLORADO FOR X-RAY
 04/18/2001 - 12/31/2004 FY02: \$200,000 Total: \$300,000
Prin. Invest.: D CASH
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 4467 UNIV OF COLORADO - BOULDER 3001
 NATURAL OSCILLATIONS OF THE THERMOSPHERE-IONOSPHER
 05/27/1997 - 04/30/2002 FY02: \$0 Total: \$271,054
Prin. Invest.: P FORBES
Tech. Officer: GSFC/M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 6048 UNIV OF COLORADO - BOULDER 3009
 LATE STAGES OF ACCRETION OF URANUS AND NEPTUNE
 07/25/1997 - 06/30/2002 FY02: \$0 Total: \$164,470
Prin. Invest.: D STEWART
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4804 UNIV OF COLORADO - BOULDER 3002
 A UNIFIED ANALYSIS OF NON-RADIATIVE HEATING AND WI
 07/30/1997 - 07/31/2003 FY02: \$0 Total: \$497,100
Prin. Invest.: G HARPER
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6051 UNIV OF COLORADO - BOULDER 3010
 ASSESSING FUTURE STABILITY OF US HIGH PLAINS LANDC PROCESS
 MODELING WITH LANDSAT IN SITU MODERN, AND
 07/28/1997 - 09/30/2001 FY02: -\$64 Total: \$529,936
Prin. Invest.: D WEBB
Tech. Officer: GSFC/G C GUTMIN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4918 UNIV OF COLORADO - BOULDER 3003
 PENETRATIVE DYNAMICS OF THE SOLAR INTERIOR
 07/07/1997 - 11/30/2000 FY02: \$0 Total: \$261,809
Prin. Invest.: D JULIEN
Tech. Officer: GSFC/W G WAGNER
CASE Category: 13 – PHYSICS

NAG 5 6134 UNIV OF COLORADO - BOULDER 3011
 QUANTIFYING GRASSLAND-TO-WOODLAND TRANSITIONS AND CARBON
 AND NITROGEN DYNAMICS INTHE SOUTHWEST UNIT
 09/08/1997 - 01/31/2002 FY02: \$0 Total: \$548,190
Prin. Invest.: D A WESSMAN
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5027 UNIV OF COLORADO - BOULDER 3004
 ENERGY TRANSFER IN THE THERMOSPHERE AND MESOSPHERE FUNDING
 FOR A ONE-YEAR EFFORT IN BASIC RESEARCH
 03/03/1995 - 02/29/2004 FY02: \$0 Total: \$383,148
Prin. Invest.: S SOLOMON
Tech. Officer: GSFC/L EARLY
CASE Category: 13 – PHYSICS

NAG 5 6337 UNIV OF COLORADO - BOULDER 3012
 X-RAY REPROCESSING IN ACTIVE GALACTIC NUCLEI
 10/30/1997 - 06/30/2004 FY02: \$109,700 Total: \$530,700
Prin. Invest.: M BEGELMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 5028 UNIV OF COLORADO - BOULDER 3005
 TIDES, PLANETARY WAVES, AND EDDY FORCING OF THE MEAN MLT
 CIRCULATION FOR THE TIMED SCIENCE...
 03/03/1995 - 03/05/2005 FY02: \$354,000 Total: \$1,189,576
Prin. Invest.: J FORBES
Tech. Officer: GSFC/L J EARLY, GSFC/R H PLESS
CASE Category: 13 – PHYSICS

NAG 5 6462 UNIV OF COLORADO - BOULDER 3013
 VALIDATION STUDIES AND SENSITIVITY ANALYSES FOR RE TRIEVALS OF
 SNOW ALBEDO & SNOWCOVERED AREA FROM
 10/14/1997 - 09/30/2003 FY02: \$44,634 Total: \$332,913
Prin. Invest.: A NOLIN
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6474 UNIV OF COLORADO - BOULDER 3014
 IMAGING INTERPLANETARY HYDROGEN WITH ULYSSES
 11/13/1997 - 10/31/2001 FY02: \$0 Total: \$120,000
Prin. Invest.: D PRYOR
Tech. Officer: GSFC/L LING
CASE Category: 11 – ASTRONOMY

NAG 5 6521 UNIV OF COLORADO - BOULDER 3015
 IMPROVING THE ACCURACY OF SATELLITE SEA SURFACE TEMPERATURE
 MEASUREMENTS BY EXPLICITLY ACCOUNTING FOR
 12/05/1997 - 09/30/2001 FY02: -\$1,410 Total: \$524,959
Prin. Invest.: D EMERY
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6629 UNIV OF COLORADO - BOULDER 3016
 STUDIES OF TROPICAL/MID-LATITUDE EXCHANGE USING UARS OBSER-
 VATIONS
 11/18/1997 - 11/30/2001 FY02: \$0 Total: \$160,089
Prin. Invest.: D AVALLONE
Tech. Officer: GSFC/A DOUGLASS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6636 UNIV OF COLORADO - BOULDER 3017
 PASSIVE MICROWAVE SNOW COVER ALGORITHM INTERCOMPARISON
 AND VALIDATION
 11/18/1997 - 10/31/2001 FY02: -\$396 Total: \$306,766
Prin. Invest.: D L ARMSTRONG
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6683 UNIV OF COLORADO - BOULDER 3018
 MODELING AND ANALYSIS OF UARS DATA IN THE STRATOSPHERE,
 MESOSPHERE, AND LOWER THERMOSPHERE
 12/08/1997 - 11/30/2001 FY02: -\$15 Total: \$79,985
Prin. Invest.: S BAILEY
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6758 UNIV OF COLORADO - BOULDER 3019
 LABORATORY STUDIES OF THE VISIBLE SPECTROSCOPY AND CHEMISTRY
 OF POLYCYCLIC AROMATIC HYDROCARBON (PAH)
 12/24/1997 - 12/31/2002 FY02: \$0 Total: \$494,662
Prin. Invest.: T P SNOW
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 6791 UNIV OF COLORADO - BOULDER 3020
 EXTRACTION OF TIDES AND PLANETARY WAVES FROM SATELLITE
 OBSERVATIONS
 02/17/1998 - 02/28/2002 FY02: -\$25 Total: \$142,018
Prin. Invest.: S PALO
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NAG 5 6820 UNIV OF COLORADO - BOULDER 3021
 ARCTIC REGIONAL SEA-ICE ANOMALIES: A DIAGNOSIS OF ICE-
 ATMOSPHERE OCEAN INTERACTIONS AND LINKAGES TO
 01/09/1998 - 12/31/2001 FY02: -\$287 Total: \$257,216
Prin. Invest.: A LYNCH
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6850 UNIV OF COLORADO - BOULDER 3022
 UARS - SOLSTICE
 01/12/1998 - 12/14/2001 FY02: \$0 Total: \$723,000
Prin. Invest.: D ROTTMAN
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6875 UNIV OF COLORADO - BOULDER 3023
 ABSOLUTE GRAVITY/GPS MEASUREMENTS IN GREENLAND
 02/17/1998 - 12/31/2001 FY02: -\$5 Total: \$57,569
Prin. Invest.: J WAHR
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6880 UNIV OF COLORADO - BOULDER 3024
 LASER INTERFEROMETRY TECHNIQUES FOR ACCURATE MEASUREMENT
 OF DISTANCE CHANGES BETWEEN WIDELY SEPARATED
 02/17/1998 - 12/31/2000 FY02: \$0 Total: \$285,000
Prin. Invest.: R T STEBBINS
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 6900 UNIV OF COLORADO - BOULDER 3025
 INVESTIGATIONS OF CLOUDS AND AEROSOLS ON MARS AND VENUS
 01/21/1998 - 03/31/2003 FY02: \$78,800 Total: \$379,039
Prin. Invest.: O TOON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 6936 UNIV OF COLORADO - BOULDER 3026
 THE EVOLUTION AND X-RAY MORPHOLOGY OF DISTANT CLUSTERS OF
 GALAXIES
 02/04/1998 - 02/14/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: J T STOCKE
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6984 UNIV OF COLORADO - BOULDER 3027
 MEDIUM ENERGY PARTICLE PRECIPITATION EFFECTS ON THE MESO-
 SPHERE AND LOWER THERMOSPHERE
 02/27/1998 - 03/31/2002 FY02: -\$117 Total: \$229,367
Prin. Invest.: M CODRESCU
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NAG 5 7088 UNIV OF COLORADO - BOULDER 3028
 MHD SIMULATIONS OF THE COUPLING BETWEEN IO AND JUPITER
 02/23/1998 - 03/31/2002 FY02: \$0 Total: \$199,346
Prin. Invest.: F BAGENAL
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7128 UNIV OF COLORADO - BOULDER 3029
 PRECISION MEASUREMENT OF LARGE SCALE STRUCTURE-ATP
 03/24/1998 - 02/14/2002 FY02: \$0 Total: \$207,289
Prin. Invest.: A J HAMILTON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 7223 UNIV OF COLORADO - BOULDER 3030
 A SEARCH FOR CORONAL EMISSION AT THE BOTTOM OF THE MAIN-SEQUENCE
 04/09/1998 - 04/14/2003 FY02: \$0 Total: \$9,920
Prin. Invest.: G S STRINGFELLOW
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7262 UNIV OF COLORADO - BOULDER 3031
 THE INTERGALACTIC MEDIUM AND QSO ABSORPTION SYSTEM S₊ (L TSA - NEW)
 04/28/1998 - 04/30/2002 FY02: \$114,300 Total: \$542,200
Prin. Invest.: J SHULL
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7329 UNIV OF COLORADO - BOULDER 3032
 XTE PROPOSAL - RXTE OBSERVATIONS OF M87: INVESTIGATING THE NON-THERMAL CONTINUUM
 04/24/1998 - 04/14/2001 FY02: -\$266 Total: \$7,734
Prin. Invest.: C REYNOLDS
Tech. Officer: GSFC/J SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 7449 UNIV OF COLORADO - BOULDER 3033
 RELATIONSHIPS BETWEEN INTERSTELLAR AND INTERPLANETARY GRAINS
 07/02/1998 - 06/30/2002 FY02: \$0 Total: \$83,500
Prin. Invest.: T P SNOW
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7465 UNIV OF COLORADO - BOULDER 3034
 NARROW BAND IMAGING WITH HOLOGRAPHIC TELESCOPES
 11/25/1998 - 12/31/2002 FY02: \$0 Total: \$182,810
Prin. Invest.: D WILKINSON
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 7543 UNIV OF COLORADO - BOULDER 3035
 INVESTIGATING DOWNSCALING METHODS AND EVALUATING CLIMATE MODELS FOR USE IN ESTIMATING REGIONAL WATER
 06/23/1998 - 07/31/2003 FY02: -\$1,429 Total: \$268,571
Prin. Invest.: A FREI
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7638 UNIV OF COLORADO - BOULDER 3036
 INTERFEROMETRIC TECHNIQUES FOR GRAVITATIONAL WAVE DETECTION IN SPACE
 12/08/1998 - 06/30/2002 FY02: \$0 Total: \$138,000
Prin. Invest.: D BENDER
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 7652 UNIV OF COLORADO - BOULDER 3037
 AN INVESTIGATION OF THE EFFECT OF PARTICLE IONIZATION ON THE EARTH'S MIDDLE ATMOSPHERE AND ITS RADIATION
 08/25/1998 - 09/30/2001 FY02: \$0 Total: \$195,000
Prin. Invest.: D W RUSCH
Tech. Officer: HQ/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 7679 UNIV OF COLORADO - BOULDER 3038
 CLOUD STRUCTURE RECONSTRUCTION AND SHORTWAVE RADIATIVE TRANSFER MODELING FOR ARMYEAR 1 OF A 3 YEAR
 09/17/1998 - 02/28/2002 FY02: \$0 Total: \$143,000
Prin. Invest.: K EVANS
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7703 UNIV OF COLORADO - BOULDER 3039
 FUNDING FOR 'TEMPORAL VARIATIONS OF THE GEOPOTENTIAL' (SENH98-0102)
 09/23/1998 - 09/30/2003 FY02: \$0 Total: \$286,000
Prin. Invest.: J M WAHR
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7723 UNIV OF COLORADO - BOULDER 3040
 THE DISK WIND MODEL OF THE BROAD LINE REGIONS IN ACTIVE GALACTIC NUCLEI AND CATAclysmic VARIABLES
 09/23/1998 - 09/30/2002 FY02: \$0 Total: \$174,047
Prin. Invest.: M C BEGELMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7725 UNIV OF COLORADO - BOULDER 3041
 MODEL PREDICTIONS OF INTERACTIONS BETWEEN SOLAR AND ANTHROPOGENIC PERTURBATIONS IN THE EARTH'S CLIMATE
 09/23/1998 - 09/30/2001 FY02: \$0 Total: \$62,000
Prin. Invest.: D RUSCH
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7760 UNIV OF COLORADO - BOULDER 3042
 CHARACTERIZING THE SINGLE COAST ICE STREAM SYSTEM USING SATELLITE IMAGES, IMPROVED TOPOGRAPHY, AND IN SITU MEASUREMENTS
 12/21/1998 - 12/31/2002 FY02: \$0 Total: \$119,876
Prin. Invest.: T A SCAMBOS
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7784 UNIV OF COLORADO - BOULDER 3043
 SOLAR MESOSPHERE EXPLORER MEASUREMENTS OF HELIOSPHERIC AEROSOLS
 11/09/1998 - 10/31/2001 FY02: -\$44 Total: \$173,806
Prin. Invest.: C E RANDALL
Tech. Officer: GSFC/M MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7838 UNIV OF COLORADO - BOULDER 3044
 STUDY OF ANOMALOUS VARIATION OF THE TOTAL SOLAR IR RADIANCE AT THE BEGINNING OF SOLAR CYCLE 23
 12/16/1998 - 12/14/2001 FY02: \$0 Total: \$125,020
Prin. Invest.: G DE TOMA
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7996 UNIV OF COLORADO - BOULDER 3045
 GLOBAL AND LOCAL HELIOSEISMIC STUDIES OF SOLAR CONVECTION ZONE DYNAMICS USING SOI-MDI
 01/05/1999 - 12/31/2002 FY02: \$0 Total: \$685,000
Prin. Invest.: J TOOMRE
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8047 **UNIV OF COLORADO - BOULDER** **3046**
 A COMPARATIVE ANALYSIS OF THE GALILEO-ERA IO TORUS & ATMOSPHERE
 01/15/1999 - 01/14/2001 FY02: -\$386 Total: \$104,614
Prin. Invest.: N M SCHNEIDER
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8096 **UNIV OF COLORADO - BOULDER** **3047**
 ULTRAVIOLET STUDIES OF JUPITER'S HYDROCARBONS AND AEROSOLS FROM GALILEO
 01/29/1999 - 06/30/2003 FY02: \$0 Total: \$110,000
Prin. Invest.: D R PRYOR
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8108 **UNIV OF COLORADO - BOULDER** **3048**
 THE YOUNGEST STARS - LTSA 98
 02/11/1999 - 02/14/2004 FY02: \$101,625 Total: \$396,881
Prin. Invest.: J BALLY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8127 **UNIV OF COLORADO - BOULDER** **3049**
 "INFRARED OPTICAL CONSTANTS OF PARTICLES IN THE LOWER STRATOSPHERE AND UPPER TROPOSPHERE"
 02/04/1999 - 03/31/2002 FY02: \$18,789 Total: \$336,977
Prin. Invest.: M A TOLBERT
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8133 **UNIV OF COLORADO - BOULDER** **3050**
 GLOBAL MODELS OF SOLAR CONVECTION, ROTATION AND MAGNETIC ACTIVITY
 03/02/1999 - 04/30/2003 FY02: \$0 Total: \$896,788
Prin. Invest.: J TOOMRE
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 11 – ASTRONOMY

NAG 5 8178 **UNIV OF COLORADO - BOULDER** **3051**
 ULTRAVIOLET PHOTOMETRIC PARAMETERS OF THE ICY GALILEAN SATELLITES AND THE MOON
 02/11/1999 - 02/14/2001 FY02: -\$4,929 Total: \$59,871
Prin. Invest.: A HENDRIX
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8236 **UNIV OF COLORADO - BOULDER** **3052**
 SN1987A: THE BIRTH OF A SUPERNOVA REMNANT (ATP 98)
 02/25/1999 - 02/28/2003 FY02: \$0 Total: \$299,308
Prin. Invest.: R A MCCRAY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8247 **UNIV OF COLORADO - BOULDER** **3053**
 GGS CEPPAD SUPPLEMENT
 02/24/1999 - 01/31/2002 FY02: \$0 Total: \$276,000
Prin. Invest.: D BAKER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8256 **UNIV OF COLORADO - BOULDER** **3054**
 JOVIAN AURORAL CHEMISTRY
 02/11/1999 - 02/14/2003 FY02: \$0 Total: \$35,304
Prin. Invest.: W PRYOR
Tech. Officer: GSFC/DBOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8259 **UNIV OF COLORADO - BOULDER** **3055**
 MULTISPECTRAL MAPPING OF THE MARTIAN POLAR ICE CAP S
 02/16/1999 - 02/28/2003 FY02: \$0 Total: \$217,000
Prin. Invest.: A W NOLIN
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8266 **UNIV OF COLORADO - BOULDER** **3056**
 WAVE STRUCTURES AND VERTICAL COUPLING IN THE MARTIAN ATMOSPHERE
 02/24/1999 - 05/31/2002 FY02: \$0 Total: \$125,900
Prin. Invest.: J M FORBES
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8311 **UNIV OF COLORADO - BOULDER** **3057**
 THE DIURNAL CYCLE OF CONVECTION AND ITS INTERACTION WITH THE LARGE SCALE CIRCULATION
 03/12/1999 - 02/28/2002 FY02: \$0 Total: \$159,769
Prin. Invest.: M L SALBY
Tech. Officer: GSFC/J R CURRAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8320 **UNIV OF COLORADO - BOULDER** **3058**
 INTEGRATING MICROWAVE AND HYPERSPECTRAL REMOTE SENSING FOR ESTIMATING VEGETATION STRUCTURE AND BIOMASS
 04/06/1999 - 03/31/2002 FY02: \$12,060 Total: \$147,191
Prin. Invest.: G P ASNER
Tech. Officer: GSFC/D C WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8338 **UNIV OF COLORADO - BOULDER** **3059**
 PHOTOMETRIC ANALYSIS OF THE JOVIAN RING SYSTEM AND MODELING OF RING ORIGIN AND EVOLUTION
 03/23/1999 - 04/30/2003 FY02: \$0 Total: \$122,874
Prin. Invest.: L W ESPOSITO
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8362 **UNIV OF COLORADO - BOULDER** **3060**
 THEORETICAL STUDIES OF MICROPHYSICAL MARINE BOUNDARY-LAYER CLOUDS
 03/15/1999 - 03/14/2002 FY02: -\$139 Total: \$105,393
Prin. Invest.: O B TOON
Tech. Officer: GSFC/M MISCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8399 **UNIV OF COLORADO - BOULDER** **3061**
 POLAR PATHFINDER HDF-EOS PILOT PROJECT
 05/14/1999 - 05/14/2001 FY02: -\$191 Total: \$91,815
Prin. Invest.: R L WEAVER
Tech. Officer: GSFC/K MOE
CASE Category: 22 – COMPUTER SCIENCE

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 8442 UNIV OF COLORADO - BOULDER 3062
 NONLINEAR MODELING OF HIGH-LATITUDE ELECTRODYNAMIC S AND
 MID-LATITUDE CURRENTS AND PREDICTION FROM R
 04/08/1999 - 04/30/2002 FY02: \$0 Total: \$50,418
Prin. Invest.: D N BAKER
Tech. Officer: GSFC/A J KLIMAS
CASE Category: 13 – PHYSICS

NAG 5 8923 UNIV OF COLORADO - BOULDER 3070
 LABORATORY STUDIES OF LOW TEMPERATURE RATE COEFFEC IENTS:
 THE ATMOSPHERICCHEMISTRY OF THE OUTER PLAN
 01/06/2000 - 12/31/2002 FY02: \$110,200 Total: \$324,208
Prin. Invest.: D R LEONE
Tech. Officer: GSFC/R B BEEBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8538 UNIV OF COLORADO - BOULDER 3063
 SUPERCONDUCTING MIXERS FOR FAR INFRARED SPECTROSCO PY.
 08/11/1999 - 08/14/2002 FY02: \$0 Total: \$203,000
Prin. Invest.: A L BETZ
Tech. Officer: GSFC/F HERRERO
CASE Category: 11 – ASTRONOMY

NAG 5 8940 UNIV OF COLORADO - BOULDER 3071
 GALILEO MULTI-SPECTRAL ANALYSIS
 01/13/2000 - 09/30/2001 FY02: \$0 Total: \$8,241
Prin. Invest.: K SIMMONS
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8615 UNIV OF COLORADO - BOULDER 3064
 APPLICATION OF SATELLITE SAR IMAGERY IN MAPPING THE ACTIVE LAYER
 OF ARCTIC PERMAFROST
 06/14/1999 - 09/30/2002 FY02: \$35,688 Total: \$101,703
Prin. Invest.: T ZHANG
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9007 UNIV OF COLORADO - BOULDER 3072
 SATELLITE ATMOSPHERE & IO TORUS OBSERVATIONS
 01/28/2000 - 01/31/2003 FY02: \$103,000 Total: \$295,475
Prin. Invest.: N M SCHNEIDER
Tech. Officer: GSFC/T H MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8643 UNIV OF COLORADO - BOULDER 3065
 DISTRIBUTION & AUTOMATION TECHNOLOGY APPLICATION, "DATA"
 07/08/1999 - 06/30/2001 FY02: \$0 Total: \$568,626
Prin. Invest.: E R HANSEN
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9010 UNIV OF COLORADO - BOULDER 3073
 FUV SPECTRA OF EVOLVED LATE-K AND M STARS: MASS LOSS REVISITED
 AND STELLAR ACTIVITY - FUSE
 02/02/2000 - 01/31/2003 FY02: \$0 Total: \$67,000
Prin. Invest.: G HARPER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8697 UNIV OF COLORADO - BOULDER 3066
 ALGORITHMS FOR AUTONOMOUS GPS ORBIT DETERMINATION & FORMA
 TION FLYING
 08/18/1999 - 08/14/2001 FY02: \$0 Total: \$146,780
Prin. Invest.: P AXELRAD
Tech. Officer: GSFC/J LEITNER
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 5 9018 UNIV OF COLORADO - BOULDER 3074
 HIGH VELOCITY CLOUDS: ORIGIN & ENVIRONMENT - FUSE
 02/03/2000 - 01/31/2002 FY02: \$0 Total: \$24,540
Prin. Invest.: J SHULL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8709 UNIV OF COLORADO - BOULDER 3067
 LAND USE IMPACTS ON SUBTROPICAL BIOGEOCHEMICAL CYC LES: AN
 INTEGRATED FIELD-PROCESSING MODELING-REMO
 07/29/1999 - 07/31/2003 FY02: \$0 Total: \$366,582
Prin. Invest.: G ASNER
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9026 UNIV OF COLORADO - BOULDER 3075
 SIMULATION & THEORETICAL MODELING OF OBSERVATIONS OF BIPOLAR
 STRUCTURE & LOW FREQUENCY WAVES IN THE
 02/03/2000 - 02/28/2003 FY02: \$91,897 Total: \$259,115
Prin. Invest.: M V GOLDMAN
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NAG 5 8755 UNIV OF COLORADO - BOULDER 3068
 INTERCALIBRATION OF MESOSPHERE/LOWER THERMOSPHERE WINDS
 FROM SPACE-BASED & GROUND-BASED MEASUREMENTS
 08/12/1999 - 08/14/2003 FY02: \$0 Total: \$46,500
Prin. Invest.: J M FORBES
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9041 UNIV OF COLORADO - BOULDER 3076
 STELLAR WINDS, HYDROGEN WALLS, AND THE LOCAL INTER STELLAR
 MEDIUM_L TSA99
 02/22/2000 - 02/28/2003 FY02: \$0 Total: \$228,346
Prin. Invest.: B WOOD
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8910 UNIV OF COLORADO - BOULDER 3069
 SMALL-SCALE POLYGONS AND THE HISTORY OF GROUND ICE ON MARS
 12/29/1999 - 02/14/2001 FY02: -\$2,898 Total: \$56,002
Prin. Invest.: M T MELLON
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9043 UNIV OF COLORADO - BOULDER 3077
 CLIMATOLOGY OF ARCTIC CANADA
 02/22/2000 - 02/28/2003 FY02: \$39,406 Total: \$113,472
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9092 UNIV OF COLORADO - BOULDER 3078
 ION ETCHED HOLOGRAPHIC GRATINGS
 02/17/2000 - 01/31/2003 FY02: \$90,000 Total: \$255,360
Prin. Invest.: J GREEN
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9114 UNIV OF COLORADO - BOULDER 3079
 PHASE-A AND BRIDGE PHASE STUDY OF STEREO/WAVES ACCOMMODATION
 03/01/2000 - 12/31/2002 FY02: \$0 Total: \$58,206
Prin. Invest.: R ERGUN
Tech. Officer: GSFC/M L KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 9172 UNIV OF COLORADO - BOULDER 3080
 DUSTY PLASMAS IN PLANETARY MAGNETOSPHERES
 03/08/2000 - 02/28/2003 FY02: \$77,726 Total: \$225,820
Prin. Invest.: M HORANYI
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9201 UNIV OF COLORADO - BOULDER 3081
 THERMOSPHERIC ODD-NITROGEN RESPONSE TO AURORAL ENERGY
 03/09/2000 - 09/14/2001 FY02: \$0 Total: \$41,400
Prin. Invest.: S SOLOMON
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9304 UNIV OF COLORADO - BOULDER 3082
 CLOSEOUT OF "LABORATORY STUDIES OF THE NUCLEATION, COMPOSITION & REACTIVITY OF AIRCRAFT CONDENSATION
 03/22/2000 - 03/31/2002 FY02: \$0 Total: \$154,236
Prin. Invest.: D A TOLBERT
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9336 UNIV OF COLORADO - BOULDER 3083
 INVESTIGATION OF RADIO TOMOGRAPHY IMAGING OF THE MAGNETOSPHERE
 03/27/2000 - 02/28/2003 FY02: \$81,100 Total: \$232,800
Prin. Invest.: R ERGUN
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9353 UNIV OF COLORADO - BOULDER 3084
 CHARACTERIZATION AND NUMERICAL SIMULATION OF FAST SOLITARY WAVES IN THE AURORAL IONOSPHERE
 03/30/2000 - 03/31/2002 FY02: -\$15 Total: \$72,585
Prin. Invest.: R ERGUN
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9404 UNIV OF COLORADO - BOULDER 3085
 GLOBAL & REGIONAL IMPACTS OF MESOSCALE VARIABILITY IN AIR-SEA FLUXES
 04/10/2000 - 04/30/2003 FY02: \$344,134 Total: \$959,846
Prin. Invest.: P J WEBSTER
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9412 UNIV OF COLORADO - BOULDER 3086
 STANDARD GLOBAL SNOW COVER PRODUCTS FROM SATELLITE REMOTE SENSING
 05/08/2000 - 05/14/2003 FY02: \$131,463 Total: \$358,268
Prin. Invest.: R ARMSTRONG
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9421 UNIV OF COLORADO - BOULDER 3087
 ENERGIZATION AND LOSS OF OUTER RADIATION BELT ELECTRONS
 04/11/2000 - 04/30/2003 FY02: \$45,301 Total: \$137,578
Prin. Invest.: X LI
Tech. Officer: GSFC/J SHARBER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9443 UNIV OF COLORADO - BOULDER 3088
 CHARGED AEROSOLS
 04/13/2000 - 05/31/2001 FY02: -\$1,655 Total: \$35,145
Prin. Invest.: S ROBERTSON
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9448 UNIV OF COLORADO - BOULDER 3089
 KLE ANALYSIS OF SCIGN GPS DATA
 04/12/2000 - 04/14/2003 FY02: \$40,000 Total: \$120,000
Prin. Invest.: J B RUNDLE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9450 UNIV OF COLORADO - BOULDER 3090
 USE OF SATELLITE GRAVIMETRY TO DEVELOP AND TEST A LAND WATER-AND ENERGY-BALANCE MODEL
 04/12/2000 - 04/30/2003 FY02: \$0 Total: \$72,266
Prin. Invest.: J WAHR
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9474 UNIV OF COLORADO - BOULDER 3091
 THERMOSPHERIC OXYGEN MAPPER (TOM)
 04/17/2000 - 04/30/2003 FY02: \$181,055 Total: \$542,076
Prin. Invest.: A L BETZ
Tech. Officer: GSFC/B BETTS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9477 UNIV OF COLORADO - BOULDER 3092
 ADVANCING GLACIOLOGICAL APPLICATIONS OF REMOTE SENSING WITH EO-1
 04/24/2000 - 04/30/2003 FY02: \$59,230 Total: \$117,810
Prin. Invest.: T SCAMBOS
Tech. Officer: GSFC/R BINDSCHADLER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9491 UNIV OF COLORADO - BOULDER 3093
 LITHOSPHERIC DYNAMICS OF MARS: WATER, FLOW, AND FAILURE
 05/17/2000 - 04/14/2003 FY02: \$43,000 Total: \$127,830
Prin. Invest.: R E GRIMM
Tech. Officer: GSFC/J A GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 9537 UNIV OF COLORADO - BOULDER 3094
 FORMATION OF MAGNETIC STRUCTURES AT THE BASE OF THE SOLR
 CONVECTION ZONE
 05/04/2000 - 05/14/2003 FY02: \$99,711 Total: \$283,234
Prin. Invest.: N H BRUMMELL
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9568 UNIV OF COLORADO - BOULDER 3095
 REGIONAL INTEGRATED MONITORING SYSTEM FOR THE HYDR OLOGY OF
 THE PAN-ARCTIC LAND MASS
 05/17/2000 - 05/31/2003 FY02: \$179,177 Total: \$475,298
Prin. Invest.: M SERREZE
Tech. Officer: GSFC/P HAUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9590 UNIV OF COLORADO - BOULDER 3096
 CHARACTERIZING THE OXIDIZING PROPERTIES OF MARS' POLAR RE-
 GIONS
 05/15/2000 - 05/14/2002 FY02: -\$8 Total: \$84,992
Prin. Invest.: A R HENDRIX
Tech. Officer: GSFC/J BOYCE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9602 UNIV OF COLORADO - BOULDER 3097
 EVALUATION AND ERROR ASSESSMENT OF OPERATIONAL PASSIVE MI-
 CROWAVE ALGORITHMS
 05/17/2000 - 12/31/2001 FY02: -\$340 Total: \$72,383
Prin. Invest.: J STROEVE
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9631 UNIV OF COLORADO - BOULDER 3098
 MULTI-DECADE OBSERVATIONS OF MARTIAN SURFACE VARIA BILITY &
 SEDIMENT TRANSPORT: INTEGRATED ANALYSES
 05/26/2000 - 05/31/2003 FY02: \$60,000 Total: \$180,000
Prin. Invest.: S W LEE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9694 UNIV OF COLORADO - BOULDER 3099
 ATMOSPHERIC MODELING AND INFRARED OBSERVATIONS OF A TRANSIT-
 ING EXTRA-SOLAR PLANET
 06/27/2000 - 09/30/2003 FY02: \$6,822 Total: \$53,736
Prin. Invest.: L W ESPOSITO
Tech. Officer: GSFC/L D DEMING
CASE Category: 11 – ASTRONOMY

NAG 5 9722 UNIV OF COLORADO - BOULDER 3100
 GLOBAL LAND ICE MEASUREMENTS FROM SPACE
 06/22/2000 - 06/30/2003 FY02: \$120,200 Total: \$320,200
Prin. Invest.: G R SCHARFEN
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9753 UNIV OF COLORADO - BOULDER 3101
 RETRIEVAL OF HYDROMETER SIZE DISTRIBUTIONS FROM TRMM FIELD
 CAMPAIGN PROFILER DOPPLER VELOCITY SPEC
 06/23/2000 - 06/30/2003 FY02: \$68,000 Total: \$179,156
Prin. Invest.: C R WILLIAMS
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9779 UNIV OF COLORADO - BOULDER 3102
 ORIGIN OF MAGNETIC LINEATIONS ON MARS
 07/10/2000 - 06/30/2002 FY02: \$0 Total: \$100,500
Prin. Invest.: R E GRIMM
Tech. Officer: GSFC/J BOYCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9861 UNIV OF COLORADO - BOULDER 3103
 IMPROVING THE SIMULATION OF SEA ICE LEAD CONDITION & TURBULENT
 FLUXES USING RGPS PRODUCTS & MERGED
 08/09/2000 - 07/31/2003 FY02: \$120,252 Total: \$354,310
Prin. Invest.: J MASLANIK
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10000 UNIV OF COLORADO - BOULDER 3104
 DYNAMICS OF PLANETESIMALS AND PLANETARY ACCRETION
 09/20/2000 - 08/31/2001 FY02: \$0 Total: \$70,000
Prin. Invest.: G STEWART
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10083 UNIV OF COLORADO - BOULDER 3105
 CONTEMPORANEOUS XMM & HST OBSERVATIONS OF SEYFERT GALAXIES
 11/06/2000 - 11/14/2001 FY02: -\$14,495 Total: \$0
Prin. Invest.: C S REYNOLDS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10106 UNIV OF COLORADO - BOULDER 3106
 STUDENT NITRIC OXIDE EXPERIEMNT (SNOE) - EXTENDED MISSION
 11/24/2000 - 12/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: C A BARTH
Tech. Officer: GSFC/C P HOLMES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10155 UNIV OF COLORADO - BOULDER 3107
 SMALL-SCALE POLYGONS AND THE HISTORY OF GROUND ICE ON MARS
 12/18/2000 - 12/31/2002 FY02: \$65,198 Total: \$127,198
Prin. Invest.: M T MELLON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10211 UNIV OF COLORADO - BOULDER 3108
 ABSOLUTE GRAVITY/GPS MEASUREMENTS IN GREENLAND
 01/03/2001 - 12/31/2002 FY02: \$0 Total: \$19,278
Prin. Invest.: J WAHR
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10213 UNIV OF COLORADO - BOULDER 3109
 FAR INFRARED FOCAL PLANE ARRAYS
 01/04/2001 - 01/14/2004 FY02: \$307,000 Total: \$597,000
Prin. Invest.: A L BETZ
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10259 UNIV OF COLORADO - BOULDER 3110
 STUDIES FOR IMPROVED GRAVITATIONAL WAVE SENSITIVIT Y
 01/09/2001 - 12/31/2002 FY02: \$55,000 Total: \$90,000
Prin. Invest.: P L BENDER
Tech. Officer: GSFC/P CRANE
CASE Category: 13 – PHYSICS

NAG 5 10265 UNIV OF COLORADO - BOULDER 3111
 DISTRIBUTION OF NEAR-SURFACE GROUND ICE ON MARS
 01/09/2001 - 12/31/2003 FY02: \$66,000 Total: \$131,000
Prin. Invest.: M MELLON
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10288 UNIV OF COLORADO - BOULDER 3112
 IMPROVING THE ACCURACY OF SATELLITE SEA SURFACE TEMPERATURE
 MEASUREMENTS BY EXPLICITLY ACCOUNTING
 01/29/2001 - 01/31/2002 FY02: \$0 Total: \$125,000
Prin. Invest.: W EMERY
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10309 UNIV OF COLORADO - BOULDER 3113
 STUDY OF THE INFLUENCE OF SMALL SCALE E-FIELD VARIABILITY ON THE
 DISTRIBUTION OF GEOMAGNETIC
 01/24/2001 - 04/30/2003 FY02: \$0 Total: \$41,000
Prin. Invest.: M CODRESCU
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10319 UNIV OF COLORADO - BOULDER 3114
 EXCITATION AND ABUNDANCIES IN N132D - FUSE.
 01/29/2001 - 01/31/2003 FY02: \$0 Total: \$25,500
Prin. Invest.: J A MORSE
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10325 UNIV OF COLORADO - BOULDER 3115
 THE UNUSUAL WOLF-RAYET STAR EZ CMA
 01/31/2001 - 01/31/2003 FY02: \$11,000 Total: \$25,328
Prin. Invest.: S L SKINNER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10326 UNIV OF COLORADO - BOULDER 3116
 DECIPHERING THE X-RAY EMISSION OF THE NEAREST HERBIG AE STAR
 01/31/2001 - 01/31/2003 FY02: \$12,203 Total: \$27,203
Prin. Invest.: S L SKINNER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10339 UNIV OF COLORADO - BOULDER 3117
 FUV SPECTRA OF EVOLVED LATE-K & M STARS: MASS LOSS REVISITED &
 STELLAR ACTIVITY -FUSE
 02/05/2001 - 02/14/2003 FY02: \$0 Total: \$56,500
Prin. Invest.: G HARPER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10340 UNIV OF COLORADO - BOULDER 3118
 MAGNETOSPHERES AND WINDS IN THE RAPID BRAKING ZONE (FUSE 00)
 02/05/2001 - 02/14/2003 FY02: \$0 Total: \$83,900
Prin. Invest.: T R AYRES
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10362 UNIV OF COLORADO - BOULDER 3119
 X-RAY EMISSION IN WOLF-RAYET STARS: XMM REVEALS THE SHOCKING
 TRUTH
 02/06/2001 - 02/14/2003 FY02: \$13,000 Total: \$28,078
Prin. Invest.: S L SKINNER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10368 UNIV OF COLORADO - BOULDER 3120
 WIDELY TUNABLE OPTICAL LOCAL OSCILLATORS WITH 1 E-15 STABILITY:
 ULTRASTABLE LASER SYSTEMS
 02/12/2001 - 02/14/2004 FY02: \$286,229 Total: \$678,951
Prin. Invest.: J L HALL
Tech. Officer: GSFC/W HEAPS
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10413 UNIV OF COLORADO - BOULDER 3121
 REMOTE SENSING OF PLANETARY SURFACES
 02/14/2001 - 02/14/2002 FY02: \$0 Total: \$45,000
Prin. Invest.: B JAKOSKY
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10418 UNIV OF COLORADO - BOULDER 3122
 GEOMORPHOLOGY AND GEODYNAMICS AT CRUSTAL BOUNDARIES
 WITHIN ASIA AND AFRICA.
 02/22/2001 - 02/28/2003 FY02: \$50,000 Total: \$80,000
Prin. Invest.: R G BILHAM
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10474 UNIV OF COLORADO - BOULDER 3123
 SOLAR WIND FLUCTUATIONS & THEIR CONSEQUENCES ON THE MAG-
 NETOSPHERE
 02/27/2001 - 02/28/2004 FY02: \$84,842 Total: \$166,922
Prin. Invest.: X LI
Tech. Officer: GSFC/J SPANN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10508 UNIV OF COLORADO - BOULDER 3124
 DYNAMICS OF PLANETESIMALS AND PLANETARY ACCRETION
 03/05/2001 - 02/28/2003 FY02: \$80,000 Total: \$162,000
Prin. Invest.: G R STEWART
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10556 UNIV OF COLORADO - BOULDER 3125
 INVESTIGATION OF THE ASSIMILATION OF ICE MOTION DATA IN SEA ICE
 MODELS
 03/12/2001 - 03/14/2004 FY02: \$90,648 Total: \$187,241
Prin. Invest.: T ARBETTER
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10581 UNIV OF COLORADO - BOULDER 3126
 HIGH-RESOLUTION THERMAL INERTIA OF MARS
 03/19/2001 - 02/28/2004 FY02: \$70,000 Total: \$158,000
Prin. Invest.: M MELON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 10600 UNIV OF COLORADO - BOULDER 3127
 ASSESSMENT OF GREENLAND OUTLET GLACIER ALBEDO VARIABILITY
 03/14/2001 - 12/31/2002 FY02: \$0 Total: \$46,013
Prin. Invest.: J STROEVE
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10857 UNIV OF COLORADO - BOULDER 3135
 VARIABILITY AND FORCING OF CLIMATIC PARAMETERS ON THE GREENLAND ICE SHEET: GREENLAND CLIMATE NETWORK
 05/03/2001 - 04/30/2005 FY02: \$198,163 Total: \$348,163
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/A
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10601 UNIV OF COLORADO - BOULDER 3128
 COMPARISON OF INTERSTELLAR & INTERPLANETARY GRAINS
 03/19/2001 - 02/28/2003 FY02: \$0 Total: \$15,000
Prin. Invest.: T SNOW
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10892 UNIV OF COLORADO - BOULDER 3136
 HARD X-RAY, SPECTROSCOPIC MICROWAVE, AND H-ALPHA LINEAR POLARIZATION STUDIES WITH HARD X-RAY OBSERV
 05/10/2001 - 05/31/2004 FY02: \$73,173 Total: \$149,078
Prin. Invest.: A KIPLINGER
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10616 UNIV OF COLORADO - BOULDER 3129
 PHYSICAL PROPERTIES OF POTENTIAL MARS LANDING SITE S
 03/16/2001 - 03/14/2004 FY02: \$39,000 Total: \$78,000
Prin. Invest.: B JAKOSKY
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10917 UNIV OF COLORADO - BOULDER 3137
 SPATIAL VARIATION OF HELIOSEISMIC FREQUENCY SHIFTS
 05/14/2001 - 05/31/2004 FY02: \$87,735 Total: \$172,139
Prin. Invest.: B HINDMAN
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10698 UNIV OF COLORADO - BOULDER 3130
 CONTRAIL PERSISTENCE AND AIRCRAFT EXHAUST IMPACTS ON CIRRUS
 04/18/2001 - 11/30/2001 FY02: \$0 Total: \$42,025
Prin. Invest.: O TOON
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10937 UNIV OF COLORADO - BOULDER 3138
 LWS PROPOSAL TO PROVIDE SCIENTIFIC GUIDANCE AND MODELING SUPPORT FOR THE IONOSPHERIC MAPPER MISSION
 05/15/2001 - 05/14/2004 FY02: \$169,332 Total: \$339,069
Prin. Invest.: T FULLER-ROWELL
Tech. Officer: GSFC/J F SPANN
CASE Category: 99 – MULTIINTERDISCIPL, OTHER

NAG 5 10763 UNIV OF COLORADO - BOULDER 3131
 COSMOLOGICAL PARAMETERS FROM LARGE SCALE STRUCTURE (ATP 2000)
 04/23/2001 - 04/30/2004 FY02: \$87,596 Total: \$167,021
Prin. Invest.: A J HAMILTON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10948 UNIV OF COLORADO - BOULDER 3139
 MOLECULE FORMATION AT HIGH EXTINCTION AND LOW METALLICITY IN THE MAGELLANIC CLOUDS - FUSE 2000
 05/24/2001 - 05/31/2003 FY02: \$0 Total: \$62,500
Prin. Invest.: J SHULL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10790 UNIV OF COLORADO - BOULDER 3132
 DETERMINING THE STRUCTURE OF LOW-LEVEL JETS IN MARITIME STORMS USING QUIKSCAT
 04/25/2001 - 04/30/2004 FY02: \$162,404 Total: \$282,416
Prin. Invest.: O PERSSON
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10950 UNIV OF COLORADO - BOULDER 3140
 FOSSIL FUEL IN THE LOCAL GROUP (FUSE 00)
 05/24/2001 - 05/31/2003 FY02: \$0 Total: \$26,500
Prin. Invest.: J SHULL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10791 UNIV OF COLORADO - BOULDER 3133
 INFRARED AND PASSIVE MICROWAVE RADIOMETRIC SSTS AND THEIR RELATIONSHIPS TO ATMOSPHERIC FORCING
 04/25/2001 - 04/30/2004 FY02: \$214,593 Total: \$330,211
Prin. Invest.: W EMERY
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10954 UNIV OF COLORADO - BOULDER 3141
 SCALING AND ALLOMETRY IN RIVER NETWORKS: COUPLING RAINFALL, TOPOGRAPHY, AND VEGETATION WITH HYDROLOG
 05/18/2001 - 05/31/2004 FY02: \$127,893 Total: \$183,856
Prin. Invest.: V GUPTA
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10797 UNIV OF COLORADO - BOULDER 3134
 CONCEPT STUDY FOR THE "JUPITER MAGNETOSPHERIC EXPLORER" (JMEX) MISSION AO-99-OSS-05
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$423,472
Prin. Invest.: D M SCHNEIDER
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10966 UNIV OF COLORADO - BOULDER 3142
 AEROSOL-CLOUD-CLIMATE INTERACTIONS
 06/04/2001 - 05/31/2002 FY02: \$0 Total: \$68,374
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/J ZWALLY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10967 UNIV OF COLORADO - BOULDER 3143
 POLAR TIMAS OPERATIONS AND DATA ANALYSIS
 06/06/2001 - 01/31/2002 FY02: -\$4 Total: \$99,996
Prin. Invest.: W K PETERSON
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10970 UNIV OF COLORADO - BOULDER 3144
 DYNAMICAL MODELS OF SOLAR SYSTEM FORMATION AND EVOLUTION
 05/22/2001 - 05/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: G R STEWART
Tech. Officer: GSFC/D A SENSKE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10983 UNIV OF COLORADO - BOULDER 3145
 PRODUCT DISTRIBUTION FOR THE RAMP AMM-1 VERSION 2 AT THE NATIONAL SNOW AND ICE DATA CENTER
 06/12/2001 - 09/14/2002 FY02: \$0 Total: \$19,631
Prin. Invest.: T SCAMBOS
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11022 UNIV OF COLORADO - BOULDER 3146
 A STUDY OF UNCERTAINTIES FOR MODIS CLOUD RETRIEVAL OF OPTICAL THICKNESS & EFFECTIVE RADIUS
 06/07/2001 - 03/31/2003 FY02: \$0 Total: \$49,408
Prin. Invest.: D PINCUS
Tech. Officer: GSFC/D STARR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11028 UNIV OF COLORADO - BOULDER 3147
 CONTINUATION OF THE SCIENCE ANALYSIS AND DATA VALIDATION OF THE UARS SOLSTICE.
 06/25/2001 - 09/30/2002 FY02: \$88,845 Total: \$188,845
Prin. Invest.: G J ROTTMAN
Tech. Officer: GSFC/C JACKSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11069 UNIV OF COLORADO - BOULDER 3148
 INVESTIGATIONS OF DESERT DUST & SMOKE IN THE NORTH ATLANTIC IN SUPPORT OF THE TOMS INSTRUMENT.
 07/20/2001 - 07/14/2004 FY02: \$100,000 Total: \$200,000
Prin. Invest.: O B TOON
Tech. Officer: GSFC/P K BHARTIA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11107 UNIV OF COLORADO - BOULDER 3149
 VALIDATION OF AMSR-E SNOW PRODUCTS AQUA-0090-0026 / NRA-00-OES-
 07/24/2001 - 08/31/2004 FY02: \$56,322 Total: \$132,096
Prin. Invest.: R L ARMSTRONG
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11110 UNIV OF COLORADO - BOULDER 3150
 BALLOON BORNE SOUNDINGS FOR VALIDATION OF UPPER TROPOSPHERIC HUMIDITY AND TEMPERATURE (NRA-00-OES-
 07/12/2001 - 08/31/2004 FY02: \$199,234 Total: \$299,757
Prin. Invest.: H W VOEMEL
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11167 UNIV OF COLORADO - BOULDER 3151
 DENSITY STRUCTURES IN THE THERMOSPHERE OF MARS: ASSIMILATIVE ANALYSES OF MGS ACCELEROMETER AND TES
 08/07/2001 - 08/14/2003 FY02: \$45,000 Total: \$90,000
Prin. Invest.: J FORBES
Tech. Officer: GSFC/J M BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11177 UNIV OF COLORADO - BOULDER 3152
 ANALYSIS OF MGS MAGNETOMETER DATA & COMPARISONS WITH MODELS OF MARS' MAGNETIC FIELD & SOLAR WIND
 08/13/2001 - 08/14/2003 FY02: \$109,000 Total: \$170,000
Prin. Invest.: F BAGENAL
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11192 UNIV OF COLORADO - BOULDER 3153
 MEASUREMENT & INTERPRETATION ON TEMPORAL VARIATION OF THE EARTH'S GRAVITY FIELD USING GPS & SLR DATA
 08/30/2001 - 02/28/2003 FY02: \$35,236 Total: \$60,236
Prin. Invest.: S R NEREM
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11205 UNIV OF COLORADO - BOULDER 3154
 DETECTING FUTURE TRENDS IN OZONE-LOOKING FOR INITIAL SIGNS OF RECOVERY IN TOMS AND SBUV/2 RECORDS
 08/09/2001 - 08/14/2004 FY02: \$40,000 Total: \$80,915
Prin. Invest.: E WEATHERHEAD
Tech. Officer: GSFC/R MCPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11224 UNIV OF COLORADO - BOULDER 3155
 INVESTIGATING THE FORMATION OF THE THARSIS RISE AND CRUSTAL DICHOTOMY BY MODELING THE MGS DATA AND M
 08/13/2001 - 08/14/2004 FY02: \$54,000 Total: \$111,000
Prin. Invest.: S ZHONG
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11238 UNIV OF COLORADO - BOULDER 3156
 REGIONAL NPP & CARBON STOCKS IN SW USA RANGELANDS: LAND USE IMPACTS ON THE GRASSLAND-WOODLAND BALANCE
 09/17/2001 - 08/31/2004 FY02: \$104,850 Total: \$470,151
Prin. Invest.: C WESSMAN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11241 UNIV OF COLORADO - BOULDER 3157
 12TH CAMBRIDGE WORKSHOP ON COOL STARS, STELLAR SYSTEMS AND THE SUN: THE FUTURE OF COOL-STAR ASTROPH
 08/15/2001 - 09/30/2001 FY02: -\$265 Total: \$14,735
Prin. Invest.: T AYRES
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 11243 UNIV OF COLORADO - BOULDER 3158
 THEORETICAL INVESTIGATIONS OF CLOUDS AND AEROSOLS IN THE STRATOSPHERE AND UPPER TROPOSPHERE
 08/16/2001 - 08/31/2004 FY02: \$0 Total: \$139,160
Prin. Invest.: O B TOON
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 11279 UNIV OF COLORADO - BOULDER 3159
 OVERSIGHT AND DEVELOPMENT OF A COMM MONTE CAR LO RADIATIVE
 ONE YEARGRANT
 08/21/2001 - 02/28/2003 FY02: \$10,335 Total: \$22,635
Prin. Invest.: R PINCUS
Tech. Officer: GSFC/R CAHALAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11292 UNIV OF COLORADO - BOULDER 3160
 QUALITY DATA VISUALIZATION TOOL FOR MODIS
 08/22/2001 - 02/28/2003 FY02: \$0 Total: \$77,600
Prin. Invest.: R L WEAVER
Tech. Officer: GSFC/K L MOE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11294 UNIV OF COLORADO - BOULDER 3161
 SIMPLE MODELS OF THE SPATIAL DISTRIBUTION OF CLOUD RADIATIVE
 PROPERTIES FOR REMOTE SENSING STUDIES
 08/22/2001 - 09/30/2003 FY02: \$0 Total: \$42,593
Prin. Invest.: R PINCUS
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11299 UNIV OF COLORADO - BOULDER 3162
 INVESTIGATION OF THE OFF-PLANE GRATING TECHNOLOGY FOR X-RAY
 SPECTROSCOPY. DELIVERABLE I
 08/29/2001 - 11/30/2001 FY02: -\$1,444 Total: \$13,556
Prin. Invest.: D CASH
Tech. Officer: GSFC/D T NGUYEN
CASE Category: 13 – PHYSICS

NAG 5 11308 UNIV OF COLORADO - BOULDER 3163
 ICE SHELVES AND LANDFAST ICE ON THE ANTARCTIC PERI METER:
 CHARACTERISTICSAND THE EFFECTS OF CLIMATE
 08/30/2001 - 08/31/2003 FY02: \$40,000 Total: \$60,632
Prin. Invest.: T SCAMBOS
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11369 UNIV OF COLORADO - BOULDER 3164
 VALIDATION OF AMAR-E POLAR OCEAN PRODUCTS USING A COMBINATION
 OF OBSERVATIONS AND MODELLING.
 10/30/2001 - 10/31/2004 FY02: \$131,995 Total: \$131,995
Prin. Invest.: J MASLANIK
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11391 UNIV OF COLORADO - BOULDER 3165
 NEW GRANT TIMAS OPERATIONS AND DATA ANALYSIS
 12/12/2001 - 12/14/2004 FY02: \$350,000 Total: \$350,000
Prin. Invest.: W PETERSON
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11408 UNIV OF COLORADO - BOULDER 3166
 TIMED PHASE E SEE EXPERIMENT - WOODS
 12/10/2001 - 12/31/2005 FY02: \$589,500 Total: \$589,500
Prin. Invest.: T N WOODS
Tech. Officer: GSFC/B A CAMPBELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11421 UNIV OF COLORADO - BOULDER 3167
 GPS MODELING AND ANALYSIS
 01/08/2002 - 01/14/2003 FY02: \$83,545 Total: \$83,545
Prin. Invest.: P AXELROD
Tech. Officer: GSFC/J A LEITNER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11430 UNIV OF COLORADO - BOULDER 3168
 INTENSIVE AIRBORNE FLASK MEASUREMENTS OF O2/N2, AR /N2, 13C, 18O,
 AND OTHER SPECIES DURING COBRA
 12/03/2001 - 11/30/2004 FY02: \$66,141 Total: \$66,141
Prin. Invest.: J B MILLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11463 UNIV OF COLORADO - BOULDER 3169
 CHARACTERIZATION OF UV WINDOW PHOSPHORESCENCE
 12/10/2001 - 12/14/2004 FY02: \$61,000 Total: \$61,000
Prin. Invest.: S OSTERMAN
Tech. Officer: GSFC/P CRANE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11473 UNIV OF COLORADO - BOULDER 3170
 MEASUREMENTS OF "TOTAL WATER" AND CARBON DIOXIDE F ROM THE
 NASA WB-57 DURING CRYSTAL-FACE
 12/19/2001 - 12/31/2003 FY02: \$124,349 Total: \$124,349
Prin. Invest.: L M AVALLONE
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 11474 UNIV OF COLORADO - BOULDER 3171
 INFLUENCE OF NUCLEATION MECHANISMS ON THE RADIATIV E PROPER-
 TIES OF DEEP CONVECTIVE CLOUDS AND SUBVI
 12/19/2001 - 12/31/2003 FY02: \$124,896 Total: \$124,896
Prin. Invest.: O B TOON
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11487 UNIV OF COLORADO - BOULDER 3172
 GAS-PHASE CHEMISTRY OF MOLCULES AND MOLECULAR IONS OF AS-
 TROPHYSICAL INTEREST
 12/19/2001 - 12/31/2004 FY02: \$150,000 Total: \$150,000
Prin. Invest.: T P SNOW
Tech. Officer: GSFC/H HASAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11490 UNIV OF COLORADO - BOULDER 3173
 CO/H2 IN TRANSLUCENT CLOUDS
 12/27/2001 - 12/31/2003 FY02: \$51,037 Total: \$51,037
Prin. Invest.: J C GREEN
Tech. Officer: GSFC/R J OLIVESREN
CASE Category: 11 – ASTRONOMY

NAG 5 11498 UNIV OF COLORADO - BOULDER 3174
 DYNAMICAL EVOLUTION OF RING-SATELLITE SYSTEMS
 12/28/2001 - 12/31/2004 FY02: \$50,000 Total: \$50,000
Prin. Invest.: K OHTSUKI
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11501 UNIV OF COLORADO - BOULDER 3175
 RETRIEVAL AND VALIDATIONS OF CIRRUS CLOUD PROPERTIES WITH THE
 FAR-INFRAREDSENSOR FOR CIRRUS
 12/27/2001 - 12/31/2003 FY02: \$84,367 Total: \$84,367
Prin. Invest.: K F EVANS
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11506 UNIV OF COLORADO - BOULDER 3176
 HIERARCHICAL MODELING STUDY OF THE INTERACTIONS AMONG TUR-
 BULENCE, CLOUD MICROPHYSICS, AND RADIATIVE
 01/02/2002 - 12/31/2003 FY02: \$98,843 Total: \$98,843
Prin. Invest.: J A CURRY
Tech. Officer: GSFC/D ANDERSEN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11512 UNIV OF COLORADO - BOULDER 3177
 NASA COLD LAND PROCESSES FIELD EXPERIMENT PLAN
 01/07/2002 - 12/31/2004 FY02: \$73,500 Total: \$73,500
Prin. Invest.: R L ARMSTRONG
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11559 UNIV OF COLORADO - BOULDER 3178
 SPACE/TIME STATISTICS OF POLAR ICE MOTION
 01/11/2002 - 01/14/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: W EMERY
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11562 UNIV OF COLORADO - BOULDER 3179
 DYNAMICAL MODELS OF SOLAR SYSTEM FORMATION AND EVOLUTION
 01/17/2002 - 02/28/2005 FY02: \$49,000 Total: \$49,000
Prin. Invest.: G R STEWART
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11576 UNIV OF COLORADO - BOULDER 3180
 FOLLOW ON TO NAG5-8247--GGS CEPPAD
 01/09/2002 - 01/14/2005 FY02: \$75,000 Total: \$75,000
Prin. Invest.: D BAKER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11612 UNIV OF COLORADO - BOULDER 3181
 VARIABILITY AND FORCING OF CLIMATIC PARAMETERS ON THE GREEN-
 LAND ICE SHEET: GREENLAND CLIMATE NE
 01/16/2002 - 01/31/2003 FY02: \$35,127 Total: \$35,127
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11616 UNIV OF COLORADO - BOULDER 3182
 CHARACTERISTICS AND CONSEQUENCES OF FAULTING ON GA NYMEDE
 AND EUROPA
 01/17/2002 - 01/31/2004 FY02: \$70,000 Total: \$70,000
Prin. Invest.: R PAPPALARDO
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11648 UNIV OF COLORADO - BOULDER 3183
 REMOTE SENSING & GEOCHEMISTRY OF PLANETARY SURFACE
 01/25/2002 - 01/31/2004 FY02: \$59,800 Total: \$59,800
Prin. Invest.: B M JAKOSKY
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11659 UNIV OF COLORADO - BOULDER 3184
 MOVING SPECTROSCOPIC REMOTE SENSING TECHNIQUES FOR THE
 IDENTIFICATION OF SWELLING POTENTIAL OF EXPAN
 02/14/2002 - 02/28/2005 FY02: \$276,369 Total: \$276,369
Prin. Invest.: A GOETZ
Tech. Officer: GSFC/T GUBBELS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11686 UNIV OF COLORADO - BOULDER 3185
 CLOUDY RADIATIVE TRANSFER MODELING AND CLOSURE STUDIES FOR
 ARM
 02/01/2002 - 08/31/2005 FY02: \$74,792 Total: \$74,792
Prin. Invest.: K EVANS
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11736 UNIV OF COLORADO - BOULDER 3186
 ACCRETION DISK OUTFLOWS IN CATAclysmic VARIABLES (LTSA 2001)
 02/13/2002 - 02/14/2005 FY02: \$95,104 Total: \$95,104
Prin. Invest.: D PROGA
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11766 UNIV OF COLORADO - BOULDER 3187
 EVOLUTION OF PROTOPLANETARY DISKS NEAR THE SNOW-LINE
 02/25/2002 - 02/28/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: G R STEWART
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11848 UNIV OF COLORADO - BOULDER 3188
 CORONAL IRON
 04/02/2002 - 04/14/2003 FY02: \$73,300 Total: \$73,300
Prin. Invest.: T AYRES
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11850 UNIV OF COLORADO - BOULDER 3189
 DEVELOPMENT AND TEST OF OFF-PLANE GRATINGS FOR CON-
 STELLATION-X
 03/15/2002 - 02/14/2003 FY02: \$162,000 Total: \$162,000
Prin. Invest.: W CASH
Tech. Officer: GSFC/D CONTENT
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11879 UNIV OF COLORADO - BOULDER 3190
 ASPECTS OF THE GLOBAL SOLAR DYNAMIC MAGNETOHYDRODYNAMIC
 MODELS OF DEEP CONVECTION AND THE TAC
 03/19/2002 - 04/30/2005 FY02: \$360,000 Total: \$360,000
Prin. Invest.: J TOOMRE
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 5 11890 UNIV OF COLORADO - BOULDER 3191
 HIGH RESOLUTION X-RAY PROPERTIES OF BL LACS: AN XM M SURVEY
 04/09/2002 - 04/14/2003 FY02: \$2,543 Total: \$2,543
Prin. Invest.: J STOCKE
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11895 UNIV OF COLORADO - BOULDER 3192
 ORIGIN AND EVOLUTION OF IRREGULAR SATELLITES
 03/19/2002 - 03/31/2005 FY02: \$25,000 Total: \$25,000
Prin. Invest.: K OHTSUKI
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11907 UNIV OF COLORADO - BOULDER 3193
 OBSERVATIONS OF EXORS WITH THE INFRARED SPACE OBSERVATORY
 04/12/2002 - 04/14/2004 FY02: \$102,330 Total: \$102,330
Prin. Invest.: G S STRINGFELLOW
Tech. Officer: GSFC/J FROGEL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11911 UNIV OF COLORADO - BOULDER 3194
 SPECTROMETER TECHNOLOGY DEVELOPMENT FOR FAR- INFRARED LINE SURVEYS
 03/21/2002 - 03/31/2005 FY02: \$96,992 Total: \$96,992
Prin. Invest.: J GLENN
Tech. Officer: GSFC/P CRANE
CASE Category: 13 – PHYSICS

NAG 5 11920 UNIV OF COLORADO - BOULDER 3195
 EXPLORING DYNAMICAL IMPLICATIONS OF SOLAR SUBSURFACE WEATHER
 03/25/2002 - 03/14/2005 FY02: \$157,386 Total: \$157,386
Prin. Invest.: D HABER
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11924 UNIV OF COLORADO - BOULDER 3196
 CUSP DYNAMICS-PARTICLE ACCELERATION BY ALFVEN WAVE
 03/27/2002 - 03/31/2005 FY02: \$89,565 Total: \$89,565
Prin. Invest.: J SU
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11950 UNIV OF COLORADO - BOULDER 3197
 MIRA'S COMPANION IN THE FUVE
 04/02/2002 - 04/14/2003 FY02: \$31,100 Total: \$31,100
Prin. Invest.: B E WOOD
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11963 UNIV OF COLORADO - BOULDER 3198
 MULTI-WAVELENGTH OBSERVATION OF CLASSICAL NOVAE
 04/04/2002 - 03/31/2005 FY02: \$118,000 Total: \$118,000
Prin. Invest.: G S STRINGFELLOW
Tech. Officer: GSFC/J FROGEL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12002 UNIV OF COLORADO - BOULDER 3199
 INVESTIGATION OF H+ & O+ OUTFLOWS FROM THE EARTH'S IONOSPHERE
 04/12/2002 - 04/14/2004 FY02: \$75,000 Total: \$75,000
Prin. Invest.: W K PETERSON
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12026 UNIV OF COLORADO - BOULDER 3200
 MODELING OF PARALLEL ELECTRIC FIELDS IN THE AURORA
 04/22/2002 - 04/30/2005 FY02: \$90,246 Total: \$90,246
Prin. Invest.: R E ERGUN
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12029 UNIV OF COLORADO - BOULDER 3201
 PROBING THE REIONIZATION HISTORY OF THE UNIVERSE
 04/12/2002 - 05/31/2005 FY02: \$72,924 Total: \$72,924
Prin. Invest.: N GNEDIN
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12035 UNIV OF COLORADO - BOULDER 3202
 DEFEATING THE EDDINGTON LIMIT: THE NONLINEAR DEVELOPMENT OF PHOTON BUBBLE INSTABILITY
 04/12/2002 - 04/14/2005 FY02: \$95,813 Total: \$95,813
Prin. Invest.: M C BEGELMAN
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12075 UNIV OF COLORADO - BOULDER 3203
 ASSESSMENT OF BASAL MELT OF PETERMANN GLETSCHER IN NW GREENLAND
 04/23/2002 - 04/14/2005 FY02: \$32,027 Total: \$32,027
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12188 UNIV OF COLORADO - BOULDER 3204
 PRE-FORMULATION FOR THE LASER INTERFEROMETER SPACE ANTENNA (LISA) PROJECT
 05/14/2002 - 05/14/2003 FY02: \$130,000 Total: \$130,000
Prin. Invest.: P L BENDER
Tech. Officer: GSFC/R T STEBBINS
CASE Category: 13 – PHYSICS

NAG 5 12194 UNIV OF COLORADO - BOULDER 3205
 UARS SOLSTICE CONTINUED OPERATIONS
 05/23/2002 - 09/30/2004 FY02: \$50,000 Total: \$50,000
Prin. Invest.: G ROTTMAN
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12197 UNIV OF COLORADO - BOULDER 3206
 SOLAR ACTIVITY AND LONG-TERM TRENDS IN THE IONOSPHERE (SALT): A HISTORIC-DATA ANALYSIS AND MODEL
 05/15/2002 - 06/30/2005 FY02: \$159,577 Total: \$159,577
Prin. Invest.: R A AKMAEV
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12210 UNIV OF COLORADO - BOULDER 3207
 CHROMOSPHERIC ACTIVITY IN POPULATION II GIANTS.
 06/04/2002 - 06/30/2003 FY02: \$38,600 Total: \$38,600
Prin. Invest.: G HARPER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12233 UNIV OF COLORADO - BOULDER 3208
CORONAL DYNAMICS AND COMPLETE ENERGY BUDGET FOR THE M
DWARF AD LEO.
06/06/2002 - 06/14/2003 FY02: \$42,300 Total: \$42,300
Prin. Invest.: A BROWN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

NAG 5 12240 UNIV OF COLORADO - BOULDER 3209
PROBING THE REVERSE SHOCK IN AN OXYGEN-RICH SUPER-NOVA
REMNANT - FUZE 2001
06/06/2002 - 06/30/2003 FY02: \$12,000 Total: \$12,000
Prin. Invest.: J A MORSE
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

NAG 5 12260 UNIV OF COLORADO - BOULDER 3210
AEROSOL-CLOUD-CLIMATE INTERACTIONS.
07/18/2002 - 05/31/2003 FY02: \$89,574 Total: \$89,574
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/J ZWALLY
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12279 UNIV OF COLORADO - BOULDER 3211
COSMIC ORIGINS SPECTROGRAPH GTO
07/09/2002 - 09/30/2008 FY02: \$1,146,900 Total: \$1,146,900
Prin. Invest.: D GREEN
Tech. Officer: GSFC/J JELETIC
CASE Category: 11 - ASTRONOMY

NAG 5 12288 UNIV OF COLORADO - BOULDER 3212
SUPPORT FOR THE INTERNATIONAL WORKSHOP ON MULTI-ANGULAR
MEASUREMENTS AND MODELING (IWMMM-3)
06/17/2002 - 06/30/2003 FY02: \$20,798 Total: \$20,798
Prin. Invest.: A NOLIN
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12349 UNIV OF COLORADO - BOULDER 3213
AN INVESTIGATION OF THE EFFECT OF SOLAR VARIABILITY AND PARTICLE
IONIZATION ON THE EARTH'S M
08/20/2002 - 08/14/2005 FY02: \$96,547 Total: \$96,547
Prin. Invest.: D W RUSCH
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12372 UNIV OF COLORADO - BOULDER 3214
ESTIMATION OF ARCTIC MELT POND COVERAGE ON SEA ICE USING EOS
DATA: ALGORITHM DEVELOPMENT & RET
07/22/2002 - 07/31/2005 FY02: \$19,017 Total: \$19,017
Prin. Invest.: J MASLANIK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12380 UNIV OF COLORADO - BOULDER 3215
MASS IMBALANCE IN ANTARCTICA AND GREENLAND
07/12/2002 - 07/14/2005 FY02: \$52,313 Total: \$52,313
Prin. Invest.: J WAHR
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12381 UNIV OF COLORADO - BOULDER 3216
GREENLAND ICE SHEET MELT CLIMATOLOGY BASED ON PASSIVE AND
ACTIVE SATELLITE DATA: COMBINING
07/15/2002 - 07/14/2005 FY02: \$56,099 Total: \$56,099
Prin. Invest.: K STEFFAN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12394 UNIV OF COLORADO - BOULDER 3217
JUPITER MEETING BOOK PUBLISHING
07/19/2002 - 07/31/2003 FY02: \$45,000 Total: \$45,000
Prin. Invest.: F BAGENAL
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12432 UNIV OF COLORADO - BOULDER 3218
SPATIAL AND TEMPORAL PATTERNS & VARIABILITY OF SEA & ICE SURFACE
TEMPERATURES IN THE SEASON
08/01/2002 - 07/31/2005 FY02: \$53,729 Total: \$53,729
Prin. Invest.: J MASLANIK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12438 UNIV OF COLORADO - BOULDER 3219
EVOLVED LATE-TYPE STARR FUV SPECTRA: MASS LOSS AND FLUORESCENCE
08/06/2002 - 08/14/2003 FY02: \$75,400 Total: \$75,400
Prin. Invest.: G HARPER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

NAG 5 12491 UNIV OF COLORADO - BOULDER 3220
DEVELOPING RAPID HELIOSEISMIC MAPPING OF EVOLVING SOLAR SUB-
SURFACE WEATHER AND MAGNETIC STRUCTURE
08/20/2002 - 08/14/2005 FY02: \$166,912 Total: \$166,912
Prin. Invest.: B W HINDMAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12495 UNIV OF COLORADO - BOULDER 3221
ANALYSIS OF NAVIGATION ALGORITHM AND MEASUREMENTS FOR FOR-
MATION FLYING SATELLITES, IN HIGH EARTH OR
08/29/2002 - 08/31/2004 FY02: \$21,836 Total: \$21,836
Prin. Invest.: P AXELRAD
Tech. Officer: GSFC/R J CARPENTER
CASE Category: 41 - AERONAUTICAL ENGR

NAG 5 12533 UNIV OF COLORADO - BOULDER 3222
GREENLAND: REANALYSIS OF THE ENERGY BUDGET OF THE ICE SHEET
08/28/2002 - 08/31/2005 FY02: \$83,901 Total: \$83,901
Prin. Invest.: J CASSANO
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12598 UNIV OF COLORADO - BOULDER 3223
KNOWLEDGE DISCOVERY FOR GEOPHYSICAL DATA ANALYSIS
09/24/2002 - 09/14/2005 FY02: \$99,982 Total: \$99,982
Prin. Invest.: J MENNIS
Tech. Officer: GSFC/M WEI
CASE Category: 32 - GEOLOGICAL SCIENCE

COLORADO

NASA'S UNIVERSITY PROGRAM

NAG 8 1475 UNIV OF COLORADO - BOULDER 3224
 INFLUENCE OF SOLUTOCAPILLARY CONVECTION ON MACRO- VOID DE-
 FECT FORMATION IN POLYMERIC MEMBRANES
 02/03/1998 - 01/31/2003 FY02: \$11,400 Total: \$269,400
Prin. Invest.: A GREENBERG
Tech. Officer: MSFC/P M DOTY
CASE Category: 13 – PHYSICS

NAG 9 1209 UNIV OF COLORADO - BOULDER 3225
 MULTI WAVELENGTH ANALYSIS OF ASTEROIDS
 03/01/2000 - 12/31/2002 FY02: \$0 Total: \$14,880
Prin. Invest.: A R HENDRIX
Tech. Officer: JSC/F VILAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1438 UNIV OF COLORADO - BOULDER 3226
 VIRTUAL ENVIRONMENTS FOR PREFLIGHT ADAPTATION
 07/12/2002 - 08/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: K STROUD
Tech. Officer: JSC/D HARM
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 97045 UNIV OF COLORADO - BOULDER 3227
 EXTENSION OF SOLSTICE PHASE B EFFORT
 02/21/1997 - 07/31/2007 FY02: \$15,370,032 Total: \$74,703,396
Prin. Invest.: G ROTTMAN
Tech. Officer: GSFC/V GRIFFIN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 5 97046 UNIV OF COLORADO - BOULDER 3228
 LETTER CONTRACT FOR HIRDIS PHASE C/D/E
 01/17/1997 - 03/31/2008 FY02: \$5,663,575 Total: \$81,734,570
Prin. Invest.: J GILLE
Tech. Officer: GSFC/L MILAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 97145 UNIV OF COLORADO - BOULDER 3229
 MISSION OPERATIONS, DATA ANALYSIS, AND ALGORITHM MAINTENANCE
 FOR UARS SOLSTICE
 03/31/1997 - 11/30/2002 FY02: \$0 Total: \$1,558,799
Prin. Invest.: G J ROTTMAN
Tech. Officer: GSFC/C H JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 98043 UNIV OF COLORADO - BOULDER 3230
 SCIENCE MANAGEMENT FOR COS
 03/04/1998 - 07/31/2003 FY02: \$3,053,000 Total: \$15,662,600
Prin. Invest.: J GREEN
Tech. Officer: GSFC/L FEINBERG
CASE Category: 11 – ASTRONOMY

NAS 5 98070 UNIV OF COLORADO - BOULDER 3231
 OPERATION OF SNOW AND ICE DISTRIBUTED ACTIVE ARCHIVE
 01/29/1998 - 05/31/2003 FY02: \$4,581,000 Total: \$18,888,345
Prin. Invest.: R G BARRY, V TROISI
Tech. Officer: GSFC/Q A BARKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 8 38779 UNIV OF COLORADO - BOULDER 3232
 MECHANICS OF GRANULAR MATERIALS MICROGRAVITY
 09/24/1992 - 10/31/2004 FY02: \$380,000 Total: \$4,620,513
Prin. Invest.: S STURE
Tech. Officer: MSFC/B V GUYNES
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 01046 UNIV OF COLORADO - BOULDER 3233
 VERY LARGE EFFICIENT SPACE STRUCTURES
 06/22/2001 - 01/21/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: M M MIKULAS, JR
Tech. Officer: LARC/W K BELVIN
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 1 01048 UNIV OF COLORADO - BOULDER 3234
 EVA & ROBOTIC ASSEMBLY OF LARGE SPACE STRUCTURES
 08/20/2001 - 12/19/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: E C WEATHERHEAD
Tech. Officer: LARC/B A WIELICKI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1052 UNIV OF COLORADO - BOULDER 3235
 CENTER FOR ASTROBIOLOGY
 08/28/1998 - 06/30/2003 FY02: \$890,523 Total: \$2,866,015
Prin. Invest.: B JAKOSKI
Tech. Officer: ARC/R A GRAYMES, ARC/W W DOLCI
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1104 UNIV OF COLORADO - BOULDER 3236
 A COMPREHENSIVE-BASED ANALYSIS OF SHARED CONCEPTUAL MODELS
 OF AVIONICS SYSTEMS
 04/02/1999 - 10/31/2002 FY02: \$38,555 Total: \$271,533
Prin. Invest.: P POISON
Tech. Officer: ARC/E A PALMER, ARC/N SMITH
CASE Category: 21 – MATHEMATICS

NCC 2 1112 UNIV OF COLORADO - BOULDER 3237
 COMPREHENSION OF NAVIGATION DIRECTIONS
 04/14/1999 - 09/30/2002 FY02: \$0 Total: \$103,051
Prin. Invest.: A F HEALY
Tech. Officer: ARC/I BARSHI
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1145 UNIV OF COLORADO - BOULDER 3238
 THE APPLICATION OF ADVANCED CULTIVATION TECHNIQUES IN THE LONG
 TERM MAINTENANCE OF SPACE FLIGHT...
 12/01/1999 - 01/14/2003 FY02: \$140,699 Total: \$260,036
Prin. Invest.: G HEYENGA
Tech. Officer: ARC/M KLISS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1310 UNIV OF COLORADO - BOULDER 3239
 COMPREHENSION OF NAVIGATION DIRECTIONS
 02/13/2002 - 02/28/2003 FY02: \$45,000 Total: \$45,000
Prin. Invest.: A F HEALY
Tech. Officer: ARC/I BARSHI
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1340 UNIV OF COLORADO - BOULDER 3240
 ASTROBIOLOGICAL AND GEOLOGICAL IMPLICATIONS OF CONVECTIVE
 TRANSPORT IN ICY OUTERPLANET SATELLITES
 05/23/2002 - 05/31/2003 FY02: \$36,327 Total: \$36,327
Prin. Invest.: R PAPPALARDO
Tech. Officer: ARC/M FONDA, ARC/S ZHONG
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5401 **UNIV OF COLORADO - BOULDER** **3241**
 THE PROPERTIES OF CLOUDS IN THE ATMOSPHERES OF EARLY EARTH,
 MARS, & TITAN
 09/29/2000 - 10/31/2003 FY02: \$78,822 Total: \$188,623
Prin. Invest.: O B TOON
Tech. Officer: ARC/R E YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5519 **UNIV OF COLORADO - BOULDER** **3242**
 PARTICLES IN REDUCING ATMOSPHERES APPLICATIONS TO EARLY
 EARTH AND TITAN
 08/28/2002 - 10/31/2003 FY02: \$15,833 Total: \$15,833
Prin. Invest.: O B TOON
Tech. Officer: ARC/R YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 773 **UNIV OF COLORADO - BOULDER** **3243**
 MICROELECTROMECHANICAL LINEAR ACTUATOR MICROELECTROME-
 CHANICAL LINEAR ACTUATOR
 02/15/2000 - 12/31/2002 FY02: \$0 Total: \$149,998
Prin. Invest.: Y LEE
Tech. Officer: GRC/H NGUYEN
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 796 **UNIV OF COLORADO - BOULDER** **3244**
 SURFACE COLLISIONS INVOLVING PARTICLES AND MOISTURE (SCIPM)
 05/16/2000 - 05/30/2004 FY02: \$90,000 Total: \$166,000
Prin. Invest.: R H DAVIS
Tech. Officer: GRC/F P CHARIAMONTE 111
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 458 **UNIV OF COLORADO - BOULDER** **3245**
 EO-1 EVALUATION & VERIFICATION FOR APPLICATION TO LAND-USE
 CHANGE: ATMOSPHERIC CORRECTION, SOIL &
 02/25/2000 - 03/31/2003 FY02: \$148,449 Total: \$553,177
Prin. Invest.: A F GOETZ
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 480 **UNIV OF COLORADO - BOULDER** **3246**
 ANALYSIS OF EO-1, LANDSAT 7, AND AVIRIS FOR ESTIMATING VEGETATION
 STRUCTURE AND FUNCTION IN ARID EC
 03/20/2000 - 12/31/2001 FY02: \$0 Total: \$87,920
Prin. Invest.: G P ASNER
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 481 **UNIV OF COLORADO - BOULDER** **3247**
 LOW-COST EVALUATION OF EO-1 HYPERION AND ALI FOR DETECTION &
 BIOPHYSICAL CHARACTERIZATION OF FOREST
 03/20/2000 - 02/28/2002 FY02: -\$250 Total: \$128,367
Prin. Invest.: G P ASNER
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NCC 5 564 **UNIV OF COLORADO - BOULDER** **3248**
 ALGORITHMS FOR AUTONOMOUS GPS ORBIT DETERMINATION AND FOR-
 MATION FLYING
 06/12/2001 - 06/30/2002 FY02: -\$57 Total: \$24,943
Prin. Invest.: P AXELRAD
Tech. Officer: GSFC/J A LEITNER
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 8 131 **UNIV OF COLORADO - BOULDER** **3249**
 BIONERVE SPACE TECHNOLOGIES
 01/31/1997 - 02/28/2002 FY02: \$0 Total: \$12,113,345
Prin. Invest.: G MORGENTHALER
Tech. Officer: MSFC/S J LAMBING
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 8 242 **UNIV OF COLORADO - BOULDER** **3250**
 PROMOTE COMMERCIAL FUNDING R & D AND TECHNOLOGY DEV IN THE
 FIELD OF BIOSERVE SPACE TECHNOLOGIES
 01/10/2002 - 10/31/2002 FY02: \$2,250,000 Total: \$2,250,000
Prin. Invest.: L STODIECK
Tech. Officer: MSFC/J R WEST
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 65 **UNIV OF COLORADO - BOULDER** **3251**
 SPACE STATION BASED MIRON ACURACY DEPLOYMENT EXPERIMENT
 07/01/1997 - 10/31/2001 FY02: \$0 Total: \$1,475,362
Prin. Invest.: L PETERSON
Tech. Officer: JSC/C PARRA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 01023 **UNIV OF COLORADO - BOULDER** **3252**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/06/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: T O MANN
Tech. Officer: LARC/W K BELVIN
CASE Category: 42 – ASTRONAUTICAL ENGR

NGT 1 02022 **UNIV OF COLORADO - BOULDER** **3253**
 GRADUATE STUDENT RESEARCHER PROGRAM
 08/02/2002 - 06/30/2003 FY02: \$14,000 Total: \$14,000
Prin. Invest.: O VASILOV, D GOLDSTEIN
Tech. Officer: LARC/T B GATSKI
CASE Category: 46 – MECHANICAL ENGR

NGT 1 52182 **UNIV OF COLORADO - BOULDER** **3254**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 12/01/1998 - 08/31/2001 FY02: -\$1 Total: \$66,000
Prin. Invest.: M J ARMATYS, P AXELRAD
Tech. Officer: LARC/S J KATZBERG
CASE Category: 41 – AERONAUTICAL ENGR

NGT 2 52264 **UNIV OF COLORADO - BOULDER** **3255**
 MODELING AEROSOL NUCLEATION IN THE PRESENCE OF CLOUDS
 06/23/2000 - 12/31/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: O TOON
Tech. Officer: ARC/A S ACKERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 2 52270 **UNIV OF COLORADO - BOULDER** **3256**
 HYDROCARBON NUCLEATION ON THOLINS: APPLICATIONS TO TITAN
 08/29/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: M A TOLBERT
Tech. Officer: ARC/C P MCKAY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 2 52279 **UNIV OF COLORADO - BOULDER** **3257**
 COLD SALINE SPRINGS IN PERMAFROST ON EARTH AND MARS
 06/22/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: B TOON
Tech. Officer: ARC/C P MCKAY
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 2 52287 UNIV OF COLORADO - BOULDER 3258
 MODELING THE ENVIRONMENTAL EFFECTS OF LARGE IMPACTS ON MARS
 06/03/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: O B TOON
Tech. Officer: ARC/C MCKAY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 3 52386 UNIV OF COLORADO - BOULDER 3259
 COMPUTATIONAL MODELING OF EXTRACELLULAR MASS TRANSPORT
 08/22/2002 - 08/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D KLAUS
Tech. Officer: GRC/F J MONTEGANO
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 47 UNIV OF COLORADO - BOULDER 3260
 INVESTIGATION OF HARDWARE AND ALGORITHM ARCHITECTURE GEO AND
 HEORBITALS
 06/23/1997 - 06/30/2001 FY02: -\$72 Total: \$87,928
Prin. Invest.: P AXELRAD
Tech. Officer: GSFC/M S BURRELL
CASE Category: 46 – MECHANICAL ENGR

NGT 5 80 UNIV OF COLORADO - BOULDER 3261
 THE STRUCTURE AND DEVELOPMENT OF SUPERNOVA REMNANT 1987A
 (STUDENT): ELI MICHAEL
 05/12/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R MCCRAY
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 93 UNIV OF COLORADO - BOULDER 3262
 USE OF REMOTE SENSING IMAGERY IN BIOGEOCHEMICAL MODELS TO
 PREDICT TRACE GAS EMISSIONS & CROP YIELD
 06/15/1999 - 06/30/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: N KHATIB
Tech. Officer: GSFC/J L PRIVETTE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 123 UNIV OF COLORADO - BOULDER 3263
 INVESTIGATION OF GPS BISTATIC RADAR FOR SOIL MOISTURE REMOTE
 SENSING (STUDENT): DALLAS MASTERS
 06/07/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D AXELRAD
Tech. Officer: GSFC/M S BURRELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 132 UNIV OF COLORADO - BOULDER 3264
 SPACE WEATHER FORECASTING: PREDICTING RADIATION BELT ELECTRONS
 USING ADAPTIVE ARMA FILTERS & DATA
 06/04/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D BAKER
Tech. Officer: GSFC/M S BURRELL
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 133 UNIV OF COLORADO - BOULDER 3265
 ANALYSIS OF TEMPORAL VARIATIONS OF THE EARTH'S GRAVITY FIELD
 FROM CHAMP & GRACE SATELLITE DATA.
 06/04/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R NEREM
Tech. Officer: GSFC/M S BURRELL
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 140 UNIV OF COLORADO - BOULDER 3266
 GALAXY CLUSTERS AT HIGH REDSHIFT; PROBING THE HISTORY AND
 EVOLUTION OF THE INTRA-CLUSTER MEDIUM, G
 07/09/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: E ELLINGSON
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 30136 UNIV OF COLORADO - BOULDER 3267
 LABORATORY STUDIES OF CIRRUS CLOUD FORMATION MECHANISMS/
 STUDENT: FORTIN
 09/04/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: M TOLBERT
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30155 UNIV OF COLORADO - BOULDER 3268
 COMPARISONS OF THREE-DIMENSIONAL GENERAL CIRCULATION MODEL
 SIMULATIONS OF THE DESERT AEROSOL LIFE
 08/28/1998 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B TOON, COLARCO
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30180 UNIV OF COLORADO - BOULDER 3269
 SPATIAL AND TEMPORAL RESPONSE TO ANTHROPOGENIC NITROGEN
 DEPOSITION IN A HETEROGENEOUS ROCKY MOUNTAIN
 08/12/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C A WESSMAN
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30209 UNIV OF COLORADO - BOULDER 3270
 IN SITU MEASUREMENTS OF CARBON DIOXIDE IN THE UPPER TROPO-
 SPHERE & LOWER STRATOSPHERE/STUDENT GAT
 08/18/1999 - 12/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: L M AVALLONE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30345 UNIV OF COLORADO - BOULDER 3271
 LINKING LANDSAT TM DATA & EVAPOTRANSPIRATION IN TWO HUMID
 TROPICAL WATERSHEDS IN PANAMA/STUDENT AL
 08/21/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: G ASNER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30348 UNIV OF COLORADO - BOULDER 3272
 REGIONAL IMPACTS OF WOODLAND EXPANSION ON NITROGEN OXIDE
 EMISSIONS FROM TEXAS SAVANNAS: COMBINING
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: G ASNER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30363 UNIV OF COLORADO - BOULDER 3273
 LABORATORY STUDIES OF ICE NUCLEATION FROM INTERNALLY MIXED
 SULFURIC ACID/MINERALAEROSOL PARTICLES
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: M A TOLBERT
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30376 UNIV OF COLORADO - BOULDER 3274
 A HIGH-RESOLUTION ABLATION STUDY NEAR JAKOBHAVN ON THE
 GREENLAND ICE SHEET/TODD H. ALBERT
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: K STEFFEN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30394 UNIV OF COLORADO - BOULDER 3275
 IMPROVEMENTS IN THE ESTIMATION OF THE EARTH'S GRAVITY FIELD
 USING GRACE MISSION DATA (STUDENT: DON
 08/14/2001 - 08/31/2004 FY02: \$0 Total: \$22,000
Prin. Invest.: S NEREM
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30399 UNIV OF COLORADO - BOULDER 3276
 CLIMATIC VARIABILITY, HUMAN AGENCY & ENVIRONMENTAL CHANGE
 ACROSS AN ALTITUDINAL TRANSECT, ANDES-AMAZ
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R BARRY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30416 UNIV OF COLORADO - BOULDER 3277
 SNOW SLOPE STABILITY: MODELING AND INVESTIGATIONS
 (STUDENT:HANS-PETER MARSHA
 08/17/2001 - 08/31/2005 FY02: \$24,000 Total: \$33,317
Prin. Invest.: T PFEFFER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30422 UNIV OF COLORADO - BOULDER 3278
 HETEROGENEOUS N2O5 HYDROLYSIS ON MIXED (NH4)2SO4/ORGANIC
 THIN FILMS REPRESENTATIVE OF TROPOSPHERE
 09/07/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M A TOLBERT
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30464 UNIV OF COLORADO - BOULDER 3279
 SPECTROSCOPY AND PHOTOREACTIVITY OF HYDRATED COMPLEXES:
 RELEVANCE TO ATMOSPHERIC CHEMISTRY AND CLIMATE
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: V VAIDA
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30470 UNIV OF COLORADO - BOULDER 3280
 A MULTI-SENSOR APPROACH FOR ASSESSMENT OF CUMULATIVE IMPACTS
 AND ENVIRONMENTAL CHANGE ON THE ALASKA
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J MASLANIK
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40028 UNIV OF COLORADO - BOULDER 3281
 NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 12/31/1996 - 01/31/2001 FY02: \$0 Total: \$1,807,630
Prin. Invest.: E R HANSEN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40072 UNIV OF COLORADO - BOULDER 3282
 COLORADO SPACE GRANT COLL & FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$475,000 Total: \$1,010,118
Prin. Invest.: E R HANSEN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50176 UNIV OF COLORADO - BOULDER 3283
 A STUDY OF THE HOT COMPONENT OF THE LOCAL INTERSTELLAR
 MEDIUM
 05/22/1998 - 06/30/2001 FY02: -\$108 Total: \$43,892
Prin. Invest.: J C GREEN, MCLEAN
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 5 50194 UNIV OF COLORADO - BOULDER 3284
 STELLAR EVOLUTION IN STARBURST GALAXIES
 06/05/1998 - 07/31/2001 FY02: -\$25 Total: \$65,975
Prin. Invest.: P S CONTI
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 5 50197 UNIV OF COLORADO - BOULDER 3285
 MARTIAN SURFACE MAGNETIC FIELD
 06/11/1998 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: F BAGENAL
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 5 50232 UNIV OF COLORADO - BOULDER 3286
 TIDES AND ZONAL MEAN FROM SATELLITE-BASED MEASUREMENTS:
 ANALYSIS TECHNIQUES
 05/27/1999 - 06/30/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: J FORBES
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50237 UNIV OF COLORADO - BOULDER 3287
 MODELING THE POST-RUNAWAY GROWTH OF TERRESTRIAL PLANETS
 (STUDENT: CRAIG AGNOR)
 05/27/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R CANUP
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50241 UNIV OF COLORADO - BOULDER 3288
 PROBING CORONAL STRUCTURE & VARIABILITY IN ACTIVE BINARY
 SYSTEMS
 06/03/1999 - 06/30/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: A BROWN
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50242 UNIV OF COLORADO - BOULDER 3289
 MAPPING THE DETAILED STRUCTURE OF THE LOCAL INTERSTELLAR
 MEDIUM
 06/03/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J LINSKY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

COLORADO

NASA'S UNIVERSITY PROGRAM

NGT 5 50273 UNIV OF COLORADO - BOULDER 3290
 ATMOSPHERIC MODELING AND INFRARED OBSERVATIONS OF TRANSITING
 EXTRASOLAR PLANET/STUDENT: L. JEREMY RI
 06/08/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: L ESPOSITO
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50294 UNIV OF COLORADO - BOULDER 3291
 DUST DYNAMICS IN PHOTOELECTRON LAYERS NEAR SURFACE IN
 SPACE/STUDENT: AMANDA SICKAFOOSE
 06/26/2000 - 06/30/2003 FY02: \$20,000 Total: \$64,000
Prin. Invest.: J E COLDWELL
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50320 UNIV OF COLORADO - BOULDER 3292
 SATELLITE GRAVITY & LARGE-SCALE HYDROLOGY/STUDENT: SEAN SWEN-
 SON
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J WAHR
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50337 UNIV OF COLORADO - BOULDER 3293
 ASTROBIOLOGICAL AND GEOLOGICAL IMPLICATIONS OF DIAPIRIC TRANS-
 PORT WITHIN EUROPA AND GANYMEDE
 05/04/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R RAPPALARDO
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50340 UNIV OF COLORADO - BOULDER 3294
 A NARROW BAND FAR ULTRAVIOLET IMAGING SPECTROGRAPH FOR
 INTERSTELLAR SHOCKS (STUDENT: MATTHEW BEASLEY)
 05/14/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J GREEN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50341 UNIV OF COLORADO - BOULDER 3295
 NEW METHODS FOR HYPERSPECTRAL IMAGING IN THE VACUUM ULTRA-
 VIOLET STUDENT: NATHANIEL CUNNINGHA
 05/14/2001 - 07/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J GREEN
Tech. Officer: GSFC/K E BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50345 UNIV OF COLORADO - BOULDER 3296
 ELECTROSTATIC DISCHARGES NEAR THE MARIAN SURFACE (STUDENT:
 CORINNE KRAUSS)
 05/14/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M HORANYI
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50350 UNIV OF COLORADO - BOULDER 3297
 NUMERICAL ALGORITHMS FOR ALGORITHMS COMPUTING STUDENT: JULIA
 ZUEV
 05/08/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: E ZWEIBEL
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50352 UNIV OF COLORADO - BOULDER 3298
 PLANETARY-SCALE WAVES AND IONOSPHERE 'WEATHER' (STUDENT: GIL-
 BERT LICHSTEIN)
 05/09/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J FORBES
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50380 UNIV OF COLORADO - BOULDER 3299
 PRODUCTION AND ANALYSIS OF EARLY EARTH THOLINS (STUDENT:
 MELISSA TRAINER)
 05/21/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M A TOLBERT
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50384 UNIV OF COLORADO - BOULDER 3300
 BOLOCAM MILLIMETER-WAVE GALAXY SURVEY STUDENT: GLENN LAU-
 RENT
 05/23/2002 - 05/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J GLENN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50389 UNIV OF COLORADO - BOULDER 3301
 THE PHYSICS OF STRUCTURES IN SELF-GRAVITATING, COL LISIONAL
 RINGS (STUDENT: JOHN WEISS)
 06/03/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: G STEWART
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50397 UNIV OF COLORADO - BOULDER 3302
 NEW STUDIES IN X-RAY OPTICS: INTERFEROMETRY AND DI FFUSE
 SPECTROSCOPY STUDENT: RANDALL MCENTAFFE
 06/12/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W CASH
Tech. Officer: HQ/K BLANDING
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 5 50416 UNIV OF COLORADO - BOULDER 3303
 SIMULATIONS OF TURBULENT CONVECTION IN THE SUN: E XAMINING
 SUB-GRID- SCALE TURBULENCE STUDENT: M
 08/06/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J TOOMRE
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50426 UNIV OF COLORADO - BOULDER 3304
 VIRTUAL ENVIRONMENTS FOR PREFLIGHT ADAPTATION TO S PACE FLIGHT
 (STUDENT: KENNETH STROUD)
 08/14/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D KLAUS
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT10 52624 UNIV OF COLORADO - BOULDER 3305
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE-
 SEARCH PROGRAM
 07/19/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D HOEHN
Tech. Officer: KSC/R WHEELER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10521 UNIV OF COLORADO - DENVER 3306
 IONOSPHERIC ELECTRODYNAMICS OF PLANETARY-SCALE OSCILLATIONS
 03/03/2001 - 04/30/2002 FY02: \$0 Total: \$37,000
Prin. Invest.: J M FORBES
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52291 UNIV OF COLORADO - DENVER 3307
 THE ROLE OF ANNEXIN II IN OSTEOBLASTIC DIFFERENTIATION
 06/24/2002 - 06/14/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S NIELSON-PREISS
Tech. Officer: ARC/R GLOBUS
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1176 UNIV OF COLORADO AT COLORADO SPRINGS 3308
 DEVELOPMENT OF THE PSEUDO PILOTTED AIRCRAFT SIMULATION (PPAS)
 05/05/2000 - 07/31/2002 FY02: \$0 Total: \$165,979
Prin. Invest.: P J GORDOR
Tech. Officer: ARC/T F ROMER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1297 UNIV OF DENVER 3309
 IN SITU AEROSOL SIZE DISTRIBUTION MEASUREMENTS FROM THE ER-2
 SAGE III VALIDATION & STUDIES OF OZONE
 03/09/1999 - 03/31/2003 FY02: \$0 Total: \$647,824
Prin. Invest.: J C WILSON
Tech. Officer: ARC/C P SCOFIELD, ARC/S S HIPSIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1391 UNIV OF DENVER 3310
 INFRARED REMOTE SENSING OF ATMOSPHERIC CONSTITUENTS
 01/19/2000 - 12/31/2002 FY02: \$327,211 Total: \$1,131,482
Prin. Invest.: F MURCRAE
Tech. Officer: ARC/E CONDON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1578 UNIV OF DENVER 3311
 MEASURING AEROSOL SIZE DISTRIBUTION FROM THE NASA DC08 IN
 SOLVE II
 08/23/2002 - 08/14/2003 FY02: \$153,583 Total: \$153,583
Prin. Invest.: J M REEVES, J M WILSON
Tech. Officer: ARC/C P SCOFIELD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11531 UNIV OF DENVER 3312
 MEASUREMENTS OF PARTICLE COMPOSITION FROM 30 TO 2,000 NM
 ABOARD THE TWIN OTTER FOR THE CRYSTAL-
 01/03/2002 - 12/14/2003 FY02: \$79,481 Total: \$79,481
Prin. Invest.: J M REEVES
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11533 UNIV OF DENVER 3313
 IN SITU MEASUREMENT OF AEROSOL SIZE DISTRIBUTIONS AND COLLEC-
 TION OF PARTICLES FOR TEM ANALYSIS I
 01/03/2002 - 12/14/2003 FY02: \$102,298 Total: \$102,298
Prin. Invest.: J C WILSON
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 1 313 UNIV OF DENVER 3314
 ANALYSIS OF ATMOSPHERIC MEASUREMENTS IN SUPPORT OF THE
 NETWORK FOR THE DETECTION OF STRATOSPHERIC CH
 07/22/1998 - 09/30/2001 FY02: \$2 Total: \$20,986
Prin. Invest.: F J MURCRAE
Tech. Officer: LARC/C P RINSLAND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 365 UNIV OF DENVER 3315
 COLLABORATIVE STUDY FOR ANALYSIS OF HI RESOLUTION INFRARED
 ATMOSPHERIC SPECTRA BETWEEN LARC & U DENVER
 01/10/2000 - 11/30/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: A GOLDMAN
Tech. Officer: LARC/C P RINSLAND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 01061 UNIV OF DENVER 3316
 COLLABORATIVE STUDY FOR ANALYSIS OF HI RESOLUTION INFRARED
 ATMOSPHERIC SPECTRA BETWEEN LARC & U DENVER
 09/10/2001 - 09/14/2003 FY02: \$0 Total: \$54,000
Prin. Invest.: A GOLDMAN
Tech. Officer: LARC/C P RINSLAND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 506 UNIV OF DENVER 3317
 "THE LENA INSTRUMENT ABOARD THE IMAGE SATELLITE"
 07/20/2000 - 07/31/2002 FY02: \$0 Total: \$51,006
Prin. Invest.: T M STEPHEN
Tech. Officer: GSFC/T MOORE
CASE Category: 11 – ASTRONOMY

NCC 8 176 UNIV OF DENVER 3318
 INTERNATIONAL SPACE STATION METEOROID/ORBITAL DEBRIS HAZARD
 ASSESSMENT AND SOFTWARE DEVELOPMENT.
 12/22/1998 - 12/31/2002 FY02: \$147,058 Total: \$800,798
Prin. Invest.: J E WILLIAMSEN
Tech. Officer: MSFC/G D OLSEN
CASE Category: 42 – ASTRONAUTICAL ENGR

NGT 8 52894 UNIV OF DENVER 3319
 TEMPERATURE EFFECTS ON METEOROID DEBRIS PROTECTIVE STRUC-
 TURES
 08/29/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R AMME
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 11 – ASTRONOMY

NGT 1 52209 UNIV OF SOUTHERN COLORADO 3320
 GRADUATE STUDENT RESEARCH PROGRAM (GSRP) YEAR 1
 05/25/1999 - 06/30/2001 FY02: \$1 Total: \$44,000
Prin. Invest.: L M GARRETT
Tech. Officer: LARC/A E MOTLEY, LARC/L D THOMAS
CASE Category: 41 – AERONAUTICAL ENGR

CONNECTICUT

NAG 5 8650 FAIRFIELD UNIV 3321
 OPTIMIZING PERFORMANCE OF FAR-INFRARED PHOTOCONDUCTORS:
 NEW APPROACH FOR INTERPRETATION & CALIBRATION
 07/29/1999 - 01/31/2002 FY02: \$0 Total: \$151,146
Prin. Invest.: N HAEGEL
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

CONNECTICUT

NASA'S UNIVERSITY PROGRAM

NAG 2 1434 UNIV. OF CONNECTICUT HEALTH CENTER 3322
 USE OF GFP TRANSGENES TO ASSESS OSTEOPROGENTIOR PR OGRES-
 SION IN INTACT BONE
 08/29/2000 - 08/31/2003 FY02: \$175,000 Total: \$428,750
Prin. Invest.: D W ROWE
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 6316 UNIV. OF CONNECTICUT HEALTH CENTER 3323
 TRANSGENIC MARKERS OF BONE CELL LINEAGE PROGRESSIO
 09/29/1997 - 03/31/2001 FY02: -\$8,347 Total: \$361,109
Prin. Invest.: D ROWE
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 5470 UNIV. OF CONNECTICUT HEALTH CENTER 3324
 HIGH THROUGHPUT METABOLIC PROFILING BY HETERONUCLE AR NMR
 10/24/2001 - 10/31/2002 FY02: \$66,000 Total: \$66,000
Prin. Invest.: Z Y PENG
Tech. Officer: ARC/S LIANG, ARC/B A BIEGEL
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 1 01113 UNIV OF CONNECTICUT 3325
 PREDICTIONS OF FATIGUE LIFE AND DELAMINATION IN LIGHTWEIGHT
 AEROSPACE COMPONENTS
 08/16/2001 - 08/31/2003 FY02: \$0 Total: \$17,000
Prin. Invest.: K D MURPHY
Tech. Officer: LARC/J H ROBINSON
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 2 1544 UNIV OF CONNECTICUT 3326
 DEVELOPMENT OF A LABORATORY FOR IMPROVING COMMUNIC ATION
 BETWEEN AIR TRAFFIC CONTROLLERSAND PILOTS
 03/29/2002 - 09/30/2003 FY02: \$966,579 Total: \$966,579
Prin. Invest.: A BRAMMER
Tech. Officer: ARC/E WENZEL
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 7654 UNIV OF CONNECTICUT 3327
 ECOPHYSIOLOGY OF SUBPOPULATIONS OF ALEXANDRIUM TAM ARENSE
 08/25/1998 - 08/31/2001 FY02: \$0 Total: \$150,000
Prin. Invest.: C ROESLER
Tech. Officer: GSFC/J W MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7915 UNIV OF CONNECTICUT 3328
 DECIPHERING THE MOLECULAR RECORD OF EARLY EVOLUTIO N
 12/09/1998 - 07/31/2002 FY02: \$0 Total: \$147,100
Prin. Invest.: P J GOGARTEN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8602 UNIV OF CONNECTICUT 3329
 DEVELOPMENT OF PLANETARY REMOTE SENSING TECHNOLOGY FOR
 APPLICATIONS TO TELEFORENSICS
 06/21/1999 - 12/14/2001 FY02: \$0 Total: \$140,620
Prin. Invest.: J S SCHWEITZER
Tech. Officer: GSFC/J I TROMBKA
CASE Category: 11 – ASTRONOMY

NAG 5 8636 UNIV OF CONNECTICUT 3330
 UNDERSTANDING THE ERROR CHARACTERISTICS OF PRECIPI TATION
 ESTIMATES FROM SPACE-BASED OBSERVING SYSTE
 07/10/1999 - 09/30/2002 FY02: \$94,423 Total: \$326,864
Prin. Invest.: E N ANAGOSTOU
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9639 UNIV OF CONNECTICUT 3331
 INVESTIGATING THE ADEQUACY OF TRMM PRECIPITATION RADAR OBSER-
 VATIONS FOR CALIBRATING GROUND-BASED WE
 06/02/2000 - 11/30/2002 FY02: \$172,845 Total: \$392,207
Prin. Invest.: E N ANAGOSTOU
Tech. Officer: GSFC/R J LAWRENECE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10599 UNIV OF CONNECTICUT 3332
 NASA PLANNING GRANT: LEARNING COMM OF TODAY & TOMORROW
 03/14/2001 - 06/15/2003 FY02: \$0 Total: \$25,000
Prin. Invest.: D MOSS
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11143 UNIV OF CONNECTICUT 3333
 DEPLOYMENT OF A MOBILE POLARIMETRIC X-BAND RADAR & IN SITU
 INSTRUMENTATION TO SUPPORT QPE....STUDIES
 08/01/2001 - 07/31/2004 FY02: \$45,000 Total: \$135,000
Prin. Invest.: E N ANAGOSTOU
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11307 UNIV OF CONNECTICUT 3334
 CREATION OF AN EARTH GRANT GEOSPATIAL TECHNOLOGY E XTENSION
 PROGRAM (ENVIRONMENTAL RESEARCH INS
 08/30/2001 - 08/31/2004 FY02: \$0 Total: \$25,000
Prin. Invest.: D CIVCO
Tech. Officer: GSFC/E SHEFFNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11470 UNIV OF CONNECTICUT 3335
 USE OF SIMULATED SEQUENCE EVOLUTION IN AN ITERATIV E PARAMET-
 RIC BOOTSTRAPALGORITHM TO ASCERTAIN LONG
 12/14/2001 - 12/14/2004 FY02: \$43,100 Total: \$43,100
Prin. Invest.: J P GOGARTEN
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 11527 UNIV OF CONNECTICUT 3336
 MULTI-SENSOR PRECIPITATION ESTIMATION AND INVESTIG ATING IM-
 PROVEMENTS ON WEATHER AND CLIMATE ANALYSI
 01/14/2002 - 01/30/2005 FY02: \$95,000 Total: \$95,000
Prin. Invest.: E N ANAGOSTOU
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11713 UNIV OF CONNECTICUT 3337
 DETECTION OF GUNPOWDER RESIDUE & BODY FLUIDS USING PORTABLE
 X-RAY FLUORESCENCE SYSTEMS
 02/26/2002 - 02/28/2003 FY02: \$135,000 Total: \$135,000
Prin. Invest.: J S SCHWEITZER
Tech. Officer: GSFC/J I TROMBKA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12367 **UNIV OF CONNECTICUT** **3338**
 HORIZONTAL GENE TRANSFER IN THERMOPHILIC BACTERIA: OCCUR-
 RENCE AND FUNCTIONAL IMPLICATIONS
 07/09/2002 - 06/30/2005 FY02: \$113,763 Total: \$113,763
Prin. Invest.: J GOGARTEN
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1428 **UNIV OF CONNECTICUT** **3339**
 BOSE-EINSTEIN CONDENSATE AND ATOM LASER: COHERENCE AND OPTI-
 CAL PROPERTIES
 02/02/1998 - 01/31/2003 FY02: \$98,000 Total: \$354,750
Prin. Invest.: J JAVANAINEN
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 9 1243 **UNIV OF CONNECTICUT** **3340**
 RESEARCH GRANT
 07/07/2000 - 09/01/2001 FY02: -\$1,574 Total: \$20,424
Prin. Invest.: M MOREAU
Tech. Officer: JSC/F MARTIN, JSC/D SICKOREZ
CASE Category: 22 – COMPUTER SCIENCE

NAG13 99001 **UNIV OF CONNECTICUT** **3341**
 BETTER LAND USE PLANNING FOR SUBURBANIZING NE, CREATING NET-
 WORK OF GEOSPATIAL INFORMATION
 02/19/1999 - 02/18/2002 FY02: \$0 Total: \$1,099,576
Prin. Invest.: D CIVCO
Tech. Officer: SSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1067 **UNIV OF CONNECTICUT** **3342**
 PRODUCTION & CONSUMPTION OF BIOGENIC GASES IN MICROBIAL MATS
 07/17/2000 - 09/30/2002 FY02: \$0 Total: \$150,026
Prin. Invest.: P T VISSCHER
Tech. Officer: ARC/B M BEBOUT, ARC/D J DES MARIAS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5481 **UNIV OF CONNECTICUT** **3343**
 MICROBIAL SIGNATURES OF LIFE: BIOGENIC GASES AND MINERAL
 PRECIPITATES AS PARAMETERS TO ASSESS BACTERIA
 02/13/2002 - 02/28/2003 FY02: \$39,998 Total: \$39,998
Prin. Invest.: P T VISSCHER
Tech. Officer: ARC/D J DESMARAIS, ARC/B M BEBOUT
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 3 789 **UNIV OF CONNECTICUT** **3344**
 HEAT TRANSFER IN ROTATING THIN LIQUID FILMS INCLUDING NUCLEATE
 BOILING
 04/07/2000 - 11/30/2003 FY02: \$95,000 Total: \$230,000
Prin. Invest.: D FAGHRI
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NGT 1 01025 **UNIV OF CONNECTICUT** **3345**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/22/2001 - 06/30/2004 FY02: \$0 Total: \$22,000
Prin. Invest.: K D MURPHY
Tech. Officer: LARC/W K BELVIN
CASE Category: 42 – ASTRONAUTICAL ENGR

NGT 5 82 **UNIV OF CONNECTICUT** **3346**
 PREDICTING THE DISTRIBUTION OF BIODIVERSITY: INTEGRATING RE-
 MOTE SENSING TECHNOLOGY AND FIELD-BASED
 05/11/1999 - 07/31/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: R COLWELL
Tech. Officer: GSFC/M S BURRELL
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NGT 5 30369 **UNIV OF CONNECTICUT** **3347**
 INVESTIGATION OF CONTINUOUS THUNDERSTORM MONITORING OVER
 LARGE REGIONS USING SATELLITE INFRARED OBS
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: E ANAGNOSTOU
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30437 **UNIV OF CONNECTICUT** **3348**
 INVESTIGATING FLOOD PREDICTION UNCERTAINTY OF HYDROLOGIC
 MODELS DRIVEN BY SATELLITE RAINFALL DATA
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: E N ANAGNOSTOU
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 390 **UNIV OF HARTFORD** **3349**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/13/1999 - 08/31/2001 FY02: \$0 Total: \$450,000
Prin. Invest.: S TOWNSEND
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 601 **UNIV OF HARTFORD** **3350**
 CONNECTICUT NASA EPSCOR PROGRAM
 11/29/2001 - 11/30/2004 FY02: \$315,946 Total: \$315,946
Prin. Invest.: S L TOWNSEND
Tech. Officer: GSFC/D DEYTROE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40031 **UNIV OF HARTFORD** **3351**
 NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
 12/30/1996 - 02/28/2001 FY02: -\$61,206 Total: \$746,294
Prin. Invest.: S L TOWNSEND
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40093 **UNIV OF HARTFORD** **3352**
 CONNECTICUT SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
 02/28/2001 - 06/30/2005 FY02: \$273,706 Total: \$486,206
Prin. Invest.: S TOWNSEND
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4821 **WESLEYAN UNIV** **3353**
 PHOTOMETRIC STUDIES OF T TAURI STARS
 06/18/1997 - 05/31/2002 FY02: \$0 Total: \$254,400
Prin. Invest.: D HERBST
Tech. Officer: GSFC/DNAVA
CASE Category: 11 – ASTRONOMY

CONNECTICUT

NASA'S UNIVERSITY PROGRAM

NAG 5 9064 **WESLEYAN UNIV** **3354**
 MEASURING THE GALACTIC POTENTIAL WITH NASA'S SPACE INTERFER-
 OMETRY MISSION - LTSA 99
 02/29/2000 - 02/14/2005 FY02: \$33,060 Total: \$110,540
Prin. Invest.: K V JOHNSTON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 21 – MATHEMATICS

NAG 5 12001 **WESLEYAN UNIV** **3355**
 AUTONOMOUS MINERAL DETECTORS FOR MARS ROVERS AND LANDERS
 04/17/2002 - 04/14/2005 FY02: \$43,403 Total: \$43,403
Prin. Invest.: M S GILMORE
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12502 **WESLEYAN UNIV** **3356**
 PHOTOMETRIC STUDIES OF T TAURI STARS
 08/27/2002 - 08/31/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: W HERBST
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 2 1433 **YALE UNIV** **3357**
 EFFECTS OF SPACE FLIGHT ON DROSOPHILA NEURAL DEVELOPMENT
 08/29/2000 - 09/30/2002 FY02: \$0 Total: \$209,415
Prin. Invest.: H S KESHISHIAN
Tech. Officer: ARC/D R BUBENHEIM, ARC/M F VASQUEZ
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1504 **YALE UNIV** **3358**
 MECHANISMS OF GRAVITY-EVOKED NEURONAL PLASTICITY
 07/16/2001 - 09/30/2002 FY02: -\$18,632 Total: \$56,368
Prin. Invest.: R G KALB
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 1935 **YALE UNIV** **3359**
 RHEOLOGY OF CONCENTRATED EMULSIONS
 08/05/1996 - 05/31/2001 FY02: \$0 Total: \$470,000
Prin. Invest.: M LOEWENBERG
Tech. Officer: GRC/B SINGH
CASE Category: 43 – CHEMICAL ENGR

NAG 3 1939 **YALE UNIV** **3360**
 COMPUTATIONAL & EXPERIMENTAL STUDY OF LAMINAR DIFFUSION
 FLAMES IN A MICROGRAVITY ENVIRONMENT
 08/05/1996 - 11/30/2002 FY02: \$0 Total: \$444,000
Prin. Invest.: M B LONG, M D SMOOKE
Tech. Officer: GRC/K J WEILAND, GRC/H D ROSS
CASE Category: 46 – MECHANICAL ENGR

NAG 3 1951 **YALE UNIV** **3361**
 DESIGN/INTERPRETATION OF MICROGRAVITY EXPERIMENT TO OBTAIN
 FLUID/SOLID BOUNDARY CONDITIONS IN NON-I
 08/14/1996 - 12/31/2001 FY02: \$0 Total: \$400,000
Prin. Invest.: D E ROSNER
Tech. Officer: GRC/B S SINGH
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2262 **YALE UNIV** **3362**
 COMPUTATIONAL AND EXPERIMENTAL STUDY OF ENERGETIC MATERIALS
 IN A COUNTERFLOW MICROGRAVITY ENVIRONMENT
 04/27/1999 - 04/06/2003 FY02: \$76,644 Total: \$281,554
Prin. Invest.: M D SMOOKE
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2377 **YALE UNIV** **3363**
 STUDIES OF THE DYNAMIC CONTROL AND EVAPORATION OF THREE
 DIMENSIONAL DROPLET ARRAYS
 04/07/2000 - 11/30/2003 FY02: \$75,000 Total: \$217,000
Prin. Invest.: R E APFEL
Tech. Officer: GRC/R ROGERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2477 **YALE UNIV** **3364**
 FLOWS OF WET FOAMS AND CONCENTRATED EMULSIONS FLOWS OF WET
 FOAMS AND CONCENTRATED EMULSIONS
 07/24/2000 - 11/30/2003 FY02: \$51,000 Total: \$227,000
Prin. Invest.: D LOEWENBERG
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2704 **YALE UNIV** **3365**
 DROP COALESCENCE: DRAINAGE AND STABILIZATION OF THIN LIQUID
 FILMS
 02/12/2002 - 11/30/2005 FY02: \$68,864 Total: \$68,864
Prin. Invest.: D BLAWDZIEWICZ
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2722 **YALE UNIV** **3366**
 BUBBLE-SCALE MODELING OF FOAM DRAINAGE BUBBLE-SCALE MODEL-
 ING OF FOAM DRAINAGE
 03/05/2002 - 12/31/2005 FY02: \$63,747 Total: \$63,747
Prin. Invest.: D LOEWENBERG
Tech. Officer: GRC/D F CHAO
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 5255 **YALE UNIV** **3367**
 X-RAY SINGLE-PHOTON SPECTROMETERS X-RAY SINGLE-PHOTON SPEC-
 TROMETERS
 02/18/2000 - 02/03/2003 FY02: \$175,000 Total: \$515,000
Prin. Invest.: D E PROBER
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 6404 **YALE UNIV** **3368**
 OBSERVATIONAL STUDIES OF DYNAMICAL EFFECTS IN GLOBAL CLUS-
 TERS
 11/04/1997 - 08/31/2002 FY02: \$117,000 Total: \$541,000
Prin. Invest.: C BAILYN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8406 **YALE UNIV** **3369**
 MODELING CONVECTION IN STARS; IMPROVING STELLAR MODELS FOR
 STELLAR POPULATION SYNTHESIS (ATP-
 03/15/1999 - 03/14/2003 FY02: \$0 Total: \$298,261
Prin. Invest.: P F DEMARQUE
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8589 **YALE UNIV** **3370**
 PHOTON-COUNTING DETECTORS FOR SUBMILLIMETER IMAGING AND SPECTROSCOPY.
 07/08/1999 - 07/14/2002 FY02: \$0 Total: \$505,559
Prin. Invest.: R J SCHOELKOPF
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8813 **YALE UNIV** **3371**
 FROM RNA TO CONTEMPORARY METABOLISM: THE M1 RIBOZYME AS A MODEL SYSTEM
 09/23/1999 - 08/31/2001 FY02: \$0 Total: \$140,000
Prin. Invest.: R L DORIT
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9168 **YALE UNIV** **3372**
 GLOBULAR CLUSTER FORMATION (ATP 99_)
 03/27/2000 - 06/30/2001 FY02: -\$134,927 Total: \$70,503
Prin. Invest.: S ZEPF
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9316 **YALE UNIV** **3373**
 LANDSCAPE CHANGES IN THE MIDDLE EAST: A REGIONAL ASSESSMENT USING REMOTE SENSING
 03/28/2000 - 03/31/2003 FY02: \$393,333 Total: \$1,028,333
Prin. Invest.: R SMITH
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9437 **YALE UNIV** **3374**
 CHARACTERIZATION OF HUMID-FOREST & SAVANNA ECOREGIONS OF WEST & CENTRAL AFRICA USING SATELLITE SENSING
 04/13/2000 - 04/30/2003 FY02: \$183,272 Total: \$512,845
Prin. Invest.: M ASHTON
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9554 **YALE UNIV** **3375**
 RNA MODIFYING ENZYMES: DETERMINANTS OF DESIGN AND EVOLUTION OF BIOLOGICAL INFORMATION PROCESSING
 05/04/2000 - 04/30/2003 FY02: \$110,000 Total: \$213,620
Prin. Invest.: D SOLL
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9595 **YALE UNIV** **3376**
 SINGLE-PHOTON STIMULATED EMISSION DETECTORS WITH RF-SINGLE-ELECTRON TRANSDUCERS FOR VISIBLE-THROUGH-UV
 06/09/2000 - 06/30/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: D E PROBER
Tech. Officer: GSFC/C STAHLER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9651 **YALE UNIV** **3377**
 THE FORMATION AND EVOLUTION OF GLOBULAR CLUSTER SYSTEMS AND IMPLICATIONS FOR THE FORMATION HISTORY
 06/22/2000 - 06/30/2001 FY02: -\$137,260 Total: \$94,360
Prin. Invest.: S ZEPF
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9839 **YALE UNIV** **3378**
 INVESTIGATIONS OF THE TROPICAL TROPOPAUSE REGION
 11/16/2000 - 12/31/2003 FY02: \$212,510 Total: \$338,786
Prin. Invest.: S SHERWOOD
Tech. Officer: GSFC/M R SCHOEBERL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10439 **YALE UNIV** **3379**
 DEVELOPMENT OF AN ATOM INTERFEROMETER GRAVITY GRADIENT METER FOR SPACE FLIGHT, PROPOSAL 1258
 03/13/2001 - 03/14/2004 FY02: \$193,000 Total: \$474,175
Prin. Invest.: P KASEVICH
Tech. Officer: GSFC/N J DENNEHY
CASE Category: 13 – PHYSICS

NAG 5 10755 **YALE UNIV** **3380**
 FABRICATION AND CHARACTERIZATION OF SUBMILLIMETER SINGLE-PHONON COUNTERS
 04/20/2001 - 04/30/2003 FY02: \$0 Total: \$175,000
Prin. Invest.: R J SCHOELKOPF
Tech. Officer: GSFC/F HERRERO
CASE Category: 13 – PHYSICS

NAG 5 10912 **YALE UNIV** **3381**
 RING-DIAGRAM ANALYSIS OF THE SOLAR SURFACE LAYERS
 05/14/2001 - 05/31/2004 FY02: \$49,095 Total: \$106,316
Prin. Invest.: S BASU
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11335 **YALE UNIV** **3382**
 CHANGES INFLUENCE OF HUMANS, CLIMATE, AND FIRE ON FOREST ECOSYSTEMS AND CARBON DYNAMICS IN INDONESIA
 09/06/2001 - 09/14/2004 FY02: \$21,426 Total: \$274,533
Prin. Invest.: L M CURRAN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11425 **YALE UNIV** **3383**
 PHOTO-COUNTING DETECTORS FOR SUBMILLIMETER IMAGING AND SPECTROSCOPY
 12/03/2001 - 12/31/2004 FY02: \$230,000 Total: \$230,000
Prin. Invest.: R J SCHOELKOPF
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 13 – PHYSICS

NAG 5 12056 **YALE UNIV** **3384**
 INVESTIGATION OF DEEP CUMULUS FORMATION DURING CRYSTALLIZATION
 04/19/2002 - 04/30/2004 FY02: \$14,952 Total: \$14,952
Prin. Invest.: S SHERWOOD
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1351 **YALE UNIV** **3385**
 NOVEL CONCEPTS IN ACOUSTOPHORESIS FOR BIOTECHNOLOGY APPLICATIONS UNDER DIRECTION DR. APFEL.
 05/23/1997 - 09/30/2001 FY02: \$0 Total: \$248,000
Prin. Invest.: R E APFEL
Tech. Officer: MSFC/B GUYNES, MSFC/J MAYO
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

DELAWARE

NASA'S UNIVERSITY PROGRAM

NAG 8 1443 **YALE UNIV** **3386**
 R/S ATOM INTERFEROMETRY IN A MICROGRAVITY ENVIRONMENT
 02/06/1998 - 01/31/2003 FY02: \$100,000 Total: \$470,000
Prin. Invest.: M A KASEVICH
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1449 **YALE UNIV** **3387**
 INVESTIGATION OF FUTURE MICROGRAVITY ATOMIC CLOCKS
 03/09/1998 - 03/01/2003 FY02: -\$210,598 Total: \$529,402
Prin. Invest.: K GIBBLE
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1461 **YALE UNIV** **3388**
 NUCLEATION AND GROWTH MECHANISMS UNDERLYING THE MICRO-
 STRUCTURE OF POLYMER FOAMS PRODUCED
 02/18/1998 - 01/31/2002 FY02: \$16,000 Total: \$374,333
Prin. Invest.: R E APFEL, D WU
Tech. Officer: MSFC/C TALLEY
CASE Category: 13 – PHYSICS

NAG 8 1767 **YALE UNIV** **3389**
 ATOM INTERFEROMETER TEST OF THE EQUIVALENCE PRINCIPLE
 05/14/2001 - 05/13/2005 FY02: \$160,000 Total: \$310,000
Prin. Invest.: M A KASEVICH, L MALEKI
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NCC 2 1229 **YALE UNIV** **3390**
 DOMAIN-SPECIFIC SELF-ADAPTIVE SOFTWARE
 03/26/2001 - 08/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: P HUDAK
Tech. Officer: ARC/R MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 691 **YALE UNIV** **3391**
 COMBUSTION OF INDIVIDUAL BUBBLES AND SUBMERGED GAS JETS IN
 LIQUID FUELS
 03/24/1999 - 01/11/2003 FY02: \$98,100 Total: \$401,800
Prin. Invest.: D E ROSNER
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 121 **YALE UNIV** **3392**
 NOISE & SENSITIVITY OF SQPC SUBMILLIMETER DETECTORS/STUDENT:
 JOHN D. TEUFEL
 05/31/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D SCHOELKOPF
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 30371 **YALE UNIV** **3393**
 ENVIRONMENTAL ASSESSMENT OF HUMAN HEALTH RISK: SPATIAL AND
 TEMPORAL MODELS OF LYME DISEASE
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D FISH
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30457 **YALE UNIV** **3394**
 IMPLICATIONS OF FEEDBACK BETWEEN ENSO & ANTHROPOGENIC
 DISTURBANCE ON ECOSYSTEM FUNCTION AND RESILIENCE
 08/26/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L M CURRAN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50067 **YALE UNIV** **3395**
 SPACE BASED LASER-COOLED ATOMIC CLOCKS
 08/26/1997 - 06/30/2001 FY02: \$0 Total: \$65,060
Prin. Invest.: K GIBBLE
Tech. Officer: HQ/A NURRIDIN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 50287 **YALE UNIV** **3396**
 GLOBAL CLUSTER SYSTEMS AS PROBES OF GALAXY FORMATION
 (STUDENT: KATHERINE RHODE)
 06/22/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: C E BAILYN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

DELAWARE

NAG 1 2030 **DELAWARE STATE UNIV** **3397**
 INVESTIGATION OF OPTICAL PHASE DISTORTIONS IN SOLID STATE
 PULSED LASER AMPLIFIER
 03/23/1998 - 12/31/2001 FY02: \$0 Total: \$297,207
Prin. Invest.: N MELIKECHI
Tech. Officer: LARC/W C EDWARDS, LARC/N P BANRES
CASE Category: 13 – PHYSICS

NAG 3 1920 **UNIV OF DELAWARE** **3398**
 FREE-SURFACE AND CONTACT-LINE MOTION OF LIQUIDS IN A MICROGRAVITY
 ENVIRONMENT
 07/07/1996 - 07/10/2001 FY02: \$0 Total: \$355,000
Prin. Invest.: L W SCHWARTZ
Tech. Officer: GRC/M W WEISLOGEL
CASE Category: 46 – MECHANICAL ENGR

NAG 3 1955 **UNIV OF DELAWARE** **3399**
 SURFACTANT-BASED CRITICAL PHENOMENA IN MICROGRAVITY
 08/19/1996 - 08/31/2001 FY02: \$0 Total: \$241,500
Prin. Invest.: E W KALER, M E PAULATIS
Tech. Officer: GRC/B S SINGH
CASE Category: 43 – CHEMICAL ENGR

NAG 5 5181 **UNIV OF DELAWARE** **3400**
 PROTON/ANTI-PROTON RATIO AS A PROBE OF SOLAR MODULATION
 03/26/1998 - 08/31/2001 FY02: \$0 Total: \$201,604
Prin. Invest.: T K GAISSER
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5221 **UNIV OF DELAWARE** **3401**
 GRANT NAG5-5221 BALLOON AIR CHERENKOV (BACH) PI PROF PAUL
 EVENSON
 03/16/1999 - 03/11/2004 FY02: \$0 Total: \$475,000
Prin. Invest.: P A EVENSON
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 7009 **UNIV OF DELAWARE** **3402**
 NATURE AND ORIGIN OF THE HIGHEST ENERGY COSMIC RAY S - ATP
 02/12/1998 - 02/14/2002 FY02: \$0 Total: \$293,484
Prin. Invest.: T STANOV
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7949 **UNIV OF DELAWARE** **3403**
 APPLICATION OF SATELLITE ALTIMETER DATA TO STUDIES OF OCEAN
 SURFACE HEATFLUX AND UPPER OCEAN THERMA
 12/23/1998 - 12/14/2001 FY02: \$0 Total: \$225,000
Prin. Invest.: X YAN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9116 **UNIV OF DELAWARE** **3404**
 MARS GLOBAL SURVEYOR DATA ANALYSIS AND INTERPRETAT ION
 02/28/2000 - 08/31/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: N F NESS
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 10416 **UNIV OF DELAWARE** **3405**
 LMC 1995, THE THIRD SUPERSOFT X-RAY NOVA
 02/22/2001 - 02/28/2002 FY02: \$0 Total: \$5,000
Prin. Invest.: J MCDONALD
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10911 **UNIV OF DELAWARE** **3406**
 COMPARATIVE STUDY OF INTERPLANETARY MAGNETIC FIELD TURBU-
 LENCE
 05/11/2001 - 05/31/2004 FY02: \$95,315 Total: \$186,875
Prin. Invest.: C W SMITH
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10919 **UNIV OF DELAWARE** **3407**
 HIGHEST ENERGY COSMIC RAYS
 05/17/2001 - 05/31/2004 FY02: \$90,960 Total: \$180,960
Prin. Invest.: T STANLEY
Tech. Officer: GSFC/RJ OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11006 **UNIV OF DELAWARE** **3408**
 HEATING OF THE LOWER CORONA: TRANSPORT, CASCADE & RECONNEC-
 TION
 06/05/2001 - 05/31/2002 FY02: \$0 Total: \$31,000
Prin. Invest.: W H MATHAEUS
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 11095 **UNIV OF DELAWARE** **3409**
 FUV DIAGNOSTICS OF STRUCTURE IN HOT-STAR WINDS (FUSE 1999)
 07/24/2001 - 07/31/2003 FY02: \$0 Total: \$20,750
Prin. Invest.: S P OWOCKI
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11228 **UNIV OF DELAWARE** **3410**
 MAGNETIC FIELDS ON OB STARS (ATP 2000)
 08/15/2001 - 08/14/2004 FY02: \$10,655 Total: \$21,310
Prin. Invest.: D MULLAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11232 **UNIV OF DELAWARE** **3411**
 THE SPACE INFORMATION NETWORKING ARCHITECTURE FOR FUTURE
 NASA SCIENCE MISSIONS
 08/15/2001 - 08/14/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: C SHEN
Tech. Officer: GSFC/J RASH
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11452 **UNIV OF DELAWARE** **3412**
 A HYBRID APPROACH FOR EVALUATING AND PREDICTING IN TERACTIONS
 BETWEEN THE SEASONAL SNOW PACK AND THE
 12/27/2001 - 12/31/2004 FY02: \$90,126 Total: \$90,126
Prin. Invest.: D J LEATHERS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11522 **UNIV OF DELAWARE** **3413**
 SEARCH FOR SHOCK-METAMORPHOSED GRAINS IN PRECAMBRIAN SPE-
 RULE LAYERS
 12/31/2001 - 01/14/2004 FY02: \$46,400 Total: \$46,400
Prin. Invest.: B P GLASS
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11603 **UNIV OF DELAWARE** **3414**
 INTERPLANETARY TURBULENCE AND PARTICLE TRANSPORT
 01/22/2002 - 01/31/2005 FY02: \$89,372 Total: \$89,372
Prin. Invest.: W MATHAEUS
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11630 **UNIV OF DELAWARE** **3415**
 OBSERVATIONAL STUDIES OF THE SOLAR CORONA
 02/19/2002 - 04/30/2002 FY02: \$5,376 Total: \$5,376
Prin. Invest.: D MULLAN
Tech. Officer: GSFC/J DAVILA
CASE Category: 11 – ASTRONOMY

NAG 5 11773 **UNIV OF DELAWARE** **3416**
 APPLICATION OF SATELLITE ALTIMETER DATA TO STUDIES OF SURFACE
 HEAT FLUX AND UPPER OCEAN PROCESSES
 02/26/2002 - 02/28/2003 FY02: \$80,545 Total: \$80,545
Prin. Invest.: X YAN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11886 **UNIV OF DELAWARE** **3417**
 THE PHYSICAL CONDITIONS IN GRAND DESIGN STELLAR WIND VARIABIL-
 ITY.
 03/27/2002 - 03/31/2003 FY02: \$34,900 Total: \$34,900
Prin. Invest.: S P OWOCKI
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12323 **UNIV OF DELAWARE** **3418**
 DB WHITE DWARFS (FUSE 01)
 08/07/2002 - 08/14/2003 FY02: \$27,170 Total: \$27,170
Prin. Invest.: J L PROVENCAL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

DELAWARE

NASA'S UNIVERSITY PROGRAM

NAG 8 1346 UNIV OF DELAWARE 3419
 PROTEIN CRYSTALLIZATION IN COMPLEX FLUIDS
 05/23/1997 - 11/30/2001 FY02: -\$6,661 Total: \$533,339
Prin. Invest.: E W KALER, D
Tech. Officer: MSFC/D SMITH
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1427 UNIV OF DELAWARE 3420
 DROPLETS OF 3HE-4HE MIXTURES
 02/11/1998 - 01/31/2003 FY02: \$100,000 Total: \$424,000
Prin. Invest.: S T CHUI
Tech. Officer: MSFC/J W POE
CASE Category: 13 – PHYSICS

NAG 8 1830 UNIV OF DELAWARE 3421
 SUFACTANT STRUCTURES GUIDE MEMBRANE PROTEIN CRYSTALLIZATION
 10/10/2001 - 11/30/2004 FY02: \$316,000 Total: \$316,000
Prin. Invest.: E W KALER, C ROBINSON, M LENHOFF
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 989 UNIV OF DELAWARE 3422
 PROPOSAL TO DEVELOPE ASTRONAUT TRAINING
 02/08/1998 - 06/30/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: V KLEMAS, Q ZHEN
Tech. Officer: JSC/S K RUNCO
CASE Category: 33 – OCEANOGRAPHY

NCC 3 843 UNIV OF DELAWARE 3423
 SOOT FORMATION IN PURELY-CURVED PREMIXED FLAMES AN D LAMINAR
 FLAME SPEEDS OF SOOT-FORMING FLAMES
 12/28/2000 - 11/30/2004 FY02: \$31,500 Total: \$61,500
Prin. Invest.: D WANG
Tech. Officer: GRC/K R SACKSTER
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 50367 UNIV OF DELAWARE 3424
 SENSOR DESIGN AND CONTROL FOR THE REAL-TIME OPTIMI ZATION OF
 CULTURING CONDITIONS, ANALYSISAND CONT
 06/12/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P DHUJATI
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 3530 UNIV OF DELAWARE - BARTOL RESEARCH INST 3425
 MULTI-SPECTRAL DIAGNOSTICS AND DYNAMICAL MODELLING STAR
 WINDS
 12/13/1996 - 11/30/2002 FY02: \$0 Total: \$489,078
Prin. Invest.: S P OWOCKI
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6470 UNIV OF DELAWARE - BARTOL RESEARCH INST 3426
 ULYSSES-SWICS CONSTRAINTS ON NON-MAXWELLIAN ELECTR ON DIS-
 TRIBUTIONS AND UNEQUAL ION FLOW SPEEDS IN A
 11/14/1997 - 10/31/2001 FY02: \$0 Total: \$165,275
Prin. Invest.: S OWOCKI
Tech. Officer: HQ/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 6570 UNIV OF DELAWARE - BARTOL RESEARCH INST 3427
 INVESTIGATION OF INTERPLANETARY TURBULENCE AT HIGH LATITUDE
 USING THE ULYSSES SPACECRAFT
 11/13/1997 - 10/31/2001 FY02: \$0 Total: \$248,199
Prin. Invest.: C SMITH
Tech. Officer: HQ/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 6969 UNIV OF DELAWARE - BARTOL RESEARCH INST 3428
 ENERGETIC PARTICLE PROCESSES IN THE HELIOSPHERE
 03/12/1998 - 10/31/2001 FY02: \$0 Total: \$276,500
Prin. Invest.: J A LE ROUX
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7142 UNIV OF DELAWARE - BARTOL RESEARCH INST 3429
 TURBULENCE AND PARTICLE TRANSPORT IN SPACE PLASMAS
 03/23/1998 - 02/28/2002 FY02: \$0 Total: \$205,200
Prin. Invest.: J BIEBER
Tech. Officer: HQ/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7164 UNIV OF DELAWARE - BARTOL RESEARCH INST 3430
 TURBULENCE, RECONNECTION, AND HEATING IN THE LOWER CORONA
 03/13/1998 - 04/14/2002 FY02: \$0 Total: \$275,851
Prin. Invest.: W H MATTHAEUS
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7796 UNIV OF DELAWARE - BARTOL RESEARCH INST 3431
 COMPOSITION AND ABUNDANCE RATIOS OF ANOMALOUS AND GALACTIC
 COSMIC RAYS: IMPLICATIONS OF ACE OBSERVAT
 12/14/1998 - 06/30/2001 FY02: -\$47,502 Total: \$193,498
Prin. Invest.: G P ZANK
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NAG 5 8134 UNIV OF DELAWARE - BARTOL RESEARCH INST 3432
 RESEARCH IN "TURBLENCE AND TRANSPORT PROCESSES" T HIS IS THE
 FIRST YEAR OF A 3-YEAR FUNDING CYCLE.
 02/04/1999 - 02/14/2003 FY02: \$75,000 Total: \$601,954
Prin. Invest.: W H MATTAEUS
Tech. Officer: GSFC/J GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 8827 UNIV OF DELAWARE - BARTOL RESEARCH INST 3433
 PARTICIPATION IN NASA-GSFC MAGNETOMETER EXPERIMENT ON MARS
 GLOBAL SURVEYOR
 09/07/1999 - 11/30/2002 FY02: \$0 Total: \$28,836
Prin. Invest.: N F NESS
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NGT 5 40122 UNIV OF DELAWARE - BARTOL RESEARCH INST 3434
 DELAWARE SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/26/2001 - 03/31/2005 FY02: \$248,562 Total: \$657,985
Prin. Invest.: N F NESS
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50167 UNIV OF DELAWARE - BARTOL RESEARCH INST 3435
 PROTEIN CRYSTALLIZATION OF BINARY MIXTURES
 07/08/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: A M LENHOFF, TESSIER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

DISTRICT OF COLUMBIA

NAG 2 1456 GEORGE WASHINGTON UNIV 3436
 ADAPTIVE UNSTRUCTURED GRID PARALLEL BENCHMARK
 02/05/2001 - 04/30/2002 FY02: \$12,166 Total: \$48,665
Prin. Invest.: M MYERS
Tech. Officer: ARC/R BISWAS, ARC/J YAN
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 5292 GEORGE WASHINGTON UNIV 3437
 THE SHAPE OF A DESCENDING BALLOON THE SHAPE OF A DESCENDING
 BALLOON
 06/14/2000 - 11/30/2001 FY02: \$0 Total: \$49,948
Prin. Invest.: F BAGINSKI
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5353 GEORGE WASHINGTON UNIV 3438
 THE SHAPE OF A STATICALLY DETERMINATE PRESSURIZED PUMPKIN
 BALLOON AND THE ANALYSIS OF RELATED UNDE
 01/16/2002 - 12/31/2002 FY02: \$58,260 Total: \$58,260
Prin. Invest.: F BAGINSKI
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 8068 GEORGE WASHINGTON UNIV 3439
 IMPROVED NUMERICAL MODELING OF LOW-DENSITY ATMOSPHERIC
 FLOW ON IO
 01/29/1999 - 06/30/2002 FY02: \$0 Total: \$73,856
Prin. Invest.: D A LEVIN
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8287 GEORGE WASHINGTON UNIV 3440
 MARS GLOBAL SURVEYOR ACCELEROMETER EXPERIMENT: STUDY OF
 MARS THERMOSPHERE AND COUPLING
 02/22/1999 - 03/31/2002 FY02: \$0 Total: \$146,500
Prin. Invest.: G M KEATING
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9550 GEORGE WASHINGTON UNIV 3441
 PRECIPITATION STUDIES USING THE TRMM MICROWAVE LINK FACILITY
 05/30/2000 - 05/31/2003 FY02: \$101,467 Total: \$251,634
Prin. Invest.: R H LANG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10417 GEORGE WASHINGTON UNIV 3442
 DETECTION OF GUNPOWDER RESIDUE USING X-RAY FLUORESCENCE
 AND ELECTRON MICROSCOPY.
 02/21/2001 - 06/30/2002 FY02: \$0 Total: \$31,915
Prin. Invest.: D A ROWLEY
Tech. Officer: GSFC/J I TROMBKA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10539 GEORGE WASHINGTON UNIV 3443
 SOCIOECONOMIC BENEFITS OF NASA'S EARTH SCIENCE AND APPLICA-
 TIONS RESEARCH. PROPOSAL, JAUP, C
 03/16/2001 - 06/30/2002 FY02: \$0 Total: \$182,761
Prin. Invest.: D A WILLIAMSON
Tech. Officer: GSFC/E TORREZ-MARTINEZ
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11101 GEORGE WASHINGTON UNIV 3444
 PARALLEL DIMENSION REDUCTION OF HYPERSPECTRAL DATA
 07/26/2001 - 07/31/2004 FY02: \$44,967 Total: \$75,967
Prin. Invest.: T EL-GHAZAWI
Tech. Officer: GSFC/J LE MOIGNE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11175 GEORGE WASHINGTON UNIV 3445
 DATA ANALYSIS OF MGS ACCELEROMETER EXPERIMENT TO CHARACTER-
 IZE THE MARS ATMOSPHERE AT AEROBRAKING A
 08/30/2001 - 08/14/2003 FY02: \$60,000 Total: \$120,000
Prin. Invest.: G KEATING
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11317 GEORGE WASHINGTON UNIV 3446
 SCIENCE AND ENGINEERING APPRENTICESHIP PROGRAM
 10/01/2001 - 09/30/2004 FY02: \$33,042 Total: \$33,042
Prin. Invest.: M PHILLIPS
Tech. Officer: GSFC/G BLANEY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11343 GEORGE WASHINGTON UNIV 3447
 DEVELOPMENT OF INDIVIDUALLY ADDRESSABLE MICRO-MIRROR ARRAYS
 FOR SPACE APPLICATIONS
 09/27/2001 - 09/30/2002 FY02: \$0 Total: \$53,686
Prin. Invest.: M ZAGHLOUL
Tech. Officer: GSFC/M DUTTA
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 11593 GEORGE WASHINGTON UNIV 3448
 SOCIOECONOMIC BENEFITS OF NASA'S EARTH SCIENCE AND APPLICA-
 TIONS RESEARCH
 01/16/2002 - 09/30/2002 FY02: \$96,373 Total: \$96,373
Prin. Invest.: R WILLIAMSON
Tech. Officer: GSFC/E TORRES-MARTINEZ
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11834 GEORGE WASHINGTON UNIV 3449
 ANALYSIS OF LONG-TERM DECLINE IN THERMOSPHERIC DENSITIES AND
 INTERPRETATION OF RESULTS
 03/07/2002 - 02/28/2005 FY02: \$77,287 Total: \$77,287
Prin. Invest.: G M KEATING
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11948 GEORGE WASHINGTON UNIV 3450
 GRADUATE EDUCATION AND TRAINING FOR AIR FORCE ACADEMY ALUMNI
 04/03/2002 - 08/31/2002 FY02: \$0 Total: \$0
Prin. Invest.: S SARKANI
Tech. Officer: GSFC/M BROWN
CASE Category: 49 – ENGINEERING, OTHER

DISTRICT OF COLUMBIA

NASA'S UNIVERSITY PROGRAM

NAG 5 11951 **GEORGE WASHINGTON UNIV** **3451**
UNVEILING THE NATURE OF SOFT GAMMA REPEATERS AND M AGNETARS
04/08/2002 - 10/14/2002 FY02: \$9,141 Total: \$9,141
Prin. Invest.: W PARKE
Tech. Officer: GSFC/J SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 12264 **GEORGE WASHINGTON UNIV** **3452**
MICROWAVE REMOTE SENSING OF SOIL MOISTURE UNDER CO RN.
06/11/2002 - 02/14/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: R LANG
Tech. Officer: GSFC/P E O'NEIL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12594 **GEORGE WASHINGTON UNIV** **3453**
DEVELOPMENT OF INDIVIDUALLY ADDRESSABLE MICRO-MIRRORS
ARRAYS FOR SPACE APPLICATION
09/27/2002 - 09/30/2003 FY02: \$56,205 Total: \$56,205
Prin. Invest.: M ZAGHLOUL
Tech. Officer: GSFC/M LI
CASE Category: 13 – PHYSICS

NAG 9 1185 **GEORGE WASHINGTON UNIV** **3454**
DEVELOP TUNABLE DIODE LASER/CAVITY RING-DOWN SENSORS
01/11/2000 - 01/09/2003 FY02: \$122,285 Total: \$223,534
Prin. Invest.: J H MILLER
Tech. Officer: NMO/D JAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 47 **GEORGE WASHINGTON UNIV** **3455**
CORE PROGRAM IN THE JOINT INST FOR ADVANCEMENT OF FLIGHT
SCIENCES AT THE NASA-LANGLEY RESEARCH
11/05/1980 - 11/30/2000 FY02: -\$34,847 Total: \$5,426,384
Prin. Invest.: J L WHITESIDES, H W LIEBOWITZ
Tech. Officer: LARC/R L YANG, LARC/M F CARD
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 326 **GEORGE WASHINGTON UNIV** **3456**
A PROGRAM OF RESEARCH IN FLIGHT DYNAMICS IN JIAFS
01/27/1999 - 12/31/2002 FY02: \$66,865 Total: \$346,104
Prin. Invest.: V KLEIN
Tech. Officer: LARC/J G BATTERSON
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 331 **GEORGE WASHINGTON UNIV** **3457**
A COOPERATIVE PROGRAM OF RESEARCH & EDUCATION IN AEROSPACE
VEHICLE MECHANICS AT JIAFS
03/22/1999 - 12/31/2002 FY02: \$377,571 Total: \$1,203,563
Prin. Invest.: R H TOLSON
Tech. Officer: LARC/R W BUCHAN
CASE Category: 42 – AERONAUTICAL ENGR

NCC 1 370 **GEORGE WASHINGTON UNIV** **3458**
EXPERIMENTS IN THE FLUID AND THERMAL SCIENCES
02/10/2000 - 12/31/2003 FY02: \$113,526 Total: \$365,383
Prin. Invest.: A D CUTLER
Tech. Officer: LARC/G S DISKIN, LARC/M W SMITH
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 374 **GEORGE WASHINGTON UNIV** **3459**
AEROACOUSTICS RESEARCH PROGRAM JIAFS
02/15/2000 - 12/31/2002 FY02: \$88,027 Total: \$232,828
Prin. Invest.: M K MYERS
Tech. Officer: LARC/C A POWELL
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 384 **GEORGE WASHINGTON UNIV** **3460**
A RESEARCH PROGRAM IN FLIGHT SCIENCES AT THE NASA LANGLEY
RESEARCH CENTER - JIAFS
03/07/2000 - 12/31/2002 FY02: \$130,202 Total: \$505,505
Prin. Invest.: J L WHITESIDES
Tech. Officer: LARC/E WAGGONER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 387 **GEORGE WASHINGTON UNIV** **3461**
A PROGRAM OF RESEARCH AND EDUCATION IN AERO-SPACE VEHICLE
DESIGN, SYNTHESIS, AND OPTIMIZATION
03/13/2000 - 12/31/2002 FY02: \$129,900 Total: \$500,127
Prin. Invest.: R R SANDUSKY
Tech. Officer: LARC/M D MOORE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01017 **GEORGE WASHINGTON UNIV** **3462**
PROGRAM OF RESEARCH AND EDUCATION IN AEROSPACE STRUCTURES
AT THE JOINT INST FOR ADVANCEMENT
01/18/2001 - 12/31/2002 FY02: \$294,103 Total: \$638,993
Prin. Invest.: P A COOPER, R H TOLSON
Tech. Officer: LARC/K L BRINKLEY
CASE Category: 42 – AERONAUTICAL ENGR

NCC 1 01020 **GEORGE WASHINGTON UNIV** **3463**
A CORE PROGRAM IN JIAFS
02/02/2001 - 12/31/2002 FY02: \$133,039 Total: \$266,745
Prin. Invest.: J WHITESIDES
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1323 **GEORGE WASHINGTON UNIV** **3464**
ADAPTIVE UNSTRUCTURED GRID PARALLEL BENCHMARK
03/12/2002 - 02/28/2003 FY02: \$28,890 Total: \$28,890
Prin. Invest.: M K MYERS
Tech. Officer: ARC/R BISWAS, ARC/B BIEGEL
CASE Category: 22 – COMPUTER SCIENCE

NCC 4 156 **GEORGE WASHINGTON UNIV** **3465**
INFRARED THERMOGRAPHY FLIGHT EXPERIMENTATIONS INFRARED
THERMOGRAPHY FLIGHT EXPERIMENTATIONS
05/13/2002 - 12/13/2002 FY02: \$25,446 Total: \$25,446
Prin. Invest.: R C BLANCHARD
Tech. Officer: DFRC/D W BANKSE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 436 **GEORGE WASHINGTON UNIV** **3466**
PROGRAM FOR RESEARCH AND EDUCATION IN SPACE TECHNOLOGY
(PREST)
10/04/1999 - 01/31/2002 FY02: \$0 Total: \$192,253
Prin. Invest.: S A SARKANI
Tech. Officer: GSFC/D ASATO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1366 **GEORGETOWN UNIV** **3467**
GENE EXPRESSION OF HUMAN COLORECTAL CARCINOMA IN MICRO-
GRAVITY
08/29/2001 - 09/30/2004 FY02: \$167,000 Total: \$210,000
Prin. Invest.: J M JESSUP
Tech. Officer: JSC/D RISIN
CASE Category: 43 – CHEMICAL ENGR

NASA'S UNIVERSITY PROGRAM

DISTRICT OF COLUMBIA

NAG 1 2019 **HOWARD UNIV** **3468**
 STRUCTURE-FUNCTION RELATIONSHIPS OF IMPACT-MODIFIED CYANATE
 ESTER RESINS
 03/13/1998 - 03/15/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: W E COLLINS
Tech. Officer: LARC/H L BELVIN, LARC/J W CONNELL
CASE Category: 43 – CHEMICAL ENGR

NAG 1 2148 **HOWARD UNIV** **3469**
 CONTRIBUTION OF FLAP-SIDE EDGE VORTEX BURSTING TO AIRFRAME
 NOISE (NRA 98-LARC-5)
 02/05/1999 - 11/04/2001 FY02: \$0 Total: \$217,274
Prin. Invest.: S T SMITH
Tech. Officer: LARC/R R ANTOLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1526 **HOWARD UNIV** **3470**
 A SEARCH FOR PORPHYRINS & METALLOPORPHYRINS IN THE MURCHISON
 METEORITE USING MALDI-TOF MASS SPECTRO
 09/27/2001 - 09/30/2003 FY02: \$0 Total: \$60,778
Prin. Invest.: P HAMBRIGHT
Tech. Officer: ARC/G COOPER, ARC/B J COLLINS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 1978 **HOWARD UNIV** **3471**
 AEROSPACE POWER SYSTEM AUTOMATION
 10/25/1996 - 12/31/2000 FY02: -\$665 Total: \$299,335
Prin. Invest.: J A MOMOH
Tech. Officer: GRC/J L DOLCE
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2287 **HOWARD UNIV** **3472**
 EXPERIMENTAL VERIFICATION OF ELECTRIC DRIVE TECHNOLOGIES
 BASED ON ARTIFICIAL INTELLIGENCE TOOLS
 08/23/1999 - 06/01/2002 FY02: \$0 Total: \$152,000
Prin. Invest.: D RUBAI
Tech. Officer: GRC/D F NOGA
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2429 **HOWARD UNIV** **3473**
 A TRANSPORT OPERATION AND CONTROL OF HIGH PERFORMANCE,
 POWER MANAGEMENT AND DISTRIBUTION (PMAD)
 05/23/2000 - 12/31/2001 FY02: \$0 Total: \$58,065
Prin. Invest.: D A MOMOH
Tech. Officer: GRC/R M BUTTON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2621 **HOWARD UNIV** **3474**
 DETECTION, DIAGNOSIS, LOCATION AND RECOMMENDATION OF REMEDIAL
 ACTIONS FOR CORONA/SOFT FAULTS
 05/24/2001 - 04/05/2003 FY02: \$40,000 Total: \$97,517
Prin. Invest.: D A MOMOH
Tech. Officer: GRC/R M BUTTON
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9175 **HOWARD UNIV** **3475**
 CELEBRATING 20TH CENTURY PIONEERS IN ATMOSPHERIC SCIENCES
 03/08/2000 - 02/28/2001 FY02: -\$519 Total: \$19,481
Prin. Invest.: V M MORRIS
Tech. Officer: GSFC/N KHAZANIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9279 **HOWARD UNIV** **3476**
 TO PROVIDE 7 ON-SITE INTERNSHIPS AT GODDARD FOR GRADUATE
 STUDENTS IN ADMINISTRATIVE DISCIPLINES
 03/21/2000 - 03/31/2001 FY02: \$0 Total: \$73,700
Prin. Invest.: W WOODARD
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10371 **HOWARD UNIV** **3477**
 NANOCOMPOSITE-BASED COMPACT THERMOMAGNETIC CRYOCOLLECTORS
 NRA PROPOSAL#1319
 02/09/2001 - 02/14/2004 FY02: \$109,773 Total: \$236,172
Prin. Invest.: T HUBER
Tech. Officer: GSFC/J TUTTLE
CASE Category: 13 – PHYSICS

NAG 5 10675 **HOWARD UNIV** **3478**
 SUPPLEMENT TO THE CENTER FOR THE STUDY OF TERRESTRIAL AND
 EXTRATERRESTRIAL ATMOSPHERES (CSTEA)
 03/27/2001 - 03/14/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: A N THORPE
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10838 **HOWARD UNIV** **3479**
 PUBLIC SERVICE INTERN PROGRAM
 05/11/2001 - 05/31/2002 FY02: \$0 Total: \$73,700
Prin. Invest.: M C WOODARD
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11118 **HOWARD UNIV** **3480**
 TECHNOLOGY ASSESSMENT AND RELIABILITY CHARACTERIZATION OF
 III-V SEMICONDUCTOR MODFET DEVICE
 08/07/2001 - 08/14/2003 FY02: \$0 Total: \$50,000
Prin. Invest.: D MOHAMMAD
Tech. Officer: GSFC/A SHARMA
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 12021 **HOWARD UNIV** **3481**
 NASA/HBCU RENEWABLE ENERGY AND TEACHING UTILIZATION PROJECT
 04/22/2002 - 04/30/2003 FY02: \$567,166 Total: \$567,166
Prin. Invest.: A THORPE
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12110 **HOWARD UNIV** **3482**
 MAGNETIC PROPERTIES OF PRIMITIVE CHONDRITES
 05/14/2002 - 05/14/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: A N THORPE
Tech. Officer: GSFC/D MENCHAN
CASE Category: 13 – PHYSICS

NAG 5 12172 **HOWARD UNIV** **3483**
 NASA/GODDARD PUBLIC SERVICE INTERN PROGRAM
 05/10/2002 - 04/30/2003 FY02: \$53,600 Total: \$53,600
Prin. Invest.: D WOODARD
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

DISTRICT OF COLUMBIA

NASA'S UNIVERSITY PROGRAM

NAG 5 12241 **HOWARD UNIV** **3484**
 DEVELOPMENT OF HYBRID BEOWULF/APPLE MACINTOSH OPERATING
 SYSTEM X CLUSTER
 05/28/2002 - 05/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: T E SHURN
Tech. Officer: GSFC/M G REPH
CASE Category: 22 – COMPUTER SCIENCE

NAG 9 977 **HOWARD UNIV** **3485**
 CAFFEINE METBOLISM-THE PHARMACOKINETICS OF SPACE FLIGHT
 09/30/1997 - 12/31/2001 FY02: -\$27,272 Total: \$366,780
Prin. Invest.: M W COOMES
Tech. Officer: JSC/L PUTCHA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAS 5 00214 **HOWARD UNIV** **3486**
 HIERARCHICAL ALGORITHMS & THEIR EMBEDDED COMPUTATIONAL REAL-
 IZATION IN RECONFIGURABLE H/W.
 09/29/2000 - 09/28/2002 FY02: \$239,515 Total: \$473,869
Prin. Invest.: C GLOTZER
Tech. Officer: GSFC/J STEPHENS
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 571 **HOWARD UNIV** **3487**
 EXPERIMENTAL EVALUATION OF MOTOR DRIVE TECHNOLOGIES FOR
 FUTURE AEROSPACE APPLICATIONS
 08/01/1997 - 01/31/2001 FY02: \$0 Total: \$312,543
Prin. Invest.: A RUBAAL, M E ELBULUK
Tech. Officer: GRC/M D KANKAM
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 184 **HOWARD UNIV** **3488**
 TERRESTRIAL AND EXTRATERRESTRIAL ATMOSPHERES
 03/12/1997 - 02/28/2002 FY02: \$1,000,000 Total: \$5,997,706
Prin. Invest.: A N THORPE
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 387 **HOWARD UNIV** **3489**
 CENTER FOR THE STUDY OF TERRESTRIAL AND EXTRATERRESTRIAL
 ATMOSPHERES (CSTEA)
 04/16/1999 - 07/31/2001 FY02: \$0 Total: \$223,362
Prin. Invest.: S T SMITH
Tech. Officer: GSFC/W R HOEGY
CASE Category: 13 – PHYSICS

NCC 5 420 **HOWARD UNIV** **3490**
 CSTEA-HBCU ACACEMIC AND RESEARCH CONSORTIUM (CHARC)
 08/30/1999 - 08/31/2002 FY02: \$0 Total: \$1,125,000
Prin. Invest.: A THORPE
Tech. Officer: GSFC/W HOEGY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 424 **HOWARD UNIV** **3491**
 GSFC/HU FELLOWSHIP IN ATMOSPHERIC SCIENCE (GOHFAS)
 08/27/1999 - 08/31/2001 FY02: -\$4,698 Total: \$170,302
Prin. Invest.: S T SMITH
Tech. Officer: GSFC/W HOEGY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 556 **HOWARD UNIV** **3492**
 GODDARD SPACE FLIGHT CENTER/HOWARD UNIV FELLOWSHIP IN ATMOS-
 PHERIC SCIENCE (GOHFAS)
 05/24/2001 - 04/30/2004 FY02: \$220,000 Total: \$515,000
Prin. Invest.: S T SMITH
Tech. Officer: GSFC/W R HOEGY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 656 **HOWARD UNIV** **3493**
 HOWARD/GSFC METEORITIC CRATERS AND METEORITES PROJECT
 09/13/2002 - 09/14/2003 FY02: \$35,938 Total: \$35,938
Prin. Invest.: D N THORPE
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 8 184 **HOWARD UNIV** **3494**
 IMPORT OF IMPAIRED POLYADP-RIBOSYLATION AND FREE RADICAL
 STRESS IN ATAXIA-TELANGIECTASIA
 09/01/1999 - 08/31/2001 FY02: -\$28,981 Total: \$70,368
Prin. Invest.: R SRIDHAR
Tech. Officer: MSFC/R SRIDHAR
CASE Category: 56 – MEDICL

NGT 5 77 **HOWARD UNIV** **3495**
 SUPPORT OF THE 1999 ASEE-NASA SUMMER FACULTY FELLOWSHIP
 PROGRAM (AERONAUTICS AND SPACE RESE
 03/25/1999 - 12/31/2000 FY02: -\$9,175 Total: \$422,325
Prin. Invest.: J B HALPERN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 113 **HOWARD UNIV** **3496**
 SUPPORT OF THE 2001 ASEE-NASA SUMMER FACULTY FELLOWSHIP
 PROGRAM (AERONAUTICS & SPACE RESEA
 04/13/2001 - 03/31/2003 FY02: \$0 Total: \$354,000
Prin. Invest.: J B HALPERN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12500 **SOUTHEASTERN UNIV** **3497**
 PROJECT ESCAPE (EAGER STUDENT COMM ACTIVISM FOR PLANET
 EARTH)
 09/30/2002 - 09/30/2005 FY02: \$97,739 Total: \$97,739
Prin. Invest.: G GRANTHAM
Tech. Officer: GSFC/D MENCHAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10027 **THE AMERICAN UNIV** **3498**
 DEEP LITHOSPHERIC STRUCTURE.
 10/02/2000 - 09/30/2001 FY02: \$0 Total: \$7,740
Prin. Invest.: J KUTINA
Tech. Officer: GSFC/P TAYLOR
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 5 482 **THE AMERICAN UNIV** **3499**
 DEVELOPMENT OF STATE-OF-THE-ART SOLID STATE LASERS FOR ALTIM-
 ETRY & OTHER LIDAR APPLICATIONS
 03/23/2000 - 02/28/2003 FY02: \$0 Total: \$343,682
Prin. Invest.: R B KAY
Tech. Officer: GSFC/J L BUFTON
CASE Category: 13 – PHYSICS

NCC 5 630 THE AMERICAN UNIV 3500
 OCILLATOR ARCHITECTURE
 02/12/2002 - 02/14/2005 FY02: \$160,000 Total: \$160,000
Prin. Invest.: R KAY
Tech. Officer: GSFC/M M MATSUMURA
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 40068 THE AMERICAN UNIV 3501
 DISTRICT OF COLUMBIA/NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/29/2000 - 02/28/2003 FY02: \$211,500 Total: \$636,500
Prin. Invest.: R BERENDZEN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01066 THE CATHOLIC UNIV OF AMERICA 3502
 REAL-TIME ADAPTIVE AUTOMATION OF FLIGHT TASKS
 04/18/2001 - 12/31/2001 FY02: \$0 Total: \$38,837
Prin. Invest.: R PARASURAMAN
Tech. Officer: LARC/L J PRINZEL
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 5 3378 THE CATHOLIC UNIV OF AMERICA 3503
 OBSERVATIONS AND ANALYSIS OF DATA OBTAINED BY THE SPACE TELESCOPE IMAGING SPECTROGRAPH
 08/28/1996 - 09/30/2002 FY02: \$202,505 Total: \$656,170
Prin. Invest.: A BOGGESS
Tech. Officer: GSFC/T R GULL
CASE Category: 11 – ASTRONOMY

NAG 5 3487 THE CATHOLIC UNIV OF AMERICA 3504
 MEASURING BORON ABUNDANCES WITH IUE SPECTRA USING LINES
 11/25/1996 - 11/14/2000 FY02: -\$324 Total: \$31,581
Prin. Invest.: F C BRUNHWEILER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4103 THE CATHOLIC UNIV OF AMERICA 3505
 OBSERVATIONS AND ANALYSIS OF SEYFERT GALAXIES WITH THE SPACE TELESCOPE IMAGING SPECTROGRAPH
 03/31/1997 - 08/31/2002 FY02: \$25,000 Total: \$837,607
Prin. Invest.: S KRAEMER
Tech. Officer: GSFC/T GULL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4940 THE CATHOLIC UNIV OF AMERICA 3506
 INTERPRETIVE TOOLS FOR ANALYSIS OF CORONAL IMAGES
 06/23/1997 - 09/30/2002 FY02: \$0 Total: \$192,800
Prin. Invest.: O C ST.CYR
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 6139 THE CATHOLIC UNIV OF AMERICA 3507
 NEAR-SURFACE MANIFESTATIONS OF GEO-EFFECTIVE SOLAR
 09/08/1997 - 09/14/2002 FY02: \$0 Total: \$198,827
Prin. Invest.: D GOPALSWAMY
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 6239 THE CATHOLIC UNIV OF AMERICA 3508
 A STUDY OF PHYSICAL PROCESSES IN THE ATMOSPHERE OF
 09/08/1997 - 09/30/2002 FY02: \$0 Total: \$268,375
Prin. Invest.: R D ROBINSON
Tech. Officer: GSFC/K G CARPENTER
CASE Category: 11 – ASTRONOMY

NAG 5 7753 THE CATHOLIC UNIV OF AMERICA 3509
 QUANTITATIVE ANALYSIS OF ETHANE AND METHANE IN COMETS HYAKUTAKE AND HALE-BOPP: DETERMINATION OF
 12/08/1998 - 12/31/2001 FY02: \$0 Total: \$98,174
Prin. Invest.: N RUSSO
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7905 THE CATHOLIC UNIV OF AMERICA 3510
 SPATIAL-SPECTRAL MAPPING OF COMETARY CO EMISSION, AND COMPARISON WITH OTHER ORGANICS
 12/10/1998 - 09/30/2002 FY02: \$0 Total: \$238,350
Prin. Invest.: D A DISANTI
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8018 THE CATHOLIC UNIV OF AMERICA 3511
 INTERPRETATION OF SOHO/LASCO,EIT, UVCS OBSERVATIONS USING A MULTI-DIMENSIONAL MHD MODEL
 01/06/1999 - 12/31/2002 FY02: \$0 Total: \$172,276
Prin. Invest.: M GUATHAKURTA
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8276 THE CATHOLIC UNIV OF AMERICA 3512
 RADIATIVE ACCELERATION CALCULATIONS FOR B STAR ENV ELOPES AND ATMOSPHERES(ATP 98)
 02/19/1999 - 02/28/2003 FY02: \$0 Total: \$157,491
Prin. Invest.: C R PROFFITT
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8508 THE CATHOLIC UNIV OF AMERICA 3513
 EXPERIMENTAL STUDIES OF IGNEOUS PROCESSES IN ENSTATITE METEORITES
 05/21/1999 - 04/30/2003 FY02: \$0 Total: \$20,000
Prin. Invest.: T DICKINSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8622 THE CATHOLIC UNIV OF AMERICA 3514
 CONTINUED DEVELOPMENT OF A FABRY-PEROT AND LYOT NARROW BAND IMAGING SYSTEM.
 06/22/1999 - 06/30/2002 FY02: \$0 Total: \$58,180
Prin. Invest.: F C BRUNHWEILER
Tech. Officer: GSFC/B WOODGATE
CASE Category: 11 – ASTRONOMY

NAG 5 8691 THE CATHOLIC UNIV OF AMERICA 3515
 A SEARCH FOR ROTATIONAL MODULATION OF X-RAY CTRNS ON GAMMA CAS (BO.5E)
 07/21/1999 - 01/31/2001 FY02: \$962 Total: \$10,772
Prin. Invest.: R D ROBINSON
Tech. Officer: GSFC/J SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 8761 THE CATHOLIC UNIV OF AMERICA 3516
 HUMAN BIOLOGY-BASED ADAPTIVE SYSTEMS IN SUPPORT OF SPACE EXPLORATION
 09/03/1999 - 08/31/2003 FY02: \$155,948 Total: \$628,282
Prin. Invest.: R D PARASURAMAN
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

DISTRICT OF COLUMBIA

NASA'S UNIVERSITY PROGRAM

NAG 5 8793 THE CATHOLIC UNIV OF AMERICA 3517
 ULTRAVIOLET DIAGNOSTICS OF MAGNETIC AND RELATED ACTIVITY IN
 MAIN SEQUENCE B STARS (ADP 98)
 09/07/1999 - 11/30/2002 FY02: \$0 Total: \$65,760
Prin. Invest.: M SMITH
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8968 THE CATHOLIC UNIV OF AMERICA 3518
 CORONAL EMISSION AND MASS LOSS IN THE HOTTEST STAR OF THE H-R
 DIAGRAM - FUSE
 01/24/2000 - 01/31/2002 FY02: \$0 Total: \$48,100
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8977 THE CATHOLIC UNIV OF AMERICA 3519
 PHASE RESOLVED STUDIES OF THE MAGNETIC A-STAR 17 COM A (HD
 108662)- FUSE
 01/24/2000 - 01/31/2003 FY02: \$0 Total: \$16,500
Prin. Invest.: C R PROFFITT
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8998 THE CATHOLIC UNIV OF AMERICA 3520
 THE DRIVERS OF CORONAL AND INTERPLANETARY SHOCKS.
 02/02/2000 - 02/14/2002 FY02: \$0 Total: \$110,000
Prin. Invest.: N GOPALSWAMY
Tech. Officer: GSFC/M L KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 9502 THE CATHOLIC UNIV OF AMERICA 3521
 GLOBAL MEASUREMENT OF SOLAR WIND SPEED AND TEMPERATURE IN
 THE SUN'S CORONA USING GROUND-BASED VISIBL
 06/06/2000 - 06/14/2003 FY02: \$163,180 Total: \$414,819
Prin. Invest.: O ST.CYR
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9539 THE CATHOLIC UNIV OF AMERICA 3522
 ABUNDANCES OF VERY HEAVY ELEMENTS IN LATE-B AND EARLY-A STARS
 (ADP 99)
 05/09/2000 - 05/14/2003 FY02: \$31,235 Total: \$91,693
Prin. Invest.: G W WAHLGREN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9600 THE CATHOLIC UNIV OF AMERICA 3523
 MICROWAVE ENHANCEMENT IN CORONAL HOLES: STRUCTURE, VARIABIL-
 ITY & MAGNETIC NATURE
 05/19/2000 - 09/14/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: N GOPALSWAMY
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9696 THE CATHOLIC UNIV OF AMERICA 3524
 HOT POPULATIONS IN NEARBY ELLIPTICAL GALAXIES - FUSE
 07/18/2000 - 07/31/2003 FY02: \$0 Total: \$58,879
Prin. Invest.: T BROWN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9888 THE CATHOLIC UNIV OF AMERICA 3525
 A SPECTROSCOPIC STUDY OF ION MOTIONS IN CORONAL HOLES USING
 SOHO/SUMER OBSERVATIONS
 08/24/2000 - 08/31/2003 FY02: \$0 Total: \$99,686
Prin. Invest.: T MORAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 10006 THE CATHOLIC UNIV OF AMERICA 3526
 LARGE-SCALE STRUCTURE IN THE DISTANT UNIVERSE
 09/22/2000 - 09/30/2002 FY02: \$0 Total: \$91,366
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/B WOODGATE
CASE Category: 11 – ASTRONOMY

NAG 5 10013 THE CATHOLIC UNIV OF AMERICA 3527
 RESEARCH EXPERIENCES FOR UNDERGRADUATES IN THE LABORATORY
 FOR ASTRONOMY & SOLARPHYSICS
 09/25/2000 - 09/30/2005 FY02: \$176,753 Total: \$272,860
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/C CRANNEL
CASE Category: 11 – ASTRONOMY

NAG 5 10033 THE CATHOLIC UNIV OF AMERICA 3528
 SPACE QUALIFICATION OF LARGE LIGHTWEIGHT MIRROR TECHNOLOGY
 FOR USE AT VISIBLE & NEAR-IR WAVELENGTH
 09/29/2000 - 12/31/2001 FY02: \$0 Total: \$84,000
Prin. Invest.: P C CHEN
Tech. Officer: GSFC/S G NEFF
CASE Category: 11 – ASTRONOMY

NAG 5 10095 THE CATHOLIC UNIV OF AMERICA 3529
 DEVELOPMENT OF IR ARRAY SPECTROMETERS FOR GROUND- BASED &
 SPACE-BORNE PLANETARY ASTRONOMY.
 11/28/2000 - 11/30/2003 FY02: \$99,443 Total: \$210,748
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/D C REUTER
CASE Category: 11 – ASTRONOMY

NAG 5 10130 THE CATHOLIC UNIV OF AMERICA 3530
 SOLAR WIND ELECTRON DATA ANALYSES
 12/06/2000 - 06/14/2002 FY02: \$0 Total: \$64,000
Prin. Invest.: Y WHANG
Tech. Officer: GSFC/K W OGILVIE
CASE Category: 13 – PHYSICS

NAG 5 10231 THE CATHOLIC UNIV OF AMERICA 3531
 THE DRIVERS OF CORONAL AND INTERPLANETARY SHOCKS
 01/22/2001 - 02/14/2004 FY02: \$101,280 Total: \$198,550
Prin. Invest.: N GOPALSWAMY
Tech. Officer: GSFC/M L KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 10307 THE CATHOLIC UNIV OF AMERICA 3532
 DEVELOPMENT OF INSTRUMENTATION & MISSION OPERATION CONCEPTS
 FOR THE SOLAR TERRESTRIAL RELATIONS OBSE
 01/31/2001 - 01/31/2005 FY02: \$131,464 Total: \$259,714
Prin. Invest.: D ST. CYR
Tech. Officer: GSFC/D ORWIG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10382 THE CATHOLIC UNIV OF AMERICA 3533
 MONITORING THE VARIABLE ABSORPTION IN THE SEYFERT 1 GALAXY NGC 3783 WITH FUSE, HST, AND CHANDRA
 02/06/2001 - 02/14/2003 FY02: \$0 Total: \$85,600
Prin. Invest.: D CRENSHAW
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10492 THE CATHOLIC UNIV OF AMERICA 3534
 CONTINUED MAPPING OF HIGH-ALTITUDE OZONE & SEARCH FOR NIGHT-GLOW ON MARS
 02/27/2001 - 02/28/2004 FY02: \$63,000 Total: \$122,800
Prin. Invest.: V KRASNOPOLSKY
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10500 THE CATHOLIC UNIV OF AMERICA 3535
 SCIENTIFIC WORKSHOP AT THE CATHOLIC UNIV OF AMERICA: MASSS OUTFLOWIN ACTIVE GALACTIC NUCLEI: N
 03/09/2001 - 12/31/2001 FY02: \$0 Total: \$10,000
Prin. Invest.: S KRAEMER
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10575 THE CATHOLIC UNIV OF AMERICA 3536
 CORRELATIVE PHOTOCHEMICAL STUDY OF THE IRTF-CSHELL MAPS OF O3, CO & H2O & THE MGS TES OBSERVATIONS O
 03/13/2001 - 03/14/2004 FY02: \$55,000 Total: \$110,000
Prin. Invest.: V KRASNOPOLSKY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10680 THE CATHOLIC UNIV OF AMERICA 3537
 DARK CLUSTERS AS GRAVITATIONAL LENSES
 04/02/2001 - 03/31/2003 FY02: \$0 Total: \$24,020
Prin. Invest.: G WILLIGER
Tech. Officer: GSFC/D KAZANAS
CASE Category: 11 – ASTRONOMY

NAG 5 10795 THE CATHOLIC UNIV OF AMERICA 3538
 GROUND-BASED INFRARED SPECTROSCOPY OF WATER IN COMETS: FLUORESCENCE MODELING AND QUANTITATIVE AN
 04/25/2001 - 04/30/2004 FY02: \$43,600 Total: \$85,900
Prin. Invest.: N D RUSSO
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10837 THE CATHOLIC UNIV OF AMERICA 3539
 PROPAGATION OF CMES THROUGH THE INTERPLANETARY MEDIUM: INTERACTIONS WITH THE SOLAR WIND
 04/27/2001 - 04/30/2002 FY02: \$0 Total: \$50,880
Prin. Invest.: N GOPALSWAMY
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10867 THE CATHOLIC UNIV OF AMERICA 3540
 X-RAY & MICROWAVE MODELS IN SUPPORT OF HESSI SOLAR FLARE OBSERVATIONS.
 05/07/2001 - 05/14/2002 FY02: \$10,000 Total: \$20,800
Prin. Invest.: L OFMAN
Tech. Officer: GSFC/G D HOLMAN
CASE Category: 11 – ASTRONOMY

NAG 5 10870 THE CATHOLIC UNIV OF AMERICA 3541
 RXTE FLARES ON PROX CEN (ADP 00)
 05/07/2001 - 05/14/2003 FY02: \$0 Total: \$11,941
Prin. Invest.: R D ROBINSON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10931 THE CATHOLIC UNIV OF AMERICA 3542
 INVESTIGATING THE EXCITATION MECHANISM FOR COMETARY X-RAY, EUV, & FUV EMISSIONS(FUSE 2000)
 05/16/2001 - 05/31/2002 FY02: \$0 Total: \$10,000
Prin. Invest.: V KRASNOPOLSKY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10944 THE CATHOLIC UNIV OF AMERICA 3543
 JUST WHAT IS ETA CARINAE - FUSE 00
 05/24/2001 - 05/31/2003 FY02: \$0 Total: \$23,500
Prin. Invest.: R IPING
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11003 THE CATHOLIC UNIV OF AMERICA 3544
 PHYSICAL PROPERTIES OF THE SOLAR WIND IN CORONAL HOLES DEDUCED FROM WAVES IN PLUMES
 06/06/2001 - 05/31/2002 FY02: \$0 Total: \$10,000
Prin. Invest.: L OFMAN
Tech. Officer: GSFC/W J WAGNER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11014 THE CATHOLIC UNIV OF AMERICA 3545
 SEARCH FOR H2 IN MARS' ATMOSPHERE (FUSE 1999)
 06/25/2001 - 06/30/2002 FY02: \$0 Total: \$25,900
Prin. Invest.: V KRASNOPOLSKY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11131 THE CATHOLIC UNIV OF AMERICA 3546
 EVOLUTION OF THE BASTILLE DAY SHOCK AND MERGED INTERACTION REGION
 07/24/2001 - 10/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: Y C WHANG
Tech. Officer: GSFC/L F BURLAGA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11137 THE CATHOLIC UNIV OF AMERICA 3547
 CIRCUMSTELLAR ENVIRONMENTS OF EVOLVED STARS AND THEIR INTERACTION WITH THE INTERSTELLAR MEDIUM
 07/20/2001 - 07/31/2004 FY02: \$118,026 Total: \$233,737
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11162 THE CATHOLIC UNIV OF AMERICA 3548
 CONSEQUENCES OF CME INTERACTION IN THE INTERPLANETARY MEDIUM
 08/07/2001 - 08/14/2003 FY02: \$0 Total: \$60,000
Prin. Invest.: J W BROSIUS
Tech. Officer: GSFC/M ACUNA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11225 THE CATHOLIC UNIV OF AMERICA 3549
 SOLAR WIND INTERACTION WITH THE MARTIAN CRUSTAL MAGNETIC
 FIELDS AND THE IMPLICATIONS FOR THE EVOLUTION
 08/13/2001 - 08/14/2003 FY02: \$40,000 Total: \$115,000
Prin. Invest.: D CRIDER
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11327 THE CATHOLIC UNIV OF AMERICA 3550
 DEVELOPMENT OF GOSSAMER CLASS TELESCOPE MIRRORS
 FOR STARS IN THE UPPER H-R DIAGRAM
 09/18/2001 - 03/31/2002 FY02: \$0 Total: \$35,303
Prin. Invest.: P C CHEN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11342 THE CATHOLIC UNIV OF AMERICA 3551
 NEW MODEL ATMOSPHERES AND SPECTRAL ENERGY DISTRIBUTIONS
 FOR STARS IN THE UPPER H-R DIAGRAM
 09/24/2001 - 09/30/2002 FY02: \$0 Total: \$70,615
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/S HEAP
CASE Category: 11 – ASTRONOMY

NAG 5 11377 THE CATHOLIC UNIV OF AMERICA 3552
 THREE DIMENSIONAL MHD MODELING OF THE SOLAR WIND
 10/26/2001 - 10/31/2002 FY02: \$22,602 Total: \$22,602
Prin. Invest.: L OFMAN
Tech. Officer: GSFC/A ROBERTS
CASE Category: 13 – PHYSICS

NAG 5 11395 THE CATHOLIC UNIV OF AMERICA 3553
 REDUCTION AND SCIENTIFIC ANALYSIS OF INFRARED DATA OBTAINED
 WITH THE NEAR INFRARED SPECTROMETER
 11/20/2001 - 11/30/2002 FY02: \$24,104 Total: \$24,104
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/M M FREUND
CASE Category: 11 – ASTRONOMY

NAG 5 11705 THE CATHOLIC UNIV OF AMERICA 3554
 ANALYSIS OF RXTE AO5 DATA OF GAMMA CAS (ADP 2001)
 02/07/2002 - 06/30/2003 FY02: \$28,513 Total: \$28,513
Prin. Invest.: M A SMITH
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11757 THE CATHOLIC UNIV OF AMERICA 3555
 USING CDS, EIT, AND COORDINATED GROUND-BASED OBSERVATIONS TO
 MEASURE CORONAL MAGNETIC FIELDS AND
 03/04/2002 - 07/14/2005 FY02: \$96,400 Total: \$96,400
Prin. Invest.: J W BROSIUS
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICALSCIENCE, OTHER

NAG 5 11815 THE CATHOLIC UNIV OF AMERICA 3556
 INTERPRETATION OF SOHO/LASCO, EIT, UVCS OBSERVATIONS USING A
 MULTIDIMENSIONAL MHD MODEL
 03/06/2002 - 03/14/2005 FY02: \$29,622 Total: \$29,622
Prin. Invest.: L OFMAN
Tech. Officer: GSFC/E SITTLER
CASE Category: 13 – PHYSICS

NAG 5 11841 THE CATHOLIC UNIV OF AMERICA 3557
 MAGNETOHYDRODYNAMIC PROCESSES IN THE SOLAR CORONA AND THE
 SOLAR WIND.
 03/11/2002 - 03/31/2003 FY02: \$65,464 Total: \$65,464
Prin. Invest.: L OFMAN
Tech. Officer: GSFC/J DAVILA
CASE Category: 11 – ASTRONOMY

NAG 5 11877 THE CATHOLIC UNIV OF AMERICA 3558
 MULTI-FLUID AND HYBRID MODELS OF WAVES IN CORONAL STRUCTURES
 03/15/2002 - 03/14/2005 FY02: \$90,050 Total: \$90,050
Prin. Invest.: L OFMAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11883 THE CATHOLIC UNIV OF AMERICA 3559
 RESEARCH PROGRAM: SOLAR WIND ELECTRON DATA ANALYSIS
 03/20/2002 - 06/14/2003 FY02: \$31,630 Total: \$31,630
Prin. Invest.: Y WHANG
Tech. Officer: GSFC/R FITZENREITER
CASE Category: 13 – PHYSICS

NAG 5 12071 THE CATHOLIC UNIV OF AMERICA 3560
 EXPERIMENTAL STUDIES OF IGENOUS PROCESSES IN ENSTATITE METE-
 ORITES
 04/19/2002 - 04/30/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: T DICKINSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12121 THE CATHOLIC UNIV OF AMERICA 3561
 A FUSE DETERMINATION OF THE GRAVITATIONAL REDSHIFT AND SPEC-
 TROSCOPIC MASS OF SIRUS B
 04/29/2002 - 04/30/2003 FY02: \$2,500 Total: \$2,500
Prin. Invest.: M SAHU
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12178 THE CATHOLIC UNIV OF AMERICA 3562
 MONITORING THE VARIABLE ABSORPTION IN THE SEYFERT 1 GALAXY NGC
 3783 WITH FUSE, HST, AND CHANDRA_ - FU
 06/28/2002 - 06/14/2003 FY02: \$55,000 Total: \$55,000
Prin. Invest.: D CRENSHAW
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12208 THE CATHOLIC UNIV OF AMERICA 3563
 PRODUCTION AND EXCITATION OF COMETARY CO EMISSION, AND COM-
 PARISON WITH OTHER ORGANIC VOLATILES
 06/03/2002 - 05/31/2005 FY02: \$49,800 Total: \$49,800
Prin. Invest.: M A DISANTI
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12235 THE CATHOLIC UNIV OF AMERICA 3564
 EFFECTS OF CRUSTAL MAGNETIZATION ON THE STRUCTURE OF THE
 MARTIAN IONOSPHERE
 05/29/2002 - 07/31/2005 FY02: \$42,333 Total: \$42,333
Prin. Invest.: D CRIDER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12265 THE CATHOLIC UNIV OF AMERICA 3565
 HST AND GROUND-BASED OBSERVATIONS OF ASTRONOMICAL SOURCES
 06/24/2002 - 06/30/2007 FY02: \$315,059 Total: \$315,059
Prin. Invest.: F C BRUHWEILER
Tech. Officer: GSFC/T GULL
CASE Category: 11 – ASTRONOMY

NAG 5 12285 THE CATHOLIC UNIV OF AMERICA 3566
 QUANTITATIVE INFRARED DATA ANALYSIS OF ETHANE AND RELATED
 ORGANICS IN COMETS: OBTAINING CLUES TO THE
 06/11/2002 - 06/14/2005 FY02: \$29,700 Total: \$29,700
Prin. Invest.: N DELLA RUSSO
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTIINTERDISCIPL, OTHER

NAG 5 12331 THE CATHOLIC UNIV OF AMERICA 3567
 SUPPORT FOR THE SYMPOSIUM: INTERSTELLAR TRAVEL AND MULTI-
 GENERATION SPACE SHIPS
 07/08/2002 - 06/30/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: F BRUHWEILER
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12347 THE CATHOLIC UNIV OF AMERICA 3568
 IONIZATION STRUCTURE OF NGC 7009
 08/15/2002 - 08/31/2003 FY02: \$51,035 Total: \$51,035
Prin. Invest.: R IPING
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12389 THE CATHOLIC UNIV OF AMERICA 3569
 THE ORIGIN AND EARLY PROPAGATION OF ERUPTIONS IN THE SUN'S
 CORONA
 07/17/2002 - 07/14/2003 FY02: \$48,921 Total: \$48,921
Prin. Invest.: D C WANG
Tech. Officer: GSFC/B THOMPSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12529 THE CATHOLIC UNIV OF AMERICA 3570
 RADIAL EVOLUTION OF BASTILLE DAY FLOWS
 08/28/2002 - 08/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: Y C WHANG
Tech. Officer: GSFC/L F BURLAGA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12575 THE CATHOLIC UNIV OF AMERICA 3571
 SOLAR IR MAGNETIC FIELD MEASUREMENTS WITH THE CELESTE
 GRATING SPECTROGRAPH.
 09/16/2002 - 09/30/2005 FY02: \$25,000 Total: \$25,000
Prin. Invest.: T MORAN
Tech. Officer: GSFC/D E JENNINGS
CASE Category: 11 – ASTRONOMY

NAG 5 12591 THE CATHOLIC UNIV OF AMERICA 3572
 CRYOGENIC LABORATORY INFRARED SPECTROSCOPY FOR REMOTE
 SENSING OF ATMOSPHERES
 09/24/2002 - 09/30/2007 FY02: \$74,278 Total: \$74,278
Prin. Invest.: D W STEYERT
Tech. Officer: GSFC/D C REUTER
CASE Category: 13 – PHYSICS

NCC 2 1247 THE CATHOLIC UNIV OF AMERICA 3573
 HUMAN FACTORS IN DISTRIBUTED AIR-GROUND TRAFFIC MANAGEMENT
 03/26/2001 - 03/31/2003 FY02: \$0 Total: \$30,082
Prin. Invest.: R PARASURAMAN
Tech. Officer: ARC/R MOGFORD, ARC/P SNYDER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 380 THE CATHOLIC UNIV OF AMERICA 3574
 INVESTIGATION OF X-RAY AND GAMMA-RAYS FROM SOLAR FLARES AND
 PLANETARY TYPE BODIES
 02/12/1999 - 03/31/2003 FY02: \$0 Total: \$1,014,985
Prin. Invest.: R D STARR
Tech. Officer: GSFC/L ORWIG
CASE Category: 11 – ASTRONOMY

NCC 5 445 THE CATHOLIC UNIV OF AMERICA 3575
 INFRARED SPECTROSCOPY OF COMETS: AN OBSERVATIONAL AND EX-
 PERIMENTAL STUDY OF COMETARY COMPOSITION AND
 04/20/2000 - 05/31/2003 FY02: \$44,380 Total: \$82,520
Prin. Invest.: N DELLO RUSSO
Tech. Officer: GSFC/M J MUMMA
CASE Category: 13 – PHYSICS

NCC 5 452 THE CATHOLIC UNIV OF AMERICA 3576
 CHEMICAL/PHYSICAL PROPERTIES OF PLANETARY & ASTRO- PHYSICAL
 MOLECULES
 02/03/2000 - 04/30/2005 FY02: \$258,192 Total: \$800,501
Prin. Invest.: T THORN
Tech. Officer: GSFC/J E ALLEN
CASE Category: 12 – CHEMISTRY

NCC 5 504 THE CATHOLIC UNIV OF AMERICA 3577
 SPATIAL-SPECTRAL MAPPING OF CO AND OTHER EMISSIONS IN COMETS,
 AND OF WATER IN MARS ATMOSPHERE
 06/27/2000 - 03/31/2003 FY02: \$80,166 Total: \$95,746
Prin. Invest.: M A DISANTI
Tech. Officer: GSFC/M J MUMMA
CASE Category: 13 – PHYSICS

NCC 5 512 THE CATHOLIC UNIV OF AMERICA 3578
 RENEWAL OF COOP AGREEMENT NCC-418 MAINTENANCE OF CDAA DATA
 BASE.
 08/24/2000 - 08/31/2001 FY02: \$0 Total: \$7,000
Prin. Invest.: N GOPALSWAMY
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 5 548 THE CATHOLIC UNIV OF AMERICA 3579
 HESSI DATA ANALYSIS
 04/06/2001 - 04/14/2003 FY02: \$65,600 Total: \$127,000
Prin. Invest.: J BROSIUS
Tech. Officer: GSFC/B DENNIS
CASE Category: 13 – PHYSICS

NCC 5 636 THE CATHOLIC UNIV OF AMERICA 3580
 RESEARCH OF COSMIC HARD X-RAYS AND GAMMA-RAYS
 03/05/2002 - 03/31/2005 FY02: \$187,105 Total: \$187,105
Prin. Invest.: R D STARR
Tech. Officer: GSFC/J A NUTH
CASE Category: 11 – ASTRONOMY

FLORIDA

NASA'S UNIVERSITY PROGRAM

NGT 1 01028 THE CATHOLIC UNIV OF AMERICA 3581
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/12/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: R PARASUROMA
Tech. Officer: LARC/D J WING
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52190 THE CATHOLIC UNIV OF AMERICA 3582
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/20/1998 - 06/30/2001 FY02: \$12,000 Total: \$66,001
Prin. Invest.: S M GALSTER, R PARASURAMAN
Tech. Officer: LARC/P C SHUTTE, LARC/A T POPE
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 5 4724 UNIV OF DISTRICT OF COLUMBIA 3583
 SATURDAY ACADEMY PROGRAM
 06/19/1997 - 03/31/2001 FY02: \$0 Total: \$1,768,980
Prin. Invest.: W R COLEMAN
Tech. Officer: GSFC/L RANDOLPH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9545 UNIV OF DISTRICT OF COLUMBIA 3584
 REMOTE SENSING SPECTRAL IDENTIFICATION OF FRESHWATER PLANKTON
 05/03/2000 - 09/30/2002 FY02: \$0 Total: \$72,143
Prin. Invest.: H L PHELPS
Tech. Officer: GSFC/D MENCHAN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 10855 UNIV OF DISTRICT OF COLUMBIA 3585
 RETAINING HIGH POTENTIAL JUNIOR AND SENIOR HIGH SCHOOL STUDENTS
 05/02/2001 - 09/30/2002 FY02: \$0 Total: \$295,047
Prin. Invest.: W COLEMAN
Tech. Officer: GSFC/C HOLLINSWORTH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12335 UNIV OF DISTRICT OF COLUMBIA 3586
 SCIENCE AND ENGINEERING CENTER'S SUMMER ACADEMIC ENRICHMENT PROGRAM
 07/11/2002 - 07/14/2003 FY02: \$64,000 Total: \$64,000
Prin. Invest.: G DAVIS
Tech. Officer: GSFC/D HALE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

FLORIDA

NAG10 195 BETHUNE - COOKMAN COLL 3587
 OPERATION OF THE CNTR FOR SPACE EDUCATION
 09/11/1996 - 09/30/2001 FY02: \$0 Total: \$1,691,580
Prin. Invest.: G W BECKLES, A E LONG
Tech. Officer: KSC/S DUTCZAK
CASE Category: 41 – AERONAUTICAL ENGR

NAG10 269 BETHUNE - COOKMAN COLL 3588
 NASA/FLORIDA MINORITY INST ENTREPRENEURIAL PARTNERSHIP
 09/13/1999 - 10/31/2001 FY02: \$0 Total: \$1,200,000
Prin. Invest.: A D TAYLOR
Tech. Officer: KSC/W B WILLIAMS
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NCC 5 426 BETHUNE - COOKMAN COLL 3589
 A BETTER, FASTER AND INEXPENSIVE PHOTOGRAMMETRY SYSTEM
 09/07/1999 - 08/31/2002 FY02: \$0 Total: \$199,991
Prin. Invest.: E F EKPO
Tech. Officer: GSFC/S E HETHERINGTON
CASE Category: 13 – PHYSICS

NCC10 55 BETHUNE - COOKMAN COLL 3590
 OPERATION AT THE CENTER FOR SPACE EDUCATION
 09/24/2001 - 09/24/2006 FY02: \$404,096 Total: \$765,354
Prin. Invest.: A LONG
Tech. Officer: KSC/S DUTCZAK, KSC/P SAILER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11097 ECKERD COLL 3591
 INFRARED SPECTRA OF COSMIC-TYPE ICES CONTAINING NITROGEN
 07/06/2001 - 07/14/2004 FY02: \$10,500 Total: \$20,500
Prin. Invest.: R L HUDSON
Tech. Officer: GSFC/M H MOORE
CASE Category: 12 – CHEMISTRY

NAG 1 02087 EMBRY-RIDDLE AERONAUTICAL UNIV 3592
 TRAINING & TRANSITION WITH ADVANCED DISPLAYS
 05/01/2002 - 12/31/2003 FY02: \$165,603 Total: \$165,603
Prin. Invest.: R L NEWMAN, S N STANDIFORD
Tech. Officer: LARC/L J GLAAB
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 5199 EMBRY-RIDDLE AERONAUTICAL UNIV 3593
 ICE CONTENT AND ODD-OXYGEN IN NOCTILUCENT-CLOUDS (ICON)
 06/18/1998 - 03/31/2003 FY02: \$0 Total: \$313,791
Prin. Invest.: P J ESPY
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5265 EMBRY-RIDDLE AERONAUTICAL UNIV 3594
 FIRST YEAR FUNDING/ CYROGENIC WHOLE AIR SAMPLING OF CARBON DIOXIDE IN THE UPPER MESOSPHERE
 04/12/2000 - 03/23/2003 FY02: \$100,500 Total: \$318,800
Prin. Invest.: P W ERDMAN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 10066 EMBRY-RIDDLE AERONAUTICAL UNIV 3595
 ENERGETICS & DYNAMICS OF THE MESOSPHERE & LOWER THERMOSPHERE; TIMED/CEDAR COLLABORATIVE STUDIES
 10/31/2000 - 10/31/2003 FY02: \$66,700 Total: \$265,300
Prin. Invest.: G G SIVJEE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCA 1 133 EMBRY-RIDDLE AERONAUTICAL UNIV 3596
 1996 AGATE - GENERAL AVIATION
 07/23/1996 - 10/31/2001 FY02: -\$22,000 Total: \$3,800,800
Prin. Invest.: S HAMPTON
Tech. Officer: LARC/B J HOLMES, LARC/M H DURHAM
CASE Category: 41 – AERONAUTICAL ENGR

NCA 1 01003 EMBRY-RIDDLE AERONAUTICAL UNIV 3597
 SOUTHEAST SATSLAB
 08/31/2001 - 09/30/2002 FY02: \$2,000,000 Total: \$2,500,000
Prin. Invest.: S HAMPTON
Tech. Officer: LARC/J R BURLEY
CASE Category: 41 – AERONAUTICAL ENGR

NASA'S UNIVERSITY PROGRAM

FLORIDA

NCC 3 685 **EMBRY-RIDDLE AERONAUTICAL UNIV** **3598**
 SILICON CARBIDE DIODE MIXERS FOR IMPROVED SAFETY I N AIRCRAFT
 RF AVIONICS
 03/04/1999 - 06/26/2002 FY02: \$0 Total: \$73,025
Prin. Invest.: A HELFRICK
Tech. Officer: GRC/P G NEUDECK
CASE Category: 45 – ELECTRICAL ENGR

NAG 2 1384 **FLA INTERNATIONAL UNIV** **3599**
 DEVELOPING AN ADVANCED EENVIRONMENT FOR COLLABORAT IVE COM-
 PUTING BY AUGMENTING POSTDOC
 09/15/1999 - 07/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: I R FERNANDEZ
Tech. Officer: ARC/H T STEWART, ARC/S LAU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1440 **FLA INTERNATIONAL UNIV** **3600**
 SPECIFICATION & ANALYSIS OF SOFTWARE ARCHITECTURES OF HIGH
 ASSURANCE SYSTEMS
 09/26/2000 - 09/14/2003 FY02: \$92,513 Total: \$287,358
Prin. Invest.: X HE, X HE
Tech. Officer: ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 3826 **FLA INTERNATIONAL UNIV** **3601**
 BASIC RESEARCH IN ATOMIC, MOLECULAR AND OPTICAL PHYSICS IN
 SUPPORT OF NASA STRATEGIC ENTERPRISES
 01/29/1997 - 01/31/2001 FY02: -\$859 Total: \$297,935
Prin. Invest.: K HARDY
Tech. Officer: GSFC/R HARTLE
CASE Category: 11 – ASTRONOMY

NAG 5 8156 **FLA INTERNATIONAL UNIV** **3602**
 AVIRIS IMAGE CLASSIFICATION USING PHYTOPLANKTON RE FLECTANCE
 SPECTRA
 02/02/1999 - 01/31/2001 FY02: -\$117 Total: \$14,105
Prin. Invest.: L L RICHARDSON
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8791 **FLA INTERNATIONAL UNIV** **3603**
 A STUDY OF THEFINAL PRODUCT STATES OF THE DISSOCIA TIVE RECOM-
 BINATION REACTION BY TOSPECTROSCOPY
 08/31/1999 - 08/31/2003 FY02: \$0 Total: \$198,472
Prin. Invest.: K HARDY
Tech. Officer: GSFC/R HARTLE
CASE Category: 13 – PHYSICS

NAG 5 9478 **FLA INTERNATIONAL UNIV** **3604**
 HIGH PERFORMANCE DATABASE MANAGEMENT WITH APPLICAT ION TO
 EARTH SCIENCE
 04/25/2000 - 04/30/2003 FY02: \$500,000 Total: \$1,500,000
Prin. Invest.: N RISHE
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1404 **FLA INTERNATIONAL UNIV** **3605**
 USING LANDSAT 7 DATA IN GIS-BASED REVISION OF REEF BASE
 05/14/2002 - 09/30/2004 FY02: \$57,393 Total: \$57,393
Prin. Invest.: J GEBELEIN
Tech. Officer: JSC/G BYRNE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG10 212 **FLA INTERNATIONAL UNIV** **3606**
 APPLIED RESEARCH IN INDUSTRIAL & SYSTEMS ENGINEERING (ARISE)
 CENTER
 08/29/1997 - 08/31/2001 FY02: -\$27,415 Total: \$372,545
Prin. Invest.: M A CENTENO
Tech. Officer: KSC/A MITSKEVICH
CASE Category: 49 – ENGINEERING, OTHER

NAG10 251 **FLA INTERNATIONAL UNIV** **3607**
 MATHEMATICS, SCIENCE & TECH ACHIEVEMENT (MSTA)
 09/23/1998 - 09/22/2001 FY02: \$0 Total: \$299,994
Prin. Invest.: C MENDEZ
Tech. Officer: KSC/R MC KINNEY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 254 **FLA INTERNATIONAL UNIV** **3608**
 PROGRAM
 05/01/1999 - 07/01/2002 FY02: \$0 Total: \$599,982
Prin. Invest.: C MENDEZ
Tech. Officer: KSC/R MCKINNEY
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NAG10 259 **FLA INTERNATIONAL UNIV** **3609**
 MSTA - MATH, SCIENCE & TECHNOLOGY ACHIEVEMENT
 05/01/1999 - 08/14/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: I BECCERA-FERNANDEZ
Tech. Officer: KSC/S ROBERTS
CASE Category: 22 – COMPUTER SCIENCE

NAG10 268 **FLA INTERNATIONAL UNIV** **3610**
 PROJECT VISION: VERY INTENSIVE SCIENTIFIC INTERC URRICULAR ON-
 SITE EDUCATION
 09/09/1999 - 12/31/2001 FY02: -\$6,679 Total: \$789,074
Prin. Invest.: G A ROIG
Tech. Officer: KSC/R J MCKINNEY
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG10 292 **FLA INTERNATIONAL UNIV** **3611**
 SPACEPORT TECHHNOLOGY CENTER AND WORK INSTRUCTION DELIVERY
 INITIATIVE
 09/29/2000 - 08/31/2001 FY02: -\$5,282 Total: \$54,956
Prin. Invest.: M CENTENO
Tech. Officer: KSC/M GROH-HAMMOND
CASE Category: 22 – COMPUTER SCIENCE

NAG10 307 **FLA INTERNATIONAL UNIV** **3612**
 ENHANCING THE SCOPE AND FUNCTIONALITY OF SAGE (SEA RCHABLE
 ANSWER GENERATING ENVIRONMENT)
 09/28/2001 - 08/31/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: I BECERRA-FERNANDEZ
Tech. Officer: KSC/O MELENDEZ
CASE Category: 22 – COMPUTER SCIENCE

NAG10 309 **FLA INTERNATIONAL UNIV** **3613**
 BRINGING SCIENCE AND TECHNOLOGY TO HISPANIC YOUTH THROUGH
 TELEVISED, SPANISH-LANGUAGEMEDIA: BRIDGIN
 09/28/2001 - 08/31/2002 FY02: \$0 Total: \$154,667
Prin. Invest.: G ROIG
Tech. Officer: KSC/J NUNEZ
CASE Category: 41 – AERONAUTICAL ENGR

FLORIDA

NASA'S UNIVERSITY PROGRAM

NAG10 311 **FLA INTERNATIONAL UNIV** **3614**
 PROJECT M.A.S.T.T. MATHEMATICS/APPLIED SCIENCES TEACHERS TRAINING
 02/25/2002 - 11/01/2002 FY02: \$182,690 Total: \$182,690
Prin. Invest.: G A ROIG
Tech. Officer: KSC/H BURSIAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 321 **FLA INTERNATIONAL UNIV** **3615**
 INTERNSHIP PROGRAM AT KENNEDY SPACE CENTER (IPKSC)
 09/03/2002 - 07/31/2003 FY02: \$108,822 Total: \$108,822
Prin. Invest.: M CENTENO
Tech. Officer: KSC/G BUCKINGHAM
CASE Category: 49 – ENGINEERING, OTHER

NAS 3 02065 **FLA INTERNATIONAL UNIV** **3616**
 ICING SOFTWARE CODE VALIDATION
 10/24/2001 - 04/24/2002 FY02: \$50,164 Total: \$50,164
Prin. Invest.: M A EBADIAN
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 663 **FLA INTERNATIONAL UNIV** **3617**
 PROMOTING EQUITY IN PREPARING SECONDARY TEACHERS IN MATH-EMATICS, SCIENCE AND TECHNOLOGY
 08/21/2002 - 08/31/2005 FY02: \$199,916 Total: \$199,916
Prin. Invest.: C MENDEZ
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01057 **FLORIDA A&M UNIV** **3618**
 ACTIVE CONTROL OF BOUNDARY-LAYER SEPARATION AND FLOW DISTORTION IN ADVERSE PRESSURE GRADIENT FLOWS
 03/27/2001 - 03/31/2004 FY02: \$80,103 Total: \$161,084
Prin. Invest.: F S ALVI, C SHIH
Tech. Officer: LARC/S A GORTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02059 **FLORIDA A&M UNIV** **3619**
 ACTIVE-ADAPTIVE CONTROL OF INLET SEPARATION USING SUPERSONIC MICROJETS
 02/28/2002 - 02/28/2005 FY02: \$65,000 Total: \$65,000
Prin. Invest.: F S ALVI
Tech. Officer: LARC/S A GORTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02114 **FLORIDA A&M UNIV** **3620**
 PARTIAL SUPPORT TO THE 2002 NATIONAL TEACHER PREPARATION SYMPOSIUM
 09/11/2002 - 11/01/2002 FY02: \$16,880 Total: \$16,880
Prin. Invest.: F HAMILTON
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 2 1439 **FLORIDA A&M UNIV** **3621**
 INVESTIGATION OF THE ELECTRONIC PROPERTIES OF DISTORTED CARBON NANOTUBES
 09/21/2000 - 08/31/2003 FY02: \$90,584 Total: \$277,339
Prin. Invest.: M ENCINOSA
Tech. Officer: ARC/B J COLLINS, ARC/D JAMES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 1759 **FLORIDA A&M UNIV** **3622**
 A GRADUATE FELLOWSHIP COMPONENT TO AUGMENT PROGRAM IMAGE
 06/14/1995 - 12/14/2001 FY02: \$0 Total: \$1,522,879
Prin. Invest.: F S HUMPHRIES, F J FOREMAN
Tech. Officer: GRC/J E BOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2193 **FLORIDA A&M UNIV** **3623**
 ROBUST FAULT DETECTION AND ISOLATION FOR NASA LAUNCH VEHICLES
 09/01/1998 - 08/31/2002 FY02: \$0 Total: \$234,476
Prin. Invest.: E G COLLINS
Tech. Officer: GRC/T GUO
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2786 **FLORIDA A&M UNIV** **3624**
 A GRADUATE FELLOWSHIP COMPONENT TO AUGMENT PROGRAM IMAGE
 05/31/2002 - 05/31/2003 FY02: \$356,005 Total: \$356,005
Prin. Invest.: A F VAUGHN-COOKE
Tech. Officer: GRC/D JOHNSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 4 164 **FLORIDA A&M UNIV** **3625**
 EVOLUTIONARY ALGORITHMS
 02/26/1999 - 02/26/2003 FY02: \$0 Total: \$225,000
Prin. Invest.: M ABDULLAH, F HAMILTON
Tech. Officer: DFRC/K GUPTA, DFRC/E COX
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9119 **FLORIDA A&M UNIV** **3626**
 LINKAGES 2001 PROJECT
 02/24/2000 - 01/31/2001 FY02: \$0 Total: \$500,000
Prin. Invest.: J H AMMONS
Tech. Officer: GSFC/J MALONE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9420 **FLORIDA A&M UNIV** **3627**
 ELECTROCHEMICAL CAPACITORS & HYBRID POWER SOURCES FOR SPACE APPLICATIONS
 04/11/2000 - 04/30/2003 FY02: \$98,329 Total: \$296,164
Prin. Invest.: J ZHENG
Tech. Officer: GSFC/J MALONE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10148 **FLORIDA A&M UNIV** **3628**
 COLLISION PROCESSES IN ASTROPHYSICAL PLASMAS
 12/08/2000 - 12/31/2003 FY02: \$175,427 Total: \$350,854
Prin. Invest.: C A WEATHERFORD
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 5 10726 **FLORIDA A&M UNIV** **3629**
 LINKAGES 2001 PROJECT
 04/09/2001 - 03/31/2002 FY02: \$250,000 Total: \$500,000
Prin. Invest.: B KELLY
Tech. Officer: GSFC/J MALONE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 238 **FLORIDA A&M UNIV** **3630**
 MINORITY ACCESS TO GRAD ENGR PROGRAM
 12/17/1997 - 04/30/2002 FY02: -\$3,822 Total: \$5,729,234
Prin. Invest.: F S HUMPHRIES
Tech. Officer: KSC/E SMITH
CASE Category: 49 – ENGINEERING, OTHER

NASA'S UNIVERSITY PROGRAM

FLORIDA

NAG10 242 **FLORIDA A&M UNIV** **3631**
 MAPSTAP
 05/13/1998 - 12/31/2002 FY02: \$0 Total: \$599,997
Prin. Invest.: B SAMUELS
Tech. Officer: KSC/E JOHNSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 248 **FLORIDA A&M UNIV** **3632**
 PRODIGY 2000
 09/23/1998 - 09/22/2001 FY02: -\$18,832 Total: \$281,168
Prin. Invest.: B MCCUNE
Tech. Officer: KSC/R MCKINNEY
CASE Category: 62 – PSYCHOLOGY SOCIAL ASPECTS

NAG10 264 **FLORIDA A&M UNIV** **3633**
 ELECTROSTATIC CHARGING, PRECIPITATION, ADHESION, AND DISSIPATION IN THE MARTIAN ATMOSPHERE
 08/01/1999 - 10/31/2001 FY02: -\$42,052 Total: \$150,522
Prin. Invest.: F B GROSS
Tech. Officer: KSC/R LEE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG10 267 **FLORIDA A&M UNIV** **3634**
 PROJECT DISCOVER II SBI/NASA INTERNSHIPS PROJECT DISCOVER II SBI/NASA INTERNSHIPS
 09/09/1999 - 09/30/2002 FY02: \$138,605 Total: \$582,294
Prin. Invest.: S C MOBLEY
Tech. Officer: KSC/R J MCKINNEY
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NAG10 289 **FLORIDA A&M UNIV** **3635**
 WIRELESS SPREAD-SPECTRUM INTERCOMMUNICATION SYSTEM WIRELESS SPREAD-SPECTRUM INTERCOMMUNICATION SYSTEM
 07/11/2000 - 06/07/2003 FY02: \$97,939 Total: \$291,520
Prin. Invest.: B A HARVEY
Tech. Officer: KSC/F MCKENZIE
CASE Category: 45 – ELECTRICAL ENGR

NAG10 314 **FLORIDA A&M UNIV** **3636**
 INCREASING MINORITY ACCESS TO GRADUATE ENGINEERING PROGRAM (IMAGE)
 03/29/2002 - 02/12/2003 FY02: \$1,270,000 Total: \$1,270,000
Prin. Invest.: H LEWIS III
Tech. Officer: KSC/D ABRAHAM
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 252 **FLORIDA A&M UNIV** **3637**
 CENTER FOR NONLINEAR AND NONEQUILIBRIUM AEROSCIENCES (CENTAS)
 04/23/1997 - 12/31/2002 FY02: \$1,000,000 Total: \$6,200,000
Prin. Invest.: J JOHNSON
Tech. Officer: LARC/W SELLERS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 956 **FLORIDA A&M UNIV** **3638**
 A COOPERATIVE RESEARCH PROGRAM IN AERONAUTICAL INFORMATION SCIENCE TECHNOLOGIES
 07/01/1996 - 02/28/2001 FY02: \$0 Total: \$1,316,338
Prin. Invest.: A KROTHAPALLI, L LOURENCO, S WALKER
Tech. Officer: ARC/J C ROSS, ARC/P T SODERMAN
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1005 **FLORIDA A&M UNIV** **3639**
 DEVELOPMENT OF A TRANSDERMAL DELIVERY DEVICE FOR MELATONIN IN VIVO
 08/25/1997 - 07/31/2003 FY02: \$0 Total: \$276,406
Prin. Invest.: M S SACHDEVA
Tech. Officer: ARC/C M WINGET, ARC/G S LEE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1221 **FLORIDA A&M UNIV** **3640**
 A COOPERATIVE RESEARCH PROGRAM IN AERONAUTICAL INFORMATION SCIENCE TECHNOLOGIES
 03/22/2001 - 03/14/2003 FY02: \$354,574 Total: \$704,501
Prin. Invest.: A KROTHAPALLI, C SHIH, L LOURENCO
Tech. Officer: ARC/G K YAMAUCHI, ARC/J C ROSS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52430 **FLORIDA A&M UNIV** **3641**
 DETERMINING MECHANICAL PROPERTIES OF NANOMATERIALS USING NANOINDENTATION AND A FINITE ELEMENT METHOD
 06/19/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M M ABDULLAH
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01079 **FLORIDA ATLANTIC UNIV** **3642**
 MODIFIED AND ADVANCED FORMULATIONS FOR UNCERTAINTY ANALYSIS IN STRUCTURES ANALYSIS
 06/01/2001 - 01/31/2002 FY02: \$0 Total: \$33,095
Prin. Invest.: I ELISHAKOFF
Tech. Officer: LARC/W J STROUD, LARC/I S RAJU
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2023 **FLORIDA ATLANTIC UNIV** **3643**
 SPACE COMMUNICATIONS TECHNOLOGY CENTER
 03/12/1997 - 06/30/2002 FY02: \$34,999 Total: \$1,439,998
Prin. Invest.: W E GLENN, H HELMKEN
Tech. Officer: GRC/T P BIZON
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2702 **FLORIDA ATLANTIC UNIV** **3644**
 NOISE GENERATED BY FANS WITH SUPERSONIC TIP SPEEDS NOISE GENERATED BY FANS WITH SUPERSONIC TIP SPEED
 02/15/2002 - 08/31/2004 FY02: \$71,483 Total: \$71,483
Prin. Invest.: S GLEGG
Tech. Officer: GRC/A ENVIA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12129 **FLORIDA ATLANTIC UNIV** **3645**
 ACHIEVING HIGH SOFTWARE RELIABILITY.
 04/30/2002 - 09/30/2004 FY02: \$139,000 Total: \$139,000
Prin. Invest.: T KHOSHGOFTARR
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAS 3 26956 **FLORIDA ATLANTIC UNIV** **3646**
 ACTS PROPAGATION EXPERIMENTS
 06/21/1993 - 02/28/2003 FY02: \$30,000 Total: \$436,278
Prin. Invest.: H F HELMKEN
Tech. Officer: GRC/R J GUNDERMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

FLORIDA

NASA'S UNIVERSITY PROGRAM

NCC 2 1141 **FLORIDA ATLANTIC UNIV** **3647**
 ACHIEVING HIGH SOFTWARE RELIABILITY
 09/17/1999 - 09/30/2000 FY02: \$0 Total: \$274,762
Prin. Invest.: T G KHOSGOFTAR
Tech. Officer: ARC/S YASSINI, ARC/D OZBURN
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 50257 **FLORIDA INST OF TECHNOLOGY** **3655**
 TECHNOLOGIES FOR ASSESSING THE EFFECTS OF LONG-TERM SPACE
 HABITATION ON CELLULAR AGING_ STUDENT: K
 07/09/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C HELMSTETTER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 230 **FLORIDA ATLANTIC UNIV** **3648**
 PROMOTE COMMERCIALY FUNDING R & D AND TECH DEV IN THE FIELD
 OF SPACE COMMUNICATIONS
 11/01/2001 - 10/31/2002 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: W E GLENN
Tech. Officer: MSFC/S LAMBING
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 50290 **FLORIDA INST OF TECHNOLOGY** **3656**
 THE LUMINOSITY FUNCTION & THE CHROMOSPHERIC ACTIVITY-AGE
 RELATION FOR M DWARF STARS IN COMMON PROPER
 MOTION
 06/27/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: T OSWALT
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2260 **FLORIDA INST OF TECHNOLOGY** **3649**
 MODELING COMPOSITES LAMINATE CRUSHING FOR CRASH ANALYSIS
 01/12/2000 - 12/15/2001 FY02: \$0 Total: \$51,066
Prin. Invest.: D C FLEMING
Tech. Officer: LARC/L E JONES
CASE Category: 46 – MECHANICAL ENGR

NAG10 247 **FLORIDA MEMORIAL COLL** **3657**
 INITIATIVE FOR AFRICAN AMERICAN/UNDER REPRESENTED STUDENTS
 08/01/1998 - 11/11/2001 FY02: \$0 Total: \$527,713
Prin. Invest.: H HUISSO
Tech. Officer: KSC/R MC KINNEY
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 2 1508 **FLORIDA INST OF TECHNOLOGY** **3650**
 GRAVITATIONAL IMPACTS ON THE CELL CYCLE
 07/23/2001 - 07/31/2003 FY02: \$142,647 Total: \$225,215
Prin. Invest.: C E HELMSTETTER
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2078 **FLORIDA STATE UNIV** **3658**
 NOISE SUPPRESSION OF HEATED SUPERSONIC JETS BY WATER INJECTION
 06/16/1998 - 04/30/2001 FY02: -\$8,400 Total: \$211,022
Prin. Invest.: A KROTHAPALLI, L LOURENCO
Tech. Officer: LARC/M K NORUM, LARC/M K PONTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10888 **FLORIDA INST OF TECHNOLOGY** **3651**
 COSMIC RAY INTERSTELLAR PROPAGATION (ATP 2000)
 05/09/2001 - 05/14/2004 FY02: \$64,173 Total: \$127,465
Prin. Invest.: M ZHANG
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 1 2127 **FLORIDA STATE UNIV** **3659**
 DYNAMICAL FACTORS CONTROLLING OZONE, OH AND AEROSOL LEVELS
 OVER THE PEM-TROPICS B REGION
 01/20/1999 - 12/31/2001 FY02: \$0 Total: \$203,000
Prin. Invest.: T N KRISHNAURTI
Tech. Officer: LARC/J R RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11036 **FLORIDA INST OF TECHNOLOGY** **3652**
 STUDIES OF COSMIC RAY MODULATION & ENERGETIC PARTICLE PROPAGATION
 IN TIME-DEPENDENT 3-DIMENSION
 06/12/2001 - 07/31/2004 FY02: \$105,608 Total: \$206,768
Prin. Invest.: M ZHANG
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2145 **FLORIDA STATE UNIV** **3660**
 AIRFRAME-JET ENGINE INTEGRATION NOISE
 03/30/1999 - 12/31/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: C K TAM
Tech. Officer: LARC/R R ANTCLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11921 **FLORIDA INST OF TECHNOLOGY** **3653**
 MEASURING SOLAR CYCLE VARIATIONS OF HE3 IN ENERGETIC PARTICLE
 EVENTS
 04/09/2002 - 03/31/2005 FY02: \$78,186 Total: \$78,186
Prin. Invest.: J R DWYER
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 1 01031 **FLORIDA STATE UNIV** **3661**
 DISCONTINUOUS SPECTRAL ELEMENT AEROACOUSTIC CODE FOR FAN
 NOISE RADIATION
 02/08/2001 - 11/30/2003 FY02: \$110,165 Total: \$163,235
Prin. Invest.: M Y HUSSAINI
Tech. Officer: LARC/F FARASSAT, LARC/R H THOMAS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1582 **FLORIDA INST OF TECHNOLOGY** **3654**
 "NEW CELL CULTURE TECHNOLOGY"
 03/01/1999 - 11/30/2002 FY02: \$134,000 Total: \$485,450
Prin. Invest.: C HELMSTALTER
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 1 02022 **FLORIDA STATE UNIV** **3662**
 SINGLE WALL CARBON NANOTUBE ALIGNMENT MECHANISMS FOR NON-
 DESTRUCTIVE EVALUATION
 12/17/2001 - 12/16/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: S HONG
Tech. Officer: LARC/J D JORDAN
CASE Category: 13 – PHYSICS

NAG 3 1841 **FLORIDA STATE UNIV** **3663**
 THERETICAL STUDIES OF LIQUID HELIUM NEAR THE SUPER FLUID
 TRANSITION
 05/01/1996 - 05/15/2002 FY02: \$0 Total: \$291,000
Prin. Invest.: E MANOUSAKIS
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 1885 **FLORIDA STATE UNIV** **3664**
 FLUID PHYSICS IN STOCHASTIC ACCELERATION ENVIRONMENT
 06/17/1996 - 06/16/2001 FY02: \$0 Total: \$434,901
Prin. Invest.: J VINALS
Tech. Officer: GRC/A CHAIT
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2102 **FLORIDA STATE UNIV** **3665**
 NUMERICAL SIMULATION OF SCREECH TONES FROM SUPERSONIC JETS:
 PHYSICS & PREDICTIONS
 12/24/1997 - 11/30/2001 FY02: \$0 Total: \$247,500
Prin. Invest.: C K TAM
Tech. Officer: GRC/K Q ZAMAN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2327 **FLORIDA STATE UNIV** **3666**
 ADVANCED COMPUTATIONAL AEROACOUSTICS METHODS FOR FAN NOISE
 PREDICTIONS
 02/07/2000 - 01/11/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: C TAM
Tech. Officer: GRC/E ENVIA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2445 **FLORIDA STATE UNIV** **3667**
 LATTICE-BOLTZMANN TECHNIQUES FOR MULTIPHASE FLOW TRANSPORT IN
 MICROGRAVITY ENVIRONMENT
 05/25/2000 - 05/18/2002 FY02: \$0 Total: \$132,828
Prin. Invest.: D CHELLA
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4873 **FLORIDA STATE UNIV** **3668**
 USING NASA FULL PHYSICS ADJOINT OF THE GEOS-1 GCM ANALYSIS,
 SENSITIVITY ANALYSIS AND OPTIMAL SENSOR
 07/03/1997 - 05/31/2002 FY02: \$0 Total: \$323,576
Prin. Invest.: I NAVON
Tech. Officer: GSFC/M HALL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6258 **FLORIDA STATE UNIV** **3669**
 AN INTERCOMPARISON OF THE INFLUENCE OF VEGETATION SURFACE-
 ATMOSPHERE WATER EXCHANGE AND BOUNDARY LAYER
 08/27/1997 - 07/31/2001 FY02: \$0 Total: \$350,000
Prin. Invest.: E SMITH
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6665 **FLORIDA STATE UNIV** **3670**
 COMBINING SSM/I, T/T2 AND GOES MEASUREMENTS FOR A SATELLITE-
 BASED ATMOSPHERIC WATER BUDGET OF
 11/25/1997 - 11/30/2002 FY02: \$0 Total: \$495,000
Prin. Invest.: H J COOPER
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7254 **FLORIDA STATE UNIV** **3671**
 ANOMALOUS HEAT BUDGETS IN THE INTERIOR PACIFIC OCEAN ON
 SEASONAL-TO- INTERANNUAL TIMESCALES AND
 05/14/1998 - 04/30/2001 FY02: -\$802 Total: \$86,698
Prin. Invest.: J J O'BRIEN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 7302 **FLORIDA STATE UNIV** **3672**
 RETRIEVAL OF SURFACE RADIATION FLUXES OVER BOREAS SNOW
 REGIME FROM GOES 8 IMAGERY FOR APPLICATIONS
 05/04/1998 - 10/31/2000 FY02: -\$4,249 Total: \$161,153
Prin. Invest.: E A SMITH
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7577 **FLORIDA STATE UNIV** **3673**
 "REDUCTION AND ANALYSIS OF LEO SATELLITE MAGNETIC FIELD DATA"
 (SENH98-0077)
 08/04/1998 - 07/31/2001 FY02: \$0 Total: \$196,000
Prin. Invest.: J C CAIN
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7618 **FLORIDA STATE UNIV** **3674**
 ANNUAL MARINE PRIMARY PRODUCTION ALGORITHM DEVELOPMENT AND
 APPLICATION TO MODIS DATA
 09/08/1998 - 07/31/2001 FY02: \$0 Total: \$156,053
Prin. Invest.: R L IVERSON
Tech. Officer: GSFC/W ESAIAS
CASE Category: 33 – OCEANOGRAPHY

NAG 5 7630 **FLORIDA STATE UNIV** **3675**
 ZONAL PROPAGATION OF NONLINEAR OCEANIC ANOMALIES
 08/10/1998 - 09/30/2001 FY02: \$0 Total: \$454,144
Prin. Invest.: W DEWAR
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7718 **FLORIDA STATE UNIV** **3676**
 VALIDATION OF TRMM LEVEL-3 PRECIPITATION DATA OVER AFRICA
 10/27/1998 - 10/31/2002 FY02: \$0 Total: \$252,007
Prin. Invest.: S E NICHOLSON
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8284 **FLORIDA STATE UNIV** **3677**
 ANALYSIS OF THE CRUSTAL MAGNETIC FIELD OF MARS
 02/19/1999 - 06/12/2002 FY02: \$0 Total: \$128,200
Prin. Invest.: J C CAIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8291 **FLORIDA STATE UNIV** **3678**
 THERMODYNAMICS IN LAYERED MODELS
 02/25/1999 - 02/28/2002 FY02: \$0 Total: \$261,628
Prin. Invest.: W WEWAR
Tech. Officer: GSFC/M RIENECKER
CASE Category: 33 – OCEANOGRAPHY

FLORIDA

NASA'S UNIVERSITY PROGRAM

NAG 5 8327 **FLORIDA STATE UNIV** **3679**
 ADVANCED DATA ASSIMILATION INTO OCEAN CIRCULATION MODELS
 DRIVEN BY NSCAT DATA & ENSO IMPACTS NORTH
 04/28/1999 - 04/30/2002 FY02: \$77,000 Total: \$641,000
Prin. Invest.: J J O'BRIEN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8598 **FLORIDA STATE UNIV** **3680**
 THE IMPACT OF VEGETATION CHANGES IN THE SAHEL ON REGIONAL
 SCALE HYDROLOGY
 06/14/1999 - 06/30/2003 FY02: \$29,673 Total: \$249,034
Prin. Invest.: S E NICHOLSON
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8647 **FLORIDA STATE UNIV** **3681**
 "STUDY OF THE EVOLUTION OF PRECIPITATION AND CLOUD STRUCTURES
 DURING THE LIFE CYCLE ... TRMM AND IS
 07/19/1999 - 07/31/2002 FY02: \$0 Total: \$94,000
Prin. Invest.: G LIU
Tech. Officer: GSFC/W B ROSSOW
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9410 **FLORIDA STATE UNIV** **3682**
 STUDY THE IMPACT OF TOMS OZONE MEASUREMENTS ON MEASOCALE
 PREDICTION USING MM5 4D-VAR SYSTEM
 04/11/2000 - 04/30/2001 FY02: -\$199 Total: \$46,573
Prin. Invest.: X ZOU
Tech. Officer: GSFC/A J KRUEGER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9662 **FLORIDA STATE UNIV** **3683**
 SUPERENSEMBLE FORECASTS OF PRECIPITATION USING TRMM, TMI & PR
 ALGORITHMS
 06/06/2000 - 11/30/2002 FY02: \$174,900 Total: \$368,613
Prin. Invest.: T N KRISHNAMURTI
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9845 **FLORIDA STATE UNIV** **3684**
 SIBERIAN PERMAFORST: APPLICATIONS TO MARS
 08/07/2000 - 07/31/2001 FY02: \$0 Total: \$40,492
Prin. Invest.: I FRIEDMAN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9866 **FLORIDA STATE UNIV** **3685**
 RETRIEVAL OF SURFACE RADIATION FLUXES OVER BOREAS SNOW
 REGIME FROM GOES 8 IMAGERY FOR APPLICATIONS T
 08/07/2000 - 07/31/2001 FY02: -\$449 Total: \$27,551
Prin. Invest.: E A SMITH
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10001 **FLORIDA STATE UNIV** **3686**
 016 OF TRMM FIELD CAMPAIGN DATA FOR VALIDATION-APPLICATION
 STUDIES WITH LEVEL 2 RAIN PROFILE ALGORI
 09/21/2000 - 11/30/2002 FY02: \$250,565 Total: \$400,000
Prin. Invest.: H A COOPER
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10860 **FLORIDA STATE UNIV** **3687**
 VARIABILITY OF THE WESTERN INDIAN OCEAN & THE GULF OF ADEN
 05/02/2001 - 04/30/2004 FY02: \$96,473 Total: \$190,480
Prin. Invest.: D NOF
Tech. Officer: GSFC/E LINDSRTOM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11067 **FLORIDA STATE UNIV** **3688**
 APPLICATIONS OF TOMS OZONE DATA TO NUMERICAL WEATHER ANALYSIS
 AND FORECAST
 07/09/2001 - 07/14/2004 FY02: \$70,000 Total: \$140,000
Prin. Invest.: X ZOU
Tech. Officer: GSFC/P K BHARTA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11889 **FLORIDA STATE UNIV** **3689**
 PHYSICAL VALIDATION OF AMSR SNOWFALL RETRIEVAL OVER OCEAN
 USING DATA FROM WASKASA BAY EXPERIMENT
 04/08/2002 - 05/31/2005 FY02: \$30,000 Total: \$30,000
Prin. Invest.: G LIU
Tech. Officer: GSFC/R ADLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12097 **FLORIDA STATE UNIV** **3690**
 EVALUATION OF OPERATIONAL LONGWAVE RADIATION BUDGET PARAM-
 ETERS USING THE GOES SOUNDERS
 04/26/2002 - 06/30/2003 FY02: \$329,264 Total: \$329,264
Prin. Invest.: P G ELLINGSON
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12475 **FLORIDA STATE UNIV** **3691**
 ANALYSIS OF MARS GLOBAL SURVEYOR MAGNETIC DATA & CORRELA-
 TION WITH ER DATA & GEOPHYSICAL PARAMETE
 08/15/2002 - 08/14/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: J C CAIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12487 **FLORIDA STATE UNIV** **3692**
 NUMERICAL MODELING OF CROSS-SHELF EXCHANGE PROCESSES IN
 THE GULF OF MEXICO
 08/26/2002 - 08/31/2005 FY02: \$90,000 Total: \$90,000
Prin. Invest.: J O'BRIEN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1537 **FLORIDA STATE UNIV** **3693**
 IMPACT STUDIES OF NEWER DATA SETS (COMEX-3) ON VERY HIGH
 RESOLUTION GLOBAL FORECASTS
 06/05/1998 - 10/30/2002 FY02: \$0 Total: \$273,035
Prin. Invest.: T N KRISHNAMURTI
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1773 **FLORIDA STATE UNIV** **3694**
 PREDICTING DYNAMIC AND STATIC CRITICAL PROPERTIES OF BULK AND
 CONFINED HELIUM.
 04/26/2001 - 04/30/2005 FY02: \$69,454 Total: \$137,118
Prin. Invest.: E MANOUSAKIS
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NASA'S UNIVERSITY PROGRAM

FLORIDA

NAG 8 1848 **FLORIDA STATE UNIV** **3695**
 ASSIMILATION, ENSEMBLE FORECASTS AND ADAPTIVE STRATEGIES
 USING CAMS-4 DATASETS
 08/20/2001 - 09/02/2004 FY02: \$80,076 Total: \$148,678
Prin. Invest.: T N KRISHNAMURTI
Tech. Officer: MSFC/J E ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1882 **FLORIDA STATE UNIV** **3696**
 ASSIMILATION OF AIRS RADIANCE DATA FOR IMPROVING 12-H QPF USING
 MM5 4D-VAR SYSTEM
 08/20/2002 - 09/01/2004 FY02: \$107,805 Total: \$107,805
Prin. Invest.: X ZOU
Tech. Officer: MSFC/B LAPENTA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG13 02011 **FLORIDA STATE UNIV** **3697**
 SCATTEROMETER DERIVED OPERATIONAL WINDS, SURFACE PRESSURES,
 AND RAIN
 12/11/2001 - 12/11/2004 FY02: \$125,000 Total: \$125,000
Prin. Invest.: J J O'BRIEN, M A BOURASSA
Tech. Officer: SSC/R MILLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 02045 **FLORIDA STATE UNIV** **3698**
 NOISE REDUCTION RESEARCH EFFORT IN SUPPORT OF QAT
 03/08/2002 - 03/10/2004 FY02: \$56,250 Total: \$56,250
Prin. Invest.: C TAM
Tech. Officer: LARC/R H THOMAS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 412 **FLORIDA STATE UNIV** **3699**
 NUMERICAL SIMULATIONS AND DIAGNOSTIC STUDIES RELATING METEOROLOGY
 TO ATMOSPHERIC CHEMISTRY DURING
 09/18/2000 - 08/31/2003 FY02: \$140,177 Total: \$281,700
Prin. Invest.: H E FUELBERG
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 01026 **FLORIDA STATE UNIV** **3700**
 AN INVESTIGATION OF THE FLOW PHYSICS OF ACOUSTIC LINERS BY
 DIRECT NUMERICAL SIMULATION
 01/31/2001 - 12/31/2003 FY02: \$78,000 Total: \$138,000
Prin. Invest.: C K TAM
Tech. Officer: LARC/W R WATSON, LARC/M G JONES
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02025 **FLORIDA STATE UNIV** **3701**
 BAYSIAN INFERENCE AND UNCERTAINTY QUANTIFICATION
 04/22/2002 - 04/21/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: M Y HUSSAINI
Tech. Officer: LARC/T A ZANG
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1349 **FLORIDA STATE UNIV** **3702**
 UNCERTAINTY QUANTIFICATION FOR LOW FIDELITY AERO/AEROTHERMO
 MODELS
 06/21/2002 - 06/30/2003 FY02: \$67,598 Total: \$67,598
Prin. Invest.: M Y HUSSAINI
Tech. Officer: ARC/M E LIVINGSTON, ARC/D MATHIAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 292 **FLORIDA STATE UNIV** **3703**
 HIGH RESOLUTION CARBON EXCHANGE OVER LARGE-SCALE AMAZONIA
 BASED ON MODELING AND GOES SATELLITE
 06/25/1998 - 12/31/2002 FY02: \$97,404 Total: \$477,044
Prin. Invest.: E A SMITH
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 158 **FLORIDA STATE UNIV** **3704**
 SOUTHEAST REGIONAL EARTH SCIENCE APPLICATIONS CENTER
 09/25/1998 - 09/24/2003 FY02: \$0 Total: \$90,000
Prin. Invest.: J J O'BRIEN
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 30158 **FLORIDA STATE UNIV** **3705**
 DYNAMICS AND VARIABILITY OF THE NORTH HAWAIIAN RIDGE CURRENT
 FROM SATELLITE ALTIMETRY AND AN
 08/28/1998 - 12/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J J O'BRIEN, LEONARDI
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30164 **FLORIDA STATE UNIV** **3706**
 NONLINEAR EXCHANGE PROCESSES BETWEEN THE PACIFIC AND THE
 INDIAN OCEAN
 08/31/1998 - 08/31/2002 FY02: \$0 Total: \$58,000
Prin. Invest.: D NOF, H SIMMONS
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30186 **FLORIDA STATE UNIV** **3707**
 THE WATER BALANCE OF EASTERN AFRICAN GREAT LAKES STUDENT:
 XANGANG YIN
 08/19/1999 - 08/31/2001 FY02: -\$25 Total: \$43,975
Prin. Invest.: S E NICHOLSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30370 **FLORIDA STATE UNIV** **3708**
 DEVELOPMENT OF SCATTEROMETER-DERIVED RESEARCH-QUALITY SURFACE
 PRESSURES STUDENT: KYLE HILBURN
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J O'BRIEN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30454 **FLORIDA STATE UNIV** **3709**
 EVALUATING SOURCES OF THE GEOMAGNETIC FIELD BY GLOBAL
 MODELING: CORE, CRUST, IONOSPHERE AND OCEAN
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J C CAIN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 282 **MIAMI-DADE COMM COLL** **3710**
 HOMESTEAD BUSINESS INCUBATOR HOMESTEAD BUSINESS INCUBATOR
 05/18/2000 - 07/31/2003 FY02: \$0 Total: \$915,000
Prin. Invest.: E J PADRON
Tech. Officer: KSC/D CULBERTSON
CASE Category: 79 – SOCIAL SCIENCE, OTHER

FLORIDA

NASA'S UNIVERSITY PROGRAM

NAG 5 12298 SAINT THOMAS UNIV 3711
 COMPUTER EQUIPMENT FOR SCIENCE AND TECHNOLOGY
 06/28/2002 - 06/30/2003 FY02: \$570,000 Total: \$570,000
Prin. Invest.: A VYNNE
Tech. Officer: HQ/M MATEU
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 2 1465 THE UNIV OF CENTRAL FLORIDA 3712
 VERIFICATION TOOLS FOR KSC LAUNCH CONTROL SOFTWARE
 03/22/2001 - 07/31/2003 FY02: \$29,200 Total: \$79,200
Prin. Invest.: G H WALTON
Tech. Officer: ARC/J PENIX
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2691 THE UNIV OF CENTRAL FLORIDA 3713
 GLENN-HT/BEM CONJUGATE HEAT TRANSFER SOLVER FOR LA RGE-SCALE
 TURBOMACHINERY MODELS
 01/11/2002 - 10/01/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D J KASSAB
Tech. Officer: GRC/J D HEIDMANN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2751 THE UNIV OF CENTRAL FLORIDA 3714
 HYDROGEN RESEARCH FOR FLORIDA UNIVERSITIES HYDROGEN RE-
 SEARCH FOR FLORIDA UNIVERSITIES
 03/25/2002 - 09/30/2003 FY02: \$5,425,000 Total: \$5,425,000
Prin. Invest.: D L BLOCK
Tech. Officer: GRC/D J CHATO
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8265 THE UNIV OF CENTRAL FLORIDA 3715
 INVESTIGATIONS OF MARTIAN IMPACT CRATER MORPHOLOGIES AND
 MORPHOMETRIES
 02/23/1999 - 04/30/2002 FY02: -\$43,567 Total: \$98,133
Prin. Invest.: N G BARLOW
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9548 THE UNIV OF CENTRAL FLORIDA 3716
 TRMM VALIDATION: IMPROVED ZR RELATIONSHIP FROM TEFLUN-B &
 TROPICAL CYCLONE WINDS & PRECIPITATION
 05/30/2000 - 05/31/2003 FY02: \$125,000 Total: \$318,667
Prin. Invest.: W JONES
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10308 THE UNIV OF CENTRAL FLORIDA 3717
 ANTENNA-COUPLED INFRARED SENSORS- PROPOSAL #215
 02/02/2001 - 01/31/2004 FY02: \$184,546 Total: \$364,142
Prin. Invest.: G D BOREMAN
Tech. Officer: GSFC/T STEVENSON
CASE Category: 13 – PHYSICS

NAG 5 10730 THE UNIV OF CENTRAL FLORIDA 3718
 FOURIER TRANSFORM IMAGING SPECTROMETER WITH HIGH- THROUGH-
 PUT AND NO MOVING PARTS
 04/10/2001 - 04/14/2003 FY02: \$116,000 Total: \$236,000
Prin. Invest.: R G SELLAR
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 12263 THE UNIV OF CENTRAL FLORIDA 3719
 CIRRRUS REGIONAL STUDY OF TROPICAL ANVILS AND CIRRRUS S LAYERS -
 FLORIDA AREA CIRRRUS EXPERIMENT.
 06/10/2002 - 05/31/2003 FY02: \$16,134 Total: \$16,134
Prin. Invest.: T KASPARIS
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG10 258 THE UNIV OF CENTRAL FLORIDA 3720
 NASA/UCF SPACE SCHOLARS PROGRAM
 05/01/1999 - 06/30/2001 FY02: -\$21,205 Total: \$54,732
Prin. Invest.: J SMITH
Tech. Officer: KSC/R MCKINNEY
CASE Category: 49 – ENGINEERING, OTHER

NAG10 276 THE UNIV OF CENTRAL FLORIDA 3721
 DEVELOPMENT OF ADVANCE LIFE SUPPORT AUTOMATED REMOTE
 MANIPULATOR END-EFFECTOR (ALSARM) (PHASE II)
 02/02/2000 - 11/15/2001 FY02: \$0 Total: \$41,259
Prin. Invest.: D W JOHNSON
Tech. Officer: KSC/C D QUINCY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG10 278 THE UNIV OF CENTRAL FLORIDA 3722
 FUNGAL DIVERSITY IN COMPOST STUDIED USING BOTH TRADITIONAL
 PLATTING AND MOLECULAR APPROACHES
 02/14/2000 - 10/09/2001 FY02: -\$3,892 Total: \$106,108
Prin. Invest.: J F WEISHAMPEL
Tech. Officer: KSC/C QUINCY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG10 280 THE UNIV OF CENTRAL FLORIDA 3723
 2000 NASA/ASEE SUMMER FACULTY FELLOWSHIP RESEARCH PROGRAM
 04/10/2000 - 03/31/2002 FY02: -\$4,290 Total: \$352,710
Prin. Invest.: D HOSIER
Tech. Officer: KSC/J P GORDON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 290 THE UNIV OF CENTRAL FLORIDA 3724
 ASSESSMENT OF TECHNOLOGIES FOR VISUAL GAS LEAK DETECTION
 07/30/2000 - 10/31/2001 FY02: \$0 Total: \$65,043
Prin. Invest.: R SELLAR
Tech. Officer: KSC/C DAVIS
CASE Category: 13 – PHYSICS

NAG10 296 THE UNIV OF CENTRAL FLORIDA 3725
 INSTALIZING KENNEDY SPACE CENTER'S STRATEGIC LEARNING PRO-
 CESS
 03/30/2001 - 12/31/2002 FY02: \$0 Total: \$262,000
Prin. Invest.: T KOTNOUR
Tech. Officer: KSC/J LYONS
CASE Category: 49 – ENGINEERING, OTHER

NAG10 299 THE UNIV OF CENTRAL FLORIDA 3726
 NASA/ASEE SUMMER FACULTY FELLOWSHIP RESEARCH PROGRAM
 05/16/2001 - 12/31/2002 FY02: \$0 Total: \$346,141
Prin. Invest.: R HOSLER
Tech. Officer: KSC/C BLACK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NASA'S UNIVERSITY PROGRAM

FLORIDA

NAG10 301 THE UNIV OF CENTRAL FLORIDA 3727
 ULTRASOUND ENHANCEMENT OF A PERMEABLE REACTIVE BAR RIER
 UNDERGOING ACCELERATE AGING
 06/15/2001 - 12/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: D R REINHART
Tech. Officer: KSC/J W QUINN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG10 306 THE UNIV OF CENTRAL FLORIDA 3728
 INTELLIGENT TEXT RETRIEVAL AND KNOWLEDGE ACQUISITI ON FROM
 TEXTS FOR NASA APPLICATIONS: PREPROCESSIN
 09/07/2001 - 03/31/2002 FY02: -\$1,427 Total: \$48,573
Prin. Invest.: F GOMEZ
Tech. Officer: KSC/C G STEVENSON
CASE Category: 49 – ENGINEERING, OTHER

NAG10 312 THE UNIV OF CENTRAL FLORIDA 3729
 REDUCTIVE EMULSIONS FOR REMEDIATION OF GROUNDWATER CONTAMI-
 NATED WITH HALOGENATED HYDROCARBONS
 04/26/2002 - 02/16/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: C GEIGER
Tech. Officer: KSC/J W QUINN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG10 313 THE UNIV OF CENTRAL FLORIDA 3730
 RAPID DECHLORINATION OF POLYCHLORINATED BIPHENYLS IN SOILS BY
 PD/FE BIMETALLIC EMULSIONS
 05/02/2002 - 02/16/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: D L GEIGER
Tech. Officer: KSC/J W QUINN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG10 315 THE UNIV OF CENTRAL FLORIDA 3731
 NASA/ASEE SUMMER FACULTY FELLOWSHIP RESEARCH PROGR AM
 05/02/2002 - 12/31/2002 FY02: \$341,796 Total: \$341,796
Prin. Invest.: D KOTNOUR
Tech. Officer: KSC/C D BLACK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 318 THE UNIV OF CENTRAL FLORIDA 3732
 RETRIEVING NASA PROBLEM REPORTS WITH NATURAL LANGU AGE
 PROCESSING
 07/10/2002 - 09/30/2002 FY02: \$25,000 Total: \$25,000
Prin. Invest.: D GOMEZ
Tech. Officer: KSC/C STEVENSON
CASE Category: 22 – COMPUTER SCIENCE

NAG10 319 THE UNIV OF CENTRAL FLORIDA 3733
 AUTOMATIC PARTICLE COUNTING USING AN ACOUSTIC TRANSDUCER
 07/02/2002 - 10/31/2002 FY02: \$36,700 Total: \$36,700
Prin. Invest.: D CHEN
Tech. Officer: KSC/G HADDARD
CASE Category: 46 – MECHANICAL ENGR

NAG10 323 THE UNIV OF CENTRAL FLORIDA 3734
 A SHAPE MEMORY ALLOY THERMAL CONDITION SWITCH FOR USE AT
 CRYOGENIC TEMPERATURES
 09/06/2002 - 08/31/2003 FY02: \$112,842 Total: \$112,842
Prin. Invest.: R NAIDYANATHAN
Tech. Officer: KSC/B NOTARDONATO
CASE Category: 46 – MECHANICAL ENGR

NCA10 41 THE UNIV OF CENTRAL FLORIDA 3735
 FUNDED SPACE ACT AGREEMENT FOR SPACEPORT SYSTEM PROCESSING
 MODEL
 02/25/2000 - 09/29/2000 FY02: \$0 Total: \$320,000
Prin. Invest.: M MOLLAGHASGEMI
Tech. Officer: KSC/G CATES, KSC/D SHELTON
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 712 THE UNIV OF CENTRAL FLORIDA 3736
 ULTRA-LIGHT-WEIGHT, RADATION-RESISTANT, THIN-FILM SOLAR CELLS
 FOR SPACE ELECTRICPOWER
 06/10/1999 - 12/31/2002 FY02: \$23,000 Total: \$183,000
Prin. Invest.: N G DHERE
Tech. Officer: GRC/A F HEPP
CASE Category: 13 – PHYSICS

NCC10 35 THE UNIV OF CENTRAL FLORIDA 3737
 NASA NOX3; PILOT SCALE EVALUATION OF NEW TECHNOLOG Y FOR NOX
 CONTROL
 02/22/2000 - 12/31/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: D C COOPER
Tech. Officer: KSC/M COLLINS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40069 THE UNIV OF CENTRAL FLORIDA 3738
 FLORIDA/NATIONAL SPACE GRANT COLL & FELLOWSHIP PROGRAM
 04/28/2000 - 04/29/2001 FY02: \$0 Total: \$475,000
Prin. Invest.: S DURRANCE
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40071 THE UNIV OF CENTRAL FLORIDA 3739
 FLORIDA/NATIONAL SPACE GRANT COLL & FELLOWSHIP PROGRAM
 01/05/2001 - 08/31/2003 FY02: \$0 Total: \$85,000
Prin. Invest.: S DURRANCE
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40107 THE UNIV OF CENTRAL FLORIDA 3740
 FLORIDA SPACE GRANT CONSORTIUM
 03/02/2001 - 02/28/2005 FY02: \$475,000 Total: \$961,000
Prin. Invest.: S DURRANCE
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT10 52625 THE UNIV OF CENTRAL FLORIDA 3741
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE-
 SEARCH PROGRAM
 08/10/2000 - 06/30/2001 FY02: -\$1,302 Total: \$20,698
Prin. Invest.: D G KOTNOUR
Tech. Officer: KSC/L GOSPER
CASE Category: 49 – ENGINEERING, OTHER

NGT10 52627 THE UNIV OF CENTRAL FLORIDA 3742
 INSTABILITIES IN MAGNETIC FLUIDS IN TERRESTRIAL AND MICROGRAVITY
 ENVIRONMENTS
 07/24/2000 - 06/13/2002 FY02: -\$22,000 Total: \$22,000
Prin. Invest.: D LUO
Tech. Officer: KSC/R YOUNGQUIST
CASE Category: 13 – PHYSICS

FLORIDA

NASA'S UNIVERSITY PROGRAM

NGT10 52630 THE UNIV OF CENTRAL FLORIDA 3743
 GSRP: STRATEGIC IMPLEMENTATION THROUGH PROCESS ALIGNMENT
 08/02/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: NOT AVAILABLE
Tech. Officer: KSC/L GOSPER
CASE Category: 49 – ENGINEERING, OTHER

NGT10 52634 THE UNIV OF CENTRAL FLORIDA 3744
 CHARACTERIZATION OF NEW PIEZOELECTRIC MATERIALS FOR SURFACE
 ACOUSTIC WAVE DEVICE
 08/28/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D C MAJOCHA
Tech. Officer: KSC/C D BLACK
CASE Category: 13 – PHYSICS

NAG 1 2092 UNIV OF FLORIDA 3745
 DEV OF AN INNOVATIVE ALGORITHM FOR AERODYNAMICS- STRUCTURE
 INTERACTION USING LATTICE BOLTZMANN METH
 07/31/1998 - 07/14/2001 FY02: \$0 Total: \$297,500
Prin. Invest.: R MEI, W SHYY, L LUO
Tech. Officer: LARC/D H RUDY, LARC/R T BIEDRON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2133 UNIV OF FLORIDA 3746
 MEMS-BASED ACOUSTIC ARRAY TECHNOLOGY MY 1/3
 02/11/1999 - 12/31/2002 FY02: \$23,150 Total: \$429,870
Prin. Invest.: M SHEPLAK
Tech. Officer: LARC/R R ANTELIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2177 UNIV OF FLORIDA 3747
 VARIABLE COMPLEXITY OPTIMIZATION OF COMPOSITE STRUCTURES
 04/02/1999 - 01/27/2002 FY02: \$20,145 Total: \$387,308
Prin. Invest.: R T HAFTKA
Tech. Officer: LARC/J H STARNES, JR.
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2188 UNIV OF FLORIDA 3748
 INFORMATION THEORETIC EXTRACTION OF ELECTROENCEPHALOGRAPH
 (EEG) FEATURES FOR MONITORING SUBJECT ATTENTION
 04/28/1999 - 09/30/2000 FY02: -\$105 Total: \$59,818
Prin. Invest.: J C PRINCIPE
Tech. Officer: LARC/M A MOTTER, LARC/A T POPE
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 2198 UNIV OF FLORIDA 3749
 REDUCED ORDER MODELS VIA MULTIREOLUTION ANALYSIS FOR CON-
 TROL OF FLOW
 05/19/1999 - 02/18/2002 FY02: -\$643 Total: \$157,167
Prin. Invest.: A J KURDILA
Tech. Officer: LARC/W A SILVA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2249 UNIV OF FLORIDA 3750
 THE DEVELOPMENT OF DESIGN TOOLS FOR FLOW-CONTROL ACTUATORS
 12/21/1999 - 01/02/2003 FY02: \$60,737 Total: \$183,052
Prin. Invest.: L N CATTAFESTA, A J KURDILA
Tech. Officer: LARC/S A GORTON, LARC/R D JOSLIN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2261 UNIV OF FLORIDA 3751
 ADVANCED TECHNOLOGY DEVELOPMENT FOR ACTIVE ACOUSTIC LINERS
 01/21/2000 - 10/31/2000 FY02: -\$422 Total: \$101,971
Prin. Invest.: M SHEPLAK
Tech. Officer: LARC/M G JONES, LARC/T L PARROTT
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 01013 UNIV OF FLORIDA 3752
 ELECTROMECHANICAL ACOUSTIC LINER TECHNOLOGY
 02/07/2001 - 12/31/2003 FY02: \$90,000 Total: \$170,000
Prin. Invest.: L N SHEPLAK, L N CATTAFESTA III
Tech. Officer: LARC/M G JONES, LARC/T L PARROT
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 01024 UNIV OF FLORIDA 3753
 COMPUTATIONAL MODELING & ANALYSIS SYNTHETIC JETS
 03/09/2001 - 03/31/2004 FY02: \$45,000 Total: \$90,000
Prin. Invest.: R MITTAL, L N CATTAFESTA III
Tech. Officer: LARC/S A GORTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01088 UNIV OF FLORIDA 3754
 ANALYSIS METHODS FOR FUNCTIONALLY GRADED MATERIALS AND
 STRUCTURES
 06/14/2001 - 12/31/2001 FY02: -\$57 Total: \$29,943
Prin. Invest.: B V SANKAR
Tech. Officer: LARC/D R AMBUR
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01098 UNIV OF FLORIDA 3755
 INTEGRATED SHEAR STRESS/TEMPERATURE MICROMACHINED SENSORS
 06/14/2001 - 10/31/2001 FY02: \$0 Total: \$52,091
Prin. Invest.: M SHEPLAK, T NISHIDA, L N CATTAFESTA, III
Tech. Officer: LARC/S K KAHNG
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 02042 UNIV OF FLORIDA 3756
 DESIGN OPTIMIZATION OF COMPOSITE STRUCTURES UNDER UNCER-
 TAINTY
 01/28/2002 - 01/27/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: R T HAFTKA
Tech. Officer: LARC/J H STARNES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02067 UNIV OF FLORIDA 3757
 COMBINED THERMAL AND STRUCTURAL OPTIMIZATION OF FUNCTIONALLY
 GRADED TILE
 03/08/2002 - 03/07/2003 FY02: \$68,580 Total: \$68,580
Prin. Invest.: R T HAFTKA, B V SANKAR
Tech. Officer: LARC/M L BLOSSER
CASE Category: 46 – MECHANICAL ENGR

NAG 1 02068 UNIV OF FLORIDA 3758
 IDENTIFICATION AND CONTROL OF AIRCRAFTS USING MULTIPLE MODELS
 AND ADAPTIVE INVERSE CONTROL
 03/14/2002 - 11/30/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: J C PRINCIPE
Tech. Officer: LARC/M A MOTTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02104 **UNIV OF FLORIDA** **3759**
 DURABILITY OF MULTIFUNCTIONAL FOAMS AND THEIR COMPONENTS
 07/01/2002 - 06/30/2004 FY02: \$35,000 Total: \$35,000
Prin. Invest.: B V SANKAR
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1179 **UNIV OF FLORIDA** **3760**
 DESIGN SPACE EXPLORATION FOR MDO ON A TERAFLAP COM PUTER
 02/26/1998 - 01/31/2001 FY02: -\$1,792 Total: \$102,548
Prin. Invest.: R T HAITKA
Tech. Officer: ARC/G H KLOPTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2341 **UNIV OF FLORIDA** **3761**
 SHEET FLOWS, AVALANCHES, AND DUNE EVOLUTION ON EAR TH AND MARS
 03/01/2000 - 11/30/2003 FY02: \$19,125 Total: \$41,985
Prin. Invest.: D M HANES
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2382 **UNIV OF FLORIDA** **3762**
 MICROGRAVITY DRIVEN INSTABILITIES IN GAS-FLUIDIZED BEDS
 04/05/2000 - 11/30/2003 FY02: \$59,453 Total: \$137,440
Prin. Invest.: A L LADD
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2415 **UNIV OF FLORIDA** **3763**
 SEPARATION OF SPECIES BY OSCILLATORY FLOW SEPARATION OF SPECIES BY OSCILLATORY FLOW
 06/07/2000 - 11/30/2003 FY02: \$95,000 Total: \$225,250
Prin. Invest.: D NARAYANAN
Tech. Officer: GRC/F P CHIARAMONTE III
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2553 **UNIV OF FLORIDA** **3764**
 SUPERSONIC INLETS FOR PULSE DETONATION ENGINES
 03/15/2001 - 01/01/2004 FY02: \$85,273 Total: \$135,717
Prin. Invest.: C SEGAL
Tech. Officer: GRC/R FERNANDEZ
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2630 **UNIV OF FLORIDA** **3765**
 WEIGHT OPTIMIZATION OF ACTIVE THERMAL MANAGEMENT USING A NOVEL HEAT PUMP
 06/13/2001 - 05/31/2003 FY02: \$71,667 Total: \$130,000
Prin. Invest.: D E LEAR
Tech. Officer: GRC/E L GOLLIER
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2750 **UNIV OF FLORIDA** **3766**
 HYDROGEN RESEARCH AND EDUCATION HYDROGEN RESEARCH AND EDUCATION
 03/25/2002 - 09/30/2003 FY02: \$2,700,000 Total: \$2,700,000
Prin. Invest.: D GOSWAMI
Tech. Officer: GRC/D J CHATO
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3772 **UNIV OF FLORIDA** **3767**
 HUMAN DIMENSIONS OF DEFORESTATION & REGROWTH IN THE INTEGRATING DATA FROM SATELLITES, DEMOGRAPHIC CENSUS
 03/11/1997 - 02/28/2001 FY02: -\$18,823 Total: \$517,545
Prin. Invest.: D WOOD
Tech. Officer: GSFC/N MAYNARD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4531 **UNIV OF FLORIDA** **3768**
 DYNAMICS OF SOLAR SYSTEM DUST
 05/08/1997 - 02/28/2002 FY02: -\$193 Total: \$419,251
Prin. Invest.: D F DERMOTT
Tech. Officer: HQ/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6378 **UNIV OF FLORIDA** **3769**
 OPTICAL PROPERTIES OF IRREGULAR DUST PARTICLES: EXPERIMENT AND THEORY
 10/08/1997 - 10/31/2002 FY02: \$0 Total: \$261,944
Prin. Invest.: D GUSTAFSON
Tech. Officer: GSFC/S HOWARD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7664 **UNIV OF FLORIDA** **3770**
 "THE USE OF SATELLITE-GENERATED METEOROLOGICAL DATA TO PREDICT MOSQUITO-BORNE ENCEPHALITIS TRANSMISSION"
 09/09/1998 - 09/30/2000 FY02: -\$315 Total: \$35,685
Prin. Invest.: J F DAY
Tech. Officer: GSFC/B W MESSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8522 **UNIV OF FLORIDA** **3771**
 CHEMICAL ABUNDANCES AND EVOLUTION IN QUASARS AND ACTIVE GALACTIC NUCLEI
 05/12/1999 - 05/14/2002 FY02: \$0 Total: \$205,000
Prin. Invest.: F W HAMANN
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8944 **UNIV OF FLORIDA** **3772**
 COMPLEX SILICATE GRAINS WITH SUBLIMATING MANTLES: A SYSTEMATIC LABORATORY STUDY OF OPTICAL PROPERTIES
 01/13/2000 - 01/14/2003 FY02: \$70,795 Total: \$204,564
Prin. Invest.: L KOLOKOLOVA
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9280 **UNIV OF FLORIDA** **3773**
 A GLOBAL, MULTI-WAVEBAND MODEL OF THE ZODIACAL CLOUD (ADP 99)
 03/21/2000 - 03/31/2003 FY02: \$45,178 Total: \$131,624
Prin. Invest.: K GROGAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9331 **UNIV OF FLORIDA** **3774**
 LAND-USE & LAND-COVER CHANGE: DECADAL-SCALE DYNAMICS OF LAND OWNERSHIP LAND MANAGEMENT & CARBON
 03/28/2000 - 04/30/2003 FY02: \$115,000 Total: \$311,662
Prin. Invest.: M W BINFORD
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

FLORIDA

NASA'S UNIVERSITY PROGRAM

NAG 5 10567 UNIV OF FLORIDA 3775
 CHARACTERIZATION AND SIMULATION OF REMOTELY SENSED SOIL MOIS-
 TURE FOR RAINFALL-RUNOFF MODELING
 03/12/2001 - 03/14/2004 FY02: \$81,142 Total: \$159,995
Prin. Invest.: J JACOBS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10670 UNIV OF FLORIDA 3776
 MOLTEN MORPHOLOGIES & NON-EQUILIBRIUM MINERAL COMP OSITIONS
 GENERATED BY A POLYMER-INDUCE LIQUID PRE
 03/29/2001 - 04/30/2004 FY02: \$100,000 Total: \$200,000
Prin. Invest.: L B GOWER
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11635 UNIV OF FLORIDA 3777
 A MULTIWAVELENGTH STUDY OF LBCGS FROM Z=1 TO Z=0 (LTSA 2001)
 01/29/2002 - 01/31/2007 FY02: \$83,761 Total: \$83,761
Prin. Invest.: R GUZMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11643 UNIV OF FLORIDA 3778
 ORIGINS AND DYNAMICS OF INTERPLANETARY DUST PARTIC LES
 01/23/2002 - 01/31/2005 FY02: \$86,600 Total: \$86,600
Prin. Invest.: S F DERMOTT
Tech. Officer: GSFC/D SENSEK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12565 UNIV OF FLORIDA 3779
 THE RESPONSE OF SOIL CARBON TO PERMAFROST MELTING IN HIGH
 LATITUDE ECOSYSTEMS
 09/12/2002 - 09/14/2005 FY02: \$119,600 Total: \$119,600
Prin. Invest.: E SCHUUR
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1251 UNIV OF FLORIDA 3780
 R/S " CONFINEMENT AND PROPULSION CHARACTERISTICS OF THE
 GASDYNAMIC MIRROR FUSION ROCKET"
 12/23/1996 - 12/31/2002 FY02: \$70,000 Total: \$489,878
Prin. Invest.: S ANGHAI
Tech. Officer: MSFC/M J VANDYKE
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1673 UNIV OF FLORIDA 3781
 MORPHOLOGICAL STABILITY OF FACETED INTERFACES
 05/16/2000 - 11/30/2003 FY02: \$90,000 Total: \$220,500
Prin. Invest.: R ABBASCHIAM
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1675 UNIV OF FLORIDA 3782
 THE FEATURES OF SELF-ASSEMBLING ORGANIC BILAYERS IMPORTANT TO
 THE FORMATION OF INORGANIC MATERIALS.
 05/11/2000 - 11/30/2003 FY02: \$90,000 Total: \$215,500
Prin. Invest.: D TALHAM
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1679 UNIV OF FLORIDA 3783
 AN ELETROCHEMICAL METHOD TO VISUALIZE FLOW IN LIQUID METALS
 04/25/2000 - 11/30/2003 FY02: \$110,000 Total: \$259,500
Prin. Invest.: T J ANDERSON
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1729 UNIV OF FLORIDA 3784
 DEVELOPMENT AND APPLICATION OF OPTIMIZATION TECHNIQUES FOR
 ROCKET ENGINE COMPONENT DESIGN
 06/16/2000 - 05/31/2001 FY02: -\$29 Total: \$49,971
Prin. Invest.: W SHYY
Tech. Officer: MSFC/L W GRIFFIN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 8 1791 UNIV OF FLORIDA 3785
 RESEARCH ENTITLED, "DEV. OF OPTIMIZATION STRATEGIE FOR FULL-
 FLOW STAGED COMBUSTION INJECTORS
 03/15/2001 - 03/14/2005 FY02: \$100,000 Total: \$180,000
Prin. Invest.: W SHYY
Tech. Officer: MSFC/K TUCKER, MSFC/D CHAFFEE
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1821 UNIV OF FLORIDA 3786
 APPLICATION OF PRESSURE SENSITIVE PAINT TO THE MSFC 14 INCH
 TRISONIC WIND TUNNEL
 06/01/2001 - 08/31/2002 FY02: \$10,511 Total: \$39,872
Prin. Invest.: B CARROLL
Tech. Officer: MSFC/A L FROST
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG10 145 UNIV OF FLORIDA 3787
 GENETICALLY ENGINEERED PLANT BIOMONITOR IN MICRO- GRAVITY
 09/21/1994 - 08/31/2001 FY02: \$0 Total: \$711,208
Prin. Invest.: R J FERL
Tech. Officer: KSC/W M KNOTT
CASE Category: 55 – AGRICULTURE

NAG10 285 UNIV OF FLORIDA 3788
 CRYOGENICS R&T SUPPORT FOR KENNEDY SPACE CENTER CRYOGENICS
 R&T SUPPORT FOR KENNEDY SPACE CENTER
 06/05/2000 - 05/18/2003 FY02: \$0 Total: \$225,000
Prin. Invest.: C SEGAL
Tech. Officer: KSC/M LONERGAN
CASE Category: 43 – CHEMICAL ENGR

NAG10 291 UNIV OF FLORIDA 3789
 TIANGENIC PLANT BIOMONITORS TIANGENIC PLANT BIOMONITORS
 09/29/2000 - 09/30/2003 FY02: \$170,000 Total: \$365,399
Prin. Invest.: R J FERL
Tech. Officer: KSC/D R COX
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG10 293 UNIV OF FLORIDA 3790
 DEVELOPMENT OF AN OBJECT-ORIENTED ALS-CROP DATABAS E SYSTEM
 FOR DOCUMENTING RESEARCH AND MARS DEPLOY
 12/08/2000 - 10/29/2003 FY02: \$62,500 Total: \$107,500
Prin. Invest.: R A BUCKLIN
Tech. Officer: KSC/J C SAGER
CASE Category: 55 – AGRICULTURE

NAG10 303	UNIV OF FLORIDA	3791	NCC 2 5246	UNIV OF FLORIDA	3799
ELECTROLYTIC REDUCTION OF CO-2 TO 0-2 AND CO FOR I SRU WITH HIGH CONDUCTIVITY SOLID OXIDE ELECTROLYT			OPTIMIZATION OF INFRARED DETECTOR ARRAYS FOR AIRBORNE ASTRO		
07/27/2001 - 04/30/2002	FY02: -\$508	Total: \$14,492	12/03/1997 - 02/28/2001	FY02: -\$1,227	Total: \$141,595
<i>Prin. Invest.:</i> E D WACHSMAN			<i>Prin. Invest.:</i> C M TELESKO, R K PIKA		
<i>Tech. Officer:</i> KSC/D E LUECK			<i>Tech. Officer:</i> ARC/E F ERICKSON, ARC/M R HAAS		
<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG10 316	UNIV OF FLORIDA	3792	NCC 2 5403	UNIV OF FLORIDA	3800
SPACE AGRICULTURE AND BIOTECHNOLOGY RESEARCH AND EDUCATION (SABRE)			COMPUTATIONAL INVESTIGATION OF CARBON NANOTUBE MATERIALS		
04/29/2002 - 09/30/2003	FY02: \$4,750,000	Total: \$4,750,000	10/11/2000 - 11/30/2002	FY02: \$45,258	Total: \$90,131
<i>Prin. Invest.:</i> W M PHILLIPS			<i>Prin. Invest.:</i> S SINNOTT		
<i>Tech. Officer:</i> KSC/D FITCH			<i>Tech. Officer:</i> ARC/H PARTRIDGE, ARC/M MEYYAPPAN		
<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)			<i>CASE Category:</i> 22 – COMPUTER SCIENCE		
NAS10 96004	UNIV OF FLORIDA	3793	NCC 2 5424	UNIV OF FLORIDA	3801
ON-SITE MEDICAL SUPPORT DURING STS LAUNCH & LANDING OPERATIONS			UF PARTICIPATION IN THE AIRBORNE INFRARED ECHELLE SPECTROMETER PROJECT		
09/13/1996 - 09/30/2001	FY02: -\$44,104	Total: \$468,451	02/27/2001 - 02/28/2002	FY02: -\$24,352	Total: \$11,815
<i>Prin. Invest.:</i> A H NEIMS			<i>Prin. Invest.:</i> R K PINA		
<i>Tech. Officer:</i> KSC/D A TIPTON			<i>Tech. Officer:</i> ARC/E F ERICKSON		
<i>CASE Category:</i> 56 – MEDICL			<i>CASE Category:</i> 11 – ASTRONOMY		
NCC 1 397	UNIV OF FLORIDA	3794	NCC 3 994	UNIV OF FLORIDA	3802
FLEXIBLE WING BASED MICRO AERIAL VEHICLES			INST FOR FUTURE SPACE TRANSPORT INST FOR FUTURE SPACE TRANSPORT		
05/24/2000 - 09/30/2001	FY02: -\$52	Total: \$74,868	08/19/2002 - 08/18/2007	FY02: \$740,000	Total: \$740,000
<i>Prin. Invest.:</i> P G IFJU, D A JENKINS			<i>Prin. Invest.:</i> D SHYY		
<i>Tech. Officer:</i> LARC/M R WASZAK			<i>Tech. Officer:</i> GRC/M HYATT		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NCC 1 01023	UNIV OF FLORIDA	3795	NCC 8 149	UNIV OF FLORIDA	3803
REAL-TIME FEEDBACK FLOW CONTROL			RESEARCH IN COMMUNICATING SCIENTIFIC KNOWLEDGE		
02/14/2001 - 01/31/2004	FY02: \$70,000	Total: \$140,000	12/22/1997 - 08/31/2002	FY02: \$0	Total: \$1,039,917
<i>Prin. Invest.:</i> L N CATTAFESTA, III, M SHEPLAK			<i>Prin. Invest.:</i> D TREISE		
<i>Tech. Officer:</i> LARC/A E WASHBURN, LARC/W L SELLERS			<i>Tech. Officer:</i> MSFC/R KOCZOR		
<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NCC 1 01060	UNIV OF FLORIDA	3796	NCC 8 157	UNIV OF FLORIDA	3804
CHARACTERIZATION OF MICROMACHINED THERMAL SHEAR STRESS SENSOR FOR QUANTITATIVE TURBULENCE MEASUREMENT			SOUTHEAST REGIONAL EARTH SCIENCE APPLICATIONS CENTER		
08/30/2001 - 08/31/2003	FY02: \$65,260	Total: \$70,260	10/20/1998 - 10/20/2003	FY02: \$0	Total: \$120,000
<i>Prin. Invest.:</i> M SHEPLAK, W SHYY, L N CATTAFESTA, III			<i>Prin. Invest.:</i> J W JONES, J W HANSEN		
<i>Tech. Officer:</i> LARC/A E WASHBURN, LARC/A E WASHBURN			<i>Tech. Officer:</i> MSFC/J ARNOLD		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE		
NCC 1 02004	UNIV OF FLORIDA	3797	NCC 9 110	UNIV OF FLORIDA	3805
FLEXIBLE WING BASED MICRO AERIAL VEHICLES			ENVIRONMENTAL SYSTEMS COMMERCIAL SPACE TECH CNTR		
12/19/2001 - 12/18/2002	FY02: \$70,665	Total: \$70,665	09/22/2000 - 11/30/2005	FY02: \$500,000	Total: \$1,426,741
<i>Prin. Invest.:</i> P G IFJU			<i>Prin. Invest.:</i> J J WARWICK		
<i>Tech. Officer:</i> LARC/M R WASZAK			<i>Tech. Officer:</i> JSC/K R DAUES		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 54 – ENVIRONMENTAL BIOLOGY		
NCC 2 1197	UNIV OF FLORIDA	3798	NGT 1 01022	UNIV OF FLORIDA	3806
DO INTEGRINS MEDIATE THE SKELETAL RESPONSE TO ALTE RED LOADING? (SUBPROJECT C)			GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)		
08/28/2000 - 09/30/2003	FY02: \$26,814	Total: \$75,231	06/01/2001 - 06/30/2003	FY02: \$0	Total: \$22,000
<i>Prin. Invest.:</i> T J WRONSKI			<i>Prin. Invest.:</i> M SHEPLAK		
<i>Tech. Officer:</i> ARC/R K GLOBUS, ARC/E M HOLTON			<i>Tech. Officer:</i> LARC/K K TEDJOJWONS		
<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
			NGT 1 52233	UNIV OF FLORIDA	3807
			GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)		
			04/24/2000 - 06/30/2001	FY02: \$0	Total: \$22,000
			<i>Prin. Invest.:</i> M SHEPHERD		
			<i>Tech. Officer:</i> LARC/K K TEDJOJIONO		
			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		

FLORIDA

NASA'S UNIVERSITY PROGRAM

NGT 5 128 UNIV OF FLORIDA 3808
 ADAPTIVE SATELLITE ATTITUDE CONTROL/KEVIN J. WALCH KO
 08/22/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P C MASON
Tech. Officer: GSFC/M S BURRELL
CASE Category: 46 – MECHANICAL ENGR

NGT 5 50031 UNIV OF FLORIDA 3809
 DETECTING PLANETS IN CIRCUMSTELLAR DISKS
 07/17/1997 - 01/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: S DERMOTT
Tech. Officer: GSFC/K BLANDING
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 50233 UNIV OF FLORIDA 3810
 LOOKING FOR VARIATIONS IN THE INITIAL MASS FUNCTION: FIRST
 COMPREHENSIVE NEAR-INFRARED SPECTROSCOPY
 05/27/1999 - 06/30/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: E A LADA
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52890 UNIV OF FLORIDA 3811
 CRITICAL INITIAL FLAW (CIF) SIZE EVALUATION IN SINGLE CRYSTAL
 NICKEL-BASE (PWA 1493)
 06/01/2000 - 10/30/2001 FY02: -\$2,856 Total: \$19,144
Prin. Invest.: N ARAKERE
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NGT10 52626 UNIV OF FLORIDA 3812
 HIGH PERFORMANCE MASS SPECTROMETRY WITH A MINIATURE ION
 TRAP FOR BIOLOGICAL AND ENVIRONMENTAL MONITORING
 07/20/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R A YOST
Tech. Officer: KSC/F ADAMS
CASE Category: 12 – CHEMISTRY

NGT10 52632 UNIV OF FLORIDA 3813
 NASA BASED OBJECT DATABASE APPLICATION NASA BASED OBJECT
 DATABASE APPLICATION
 08/22/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: H BECK
Tech. Officer: KSC/C D BLACK
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT10 52633 UNIV OF FLORIDA 3814
 PRODUCTION OF OXYGEN FROM CARBON DIOXIDE IN A MARTIAN
 ATMOSPHERE USING PRECIOUS METAL CATALYSTS ON
 08/22/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: G B HOFSLUND
Tech. Officer: KSC/C BLACK
CASE Category: 43 – CHEMICAL ENGR

NAG 5 6577 UNIV OF MIAMI 3815
 HIGH ACCURACY INFRARED INTERFEROMETRIC VALIDATION OF SATELLITE
 SURFACE TEMPERATURE RETRIEVALS
 12/12/1997 - 05/31/2001 FY02: \$0 Total: \$599,877
Prin. Invest.: P J MINNETT
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6659 UNIV OF MIAMI 3816
 A STUDY OF THE IMPACT OF OCEANIC BIOLOGICAL PROCESSES ON THE
 AIR-SEA EXCHANGE OF METHYL BROMIDE:
 11/20/1997 - 04/30/2003 FY02: \$66,196 Total: \$386,261
Prin. Invest.: R ZIKA
Tech. Officer: GSFC/C W TREES
CASE Category: 11 – ASTRONOMY

NAG 5 7110 UNIV OF MIAMI 3817
 TOMS VALIDATION BASED ON PROFILES OF AEROSOL PROPERTIES IN
 THE LOWER TROPOSPHERE AS OBTAINED WITH
 03/18/1998 - 03/31/2002 FY02: \$0 Total: \$452,904
Prin. Invest.: D M PROSPERO
Tech. Officer: GSFC/J HERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7674 UNIV OF MIAMI 3818
 INTEGRATION OF LONG TERM OCEANIC AEROSOL RECORDS FROM UNIV
 OF MIAMI NETWORK STATIONS WITH
 09/09/1998 - 08/31/2001 FY02: \$0 Total: \$120,000
Prin. Invest.: J M PROSPERO
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8229 UNIV OF MIAMI 3819
 STUDIES OF WESTERN PACIFIC INTERANNUAL ANOMALY PATTERNS
 TOWARD IMPROVED ENSO PREDICTION.
 02/24/1999 - 03/31/2002 FY02: \$0 Total: \$175,623
Prin. Invest.: G HALIWELL
Tech. Officer: GSFC/M RIENECKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8864 UNIV OF MIAMI 3820
 SEAWIFS DATA COLLECTION, CALIBRATION, & PROCESSING FOR THE
 INDIAN OCEAN
 12/02/1999 - 01/31/2002 FY02: \$0 Total: \$107,010
Prin. Invest.: R H EVANS
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9066 UNIV OF MIAMI 3821
 PRESENT DAY TECTONICS OF THE CENTRAL ANDES
 02/18/2000 - 02/28/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: T H DIXON
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9068 UNIV OF MIAMI 3822
 VOLCANO PLUME MONITORING USING UNMANNED AERIAL VEHICLES
 02/17/2000 - 02/28/2003 FY02: \$0 Total: \$188,510
Prin. Invest.: T H DIXON
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9627 UNIV OF MIAMI 3823
 A SATELLITE DATA RECEPTION & ANALYSIS FACILITY FOR ENVIRONMENTAL
 MONITORING IN THE SOUTHEASTERN
 08/10/2000 - 07/14/2003 FY02: \$0 Total: \$1,912,800
Prin. Invest.: T DIXON
Tech. Officer: GSFC/A R TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NASA'S UNIVERSITY PROGRAM

FLORIDA

NAG 5 9739 UNIV OF MIAMI 3824
 DERIVATION, VALIDATION, & EXPLOITATION OF SEA-SUR FACE TEMPERA-
 TURES MEASURED BY SENSORS ON TRMM
 06/28/2000 - 05/31/2003 FY02: \$95,000 Total: \$246,500
Prin. Invest.: P J MINNETT
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10588 UNIV OF MIAMI 3825
 CONTINUED PROCESSING & EXTENSION OF THE AVHRR PATH FINDER
 OCEANS GLOBALSEA SURFACE TEMPERATUREDATA
 03/20/2001 - 03/31/2004 FY02: \$113,120 Total: \$220,180
Prin. Invest.: R EVANS
Tech. Officer: GSFC/J DODGE
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10725 UNIV OF MIAMI 3826
 ACTIVITIES AS PROJECT SCIENTIST OF THE GLOBAL MODE LING INITIA-
 TIVE.
 04/09/2001 - 02/29/2004 FY02: \$167,649 Total: \$329,916
Prin. Invest.: J RODRIGUEZ
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10963 UNIV OF MIAMI 3827
 IMPROVING TROPICAL CYCLONE QUANTITATIVE PRECIPITATION FORE-
 CASTS USING TRMM PRECIPITATION ESTIMATES
 06/01/2001 - 05/31/2003 FY02: \$35,000 Total: \$105,000
Prin. Invest.: S S CHEN
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11104 UNIV OF MIAMI 3828
 TRANS-OCEANIC MEASUREMENTS FOR EOS AQUA VALIDATION AQUA-
 0058-0087
 07/13/2001 - 08/31/2004 FY02: \$271,025 Total: \$434,199
Prin. Invest.: P J MINNETT
Tech. Officer: GSFC/D Q STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11277 UNIV OF MIAMI 3829
 ANALYSIS OF TROPOSPHERIC MEASUREMENTS UTILIZING A HIERARCHY
 OF MODELS
 08/22/2001 - 08/31/2004 FY02: \$0 Total: \$78,555
Prin. Invest.: J RODRIGUEZ
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11392 UNIV OF MIAMI 3830
 IMPROVE ESTIMATE OF GAS TRANSFER USING SCATTERO- METER
 11/13/2001 - 10/31/2004 FY02: \$204,364 Total: \$204,364
Prin. Invest.: D BOGUCKI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11508 UNIV OF MIAMI 3831
 RADAR OBSERVATIONS OF TROPICAL CIRRUS ANVILS
 01/03/2002 - 12/31/2003 FY02: \$64,676 Total: \$64,676
Prin. Invest.: B A ALBRETCH
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11864 UNIV OF MIAMI 3832
 WAVES: AN UNDULATING OCEAN SURFACE
 03/13/2002 - 02/28/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: H GRABER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12103 UNIV OF MIAMI 3833
 LONG-RANGE TRANSPORT OF VIABLE MICROORGANISMS THRO UGH THE
 ATMOSPHERE: THE IMPACT OF AFRICANSOURC
 04/25/2002 - 04/30/2003 FY02: \$69,932 Total: \$69,932
Prin. Invest.: J M PROSPERO
Tech. Officer: GSFC/N MAYNARD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12513 UNIV OF MIAMI 3834
 FEASIBILITY STUDY TO DETERMINE OCEANIC MIXED LAYER DEPTH USING
 LIDAR MEASUREMENTS
 08/27/2002 - 08/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D BOGUCKI
Tech. Officer: GSFC/C TREES
CASE Category: 11 – ASTRONOMY

NAG 9 1346 UNIV OF MIAMI 3835
 CELL TRANSPLANTATION THERAPY FOR DIABETES
 08/15/2001 - 09/30/2004 FY02: \$256,000 Total: \$322,000
Prin. Invest.: L INVERARDI
Tech. Officer: JSC/D RISEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG13 02050 UNIV OF MIAMI 3836
 CSTARS"DATA RECEPTION AND ANALYSIS FOR SE US, GULF OF MEXICO,
 CARIBBEAN BASIN EQUATORIAL BASIN
 08/02/2002 - 07/14/2003 FY02: \$1,200,000 Total: \$1,200,000
Prin. Invest.: T DIXON
Tech. Officer: SSC/C DEL CASTILLO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 31361 UNIV OF MIAMI 3837
 MODIS - INVESTIGATION
 01/15/1992 - 06/14/2003 FY02: \$1,161,000 Total: \$9,475,000
Prin. Invest.: O B BROWN
Tech. Officer: GSFC/H OSEROFF
CASE Category: 33 – OCEANOGRAPHY

NAS 5 31362 UNIV OF MIAMI 3838
 EOS/MODIS INVESTIGATION ENTITLED: "PROCESSING/ CALIBRATION FOR
 OCEAN OBSERVATION WITH EOS/MODIS"
 12/13/1991 - 06/14/2003 FY02: \$1,477,000 Total: \$12,599,000
Prin. Invest.: R EVANS
Tech. Officer: GSFC/H OSEROFF
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 31363 UNIV OF MIAMI 3839
 MODERATE RESOLUTION IMAGING SPECTROMETER INVESTIGATION -
 OCEAN
 01/15/1992 - 06/14/2003 FY02: \$750,000 Total: \$6,948,000
Prin. Invest.: H GORDON
Tech. Officer: GSFC/H OSEROFF
CASE Category: 31 – ATMOSPHERIC SCIENCE

FLORIDA

NASA'S UNIVERSITY PROGRAM

NCC 1 01021 UNIV OF MIAMI 3840
 DEPLOY FAST-GAS GC/MS SYS TO MEAS C2&C5 CARBONYLS, METHANOL
 & ETHANOL ON NASA AIRCRAFT DURING TRACE-
 03/13/2001 - 10/14/2002 FY02: \$75,558 Total: \$125,517
Prin. Invest.: D D RIEMER
Tech. Officer: LARC/J L RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5500 UNIV OF MIAMI 3841
 CLUES TO CORAL REEF ECOSYSTEM HEALTH DERIVED FROM AIRBORNE
 HYPERSPECTRAL DATA COUPLED WITH RADIATIVE
 07/09/2002 - 07/31/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: P KRAMER
Tech. Officer: ARC/L GUILD, ARC/J L DUNGAN
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NGT 5 30425 UNIV OF MIAMI 3842
 A STUDY OF GLOBAL RAINFALL DISTRIBUTIONS IN TROPIC AL CYCLONES
 USING NASA/TRMM DATA/STUDENT: MAN
 09/19/2001 - 09/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S S CHEN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01046 UNIV OF SOUTH FLORIDA 3843
 COMBINED THERMAL AND STRUCTURAL OPTIMIZATION OF FUNCTIONALLY
 GRADED TILE
 03/26/2001 - 12/31/2001 FY02: -\$78 Total: \$64,922
Prin. Invest.: R T HAFTA, S VENKATARAMAN, B V SANKAR
Tech. Officer: LARC/M L BLOSSER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 3 2614 UNIV OF SOUTH FLORIDA 3844
 DEVELOPMENT OF A FLEXIBLE II-VI-BASED HIGH PERFORMANCE HIGH
 BANDGAP DEVICE FOR THIN FILM TANDEM SOL
 05/23/2001 - 04/30/2003 FY02: \$104,740 Total: \$163,577
Prin. Invest.: D MOREL
Tech. Officer: GRC/A HEPP
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 3446 UNIV OF SOUTH FLORIDA 3845
 BOTTOM-ASSESSMENT AND WATER-CONSTITUENT ALGORITHM S FOR
 THE ETM IN THE COASTAL ZONE
 10/10/1996 - 06/30/2001 FY02: \$0 Total: \$782,681
Prin. Invest.: KARGER
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5202 UNIV OF SOUTH FLORIDA 3846
 COLLABORATION ON A STUDY OF SIGMA NAUGHT BLOOM EFFECTS ON
 RADAR ALTIMETERS
 06/18/1998 - 12/31/2002 FY02: \$0 Total: \$110,000
Prin. Invest.: G T MITCHUM
Tech. Officer: GSFC/G S HAYNE
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6301 UNIV OF SOUTH FLORIDA 3847
 HYPERSPECTRAL CHARACTERIZATION FOR APPLICATION TO CARBON
 CYCLING IN COASTAL REGIONS
 09/02/1997 - 08/14/2001 FY02: \$0 Total: \$335,571
Prin. Invest.: P COBLE
Tech. Officer: GSFC/J YODER
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6448 UNIV OF SOUTH FLORIDA 3848
 SYNOPTIC ANALYSIS OF FACTORS INFLUENCING CARBON FLUXES AT THE
 CARIACO CONTINENTAL MARGIN TIME SER
 10/24/1997 - 09/30/2001 FY02: \$0 Total: \$446,836
Prin. Invest.: F MULLER-KARGER
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6449 UNIV OF SOUTH FLORIDA 3849
 A NUMERICAL ANALYSIS OF NEW NITROGEN SOURCES OF NO 3 AND N2
 EFFECTING CARBON CYCLING IN THE SOUTH
 10/24/1997 - 10/14/2001 FY02: \$0 Total: \$582,965
Prin. Invest.: J WALSH
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8175 UNIV OF SOUTH FLORIDA 3850
 SOUTHEASTERN US X-BAND EOS DB RECEPTION FACILITY (SEUS-X):
 INFRASTRUCTURE FOR ENVIRONMENTAL ASSE
 02/04/1999 - 02/14/2001 FY02: \$9,340 Total: \$500,000
Prin. Invest.: F E MULLER-KARGER
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10532 UNIV OF SOUTH FLORIDA 3851
 SOUTHEASTERN US X-BAND EOS DB PROCESSING AND ANALYSIS FACIL-
 ITY INFRASTRUCTURE FOR ENVIRONMENT
 03/12/2001 - 02/28/2004 FY02: \$241,372 Total: \$468,691
Prin. Invest.: F MULLER-KARGER
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10738 UNIV OF SOUTH FLORIDA 3852
 IMPACTS OF LARGE RIVER PLUMES ON CARBON AND SALT FLUXES IN THE
 SURFACE OCEAN
 04/18/2001 - 04/30/2004 FY02: \$93,705 Total: \$219,558
Prin. Invest.: C CHU
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10908 UNIV OF SOUTH FLORIDA 3853
 A MILLENNIUM GLOBAL SCALE CORAL REEF ECOSYSTEM ASSESSMENT
 USING HIGH RESOLUTION REMOTESENSING DATA
 05/07/2001 - 05/31/2004 FY02: \$111,279 Total: \$161,279
Prin. Invest.: S ANDREFOUET
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11254 UNIV OF SOUTH FLORIDA 3854
 AN ASSESSMENT OF GLOBAL ORGANIC CARBON FLUX ALONG CONTINEN-
 TAL MARGINS
 08/20/2001 - 08/31/2004 FY02: \$44,574 Total: \$178,119
Prin. Invest.: F MULLER-KARGER
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11318 UNIV OF SOUTH FLORIDA 3855
 VOLCANIC PLUME MONITORING USING UNMANNED AERIAL VEHICLES
 10/17/2001 - 09/30/2003 FY02: \$202,559 Total: \$202,559
Prin. Invest.: C B CONNOR
Tech. Officer: GSFC/H V FREY
CASE Category: 11 – ASTRONOMY

NAG 8 1381 **UNIV OF SOUTH FLORIDA** **3856**
 RESEARCH "DEVELOPMENT OF AN INSULIN SECRETING IMMUNOPRIV-
 LEGED CELL-CELL AGGREGATE UTILIZING
 06/01/1997 - 12/31/2001 FY02: \$0 Total: \$426,000
Prin. Invest.: D CAMERON
Tech. Officer: MSFC/B GUYNES, MSFC/J MAYO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 648 **UNIV OF SOUTH FLORIDA** **3857**
 EVALUATION OF OVARIAN TUMOR CELL GROWTH AND GENE EXPRESSION
 10/28/1992 - 01/31/2002 FY02: \$0 Total: \$600,000
Prin. Invest.: J L BECKER
Tech. Officer: JSC/S R GONDA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1341 **UNIV OF SOUTH FLORIDA** **3858**
 3D GROWTH EFFECTS ON DRUG RESISTANCE IN HUMAN OVARIAN TUMOR
 CELLS
 08/01/2001 - 09/30/2004 FY02: \$135,000 Total: \$170,000
Prin. Invest.: J L BECKER
Tech. Officer: JSC/D RISIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1365 **UNIV OF SOUTH FLORIDA** **3859**
 CREATION AND TRANSPLANTATION OF IMMUNOPRIVILEGED SERTOLI-
 LERON -AGGREGATED CELLS
 07/27/2001 - 09/30/2004 FY02: \$227,000 Total: \$295,000
Prin. Invest.: S SAPORTA, D F CAMERON, A E WILLING
Tech. Officer: JSC/D RISEN
CASE Category: 56 – MEDICAL

NAG 9 1431 **UNIV OF SOUTH FLORIDA** **3860**
 USING LANDSAT 7 DATA IN A GIS-BASED REVISION OF REEF BASE
 05/30/2002 - 04/07/2005 FY02: \$60,579 Total: \$60,579
Prin. Invest.: S ANDREFOUET
Tech. Officer: JSC/G BYRNE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG10 204 **UNIV OF SOUTH FLORIDA** **3861**
 EDUCATION GRANT ENTITLED "YES WE CARE"
 01/07/1997 - 06/30/2002 FY02: \$0 Total: \$324,546
Prin. Invest.: R E HENNING
Tech. Officer: KSC/J A DIGGS
CASE Category: 41 – AERONAUTICAL ENGR

NAG10 310 **UNIV OF SOUTH FLORIDA** **3862**
 EVALUATION OF A SURFACE-APPLIED CATHODIC PROTECTION SYSTEM
 02/11/2002 - 10/31/2002 FY02: \$30,000 Total: \$30,000
Prin. Invest.: D A SAGUESS
Tech. Officer: KSC/L MACDOWELL
CASE Category: 47 – METAL & MATERIALS ENGR

NAS 3 26412 **UNIV OF SOUTH FLORIDA** **3863**
 ACTS PROPAGATION EXPERIMENTS
 05/03/1993 - 09/30/2000 FY02: -\$6,590 Total: \$370,305
Prin. Invest.: R E HENNING
Tech. Officer: GRC/G J GUNDERMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 5 31716 **UNIV OF SOUTH FLORIDA** **3864**
 EARTH OBSERVING SYSTEM MODIS/HIRIS TEAM MEMBER INVESTIGATION
 01/15/1992 - 06/14/2003 FY02: \$698,000 Total: \$6,209,168
Prin. Invest.: K R CARDER
Tech. Officer: GSFC/H OSEROFF
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 30143 **UNIV OF SOUTH FLORIDA** **3865**
 EL NINO/SOUTHERN OSCILLATION IN THE ANTARCTIC CIRCUMPOLAR
 CURRENT
 08/27/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: G T MITHCHUM, HAAN
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30346 **UNIV OF SOUTH FLORIDA** **3866**
 CHARACTERIZATION OF CDOM RIVERINE CONTRIBUTION AND DISTRIBUTION
 THOROUGH REMOTE SENSING SATELLITE IMA
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: P COBLE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30354 **UNIV OF SOUTH FLORIDA** **3867**
 IMPACT OF LARGE & SMALL RIVERSON ADJACENT OCEANIC
 ENVIRONMENTS/STUDENT: ANA ODRIOLLA
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: F MULLER-KARGER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30414 **UNIV OF SOUTH FLORIDA** **3868**
 MAPPING AND MONITORING OF CHANGE IN THE FLORIDA KEYS REEF
 TRACT FROM SPACE USING LANDSAT 7, MODIS
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: F MULLER-KARGER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50422 **UNIV OF SOUTH FLORIDA** **3869**
 IRON FERTILIZATION OF TRICHODESMIUM ON THE WEST FLORIDA SHELF:
 A THREE-DIMENSIONAL PHYSICAL
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J WALSH
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2236 **UNIV OF WEST FLORIDA** **3870**
 INTELLIGENT TACTILE SYSTEMS FOR IMPROVED SAFETY OF FLIGHT
 (NRA-98-LARC-8)
 09/20/1999 - 03/31/2002 FY02: \$0 Total: \$395,962
Prin. Invest.: A K RAV
Tech. Officer: LARC/W K GERDEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1225 **UNIV OF WEST FLORIDA** **3871**
 ATTENTION DIRECTING PILOTING DISPLAY: OZ A COMPUTER-BASED
 HUMAN-CENTERED SYSTEM
 05/29/1998 - 01/31/2002 FY02: \$0 Total: \$472,427
Prin. Invest.: D L STILL
Tech. Officer: ARC/D C FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1226 **UNIV OF WEST FLORIDA** **3872**
 INTELLIGENT HUMAN COMPUTER TACTILE INTERFACES FOR ROTOR-
 CRAFT & CIVIL AVIATION
 06/11/1998 - 12/31/2001 FY02: \$0 Total: \$485,906
Prin. Invest.: N SURI, F GUEDRY, A RAZ
Tech. Officer: ARC/J DEMAIO, ARC/J V LEBACQZ
CASE Category: 41 – AERONAUTICAL ENGR

GEORGIA

NASA'S UNIVERSITY PROGRAM

NAG 2 1332 UNIV OF WEST FLORIDA 3873
 ADAPTING AN ATTENTION DIRECTION PILOTING DISPLAY FOR THE SPACE SHUTTLE
 06/21/1999 - 09/30/2001 FY02: -\$1,648 Total: \$220,948
Prin. Invest.: D STILL
Tech. Officer: HQ/A R GROSS
CASE Category: 45 – ELECTRICAL ENGR

NAG 2 1490 UNIV OF WEST FLORIDA 3874
 TACTILE INTERFACES TO ENHANCE SAFETY PERFORMANCE A ND RELIABILITY IN AGRICULTURAL
 07/02/2001 - 06/30/2002 FY02: \$0 Total: \$54,000
Prin. Invest.: A K RAJ
Tech. Officer: ARC/J DEMAIO
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 5 8782 UNIV OF WEST FLORIDA 3875
 HAPTIC INTERFACES TO AUGMENT HUMAN/MACHINE INTERAC TION IN SPACE ACTIVITES
 08/30/1999 - 08/31/2002 FY02: \$0 Total: \$402,754
Prin. Invest.: A K RAJ
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1386 UNIV OF WEST FLORIDA 3876
 HUMAN CENTERED COMPUTING PERSPECTIVE ON MARS EXPLO RATION
 09/21/2001 - 10/31/2002 FY02: \$0 Total: \$175,000
Prin. Invest.: J HANSEN
Tech. Officer: JSC/B WARD
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1036 UNIV OF WEST FLORIDA 3877
 EXPLANATION & COLLABORATION THROUGH CONCEPT MAPS
 05/07/1998 - 06/30/2001 FY02: -\$943 Total: \$603,556
Prin. Invest.: A J CANAS
Tech. Officer: ARC/B H WHITAKER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1191 UNIV OF WEST FLORIDA 3878
 UNSOLOCATED PROPOSAL TO ESTABLISH THE INFORMATION TECHNOL- OGY ASSESSMENT CONSORTIUM (ITAC) & SUPPOR
 08/07/2000 - 05/31/2002 FY02: \$0 Total: \$959,849
Prin. Invest.: K M FORD
Tech. Officer: ARC/M E DUENAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1239 UNIV OF WEST FLORIDA 3879
 POLISHING: ENHANCING DATA QUALITY BY REPAIRING IM PERFECTIONS
 04/06/2001 - 02/28/2003 FY02: \$158,000 Total: \$275,000
Prin. Invest.: C M TENG
Tech. Officer: ARC/J SKILES
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1254 UNIV OF WEST FLORIDA 3880
 TEAMWORK IN PRACTICE: DESIGN FOR COLLABORATION IN MIXED HUMAN-ROBOTIC TEAMS
 04/27/2001 - 02/28/2003 FY02: \$174,500 Total: \$336,500
Prin. Invest.: J M BRADSHAW
Tech. Officer: ARC/R L ALENA, ARC/M G SHAFTO
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1283 UNIV OF WEST FLORIDA 3881
 MULTI-AGENT SOFTWARE DESIGN & ENGINEERING FOR HUMA N-CENTERED COLLABORATIVE AUTONOMOUS SPACE SYSTEMS
 09/04/2001 - 08/31/2003 FY02: \$150,000 Total: \$447,400
Prin. Invest.: J M BRADSHAW
Tech. Officer: ARC/D CLANCY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1295 UNIV OF WEST FLORIDA 3882
 MULTI-DOMAIN NETWORK LEARNING ALGORITHMS OF LATENT VARIABLE INTERPRETATION AND DISCOVERING GENETIC
 11/08/2001 - 11/14/2002 FY02: \$295,493 Total: \$295,493
Prin. Invest.: C GLYMOUR
Tech. Officer: ARC/J C COUGHLAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1297 UNIV OF WEST FLORIDA 3883
 CMAP TOOLS: A SOFTWARE ENVIRONMENT FOR KNOWLEDGE MODELING & SHARING
 12/18/2001 - 12/14/2002 FY02: \$100,000 Total: \$100,000
Prin. Invest.: A CANAS
Tech. Officer: ARC/M SHAFTO, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG10 165 VALENCIA COMM COLL 3884
 HIGH TECH TRNG OF INDIVIDUALS W/DISABILITY
 06/06/1995 - 08/31/2002 FY02: \$15,000 Total: \$150,043
Prin. Invest.: K WOODBERRY
Tech. Officer: KSC/G BUCKINGHAM
CASE Category: 22 – COMPUTER SCIENCE

GEORGIA

NAG 3 2806 ALBANY STATE UNIV 3885
 PRECOLL ACHIEVEMENT OF EXCELLENCE IN MATHEMATIC S, SCIENCE, ENGINEERING AND TECHNOLOGY (PACE/MSET)
 09/12/2002 - 09/12/2005 FY02: \$99,107 Total: \$99,107
Prin. Invest.: G WRENSFORD
Tech. Officer: GRC/R F LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 265 ALBANY STATE UNIV 3886
 ALBANY STATE UNIV HIGH SCHOOL/HIGH TECH ALBANY STATE UNIV HIGH SCHOOL/HIGH TECH
 09/10/1999 - 09/30/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: D HODGES-TILLER
Tech. Officer: KSC/R J MCKINNEY
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NAG 1 01091 CLARK ATLANTA UNIV 3887
 COMMERCIAL PROCESS DEVELOPMENT FOR POLYIMIDE FOAMS
 05/24/2001 - 05/24/2004 FY02: \$75,000 Total: \$150,000
Prin. Invest.: D R VEAZIE
Tech. Officer: LARC/E S WEISER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2292 CLARK ATLANTA UNIV 3888
 TEST AND EVALUATION OF NONCHROMATE FINISHING AGENT
 09/29/1999 - 08/23/2002 FY02: \$0 Total: \$199,998
Prin. Invest.: D OKHIO
Tech. Officer: GRC/R LAWRENCE
CASE Category: 43 – CHEMICAL ENGR

NASA'S UNIVERSITY PROGRAM

GEORGIA

NAG 5 6889 **CLARK ATLANTA UNIV** **3889**
ELECTRON EXCITATION CROSS SECTIONS OF ATOMS AND IONS REL-
EVANT TO PLANETARY ATMOSPHERES
01/21/1998 - 09/30/2001 FY02: \$0 Total: \$192,755
Prin. Invest.: S TAYAL
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8792 **CLARK ATLANTA UNIV** **3890**
DEVELOPMENT OF DISPERSION RELATIONS FOR SOLAR AND STELLAR
DIAGNOSTICS
09/02/1999 - 08/31/2001 FY02: \$0 Total: \$197,950
Prin. Invest.: A MSEZANE
Tech. Officer: GSFC/A TEMKIN
CASE Category: 13 – PHYSICS

NAG 5 11434 **CLARK ATLANTA UNIV** **3891**
ELECTRON COLLISIONAL EXCITATION STRENGTHS FOR IONS OF ASTRO-
PHYSICAL INTEREST
12/05/2001 - 03/31/2005 FY02: \$65,000 Total: \$65,000
Prin. Invest.: S S TAYAL
Tech. Officer: GSFC/H HASAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1493 **CLARK ATLANTA UNIV** **3892**
MOBILE SCIENCE, MATHEMATICS EDUCATION UNIT
06/01/1998 - 08/15/2001 FY02: -\$31,813 Total: \$264,171
Prin. Invest.: A MSEZANE
Tech. Officer: MSFC/W LOVE
CASE Category: 21 – MATHEMATICS

NAG 8 1535 **CLARK ATLANTA UNIV** **3893**
MASTAP FOR SCIENCE TEACHERS OPEN SUPPORT SYSTEMS (S-TOSS)
05/07/1998 - 05/01/2001 FY02: -\$33,102 Total: \$566,898
Prin. Invest.: B E ALICK
Tech. Officer: MSFC/A C BEAM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1814 **CLARK ATLANTA UNIV** **3894**
TRANSFER ICEMS INSPIRING CAREERS IN ENGINEERING, MATHEMATICS
AND SCIENCE FROM MOORHOUSE TO CLARK AT
05/21/2001 - 09/05/2001 FY02: -\$455 Total: \$19,409
Prin. Invest.: E MCDONALD
Tech. Officer: MSFC/E ORDONEZ
CASE Category: 21 – MATHEMATICS

NAS 3 01201 **CLARK ATLANTA UNIV** **3895**
RESIN TRANSFER MOLDING AND VACUUM ASSISTED RESIN TRANSFER
MOLDING PROGRAM
08/27/2001 - 07/31/2002 FY02: \$125,001 Total: \$181,137
Prin. Invest.: E A MINTZ
Tech. Officer: GRC/M A MEADOR
CASE Category: 12 – CHEMISTRY

NAS 3 02104 **CLARK ATLANTA UNIV** **3896**
PEM-FAN ALL COMPOSITE ELECTRIC AIRCRAFT ENGINE CONCEPT
06/13/2002 - 01/22/2003 FY02: \$99,786 Total: \$99,786
Prin. Invest.: J A FABUNMI
Tech. Officer: GRC/J A SEIDEL, GRC/L A BURKARDT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 552 **CLARK ATLANTA UNIV** **3897**
HIGH PERFORMANCE POLYMERS AND COMPOSITES CENTER
04/29/1997 - 03/31/2003 FY02: \$799,925 Total: \$5,799,363
Prin. Invest.: A A MINTZ
Tech. Officer: GRC/S DUTTA, GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 707 **CLARK ATLANTA UNIV** **3898**
LIQUID FUELS: PYROLYTIC DEGRADATION AND FIRE SPREAD BEHAVIOR
AS INFLUENCED BY BUOYANCY
05/19/1999 - 03/14/2003 FY02: -\$24,065 Total: \$343,169
Prin. Invest.: Y D YEBOAH
Tech. Officer: GRC/H D ROSS
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 910 **CLARK ATLANTA UNIV** **3899**
DEVELOPMENT OF THERMALLY STABLE AND HIGHLY FLUORESCENT IR
DYES
08/21/2001 - 08/19/2003 FY02: \$20,000 Total: \$40,000
Prin. Invest.: D R BU
Tech. Officer: GRC/M A MEADOR
CASE Category: 12 – CHEMISTRY

NCC 3 911 **CLARK ATLANTA UNIV** **3900**
DEVELOPING NOVEL FLUORESCENT MATERIALS WITH NEAR INFRARED
EMISSION BY USING M-PHEYLENE
09/04/2001 - 08/19/2003 FY02: \$20,000 Total: \$40,000
Prin. Invest.: D PANG
Tech. Officer: GRC/M A MEADOR
CASE Category: 12 – CHEMISTRY

NCC 5 347 **CLARK ATLANTA UNIV** **3901**
INTEGRATION OF RESEARCH AND EDUCATION IN THE AREA OF EARTH
SYSTEMS SCIENCE
07/01/1998 - 06/30/2003 FY02: \$469,658 Total: \$2,399,572
Prin. Invest.: C H WILLIAMS
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 666 **CLARK ATLANTA UNIV** **3902**
CLARK ATLANTA UNIV. AND PARTNERS CENTER FOR PREPARING MATH-
EMATICS AND SCIENCE TEACHERS FOR URBAN
08/22/2002 - 08/31/2005 FY02: \$198,778 Total: \$198,778
Prin. Invest.: B FLOURNOY
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2728 **EMORY UNIV** **3903**
CONFOCAL MICROSCOPY OF THE COLLOIDAL GLASS TRANSITION
05/06/2002 - 05/05/2006 FY02: \$84,998 Total: \$84,998
Prin. Invest.: E R WEEKS
Tech. Officer: GRC/R B ROGERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1579 **EMORY UNIV** **3904**
DESIGN, SYNTHESIS, AND CHARACTERIZATION OF WELL-DEFINED, BIO-
MIMETIC POLYPEPTIDE NETWORKS
01/05/1999 - 11/30/2002 FY02: \$113,284 Total: \$453,708
Prin. Invest.: V CONTICELLO
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 9 144 **EMORY UNIV** **3905**
 MODELING PROSTATE CANCER SKELETAL METASTASIS & GEN E THERAPY
 12/14/2001 - 11/30/2002 FY02: \$349,733 Total: \$349,733
Prin. Invest.: L CHUNG
Tech. Officer: JSC/D RISIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 1 01055 **GEORGIA INST OF TECHNOLOGY** **3913**
 INTELLIGENT PILOT AIDS FOR FLIGHT RE-PLANNING IN EMERGENCIES
 04/26/2001 - 04/25/2004 FY02: \$150,000 Total: \$215,325
Prin. Invest.: A R PRITCHETT
Tech. Officer: LARC/A C TRUJILLO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2146 **GEORGIA INST OF TECHNOLOGY** **3906**
 APPLIC OF CIRCULATION CONTROL TECHNOL TO AIRFRAME NOISE RE-
 DUCTION
 03/09/1999 - 02/28/2003 FY02: \$9,262 Total: \$643,983
Prin. Invest.: K K AHUIA, L N SANKAR, R J ENGLAN
Tech. Officer: LARC/R R ANTCLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01117 **GEORGIA INST OF TECHNOLOGY** **3914**
 NEURAL NETWORK BASED ADAPTIVE CONTROL FOR NONLINEAR FLIGHT
 REGIMES NRA 01-LARC-1
 08/16/2001 - 08/31/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: A J CALISE, N HOVAKIMYAN
Tech. Officer: LARC/M A MOTTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2149 **GEORGIA INST OF TECHNOLOGY** **3907**
 DEVELOPMENT FOR ADVANCED LIFE CYCLE COSTING METHOD FOR
 TECHNOLOGY BENEFITS/COSTS/RISK ASSESSMENT
 03/26/1999 - 12/31/2001 FY02: \$0 Total: \$323,593
Prin. Invest.: D N MAVRIS
Tech. Officer: LARC/M D MOORE, LARC/P A GELHAUSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02015 **GEORGIA INST OF TECHNOLOGY** **3915**
 DEVELOPMENT OF A MINIATURE PIEZOHYDRAULIC PUMP BASED ACTUA-
 TION SYSTEM WITH A SINGLE CRYSTAL
 12/06/2001 - 12/05/2004 FY02: \$74,954 Total: \$74,954
Prin. Invest.: C S LYNCH
Tech. Officer: LARC/G C HORNER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2169 **GEORGIA INST OF TECHNOLOGY** **3908**
 PNEUMATIC AERODYNAMICS AND CONTROL FOR CHANNEL WING
 POWERED-LIFT AIRCRAFT (FOLLOW-ON NAG-1-02075)
 03/24/1999 - 02/28/2002 FY02: \$0 Total: \$298,000
Prin. Invest.: R J ENGLAR
Tech. Officer: LARC/W T HODGES123
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02018 **GEORGIA INST OF TECHNOLOGY** **3916**
 EVALUATION OF THE NEW GENERATION TITANIUM MATRIX COMPOSITES
 FOR THE 3RD GENERATIONRLV
 12/13/2001 - 12/14/2003 FY02: \$67,201 Total: \$67,201
Prin. Invest.: W S JOHNSON
Tech. Officer: LARC/R K BIRD
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 2202 **GEORGIA INST OF TECHNOLOGY** **3909**
 SAGE II OZONE (V6.0) ANAL W/EMPHASIS ON LONG TERM TRENDS IN THE
 LOWER STRATOSPHERE(NRA-98-OES-04)
 06/11/1999 - 07/07/2002 FY02: \$0 Total: \$254,700
Prin. Invest.: D M CUNNOLD
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02023 **GEORGIA INST OF TECHNOLOGY** **3917**
 DESIGN METHODOLOGIES FOR REVOLUTIONARY AEROSPACE CONCEPTS
 01/15/2002 - 12/31/2004 FY02: \$150,000 Total: \$150,000
Prin. Invest.: D N MAVRIS
Tech. Officer: LARC/R E MCKINLEY,JR, LARC/W M KIMMEL
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2235 **GEORGIA INST OF TECHNOLOGY** **3910**
 EXPLORATION OF ADVANCED PROBABILISTIC/STOCHASTIC DESIGN METH-
 ODS
 08/26/1999 - 12/31/2002 FY02: \$139,876 Total: \$404,695
Prin. Invest.: D MAVRIS
Tech. Officer: GRC/R E YACKOVETSKY, GRC/M D MOORE
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 02054 **GEORGIA INST OF TECHNOLOGY** **3918**
 EQUIVALENT CONTINUUM CONCEPTS FOR DEFORMATION AND FRACTURE
 BASED ON MOLECULAR MODELING TECHNIQUES
 02/19/2002 - 02/28/2005 FY02: \$108,000 Total: \$108,000
Prin. Invest.: D L MCDOWELL, M ZHOU
Tech. Officer: LARC/E H GLAESSGEN, LARC/I S RAJU
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 2243 **GEORGIA INST OF TECHNOLOGY** **3911**
 DEMO/EVAL OF INTELLIGENT FLT PROPULSION & CONTROL SYS UNDER
 UNANTICIPATED CRITICALFAILURE CONDITION
 09/27/1999 - 09/30/2002 FY02: \$0 Total: \$162,846
Prin. Invest.: A J CALISE
Tech. Officer: LARC/P W GOODE
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 1 02075 **GEORGIA INST OF TECHNOLOGY** **3919**
 DEVELOPMENT OF PNEUMATIC CHANNEL WING POWER-LIFT AIRCRAFT
 TECHNOLOGY
 04/03/2002 - 04/02/2004 FY02: \$120,619 Total: \$120,619
Prin. Invest.: R J ENGLAR
Tech. Officer: LARC/B A CAMPBELL
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2312 **GEORGIA INST OF TECHNOLOGY** **3912**
 NANOTUBE REINFORCEMENT OF ADHESIVELY BONDED JOINTS
 06/20/2000 - 06/30/2003 FY02: \$0 Total: \$59,934
Prin. Invest.: W S JOHNSON
Tech. Officer: LARC/B J JENSEN
CASE Category: 46 – MECHANICAL ENGR

NAG 1 02088 **GEORGIA INST OF TECHNOLOGY** **3920**
 RESEARCH IN PLANETARY EXPLORATION AND PLANETARY ATMOSPHERIC
 FLIGHT
 04/30/2002 - 04/29/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: J R OLDS
Tech. Officer: LARC/H S WRIGHT, LARC/R D BRAUN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 02093 **GEORGIA INST OF TECHNOLOGY** **3921**
 INVESTIGATION OF PNEUMATIC INLET AND DIFFUSER BLOWING ON A
 DUCTED FAN PROPULSOR INSTATIC THRUST
 05/01/2002 - 12/15/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: S KONDOR, B ENGLAR
Tech. Officer: LARC/M D MOORE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1291 **GEORGIA INST OF TECHNOLOGY** **3922**
 SIMULATION OF THE NATIONAL AIRSPACE SYSTEM FOR SAFETY ANALYSIS
 02/02/1999 - 09/30/2002 FY02: \$48,436 Total: \$322,586
Prin. Invest.: D GOLDSMAN, A R PRITCHETT
Tech. Officer: ARC/C I STATLER, ARC/M C CONNORS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1314 **GEORGIA INST OF TECHNOLOGY** **3923**
 ENABLING CSPA OPERATIONS THROUGH PILOT DEVELOPMENT IN LONGI-
 TUDINAL APPROACH SPACING
 04/01/1999 - 06/30/2003 FY02: \$31,101 Total: \$181,302
Prin. Invest.: A B PRITCHETT
Tech. Officer: ARC/N BATTISTE, ARC/W W JOHNSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1418 **GEORGIA INST OF TECHNOLOGY** **3924**
 IN-FLIGHT DEMONSTRATION OF TACTILE CUEING ON RASCAL
 07/13/2000 - 08/31/2003 FY02: \$20,000 Total: \$119,658
Prin. Invest.: J P PRASAD, A J CALISE
Tech. Officer: ARC/M S WHALLEY, ARC/M B TISCHER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1431 **GEORGIA INST OF TECHNOLOGY** **3925**
 MOLECULAR BASIS OF MECHANO-SIGNAL TRANSDUCTION IN VASCULAR
 ENDOTHELIAL CELL
 08/15/2000 - 07/31/2003 FY02: \$154,734 Total: \$549,897
Prin. Invest.: H JO
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1488 **GEORGIA INST OF TECHNOLOGY** **3926**
 REAL-TIME CONTROL OF LEAN BLOWOUT IN A TURBINE ENGINE FOR
 MINIMIZING NOX EMISSIONS
 06/27/2001 - 05/31/2003 FY02: \$203,740 Total: \$553,718
Prin. Invest.: B ZINN
Tech. Officer: ARC/N N MANSOUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1571 **GEORGIA INST OF TECHNOLOGY** **3927**
 SYNTHESIS OF HAFNIUM BASED CERAMIC MATERIALS FOR ULTRA HIGH
 TEMPERATURE AEROSPACEAPPLICATIONS
 07/18/2002 - 07/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: M SACKS
Tech. Officer: ARC/S JOHNSON
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 1949 **GEORGIA INST OF TECHNOLOGY** **3928**
 THE DEVELOPMENT OF NOVEL, HIGH-FLUX, HEAT TRANSFER CELLS FOR
 THERMAL CONTROL IN MICROGRAVITY
 09/17/1996 - 09/12/2001 FY02: \$0 Total: \$480,000
Prin. Invest.: M K SMITH, A GLEZER
Tech. Officer: GRC/B SINGH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2006 **GEORGIA INST OF TECHNOLOGY** **3929**
 TERRESTRAL EXPERIMENTS ON G-GITTER EFFECTS ON TRANSPORT &
 PATTERN FORMATION
 01/24/1997 - 07/16/2001 FY02: \$0 Total: \$277,327
Prin. Invest.: M F SCHATZ, H L SWINNEY
Tech. Officer: GRC/W DUVAL, GRC/T K GLASGOW
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2329 **GEORGIA INST OF TECHNOLOGY** **3930**
 SINGLE-/MULTI-LAYER MICROSTRIP AND COPLANAR WAVEGUIDE LINES
 CROSSTALK
 02/09/2000 - 01/31/2003 FY02: \$50,623 Total: \$148,856
Prin. Invest.: D M TENTZERIS
Tech. Officer: GRC/G E PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2352 **GEORGIA INST OF TECHNOLOGY** **3931**
 DISTRIBUTED EXHAUST NOZZLES FOR JET NOISE REDUCTION
 03/10/2000 - 09/30/2001 FY02: \$0 Total: \$149,991
Prin. Invest.: D K AHULA
Tech. Officer: GRC/N H SAIYED
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2373 **GEORGIA INST OF TECHNOLOGY** **3932**
 NOVEL OPTICAL DIAGNOSTICS TECHNIQUES FOR STUDYING PARTICLE
 CONTACT AND DEPOSITION UPON A LARGE CYLINDER
 03/28/2000 - 11/30/2003 FY02: \$84,469 Total: \$201,621
Prin. Invest.: D YODA
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2431 **GEORGIA INST OF TECHNOLOGY** **3933**
 NON-COALESCENCE IN MICROGRAVITY: SCIENCE AND TECHNOLOGY
 05/23/2000 - 11/30/2003 FY02: \$85,500 Total: \$219,100
Prin. Invest.: D P NEITZEL
Tech. Officer: GRC/R SKARDA
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2500 **GEORGIA INST OF TECHNOLOGY** **3934**
 NONLINEAR DYNAMIC ANALYSIS OF DISORDERED BLADE-DISK ASSEM-
 BLIES
 11/03/2000 - 09/30/2001 FY02: \$0 Total: \$73,412
Prin. Invest.: D G MCGEE
Tech. Officer: GRC/J M LUCERO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2580 **GEORGIA INST OF TECHNOLOGY** **3935**
 MULTI-ACCESS & ROUTING PROTOCOLS FOR MULTICAST APPLICATIONS
 IN SATELLITE IP NETWORKS
 04/05/2001 - 03/07/2004 FY02: \$20,000 Total: \$75,000
Prin. Invest.: I F AKYILDIZ
Tech. Officer: GRC/C T RAMOS
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2585 **GEORGIA INST OF TECHNOLOGY** **3936**
 A MULTICAST PROTOCOL SUITE FOR SATELLITE IP NETWORKS
 04/10/2001 - 02/28/2004 FY02: \$0 Total: \$149,833
Prin. Invest.: D F AKYILDIZ
Tech. Officer: GRC/C T RAMOS
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2586 **GEORGIA INST OF TECHNOLOGY** **3937**
 AN INVESTIGATION OF APPLICATIONS FOR THERMODYNAMIC WORK POTENTIAL TO TURBOSHAF T ENGIN TECH EVALUATION
 04/06/2001 - 06/30/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: D N MAVRIS
Tech. Officer: GRC/D THURMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2649 **GEORGIA INST OF TECHNOLOGY** **3938**
 ACOUSTIC AND THERMOACOUSTICS: THE PATHWAY TO NO-MO VING-PARTS AEROSPACE PROPULSION
 12/31/2001 - 12/11/2004 FY02: \$99,933 Total: \$99,933
Prin. Invest.: D MAVRIS
Tech. Officer: GRC/K L SUDER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2653 **GEORGIA INST OF TECHNOLOGY** **3939**
 LARGE-EDDY/LATTICE BOLTZMANN SIMULATIONS OF MICRO-BLOWING/SUCTION STRATEGIES FOR SUBSONIC AND SUPER
 12/31/2001 - 12/11/2004 FY02: \$94,609 Total: \$94,609
Prin. Invest.: D MENON
Tech. Officer: GRC/D P HWANG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2660 **GEORGIA INST OF TECHNOLOGY** **3940**
 SUBGRID COMBUSTION MODELING FOR THE NEXT GENERATIO N NATIONAL COMBUSTION CODE
 12/22/2001 - 12/11/2004 FY02: \$98,500 Total: \$98,500
Prin. Invest.: S MENON
Tech. Officer: GRC/N LIU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2739 **GEORGIA INST OF TECHNOLOGY** **3941**
 DROP FORMULATION PROCESSES IN SOLIDS-LADON LIQUIDS DROP FORMULATION PROCESSES IN SOLIDS-LADON LIQUID
 04/02/2002 - 03/31/2006 FY02: \$62,607 Total: \$62,607
Prin. Invest.: D MORRIS
Tech. Officer: GRC/H K NAHRA
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2763 **GEORGIA INST OF TECHNOLOGY** **3942**
 VIBE TECHNOLOGY FOR MICROGRAVITY HEAT TRANSFER APP LICATIONS
 04/04/2002 - 03/31/2006 FY02: \$85,000 Total: \$85,000
Prin. Invest.: M K SMITH
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4190 **GEORGIA INST OF TECHNOLOGY** **3943**
 LABORATORY EVALUATION AND APPLICATION OF MICROWAVE UNDER SIMULATED CONDITIONS FOR PLANETARY ATMOSPHE
 06/10/1997 - 12/31/2001 FY02: -\$245 Total: \$432,606
Prin. Invest.: D G STEFFES
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7420 **GEORGIA INST OF TECHNOLOGY** **3944**
 ANALYSIS OF USER ASSISTANCE REQUESTS AT THE NASA G ODDARD DISTRIBUTED ACTIVE ARCHIVE CENTER
 06/09/1998 - 05/31/2002 FY02: \$0 Total: \$210,000
Prin. Invest.: C MITCHELL
Tech. Officer: GSFC/W TRUSZOKWSKI
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 7519 **GEORGIA INST OF TECHNOLOGY** **3945**
 APPRENTICE - INCREMENTAL PASS AUTOMATION INITIAL P ROTOTYPE AND EVALUATION WITH TRACE
 06/16/1998 - 05/31/2002 FY02: \$0 Total: \$90,000
Prin. Invest.: C MITCHELL
Tech. Officer: GSFC/J CATENA
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 7682 **GEORGIA INST OF TECHNOLOGY** **3946**
 GLOBAL DISTRIBUTION OF OF TROPOSPHERIC AEROSOLS:A 3-D MODEL ANALYSIS OF SATELITE DATA.
 09/09/1998 - 08/31/2002 FY02: \$0 Total: \$287,506
Prin. Invest.: M CHIN
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8698 **GEORGIA INST OF TECHNOLOGY** **3947**
 QUANTIFYING THE RELATIONSHIP BETWEEN REMOTELY- SENSED & MOD-ELED SOIL MOISTURE
 09/14/1999 - 06/30/2002 FY02: -\$23,034 Total: \$118,996
Prin. Invest.: C D PETERS-LIDARD
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8880 **GEORGIA INST OF TECHNOLOGY** **3948**
 PROJECT TO INTERFACE CLIMATE MODELING ON GLOBAL & REGIONAL SCALES WITH EARTH OBSERVING SYSTEM (EOS)
 11/24/1999 - 12/31/2001 FY02: \$0 Total: \$677,654
Prin. Invest.: R E DICKINSON
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8931 **GEORGIA INST OF TECHNOLOGY** **3949**
 LABORATORY INVESTIGATIONS OF STRATOSPHERIC & UPPER TROPO-SPHERIC CHEMISTRY
 01/19/2000 - 12/31/2002 FY02: \$183,111 Total: \$523,937
Prin. Invest.: P H WINE
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9868 **GEORGIA INST OF TECHNOLOGY** **3950**
 THE YANGTZE DELTA OF CHINA AS AN ENVOLVING METRO- AGRO-PLEX (MAP)
 08/09/2000 - 10/31/2001 FY02: -\$903 Total: \$249,097
Prin. Invest.: W L CHAMEIDES
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10209 **GEORGIA INST OF TECHNOLOGY** **3951**
 IMPROVING THE REPRESENTATION OF LAND IN CLIMATE MODELS BY APPLICATION OF EOS OBSERVATIONS
 12/29/2000 - 12/31/2003 FY02: \$499,707 Total: \$999,707
Prin. Invest.: R DICKINSON
Tech. Officer: GSFC/Y SUD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10374 **GEORGIA INST OF TECHNOLOGY** **3952**
 DIAGNOSTIC STUDIES OF SHORT-TERM CLIMATE VARIABILIT Y IN NASA/GSFC GENERAL CIRCULATION MODELS
 03/17/2001 - 03/31/2004 FY02: \$84,150 Total: \$169,150
Prin. Invest.: R X BLACK
Tech. Officer: GSFC/S SCHUBERT
CASE Category: 31 – ATMOSPHERICSCIENCE

NAG 5 10632 **GEORGIA INST OF TECHNOLOGY** **3953**
 COMPARISON OF INTERSTELLAR AND INTERPLANETARY DUST
 03/17/2001 - 06/30/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: J BRADLEY
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11063 **GEORGIA INST OF TECHNOLOGY** **3954**
 VARIABILITY OF AEROSOL DISTRIBUTION AND OPTICAL PROPERTIES
 SIMULATED BY GOCART MODEL USING TOMS
 06/26/2001 - 06/30/2002 FY02: -\$2,251 Total: \$58,919
Prin. Invest.: P GINOUX
Tech. Officer: GSFC/R MCPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11479 **GEORGIA INST OF TECHNOLOGY** **3955**
 AEROSOL, CHEMISTRY AND RADIATIVE FORCING: A 3-D MODEL ANALYSIS
 OF SATELLITE AND ACE-ASIA DATA
 12/21/2001 - 12/31/2003 FY02: \$60,800 Total: \$60,800
Prin. Invest.: M CHIN
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11671 **GEORGIA INST OF TECHNOLOGY** **3956**
 INVESTIGATING THE INFLUENCES OF CHANGES IN CONVECTION TYPES &
 BOUNDARY LAYER CLOUDS ON INTRASEASON
 01/28/2002 - 01/31/2005 FY02: \$163,000 Total: \$163,000
Prin. Invest.: R FU
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12122 **GEORGIA INST OF TECHNOLOGY** **3957**
 LABORATORY EVALUATION AND APPLICATION OF MICROWAVE ABSORPTION
 PROPERTIES UNDER SIMULATED CONDITIONS
 04/29/2002 - 04/30/2005 FY02: \$99,959 Total: \$99,959
Prin. Invest.: P G STEFFES
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12256 **GEORGIA INST OF TECHNOLOGY** **3958**
 "CHARACTERISTICS AND GLOBAL IMPACT OF AEROSOLS FROM S. AFRICA & E. ASIA: 3D
 MODEL ANAL DATA
 06/17/2002 - 06/30/2003 FY02: \$79,200 Total: \$79,200
Prin. Invest.: M CHIN
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12268 **GEORGIA INST OF TECHNOLOGY** **3959**
 RADIATION EFFECTS IN SIGE HBT BICMOS TECHNOLOGY
 06/25/2002 - 08/31/2003 FY02: \$61,668 Total: \$61,668
Prin. Invest.: J D CRESSLER
Tech. Officer: GSFC/R A REED
CASE Category: 13 – PHYSICS

NAG 5 12498 **GEORGIA INST OF TECHNOLOGY** **3960**
 GLOBAL MODELING AND ANALYSIS OF NONMETHANE HYDROCARBONS,
 OXYGENATED HYDROCARBONS, AND ANTHROPOGENIC
 08/29/2002 - 08/31/2004 FY02: \$80,026 Total: \$80,026
Prin. Invest.: Y WANG
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12545 **GEORGIA INST OF TECHNOLOGY** **3961**
 REFINED UNDERSTANDING OF THE INTERACTION OF ARCTIC CLOUDS
 AND SEA ICE IN REGULATING THE REGIONAL ENERGY
 09/06/2002 - 09/14/2005 FY02: \$55,053 Total: \$55,053
Prin. Invest.: J A CURRY
Tech. Officer: GSFC/W B ROSSOW
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1245 **GEORGIA INST OF TECHNOLOGY** **3962**
 EFFECT OF GRAVITY ON THE EVOLUTION OF SPATIAL ARRANGEMENT OF
 FEATURES IN MICROSTRUCTURES
 05/10/1996 - 05/09/2001 FY02: -\$120 Total: \$319,880
Prin. Invest.: A M GOKHALE
Tech. Officer: MSFC/P DOTY, MSFC/R POWER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1597 **GEORGIA INST OF TECHNOLOGY** **3963**
 R/S CONCEPTUAL DESIGN FOR ADVANCED SPACE TRANSPORTATION
 SYSTEMS
 12/16/1998 - 12/15/2001 FY02: \$10,000 Total: \$399,850
Prin. Invest.: J R OLDS
Tech. Officer: MSFC/J J HUTT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1638 **GEORGIA INST OF TECHNOLOGY** **3964**
 RESEARCH ENTITLED: "FAULT TOLERANT NONLINEAR ADAPTIVE
 FLIGHT CONTROL FOR THE X-33"
 09/24/1999 - 12/31/2002 FY02: \$0 Total: \$202,275
Prin. Invest.: A CALISE
Tech. Officer: MSFC/R DABNEY, MSFC/J HANSON
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1713 **GEORGIA INST OF TECHNOLOGY** **3965**
 STUDY OF DEPLOYMENT OPTIONS AND EXPLORATION USES FOR SPACE
 SOLAR POWER
 03/01/2000 - 01/31/2002 FY02: -\$137 Total: \$149,862
Prin. Invest.: J OLDS
Tech. Officer: MSFC/J HOWELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1819 **GEORGIA INST OF TECHNOLOGY** **3966**
 PERMEABILITY TESTING OF IMPACTED COATED COMPOSITE LAMINATES
 05/21/2001 - 08/31/2002 FY02: \$10,000 Total: \$78,616
Prin. Invest.: W S JOHNSON
Tech. Officer: MSFC/A NETTLES
CASE Category: 47 – METAL & MATERIALS ENGR

NAS 1 00087 **GEORGIA INST OF TECHNOLOGY** **3967**
 RESEARCH IN ACOUSTICS & NOISE CONTROL FOR AIRCRAFT AND SPACE
 TRANSPORTATION VEHICLES
 05/01/2000 - 04/30/2005 FY02: \$183,511 Total: \$706,387
Prin. Invest.: K K AHUJA, D E PAREKH, R J ENGLAR
Tech. Officer: LARC/L R CLARK
CASE Category: 41 – AERONAUTICAL ENGR

NAS 1 02056 **GEORGIA INST OF TECHNOLOGY** **3968**
 ELECTROMAGNETIC SYSTEMS
 12/27/2001 - 12/26/2006 FY02: \$984,762 Total: \$984,762
Prin. Invest.: G HOPKINS
Tech. Officer: LARC/T S DANIELS, LARC/R T NEECE
CASE Category: 45 – ELECTRICAL ENGR

GEORGIA

NASA'S UNIVERSITY PROGRAM

NAS 1 18938 **GEORGIA INST OF TECHNOLOGY** **3969**
 SAGE III EXPERIMENT SCIENTIFIC SUPPORT/CUNNOLD
 02/20/1990 - 01/31/2005 FY02: \$145,000 Total: \$802,700
Prin. Invest.: D M CUNNOLD
Tech. Officer: LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99073 **GEORGIA INST OF TECHNOLOGY** **3970**
 R & D OF ELECTROMAGNETIC SYSTEMS
 02/17/1999 - 02/16/2004 FY02: \$272,836 Total: \$1,764,492
Prin. Invest.: G GIMMESTAD
Tech. Officer: LARC/S D HARRAH
CASE Category: 45 – ELECTRICAL ENGR

NAS 3 00179 **GEORGIA INST OF TECHNOLOGY** **3971**
 SYSTEM STUIDES FOR NASA AEROSPACE PROPULSION AND AIRFRAME
 TECHNOLOGY
 09/28/2000 - 09/27/2005 FY02: \$0 Total: \$50,000
Prin. Invest.: R E MCKINLEY, JR, J TAI, B ROTH
Tech. Officer: LARC/C M MEYERS, LARC/M T TONG
CASE Category: 41 – AERONAUTICAL ENGR

NAS 3 02110 **GEORGIA INST OF TECHNOLOGY** **3972**
 COMBUSTION DRIVEN ACTUTOR FOR JET NOISE REDUCTION NRA PHASE
 1
 03/05/2002 - 11/05/2002 FY02: \$96,138 Total: \$96,138
Prin. Invest.: K K AHUJA
Tech. Officer: GRC/J E BRIDGE, GRC/J E BRIDGES
CASE Category: 41 – AERONAUTICAL ENGR

NAS 3 02126 **GEORGIA INST OF TECHNOLOGY** **3973**
 REVOLUTIONARY/UNCONVENTIONAL AEROPROPULSION TECHNOLOGY
 05/06/2002 - 02/05/2003 FY02: \$98,048 Total: \$98,048
Prin. Invest.: C TAM
Tech. Officer: GRC/K T PHAM
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 00171 **GEORGIA INST OF TECHNOLOGY** **3974**
 OZONE MONITORING INSTRUMENT (OMI) SCIENCE TEAM.
 06/07/2000 - 10/31/2004 FY02: \$103,018 Total: \$273,033
Prin. Invest.: D M CUNNOLD
Tech. Officer: GSFC/J C RIVERA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS10 01025 **GEORGIA INST OF TECHNOLOGY** **3975**
 OPERATIONS/MAINT SOUTHEAST REGIONAL TECH TRANSFER CENTER
 01/31/2001 - 01/31/2003 FY02: \$1,028,000 Total: \$2,228,000
Prin. Invest.: D BRIDGES, J MILLS, B HILL
Tech. Officer: KSC/C GRIFFIN, KSC/D MAKUFKA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 296 **GEORGIA INST OF TECHNOLOGY** **3976**
 MEASUREMENTS OF NO AND NO2 OVER THE TROPICAL PACIF IC
 04/28/1998 - 05/31/2001 FY02: \$0 Total: \$550,217
Prin. Invest.: S T SANDHOLM
Tech. Officer: LARC/J M HOELL, JR., LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 301 **GEORGIA INST OF TECHNOLOGY** **3977**
 MEASUREMENT OF OH, H2SO4, MSA, NH3, AND DMSO ABOARD THE P-3B
 AIRCRAFT
 05/27/1998 - 05/31/2001 FY02: -\$128 Total: \$574,555
Prin. Invest.: F L EISELE, R L MAULDIN
Tech. Officer: LARC/J L ROPER, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 306 **GEORGIA INST OF TECHNOLOGY** **3978**
 TROPOSPHERIC DIAGNOSTIC MODELING STUDIES OF PEM- TROPICS B
 FIELD DATA: INVESTIGATION OF THE
 07/10/1998 - 11/23/2001 FY02: \$0 Total: \$509,326
Prin. Invest.: D D DAVIS, G CHEN
Tech. Officer: LARC/J M HOELL, JR., LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 317 **GEORGIA INST OF TECHNOLOGY** **3979**
 MODELING AND DATA ANALYSIS OF PEM-TROPICS B OBSERVATIONS
 08/17/1998 - 07/31/2001 FY02: \$0 Total: \$391,852
Prin. Invest.: S C LIU
Tech. Officer: LARC/J M HOELL, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 375 **GEORGIA INST OF TECHNOLOGY** **3980**
 DOWNSIZING OF GATECH'S AIRBORNE FLUORESCENCE (AFS) FOR THE
 MEASUREMENT OF NITROGENOXIDES
 02/10/2000 - 05/18/2001 FY02: -\$1 Total: \$247,808
Prin. Invest.: H W GUAN, S T SANDHOLM
Tech. Officer: LARC/J L RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 401 **GEORGIA INST OF TECHNOLOGY** **3981**
 HUMAN FACTORS CONSIDERATIONS FOR SAFE RECOVERY FROM FAULTS
 IN FLIGHT CONTROL SYSTEMS
 06/08/2000 - 06/14/2003 FY02: \$96,000 Total: \$253,006
Prin. Invest.: A R PRITCHETT
Tech. Officer: LARC/C M BELCASTRO
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 411 **GEORGIA INST OF TECHNOLOGY** **3982**
 RAPID MEASUREMENTS OF AEROSOL IONIC COMPOSITION AND 3-10 NM
 PARTICLE SIZE DISTRIBUTIONS ON THE NASA
 09/14/2000 - 03/01/2003 FY02: \$113,582 Total: \$452,254
Prin. Invest.: R J WEBER
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 417 **GEORGIA INST OF TECHNOLOGY** **3983**
 MEASUREMENTS OF NO AND NO2 FROM THE ASIAN OUTFLOW INTO THE
 WESTERN PACIFIC
 09/27/2000 - 09/30/2003 FY02: \$309,006 Total: \$670,925
Prin. Invest.: S T SANDHOLM
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 421 **GEORGIA INST OF TECHNOLOGY** **3984**
 MEASUREMENT OF OH, H2SO4, MSA, AND HN03 ABOARD THE P-3B
 AIRCRAFT
 09/26/2000 - 06/30/2003 FY02: \$398,249 Total: \$686,108
Prin. Invest.: F L EISELE
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 01024 **GEORGIA INST OF TECHNOLOGY** **3985**
 TROPOSPH MODELG STUDIES TRACE-P FIELD DATA: INVEST HOX/NOX/03
 PHOTOCHEM SYS COUPL'G TO SULFUR/AEROSO
 01/29/2001 - 11/30/2003 FY02: \$342,787 Total: \$492,497
Prin. Invest.: D D DAVIS
Tech. Officer: LARC/V E DELUORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 02031	GEORGIA INST OF TECHNOLOGY	3986	NCC 3 711	GEORGIA INST OF TECHNOLOGY	3994
EXPERIMENTAL & ANALYTICAL DEVELOPMENT & EVALUATION OF ADVANCED CIRCULATION CONTROL PNEUMATIC CONFIGURATION			DAMAGE MECHANICS MODELING FOR LIFE PREDICTION OF ULTRA HIGH TEMPERATURE POLYMER MATRIX COMPOSITES		
06/10/2002 - 06/09/2005	FY02: \$50,000	Total: \$50,000	06/07/1999 - 12/31/2001	FY02: \$0	Total: \$279,974
<i>Prin. Invest.:</i> R J ENGLAR, L N SANKAR			<i>Prin. Invest.:</i> D TALREJA		
<i>Tech. Officer:</i> LARC/G S JONES, LARC/M D MOORE			<i>Tech. Officer:</i> GRC/J R ELLIS		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR		
NCC 2 945	GEORGIA INST OF TECHNOLOGY	3987	NCC 3 900	GEORGIA INST OF TECHNOLOGY	3995
ROTORCRAFT CENTERS OF EXCELLENCE			MICROMACHINED HIGH FREQUENCY CIRCUITS FOR SUBMILLI METER-WAVE SENSORS		
05/03/1996 - 02/28/2001	FY02: -\$1,167	Total: \$5,828,902	06/28/2001 - 06/24/2003	FY02: \$0	Total: \$39,918
<i>Prin. Invest.:</i> D C SCHRAGE, D A PETERS, K B BOTA			<i>Prin. Invest.:</i> D PAPANOLYMEROU		
<i>Tech. Officer:</i> ARC/Y H YU, ARC/J M DAVIS			<i>Tech. Officer:</i> GRC/G E PONCHAK		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 45 – ELECTRICAL ENGR		
NCC 2 961	GEORGIA INST OF TECHNOLOGY	3988	NCC 3 982	GEORGIA INST OF TECHNOLOGY	3996
MODELING, TRAINING, AND AIDING IN AEROSPACE SYSTEMS			UNIV RESEARCH, ENGINEERING & TECHNOLOGY INST		
07/18/1996 - 05/31/2002	FY02: \$0	Total: \$571,333	08/19/2002 - 08/18/2007	FY02: \$1,875,001	Total: \$1,875,001
<i>Prin. Invest.:</i> C M MITCHELL			<i>Prin. Invest.:</i> B T ZINN, D MAVRIS, J WILLIAMS		
<i>Tech. Officer:</i> ARC/E A PALMER, ARC/K CORKER			<i>Tech. Officer:</i> GRC/K T PHAM		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NCC 2 1124	GEORGIA INST OF TECHNOLOGY	3989	NCC 8 253	GEORGIA INST OF TECHNOLOGY	3997
HOW PROFESSIONAL PILOTS PERCEIVE & RESPOND TO AMBIGUOUS & UNCERTAIN DECISION SITUATIONS			RESEARCH AND DEVELOPMENT NSSTC		
07/01/1999 - 05/31/2003	FY02: \$91,453	Total: \$400,114	02/11/2002 - 02/10/2007	FY02: \$200,000	Total: \$200,000
<i>Prin. Invest.:</i> U M FISCHER			<i>Prin. Invest.:</i> J L GODDARD		
<i>Tech. Officer:</i> ARC/J M ORASANU			<i>Tech. Officer:</i> MSFC/S COLEMAN, MSFC/C TALLEY		
<i>CASE Category:</i> 69 – PSYCHOLOGY, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NCC 2 1193	GEORGIA INST OF TECHNOLOGY	3990	NGT 1 02002	GEORGIA INST OF TECHNOLOGY	3998
A PROBABILISTIC APPROACH TO TECHNOLOGY, IDENTIFICATION, EVALUATION & SELECTION FOR LOW COST SPACE T			GRADUATE STUDENT RESEARCHERS PROGRAM - GSRP		
08/24/2000 - 09/14/2002	FY02: \$129,119	Total: \$307,500	02/08/2002 - 02/28/2003	FY02: \$24,000	Total: \$24,000
<i>Prin. Invest.:</i> D N MAVRIS			<i>Prin. Invest.:</i> L A BOTTOMLEY		
<i>Tech. Officer:</i> ARC/M E LIVINGSTON			<i>Tech. Officer:</i> LARC/P T LILLEHEI		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 12 – CHEMISTRY		
NCC 2 1306	GEORGIA INST OF TECHNOLOGY	3991	NGT 1 02005	GEORGIA INST OF TECHNOLOGY	3999
AGENT BASED SIMULATION OF THE NATIONAL AIRSPACE SYSTEM FOR SAFETY ANALYSIS			GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)		
02/26/2002 - 02/28/2003	FY02: \$78,851	Total: \$78,851	05/21/2002 - 06/30/2005	FY02: \$14,000	Total: \$14,000
<i>Prin. Invest.:</i> A R PRITCHETT			<i>Prin. Invest.:</i> D N MAVRIS		
<i>Tech. Officer:</i> ARC/I STATLER, ARC/M M CONNORS			<i>Tech. Officer:</i> LARC/R E MCKINLEY, LARC/W M KIMMEL		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NCC 2 1332	GEORGIA INST OF TECHNOLOGY	3992	NGT 1 02006	GEORGIA INST OF TECHNOLOGY	4000
DISTRIBUTED DECISION MAKING IN HIGH RISK AND HIGH STRESS ENVIRONMENTS: A MODEL FOR EXTENDED SPACE FL			GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)		
04/18/2002 - 05/31/2003	FY02: \$28,481	Total: \$28,481	05/22/2002 - 06/30/2005	FY02: \$24,000	Total: \$24,000
<i>Prin. Invest.:</i> U M FISCHER			<i>Prin. Invest.:</i> D N MAVRIS		
<i>Tech. Officer:</i> ARC/J ORASANU			<i>Tech. Officer:</i> LARC/R E MCKINLEY, LARC/W M KIMMEL		
<i>CASE Category:</i> 62 – PSYCHOLOGY SOCIAL ASPECTS			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NCC 2 5332	GEORGIA INST OF TECHNOLOGY	3993	NGT 1 02012	GEORGIA INST OF TECHNOLOGY	4001
EVALUATION OF ADVANCED THERMAL PROTECTION TECHNIQUES FOR FUTURE REUSABLE LAUNCH VEHICLES			GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)		
07/20/1999 - 06/30/2001	FY02: -\$803	Total: \$49,949	05/24/2002 - 08/18/2005	FY02: \$24,000	Total: \$24,000
<i>Prin. Invest.:</i> R OLDS			<i>Prin. Invest.:</i> J R OLDS, S R STEFFES		
<i>Tech. Officer:</i> ARC/P KOLOZIEJ, ARC/D J RASKY			<i>Tech. Officer:</i> LARC/R D BRAUN		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NCC 2 5332	GEORGIA INST OF TECHNOLOGY	3993	NGT 1 02019	GEORGIA INST OF TECHNOLOGY	4002
EVALUATION OF ADVANCED THERMAL PROTECTION TECHNIQUES FOR FUTURE REUSABLE LAUNCH VEHICLES			GRADUATE STUDENT RESEARCHERS PROGRAM		
07/20/1999 - 06/30/2001	FY02: -\$803	Total: \$49,949	07/23/2002 - 06/30/2003	FY02: \$24,000	Total: \$24,000
<i>Prin. Invest.:</i> R OLDS			<i>Prin. Invest.:</i> W S REES		
<i>Tech. Officer:</i> ARC/P KOLOZIEJ, ARC/D J RASKY			<i>Tech. Officer:</i> LARC/E WEISER		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR		

GEORGIA

NASA'S UNIVERSITY PROGRAM

NGT 1 52132 **GEORGIA INST OF TECHNOLOGY** **4003**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/06/1996 - 08/31/2001 FY02: -\$4 Total: \$98,996
Prin. Invest.: A GLEZER, A GLEZER (ADVISOR)
Tech. Officer: LARC/R D JOSLIN
CASE Category: 46 – MECHANICAL ENGR

NGT 1 52162 **GEORGIA INST OF TECHNOLOGY** **4004**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/11/1997 - 06/30/2001 FY02: -\$20 Total: \$65,981
Prin. Invest.: B V GIBBENS
Tech. Officer: LARC/J E GARDNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 52163 **GEORGIA INST OF TECHNOLOGY** **4005**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 09/03/1997 - 09/02/2001 FY02: -\$7,402 Total: \$80,599
Prin. Invest.: J R OLDS, D W WAY
Tech. Officer: LARC/R A LEPSCH, LARC/L R ROWELL
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52170 **GEORGIA INST OF TECHNOLOGY** **4006**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/15/1997 - 01/01/2001 FY02: -\$1 Total: \$66,000
Prin. Invest.: F MISTREE
Tech. Officer: LARC/T A ZANG
CASE Category: 46 – MECHANICAL ENGR

NGT 1 52225 **GEORGIA INST OF TECHNOLOGY** **4007**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) YEAR 1
 10/28/1999 - 09/30/2001 FY02: \$1 Total: \$42,401
Prin. Invest.: W H REES
Tech. Officer: LARC/E WEISER, LARC/T ST. CLARA
CASE Category: 43 – CHEMICAL ENGR

NGT 2 52266 **GEORGIA INST OF TECHNOLOGY** **4008**
 FULLY AUTOMATED CARTESIAN GRID CFD APPLICATIONS FOR MDO IN
 HIGH - SPEED FLOWS
 07/17/2000 - 08/14/2003 FY02: \$12,000 Total: \$56,000
Prin. Invest.: S M RUFFIN
Tech. Officer: ARC/M J AHOSMIS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 2 52274 **GEORGIA INST OF TECHNOLOGY** **4009**
 CENTERS OF EXCELLENCE IN ROTORCRAFT TECHNOLOGY
 02/12/2001 - 01/31/2003 FY02: \$830,000 Total: \$1,610,000
Prin. Invest.: D P SCHRAGE, D A PETERS
Tech. Officer: ARC/Y H YU, ARC/AWKERR
CASE Category: 41 – AERONAUTICAL ENGR

NGT 3 52371 **GEORGIA INST OF TECHNOLOGY** **4010**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT
 RESEARCHERS PROGRAM
 06/26/2000 - 08/31/2002 FY02: \$0 Total: \$31,600
Prin. Invest.: J H GINSBERG
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 46 – MECHANICAL ENGR

NGT 3 52384 **GEORGIA INST OF TECHNOLOGY** **4011**
 GRADUATE STUDENT RESEARCH PROGRAM: TECHNOLOGY FOR ECAS-
 TING APPLIED TO TURBINE-BASED COMBINED-CYCLE
 07/19/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D MAVRIS
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 3 52385 **GEORGIA INST OF TECHNOLOGY** **4012**
 GRADUATE STUDENT RESEARCHERS PROGRAM: FORMULATION AND
 IMPLEMENTATION OF A METHODOLOGY FOR THE ASSESS
 07/19/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D MARVIS
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52434 **GEORGIA INST OF TECHNOLOGY** **4013**
 GRADUATE STUDENT RESEARCHERS PROGRAM - NONLINEAR HYBRID
 CONTROL FOR THERMOACOUSTIC COMBUSTION INSTA
 06/14/2002 - 06/16/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W M HADDAD
Tech. Officer: DFRC/K GUPTA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 129 **GEORGIA INST OF TECHNOLOGY** **4014**
 TRAJECTORY PLANNING FOR COORDINATING SATELLITES USING COM-
 MAND GENERATION (STUDENT: ERIKA BIEDIGER)
 06/04/2002 - 08/14/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W E SINGHOSE
Tech. Officer: GSFC/M S BURRELL
CASE Category: 46 – MECHANICAL ENGR

NGT 5 30384 **GEORGIA INST OF TECHNOLOGY** **4015**
 DEVELOPMENT OF A CHEMICAL IONIZATION MASS SPECTROMETRY
 TECHNIQUE FOR MEASURING ATMOSPHERIC PERNI
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: L HUEY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40116 **GEORGIA INST OF TECHNOLOGY** **4016**
 GEORGIA SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM
 03/08/2001 - 02/28/2005 FY02: \$475,000 Total: \$1,155,352
Prin. Invest.: E ARMANIOS
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50284 **GEORGIA INST OF TECHNOLOGY** **4017**
 EXPLOITING TEMPORAL UNCERTAINTY IN SIMULATION MODELS
 06/23/2000 - 07/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: R FUJIMOTO
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50330 **GEORGIA INST OF TECHNOLOGY** **4018**
 THE EFFECTS ON LAND SURFACE HETEROGENETIES ON AEROSOL
 CONCENTRATIONS IN CHINA & THEIR IMPACT ON REG
 08/17/2000 - 08/31/2003 FY02: \$18,000 Total: \$62,000
Prin. Invest.: W L CHAMEIDES
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50363 **GEORGIA INST OF TECHNOLOGY** **4019**
 KINETIC FRICTION ON NON-COALESCING AND NON-WETTING
 DROPS/STUDENT: MARIA-ISABEL CARNASCIALI
 06/12/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P NEITZEL
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52854 **GEORGIA INST OF TECHNOLOGY** **4020**
 DEVELOPMENT OF A TOOL FOR CONCEPTUAL DESIGN OF ROCKET BASED
 COMBINED CYCLE PROPULSION SYSTEMS
 07/21/1998 - 08/14/2001 FY02: -\$2,224 Total: \$63,776
Prin. Invest.: J R OLDS
Tech. Officer: MSFC/J F DOWDY
CASE Category: 41 – AERONAUTICAL ENGR

NGT 8 52881 **GEORGIA INST OF TECHNOLOGY** **4021**
 QUANTITATIVE CHARACTERIZATION OF GRAVITATIONAL EFFECTS ON THE
 EVOLUTION OF MICROSTRUCTURE.
 09/14/1999 - 03/14/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: A GOKHALE
Tech. Officer: MSFC/J DOWDY
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 8 52887 **GEORGIA INST OF TECHNOLOGY** **4022**
 DEV OF PREDICTIVE MODELS OF ADVANCED PROPULSION CONCEPTS
 FOR LOW COST SPACE TRANSPORTATION
 05/24/2000 - 08/01/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: J SEITZMAN
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 49 – ENGINEERING, OTHER

NGT 8 52898 **GEORGIA INST OF TECHNOLOGY** **4023**
 A CAPABILITY TO GENERATE PHYSICS-BASED MASS ESTIMATING RELATIONSHIPS
 FOR CONCEPTUAL SPACE VEHICLE
 05/25/2001 - 08/01/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: J OLDS
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 13 – PHYSICS

NGT13 52742 **GEORGIA INST OF TECHNOLOGY** **4024**
 RAPID MEASUREMENTS OF AEROSOL BULK COMPOSITION USING A
 PARTICLE INTO LIQUID SAMPLING SYSTEM
 07/12/2000 - 01/31/2003 FY02: \$12,000 Total: \$56,000
Prin. Invest.: K MAXWELL, R WEBER
Tech. Officer: SSC/R TRAVIS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT13 52750 **GEORGIA INST OF TECHNOLOGY** **4025**
 DYNAMIC FLUID FLOW SIMULATION AND VALIDATION OF E- 1 AND E-2
 LIQUID OXYGEN HYDRODYNAMIC MODELS
 06/18/2001 - 06/30/2003 FY02: \$0 Total: \$22,000
Prin. Invest.: R RIVERA
Tech. Officer: SSC/R HOLLAND
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11540 **GEORGIA SOUTHERN UNIV** **4026**
 GEOLOGIC MAPPING OF GENETIC ASTEROID FAMILIES: AN ANALYSIS OF
 THE FACES DATABASE
 01/03/2002 - 12/31/2004 FY02: \$30,000 Total: \$30,000
Prin. Invest.: M S KELLEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12445 **GEORGIA SOUTHERN UNIV** **4027**
 COMPOSITIONAL INVESTIGATION AND GENETIC TESTING OF DYNAMICAL
 ASTEROID FAMILIES
 08/14/2002 - 08/14/2005 FY02: \$11,000 Total: \$11,000
Prin. Invest.: M S KELLEY
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 254 **GEORGIA SOUTHERN UNIV** **4028**
 "PHYSICAL PROPERTIES OF PLANETARY MOLECULES", GSFC CONTROL
 NUMBER 5-3326
 10/30/1997 - 10/31/2000 FY02: -\$2,839 Total: \$81,044
Prin. Invest.: R NELSON
Tech. Officer: GSFC/J ALLEN
CASE Category: 12 – CHEMISTRY

NAG 5 4950 **GEORGIA STATE UNIV** **4029**
 WAVELENGTH-TUNABLE NOVEL SEMICONDUCTOR FIR DETECTOR RE-
 SEARCH
 06/23/1997 - 12/31/2001 FY02: \$0 Total: \$158,000
Prin. Invest.: D PERERA
Tech. Officer: GSFC/H THRONSON
CASE Category: 11 – ASTRONOMY

NAG 5 6904 **GEORGIA STATE UNIV** **4030**
 CROSS-CORRELATION ANALYSIS OF UV PROFILE VARIATIONS AND NON-
 RADIAL PULSATIONS IN BESTARS
 02/06/1998 - 12/31/2001 FY02: -\$60 Total: \$65,240
Prin. Invest.: D GIES
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7752 **GEORGIA STATE UNIV** **4031**
 PHOTOIONIZATION AND RELATED DIELECTRONIC/RADIATIVE RECOMBINA-
 TION AND ELASTIC SCATTERING CROSS SE
 11/25/1998 - 09/30/2002 FY02: \$0 Total: \$146,100
Prin. Invest.: S T MANSON
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NCC 2 5479 **GEORGIA STATE UNIV** **4032**
 THE CTIOPI EFFORT TO DISCOVER NEARBY SOUTHERN STAR S
 02/07/2002 - 01/31/2003 FY02: \$21,000 Total: \$21,000
Prin. Invest.: T J HENRY
Tech. Officer: ARC/T P GREENE, ARC/J BREGMEN
CASE Category: 11 – ASTRONOMY

NAG 2 1416 **MEDICAL COLL OF GEORGIA** **4033**
 CELLULAR & MOLECULAR MECHANISMS MEDIATING RAPID RE SEALING
 OF GRAVITY-INDUCED PLASMA MEMBRANE DISRUPT
 07/12/2000 - 06/30/2003 FY02: \$330,357 Total: \$787,523
Prin. Invest.: P L MCNEIL
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1636 **MOREHOUSE COLL** **4034**
 "USING THE NASA ROTATING BIOREACTOR TO STUDY ROLE OF NITRIC
 OXIDE IN BREAST-INDUCED ANGIOGENESIS"
 09/30/1999 - 06/30/2002 FY02: -\$7,657 Total: \$213,978
Prin. Invest.: G L SANFORD
Tech. Officer: MSFC/R RICHMOND
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NAG 8 1711 **MOREHOUSE COLL** **4035**
 STRATEGIC PREPAREDNESS ADVANCING CAREERS IN
 ENGINEERING/SCIENCES (SPACE)
 03/29/2000 - 03/28/2003 FY02: \$1,500,000 Total: \$4,540,303
Prin. Invest.: J KING
Tech. Officer: MSFC/W LOVE
CASE Category: 49 – ENGINEERING, OTHER

GEORGIA

NASA'S UNIVERSITY PROGRAM

NAG 9 964 **MOREHOUSE COLL** **4036**
 SIMULATED MICROGRAVITY ...
 09/25/1997 - 06/01/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: K DUTT
Tech. Officer: JSC/K KRISHEN
CASE Category: 56 – MEDICL

NCC 2 1322 **MOREHOUSE SCHOOL MED** **4044**
 TELEMEDICINE APPLICATION OF AUTOGENIC FEEDBACK TRAINING EXERCISE AS A TREATMENT FOR SPECIFIC PATIENTS
 03/14/2002 - 02/28/2003 FY02: \$146,926 Total: \$146,926
Prin. Invest.: E OFILI
Tech. Officer: ARC/P COWLINGS, ARC/B TOSCANO
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 2 1215 **MOREHOUSE SCHOOL MED** **4037**
 PRE-METARSAL DIFFERENTIATION & MINERALIZATION
 05/04/1998 - 06/30/2001 FY02: -\$686 Total: \$100,103
Prin. Invest.: B J KLEMENT
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 9 112 **MOREHOUSE SCHOOL MED** **4045**
 SPACE MEDICINE
 09/26/2000 - 06/30/2005 FY02: \$1,408,596 Total: \$2,608,596
Prin. Invest.: M THIERRY-PALMER
Tech. Officer: JSC/C SAMS, JSC/G HENDERSEN
CASE Category: 56 – MEDICL

NAG 2 1381 **MOREHOUSE SCHOOL MED** **4038**
 BONE & CALCIUM METABOLISM IN DAHL SALT SENSITIVE & SALT RESENTANT RATS WITH UNLOADED HINDLIMBS
 09/03/1999 - 08/31/2003 FY02: \$0 Total: \$129,499
Prin. Invest.: M THIERRY-PALMER
Tech. Officer: ARC/A J CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9157 **PAINE COLL** **4046**
 PRE-COLL ENRICHMENT PROGRAM IN MATHEMATICS SCIENCE, ENGINEERING AND TECHNOLOGY
 03/03/2000 - 02/28/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: R KESSLER
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1448 **MOREHOUSE SCHOOL MED** **4039**
 CHONDROCYTE DIFFERENTIATION & MATURATION IN HYPERGRAVITY
 09/29/2000 - 09/30/2003 FY02: \$1 Total: \$191,607
Prin. Invest.: B J KLEMENT
Tech. Officer: ARC/C E WADE, ARC/B J COLLINS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2241 **SAVANNAH STATE UNIV** **4047**
 RENEWABLE ENERGY SCADA/TRAINING USING ACTS RENEWABLE ENERGY SCADA/TRAINING USING ACTS
 03/17/1999 - 10/29/2001 FY02: -\$996 Total: \$211,090
Prin. Invest.: D KALU
Tech. Officer: GRC/R J ACOSTA
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2611 **MOREHOUSE SCHOOL MED** **4040**
 GRAVITATIONAL EFFECTS ON NUTRIENT DIFFUSION THROUGH CARTELAGINOUS MATRIX
 05/22/2001 - 07/31/2005 FY02: \$100,000 Total: \$130,000
Prin. Invest.: D J KLEMENT
Tech. Officer: GRC/D W GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG10 266 **SAVANNAH STATE UNIV** **4048**
 HIGH SCHOOL/HIGH TECH PROGRAM A PARTNERSHIP OF SSU WITH THE GEORGIA COMMITTEE ON EMPLOYMENT OF PEOPLE
 09/01/1999 - 03/30/2002 FY02: -\$33,888 Total: \$166,054
Prin. Invest.: D SAJWAN
Tech. Officer: KSC/R J MCKINNEY
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NAG 9 963 **MOREHOUSE SCHOOL MED** **4041**
 GRAVITY-INDUCED CHANGES ON THE STERILIZATION OF ...
 09/25/1997 - 09/30/2001 FY02: \$0 Total: \$299,966
Prin. Invest.: R SRIDARAN
Tech. Officer: JSC/K KRISHEN
CASE Category: 56 – MEDICL

NAG 3 2486 **SPELMAN COLL** **4049**
 DEVELOPMENT OF A PROBE FOR DETERMINING FUEL-TO-OXYGEN RATIOS IN AIRPLANE FUEL TANKS
 09/01/2000 - 08/31/2001 FY02: \$0 Total: \$42,000
Prin. Invest.: D CHEN
Tech. Officer: GRC/Q NGUYEN
CASE Category: 41 – AERONAUTICAL ENGINEERING

NAG 9 1164 **MOREHOUSE SCHOOL MED** **4042**
 TISSUE ENGINEERING OF HUMAN RETINA IN NASA BIOREACTOR FOR TRANSPLANT
 10/01/1999 - 01/02/2003 FY02: \$0 Total: \$199,999
Prin. Invest.: K DUTT
Tech. Officer: JSC/C SAMS
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 3 2758 **SPELMAN COLL** **4050**
 CONTINUED DEVELOPMENT OF A PROBE FOR DETERMINING FUEL-TO-OXYGEN RATIOS IN AIRPLANE FUEL TANKS
 03/29/2002 - 02/18/2003 FY02: \$62,600 Total: \$62,600
Prin. Invest.: D C CHEN
Tech. Officer: GRC/Q NGUYEN
CASE Category: 12 – CHEMISTRY

NCC 2 1262 **MOREHOUSE SCHOOL MED** **4043**
 JOINT RESEARCH ON SPACE-RELATED BIOLOGICAL ISSUES
 05/07/2001 - 12/31/2002 FY02: \$0 Total: \$150,000
Prin. Invest.: G SONNENFELD, M THIERRY-PALMER
Tech. Officer: ARC/S M HING, ARC/O SANTOS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1635 **SPELMAN COLL** **4051**
 FIFTH ANNUAL MODEL INST FOR EXCELLANCE CONFERENCE
 09/29/1999 - 11/29/2000 FY02: -\$39,515 Total: \$398,816
Prin. Invest.: E FALCONER
Tech. Officer: MSFC/W LOVE, MSFC/A C BEAM
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1712 **SPELMAN COLL** **4052**
 WOMEN IN SCIENCES AND ENGINEERING SCHOLARS PROGRAM
 05/15/2000 - 03/31/2003 FY02: \$1,500,000 Total: \$4,500,000
Prin. Invest.: C GILLYARD
Tech. Officer: MSFC/W LOVE
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 758 **SPELMAN COLL** **4053**
 DEVELOPMENT OF A NOVEL MULTI-COMPONENT PROBE FOR C OMBUS-
 TION AND PROPULSION DIAGNOSTICS
 12/30/1999 - 01/31/2002 FY02: \$0 Total: \$158,420
Prin. Invest.: D C CHEN
Tech. Officer: GRC/Q NGUYEN
CASE Category: 41 – AERONAUTICAL ENGR

NCC 8 194 **SPELMAN COLL** **4054**
 CRYSTAL ENGINEERING OF NONLINEAR OPTICAL COMPOUNDS NEW
 APPROACH FOR PREDICTING HYPERPOLARIZABILITIES
 09/30/1999 - 09/30/2002 FY02: \$0 Total: \$298,134
Prin. Invest.: O SCRIVEN
Tech. Officer: MSFC/D O FRAIZER
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 8 227 **SPELMAN COLL** **4055**
 SPELMAN COLL MODEL INSITUATIONS FOR EXCELLENCE
 06/26/2001 - 06/26/2006 FY02: \$1,470,400 Total: \$2,978,700
Prin. Invest.: A THOMPSON
Tech. Officer: MSFC/W LOVE, MSFC/E ORDONEZ
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8376 **UNIV OF GEORGIA** **4056**
 THE ROLE OF TRANSLUCENT CLOUDS IN GALACTIC STAR FORMATION
 (L TSA98)
 03/09/1999 - 03/14/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: L MAGNANI
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8425 **UNIV OF GEORGIA** **4057**
 NLTE MODEL ATMOSPHERES FOR VERY LOW MASS STARS (LT SA98)
 05/10/1999 - 05/14/2003 FY02: \$0 Total: \$212,115
Prin. Invest.: P H HAUSCHILDT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8469 **UNIV OF GEORGIA** **4058**
 THE EVALUATION OF SNOW WATER EQUIVALENT ACROSS GRA SSLAND
 REGIONS
 05/06/1999 - 06/30/2002 FY02: \$0 Total: \$90,185
Prin. Invest.: T L MOTE
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8951 **UNIV OF GEORGIA** **4059**
 TEMPERATURE DEPENDENT ELECTRON RECOMBINATION RATES & SPEC-
 TRAL SIGNATURES OF ION REACTIONS RELEVANT TO
 01/21/2000 - 08/31/2003 FY02: \$50,000 Total: \$135,000
Prin. Invest.: N G ADAMS
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9088 **UNIV OF GEORGIA** **4060**
 ULTRAVIOLET & VISIBLE EMISSION MECHANISMS IN ASTRO PHYSICS
 02/23/2000 - 01/31/2003 FY02: \$0 Total: \$143,766
Prin. Invest.: P C STANCIL
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9222 **UNIV OF GEORGIA** **4061**
 NON-LTE MODEL ATMOSPHERES OF HOT STARS WITH WINDS
 04/05/2000 - 04/14/2003 FY02: \$77,325 Total: \$233,824
Prin. Invest.: P H HAUSCHILDT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10551 **UNIV OF GEORGIA** **4062**
 MODELING OF EXTRASOLAR GIANT PLANETS WITH IMPROVED MOLECUL-
 AR LINE OPACITIES, CONTINUUM OPACITIES, CO
 03/09/2001 - 03/14/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: P C STANCIL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11453 **UNIV OF GEORGIA** **4063**
 CHARGE TRANSFER CALCULATIONS FOR ASTROPHYSICS
 12/06/2001 - 12/31/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: P C STANCIL
Tech. Officer: GSFC/H HASAN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11592 **UNIV OF GEORGIA** **4064**
 A HYBRID APPROACH FOR EVALUATING AND PREDICTING IN TERACTIONS
 BETWEEN THESEASONAL SNOW PACK AND THE
 01/15/2002 - 01/14/2005 FY02: \$146,055 Total: \$146,055
Prin. Invest.: T L MOTE
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1771 **UNIV OF GEORGIA** **4065**
 COMPUTER SIULATIONS OF CONFINED QUANTUM SYSTEMS IN MICRO-
 GRAVITY
 05/01/2001 - 01/31/2004 FY02: \$40,000 Total: \$100,000
Prin. Invest.: D P LANDAU
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1110 **UNIV OF GEORGIA** **4066**
 CONTROLLED GROWTH OF BIOLOGIC AND ABIOTIC CARBONATES AND-
 FEOXIDES
 05/14/1999 - 05/13/2002 FY02: \$10,000 Total: \$40,000
Prin. Invest.: C S ROMANEK
Tech. Officer: JSC/E K GIBSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02003 **UNIV OF GEORGIA** **4067**
 CARBON FROM COMMUNITIES: A SATELLITE VIEW CARBON FROM COM-
 MUNITIES: A SATELLITE VIEW
 11/08/2001 - 11/06/2004 FY02: \$517,047 Total: \$517,047
Prin. Invest.: C L NEELY
Tech. Officer: SSC/G CARTER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 233 **UNIV OF GEORGIA** **4068**
 ONE SHARE OF SYNCHROTRON BEAM TIME FROM THE SOUTH EASTRE-
 GIONAL COLLABROATIVE ACCESS TEAM (SER-CAT)
 09/13/2001 - 03/18/2006 FY02: \$0 Total: \$375,000
Prin. Invest.: B WANG
Tech. Officer: MSFC/C KUNDROT
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 5 50427 **UNIV OF GEORGIA** **4069**
 QUANTIFYING THE ROLE OF THE WESTERN TROPICAL ATLAN TIC OCEAN
 IN GLOBAL INORGANIC CARBON BUDGETS: I
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: P YAGER
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

HAWAII

NAG 2 1374 **UNIV OF HAWAII AT MANOA - HONOLULU** **4070**
 THE EVOLUTIONARY ORIGIN & DEPLOYMENT OF HOX & PARA HOX GENES
 IN METAZOA
 08/12/1999 - 07/31/2003 FY02: \$87,470 Total: \$405,358
Prin. Invest.: M Q MARTINDALE
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1519 **UNIV OF HAWAII AT MANOA - HONOLULU** **4071**
 THE EVOLUTION OF GRAVITY RECEPTION IN THE METAZOA
 08/28/2001 - 08/31/2003 FY02: \$100,000 Total: \$319,272
Prin. Invest.: M Q MARTINDALE
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 6057 **UNIV OF HAWAII AT MANOA - HONOLULU** **4072**
 MAUNA KEA ASTRONOMY EDUCATION CENTER
 06/14/2002 - 06/14/2003 FY02: \$11,862,000 Total: \$11,862,000
Prin. Invest.: G JACOB
Tech. Officer: ARC/R MANCINI
CASE Category: 11 – ASTRONOMY

NAG 5 3370 **UNIV OF HAWAII AT MANOA - HONOLULU** **4073**
 TWO EXTREMELY RED GALAXIES
 09/06/1996 - 08/14/2001 FY02: -\$25,509 Total: \$552,991
Prin. Invest.: R D JOSEPH
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 3451 **UNIV OF HAWAII AT MANOA - HONOLULU** **4074**
 ANALYSIS OF VOLCANIC ERUPTIONS AND FIRES USING LAN DSAT 7
 10/07/1996 - 06/30/2002 FY02: \$0 Total: \$294,131
Prin. Invest.: FLYNN
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3766 **UNIV OF HAWAII AT MANOA - HONOLULU** **4075**
 MINERALOGICAL MAPPING OF THE MOON
 02/20/1997 - 09/30/2001 FY02: -\$413 Total: \$487,337
Prin. Invest.: P G LUCEY
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3875 **UNIV OF HAWAII AT MANOA - HONOLULU** **4076**
 REGIONAL PLANETARY IMAGE CENTER
 02/10/1997 - 11/14/2001 FY02: -\$129 Total: \$197,656
Prin. Invest.: E R HAWKE
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4150 **UNIV OF HAWAII AT MANOA - HONOLULU** **4077**
 VOLATILE EVOLUTION
 04/02/1997 - 10/31/2000 FY02: -\$424 Total: \$339,576
Prin. Invest.: F P FANALE
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4212 **UNIV OF HAWAII AT MANOA - HONOLULU** **4078**
 ORIGIN OF METEORITE PARENT BODIES AND THE MOON
 03/19/1997 - 11/30/2002 FY02: \$0 Total: \$1,812,200
Prin. Invest.: D KEIL
Tech. Officer: GSFC/D NAVA
CASE Category: 12 – CHEMISTRY

NAG 5 4223 **UNIV OF HAWAII AT MANOA - HONOLULU** **4079**
 OBSERVATION AND ANALYSIS OF JOVIAN AND SATURNIAN S
 03/26/1997 - 09/14/2001 FY02: \$0 Total: \$32,000
Prin. Invest.: D J THOLEN
Tech. Officer: GSFC/W HUEBNER
CASE Category: 11 – ASTRONOMY

NAG 5 4257 **UNIV OF HAWAII AT MANOA - HONOLULU** **4080**
 MAPPING HAZARDOUS VOLCANOES WITH RADARSAT AND OTHE
 04/10/1997 - 02/28/2001 FY02: -\$34 Total: \$59,966
Prin. Invest.: P MOUGINIS-MARK
Tech. Officer: GSFC/R H THOMAS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4395 **UNIV OF HAWAII AT MANOA - HONOLULU** **4081**
 A GLOBAL ASSESSMENT OF ACTIVE VOLCANISM, VOLCANIC INPUTS TO
 THE ATMOSPHERE FROM THE EARTH OBSERVING
 05/06/1997 - 12/31/2000 FY02: -\$59 Total: \$1,050,886
Prin. Invest.: P J MOUGINIS-MARK
Tech. Officer: GSFC/M BALTUCK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4495 **UNIV OF HAWAII AT MANOA - HONOLULU** **4082**
 DISTANT COMETS IN THE EARLY SOLAR SYSTEM
 05/06/1997 - 03/31/2003 FY02: \$0 Total: \$430,185
Prin. Invest.: D J MEECH
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 4524 **UNIV OF HAWAII AT MANOA - HONOLULU** **4083**
 OBSERVATIONS OF PLANET-CROSSING ASTEROIDS
 05/28/1997 - 08/31/2002 FY02: \$0 Total: \$220,894
Prin. Invest.: D J THOLEN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 4669 **UNIV OF HAWAII AT MANOA - HONOLULU** **4084**
 THE SOLAR SYSTEM BEYOND NEPTUNE
 06/17/1997 - 12/31/2001 FY02: \$0 Total: \$272,495
Prin. Invest.: D C JEWITT
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 4941 UNIV OF HAWAII AT MANOA - HONOLULU 4085
 OBSERVATIONAL INVESTIGATION OF THE SOLAR INTERIOR
 06/23/1997 - 02/28/2003 FY02: \$408,850 Total: \$1,594,159
Prin. Invest.: J R KUHN
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 5276 UNIV OF HAWAII AT MANOA - HONOLULU 4086
 PHASE 1 OF CORAL REEF ECOSYSTEM PHASE 1 OF CORAL REEF ECOSYSTEM
 04/17/2000 - 04/13/2005 FY02: \$0 Total: \$291,000
Prin. Invest.: M ATKINSON
Tech. Officer: GSFC/D L PIERCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6336 UNIV OF HAWAII AT MANOA - HONOLULU 4087
 A COMPARATIVE STUDY OF X-RAY & LENSING MASS DETERMINATIONS FOR THE MOST X-RAY LUMINOUS CLUSTERS IN
 10/02/1997 - 03/14/2001 FY02: -\$1,106 Total: \$16,694
Prin. Invest.: H EBELING
Tech. Officer: GSFC/J SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 6340 UNIV OF HAWAII AT MANOA - HONOLULU 4088
 AIRCRAFT RADIATION & AEROSOL MEASUREMENTS NEAR HAWAII: SATELLITE VALIDATION AT THE MOBY BUOY & THE HOT SPOT
 10/02/1997 - 05/31/2002 FY02: \$0 Total: \$846,282
Prin. Invest.: J N PORTER
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6561 UNIV OF HAWAII AT MANOA - HONOLULU 4089
 SPECTROSCOPIC OBSERVATIONS OF THE PLANETS
 12/09/1997 - 03/31/2003 FY02: \$0 Total: \$159,000
Prin. Invest.: D OWEN
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 6829 UNIV OF HAWAII AT MANOA - HONOLULU 4090
 OUTER SOLAR SYSTEM NOMENCLATURE
 01/15/1998 - 01/14/2003 FY02: \$0 Total: \$14,750
Prin. Invest.: T OWEN
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7038 UNIV OF HAWAII AT MANOA - HONOLULU 4091
 WEAK LENSING FROM SPACE – ATP
 02/24/1998 - 03/31/2003 FY02: \$0 Total: \$246,327
Prin. Invest.: N KAISER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7056 UNIV OF HAWAII AT MANOA - HONOLULU 4092
 SUBMILLIMETER STUDIES OF COMETS
 02/27/1998 - 02/28/2002 FY02: -\$154 Total: \$123,410
Prin. Invest.: D JEWITT
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7139 UNIV OF HAWAII AT MANOA - HONOLULU 4093
 REMOTE RAMAN ANALYSIS FOR PLANETARY LANDERS
 03/04/1998 - 03/31/2002 FY02: -\$8 Total: \$417,755
Prin. Invest.: S K SHARMA
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 11 – ASTRONOMY

NAG 5 7383 UNIV OF HAWAII AT MANOA - HONOLULU 4094
 ARCHITECTURE AND IMPLEMENTATION CONSIDERATION OF A HIGH-SPEED VIBRATORY DECODER FOR REED-MULLER SUBC
 05/12/1998 - 09/14/2002 FY02: \$0 Total: \$249,000
Prin. Invest.: M FOSSORIER
Tech. Officer: GSFC/P H YEHLER
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 7513 UNIV OF HAWAII AT MANOA - HONOLULU 4095
 HYPERSPECTRAL REMOTE SENSING OF CORAL REEFS IN A TROPICAL ESTUARY
 07/28/1998 - 09/30/2001 FY02: -\$50 Total: \$230,662
Prin. Invest.: M J ATKINSON
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7578 UNIV OF HAWAII AT MANOA - HONOLULU 4096
 FUNDING FOR 'POST-ERUPTION HAZARDS AT MT. PINATUBO, PHILIPPINES' (SENH98-0118)
 08/04/1998 - 07/31/2002 FY02: \$0 Total: \$717,500
Prin. Invest.: P J MOUGINIS-MARK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7730 UNIV OF HAWAII AT MANOA - HONOLULU 4097
 INTERACTIVE TEACHING USING LANDSAT 5 AND LANDSAT 7 DATA
 09/29/1998 - 06/14/2002 FY02: \$0 Total: \$90,533
Prin. Invest.: L P FLYNN
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7855 UNIV OF HAWAII AT MANOA - HONOLULU 4098
 THERMAL INFRARED MEASUREMENTS OF THE MOON AND MERCURY
 12/07/1998 - 11/30/2002 FY02: \$0 Total: \$171,584
Prin. Invest.: D G LUCEY
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7963 UNIV OF HAWAII AT MANOA - HONOLULU 4099
 THE FIFTH PLANETARY VOLCANOLOGY FIELD WORKSHOP
 12/15/1998 - 04/30/2002 FY02: -\$164 Total: \$45,836
Prin. Invest.: S K ROWLAND
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8002 UNIV OF HAWAII AT MANOA - HONOLULU 4100
 SOLAR LIMB SHAPE, RADIUS AND OSCILLATION STUDIES USING SOHO/MDI
 01/12/1999 - 01/14/2003 FY02: \$0 Total: \$362,429
Prin. Invest.: J R KUHN
Tech. Officer: GSFC/J GURMAN
CASE Category: 11 – ASTRONOMY

NAG 5 8118 UNIV OF HAWAII AT MANOA - HONOLULU 4101
 A PRELIMINARY AEROSOL CLIMATOLOGY FOR THE PACIFIC BOUNDARY LAYER & FREE TROPOSPHERE
 01/29/1999 - 01/31/2003 FY02: \$0 Total: \$333,000
Prin. Invest.: A D CLARKE
Tech. Officer: GSFC/M MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

HAWAII

NASA'S UNIVERSITY PROGRAM

NAG 5 8216 UNIV OF HAWAII AT MANOA - HONOLULU 4102
 FIP, FIT, OR MAD? ANALYSIS OF HIGH SIGNAL-TO-NOISE ASCA SPECTRA
 OF CORONAL STARS (ADP98)
 02/08/1999 - 02/14/2002 FY02: -\$81 Total: \$67,416
Prin. Invest.: T SIMON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8253 UNIV OF HAWAII AT MANOA - HONOLULU 4103
 FROM DETECTION TO COMPREHENSION: UNDERSTANDING THE PHYSICAL
 MECHANISMS DRIVING CLUSTER X-RAY EVOLUTION
 02/19/1999 - 12/31/2003 FY02: \$149,000 Total: \$554,000
Prin. Invest.: H EBELING
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8298 UNIV OF HAWAII AT MANOA - HONOLULU 4104
 A SURVEY FOR MASSIVE PLANETS BY DIRECT IMAGING WITH ADVANCED
 ADAPTIVE OPTICS
 02/23/1999 - 02/28/2003 FY02: \$0 Total: \$369,000
Prin. Invest.: D J RODDIER
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8300 UNIV OF HAWAII AT MANOA - HONOLULU 4105
 RADIATIVE BALANCE & BEHAVIOR OF THE SEASONAL MARS POLAR CAPS
 03/05/1999 - 03/14/2003 FY02: \$0 Total: \$177,000
Prin. Invest.: T MCCORD
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8330 UNIV OF HAWAII AT MANOA - HONOLULU 4106
 SOLAR-C: SCATTER-FREE OBSERVATORY FOR LIMB ACTIVE REGIONS AND
 CORONAE
 04/30/1999 - 04/30/2003 FY02: \$104,308 Total: \$611,093
Prin. Invest.: J R KUHN
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8421 UNIV OF HAWAII AT MANOA - HONOLULU 4107
 SCIENTIFIC RESEARCH FOR DESIGN REFERENCE MISSION FOR NEXT
 GENERATION SPACE TELESCOPE
 04/02/1999 - 04/14/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: D N HALL
Tech. Officer: GSFC/E SMITH
CASE Category: 11 – ASTRONOMY

NAG 5 8593 UNIV OF HAWAII AT MANOA - HONOLULU 4108
 1999 BIOASTRONOMY MEETING
 06/04/1999 - 05/31/2001 FY02: -\$3 Total: \$39,997
Prin. Invest.: T C OWEN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8713 UNIV OF HAWAII AT MANOA - HONOLULU 4109
 MINERALOGY AND ISOTOPE CHEMISTRY OF CA-AL-RICH INCLUSIONS,
 CHONDRULES & MATRIX IN THE CV CHONDRITE
 08/04/1999 - 07/31/2003 FY02: \$0 Total: \$70,500
Prin. Invest.: K KEIL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8745 UNIV OF HAWAII AT MANOA - HONOLULU 4110
 LOCAL TSUNAMIS IN HAWAII: HAZARD ASSESSMENT & EMERGENCY
 RESPONSE
 08/24/1999 - 08/31/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: G J FRYER
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8748 UNIV OF HAWAII AT MANOA - HONOLULU 4111
 A REAL-TIME SIMULATION PACKAGE FOR STORM SURGE AND WAVE
 RUNUP PACIFIC
 08/25/1999 - 08/30/2002 FY02: \$0 Total: \$400,000
Prin. Invest.: K F CHEUNG
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8751 UNIV OF HAWAII AT MANOA - HONOLULU 4112
 DEVELOPMENT OF A UV/VISIBLE-OPTIMIZED CCD FOR WFC3 ON HST
 09/08/1999 - 09/30/2002 FY02: \$0 Total: \$93,500
Prin. Invest.: G LUPPINO
Tech. Officer: GSFC/E CHENG
CASE Category: 13 – PHYSICS

NAG 5 8757 UNIV OF HAWAII AT MANOA - HONOLULU 4113
 IMAGING, GEOCODING AND ENVIRONMENTAL MONITORING IN HAWAII AND
 THE WEST PACIFIC
 08/24/1999 - 02/28/2002 FY02: \$0 Total: \$400,000
Prin. Invest.: M BEVIS
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8863 UNIV OF HAWAII AT MANOA - HONOLULU 4114
 LABORATORY INVESTIGATIONS OF VOLATILE TRAPPING IN COMETS
 10/20/1999 - 09/30/2004 FY02: \$0 Total: \$80,000
Prin. Invest.: T C OWEN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8903 UNIV OF HAWAII AT MANOA - HONOLULU 4115
 REMOTE SENSING AND GEOLOGIC STUDIES OF PLANETARY CRUSTS
 12/28/1999 - 12/31/2002 FY02: \$86,500 Total: \$223,780
Prin. Invest.: B HAWKE
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8920 UNIV OF HAWAII AT MANOA - HONOLULU 4116
 A GLOBAL ASSESSMENT OF ACTIVE VOLCANISM FROM THE EARTH
 OBSERVING SYSTEM
 01/24/2000 - 12/31/2001 FY02: -\$3,694 Total: \$401,306
Prin. Invest.: P J MOUGINIS-MARK
Tech. Officer: GSFC/E D PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8921 UNIV OF HAWAII AT MANOA - HONOLULU 4117
 THE FIFTH PLANETARY VOLCANOLOGY FIELD WORKSHOP
 01/06/2000 - 05/31/2002 FY02: -\$33 Total: \$9,967
Prin. Invest.: S K ROWLAND
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 8979 UNIV OF HAWAII AT MANOA - HONOLULU 4118
 FINDING THE ONSET OF CONVECTION IN MAIN SEQUENCE STARS - FUSE
 01/24/2000 - 01/31/2003 FY02: \$0 Total: \$68,700
Prin. Invest.: T SIMON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8983 UNIV OF HAWAII AT MANOA - HONOLULU 4119
 PROPERTIES OF ICE ON THE SURFACE OF EUROPA AND THE OTHER ICY
 GALILEAN SATELLITES
 01/24/2000 - 01/31/2003 FY02: \$0 Total: \$85,000
Prin. Invest.: G HANSEN
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8991 UNIV OF HAWAII AT MANOA - HONOLULU 4120
 ASTEROID PROCESSING ON EROS
 01/24/2000 - 01/31/2001 FY02: -\$550 Total: \$64,450
Prin. Invest.: P G LUCEY
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9038 UNIV OF HAWAII AT MANOA - HONOLULU 4121
 VALIDATION AND ANALYSIS OF SRTM AND VCL DATA OVER TROPICAL
 VOLCANOES.
 02/10/2000 - 02/14/2003 FY02: \$65,000 Total: \$178,000
Prin. Invest.: P J MOUGINIS-MARK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9042 UNIV OF HAWAII AT MANOA - HONOLULU 4122
 ANALYSIS OF HIPPARCHOS MARGINAL PARALLAXES - ADP 99
 02/22/2000 - 02/28/2003 FY02: \$0 Total: \$45,059
Prin. Invest.: W D HEACOX
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9166 UNIV OF HAWAII AT MANOA - HONOLULU 4123
 ORIGIN & EVOLUTION OF STRUCTURE IN THE UNIVERSE DETERMINED
 FROM THE X-RAYEVOLUTION OF GALAXY
 03/08/2000 - 03/14/2003 FY02: \$0 Total: \$67,564
Prin. Invest.: J HENRY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9190 UNIV OF HAWAII AT MANOA - HONOLULU 4124
 SHARING DISCOVERIES IN PLANETARY GEOSCIENCE ON THE WORLD
 WIDE WEB AND CD-ROM
 03/07/2000 - 03/14/2003 FY02: \$65,000 Total: \$195,000
Prin. Invest.: G TAYLOR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9238 UNIV OF HAWAII AT MANOA - HONOLULU 4125
 A CALIBRATION OF THE CLUSTER FLUX MEASUREMENTS IN THE ROSAT
 ALL-SKY SURVEY - ADP 99
 03/09/2000 - 03/14/2002 FY02: \$0 Total: \$30,321
Prin. Invest.: H EBELING
Tech. Officer: GSFC/R OLIVERSON
CASE Category: 11 – ASTRONOMY

NAG 5 9252 UNIV OF HAWAII AT MANOA - HONOLULU 4126
 REAL-TIME LABORATORY FOR REMOTE SENSING
 03/10/2000 - 02/28/2003 FY02: \$355,434 Total: \$1,103,633
Prin. Invest.: T NIELSEN
Tech. Officer: HQ/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9354 UNIV OF HAWAII AT MANOA - HONOLULU 4127
 FULLERENES: A NEW CARRIER-PHASE FOR NOBLE GASES IN METEORITES
 04/03/2000 - 10/01/2001 FY02: -\$6,140 Total: \$33,860
Prin. Invest.: L BECKER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9413 UNIV OF HAWAII AT MANOA - HONOLULU 4128
 TRACKING ERUPTIONS & FIRES WITHIN THE RING OF FIRE
 04/07/2000 - 04/30/2003 FY02: \$173,834 Total: \$464,167
Prin. Invest.: L FLYNN
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9511 UNIV OF HAWAII AT MANOA - HONOLULU 4129
 INTERSTELLAR ORGANIC MOLECULES AND THE ORIGIN OF LIFE: THE
 ROLE OF EXOGENOUS DELIVERY
 05/03/2000 - 11/30/2001 FY02: -\$90,447 Total: \$84,333
Prin. Invest.: L BECKER
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9576 UNIV OF HAWAII AT MANOA - HONOLULU 4130
 THE DIVERSITY OF MARTIAN VOLCANIC FEATURES AS SEEN IN MOC
 IMAGES AND MOLATOPOGRAPHIC DATA
 05/17/2000 - 04/30/2003 FY02: \$58,000 Total: \$173,700
Prin. Invest.: P MOUGINIS-MARK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9580 UNIV OF HAWAII AT MANOA - HONOLULU 4131
 A VOLCANIC PLUME DISPERSION MONITORING AND PREDICT ION CAPA-
 BILITY
 05/09/2000 - 09/30/2002 FY02: \$0 Total: \$213,210
Prin. Invest.: S BUSINGER
Tech. Officer: GSFC/E PAYLOR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9757 UNIV OF HAWAII AT MANOA - HONOLULU 4132
 CONTROLS ON THE VARIABILITY OF PHYTOPLANKTON BIO- MASS &
 PRODUCTIVITY IN THE NORTHERN PACIFIC CENTRA
 06/23/2000 - 06/30/2002 FY02: \$0 Total: \$198,558
Prin. Invest.: R R BIDIGARE
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9765 UNIV OF HAWAII AT MANOA - HONOLULU 4133
 GEOCHEMICAL STUDIES OF THE LUNAR CRUST
 07/03/2000 - 06/30/2002 FY02: \$0 Total: \$49,000
Prin. Invest.: B HAWKE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9896 UNIV OF HAWAII AT MANOA - HONOLULU 4134
 MAPPING THE STELLAR X-RAY EMISSION BEYOND 1 GYR IN SPACE AND TIME
 09/06/2000 - 09/14/2001 FY02: -\$49 Total: \$6,951
Prin. Invest.: T SIMON
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9921 UNIV OF HAWAII AT MANOA - HONOLULU 4135
 X-RAY EMISSION FROM BROWN DWARFS: A SEQUENCE OF TEMPERATURES AND AGES?
 09/05/2000 - 09/14/2001 FY02: -\$7,800 Total: \$0
Prin. Invest.: W BRANDNER
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9992 UNIV OF HAWAII AT MANOA - HONOLULU 4136
 SEARCH FOR X-RAY EMISSION IN THE NEAREST KNOWN BROWN DWARF
 09/20/2000 - 08/31/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: E MARTIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9994 UNIV OF HAWAII AT MANOA - HONOLULU 4137
 RXJ1821+6828: TEMPERATURE DISTRIBUTION AND METALLICITY FOR A Z=0.81 CLUSTER
 09/14/2000 - 08/31/2002 FY02: \$0 Total: \$38,500
Prin. Invest.: I M GIOIA
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10025 UNIV OF HAWAII AT MANOA - HONOLULU 4138
 HARD X-RAYS FROM A COMPLETE SAMPLE OF THE BRIGHTEST ULTRALUMINOUS INFRARED GALAXIES
 09/27/2000 - 09/30/2002 FY02: \$16,400 Total: \$48,800
Prin. Invest.: D B SANDERS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10041 UNIV OF HAWAII AT MANOA - HONOLULU 4139
 MEASURING THE MASS DISTRIBUTION IN Z0.2 CLUSTER LENSES WITH XMM, HST AND CFHT
 10/03/2000 - 09/30/2003 FY02: \$0 Total: \$11,000
Prin. Invest.: H EBELING
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10045 UNIV OF HAWAII AT MANOA - HONOLULU 4140
 DATA-INTENSIVE RESEARCH & MODEL DEVELOPMENT AT THE INTERNATIONAL PACIFIC RESEARCH CENTER
 09/28/2000 - 09/30/2005 FY02: \$750,000 Total: \$1,750,000
Prin. Invest.: J MCCREARY
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10085 UNIV OF HAWAII AT MANOA - HONOLULU 4141
 THE X-RAY TEMPERATURE FUNCTION AND STRUCTURE OF CLUSTERS AT Z=0.6-1
 11/07/2000 - 11/14/2002 FY02: \$0 Total: \$5,162
Prin. Invest.: H EBELING
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10111 UNIV OF HAWAII AT MANOA - HONOLULU 4142
 MONITORING SURFACE DEFORMATION AT HAWAIIAN & OTHER BASALTIC VOLCANOES WITH RADARSAT INTERFEROMETRY
 11/20/2000 - 11/30/2002 FY02: \$35,597 Total: \$55,782
Prin. Invest.: F AMELUNG
Tech. Officer: GSFC/K PARTINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10128 UNIV OF HAWAII AT MANOA - HONOLULU 4143
 AN XMM STUDY OF LOW-ACTIVITY CORONAL STARS OF 1-2 SOLAR MASSES
 11/28/2000 - 11/30/2002 FY02: \$4,500 Total: \$9,000
Prin. Invest.: T SIMON
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10133 UNIV OF HAWAII AT MANOA - HONOLULU 4144
 PARTICIPATION IN PLANET-B NMS TEAM
 12/12/2000 - 12/14/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: T C OWEN
Tech. Officer: GSFC/W T KASPRZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10141 UNIV OF HAWAII AT MANOA - HONOLULU 4145
 NEW OPPORTUNITIES THROUGH MINORITY INITIATIVES IN SPACE SCIENCE
 12/19/2000 - 12/31/2003 FY02: \$199,991 Total: \$449,941
Prin. Invest.: R A CROWE
Tech. Officer: HQ/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 5 10228 UNIV OF HAWAII AT MANOA - HONOLULU 4146
 THE SIXTH PLANETARY VOLCANOLOGY FIELD WORKSHOP
 01/04/2001 - 01/14/2003 FY02: \$0 Total: \$48,000
Prin. Invest.: S K ROWLAND
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10229 UNIV OF HAWAII AT MANOA - HONOLULU 4147
 VOLATILE EVOLUTION
 01/04/2001 - 01/14/2003 FY02: \$0 Total: \$76,000
Prin. Invest.: F P FANALE
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10237 UNIV OF HAWAII AT MANOA - HONOLULU 4148
 REGIONAL PLANETARY IMAGE CENTER
 01/08/2001 - 01/14/2004 FY02: \$51,100 Total: \$101,400
Prin. Invest.: B R HAWKE
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10427 UNIV OF HAWAII AT MANOA - HONOLULU 4149
 EVOLUTION OF DUST AROUND STARS
 02/16/2001 - 02/28/2004 FY02: \$35,000 Total: \$70,000
Prin. Invest.: D JEWITT
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10437 UNIV OF HAWAII AT MANOA - HONOLULU 4150
 PHYSICAL PROPERTIES OF COMETRAY NUCLEUS CANDIDATES
 02/20/2001 - 02/28/2004 FY02: \$58,000 Total: \$113,500
Prin. Invest.: D JEWITT
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10514 UNIV OF HAWAII AT MANOA - HONOLULU 4151
 STABILITY & BEHAVIOR OF HYDRATED/HYDROXYLATED MATERIALS IN
 COLD SOLAR SYSTEM ENVIRONMENTS
 03/05/2001 - 03/31/2004 FY02: \$75,000 Total: \$150,000
Prin. Invest.: T MCCORD
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10564 UNIV OF HAWAII AT MANOA - HONOLULU 4152
 A DEEP X-RAY SURVEY OF LOW-MASS PMS STARS IN NGC 2264
 03/15/2001 - 03/14/2003 FY02: \$12,001 Total: \$31,134
Prin. Invest.: T SIMON
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10610 UNIV OF HAWAII AT MANOA - HONOLULU 4153
 CHRONOLOGY OF THE EARLY SOLAR NEBULA: DISTRIBUTION OF 26Al IN
 CHONDRULES FROM PRIMITIVE C
 03/16/2001 - 03/14/2004 FY02: \$30,000 Total: \$60,000
Prin. Invest.: A KROT
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10640 UNIV OF HAWAII AT MANOA - HONOLULU 4154
 EFFECTS OF VOLCANIC ERUPTIONS ON THE NATURAL ENVIRONMENT
 03/20/2001 - 03/31/2004 FY02: \$261,000 Total: \$511,000
Prin. Invest.: P MOUGINIS-MARK
Tech. Officer: GSFC/E D PAYLOR, II
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10646 UNIV OF HAWAII AT MANOA - HONOLULU 4155
 HIGH TEMPERATURES AND DISKS AROUND PMS STARS FUSE SPECTRA OF
 THREE HERBIGAEBE STARS - FUSE 2000
 03/27/2001 - 05/31/2003 FY02: \$0 Total: \$23,500
Prin. Invest.: T SIMON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10704 UNIV OF HAWAII AT MANOA - HONOLULU 4156
 A LIGHTWEIGHT FTIR SPECTROMETER FOR IN SITU GAS ANALYSIS
 05/01/2001 - 03/31/2004 FY02: \$107,752 Total: \$218,692
Prin. Invest.: P LUCEY
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 10750 UNIV OF HAWAII AT MANOA - HONOLULU 4157
 SPATIAL STATISTICS OF LARGE ASTRONOMICAL DATABASES AN ALGO-
 RITHMIC APPROACH
 05/03/2001 - 04/14/2002 FY02: \$0 Total: \$75,000
Prin. Invest.: I SZAPUDI
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10773 UNIV OF HAWAII AT MANOA - HONOLULU 4158
 A CALIBRATION OF THE CLUSTER FLUX MEASUREMENTS IN THE ROSAT
 ALL-SKY SURVEY
 04/20/2001 - 04/30/2003 FY02: \$0 Total: \$55,000
Prin. Invest.: H EBELING
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10909 UNIV OF HAWAII AT MANOA - HONOLULU 4159
 APPLICATION OF A THERMO-RHEOLOGICAL LAVA FLOW MODEL TO MAR-
 TIAN CONDITIONS
 05/09/2001 - 05/14/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: S ROWLAND
Tech. Officer: GSFC/J M BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11138 UNIV OF HAWAII AT MANOA - HONOLULU 4160
 PARTICIPATION ON THE CASSINI-HUYGENS GAS CHROMATO- GRAPH-
 MASS SPECTROMETER(GCMS) TEAM
 07/25/2001 - 07/31/2005 FY02: \$15,000 Total: \$30,000
Prin. Invest.: T C OWEN
Tech. Officer: GSFC/W T KASPRZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11362 UNIV OF HAWAII AT MANOA - HONOLULU 4161
 FLOW-EJECTA CRATER POPULATION ON MARS & CHRONOLOGY OF
 MAJOR GEOLOGIC EVENTS
 09/26/2001 - 09/30/2004 FY02: \$116,000 Total: \$200,000
Prin. Invest.: K KEIL
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11445 UNIV OF HAWAII AT MANOA - HONOLULU 4162
 THERMAL STUDIES OF NEAR EARTH OBJECTS
 12/21/2001 - 02/28/2005 FY02: \$58,000 Total: \$58,000
Prin. Invest.: D JEWITT
Tech. Officer: GSFC/T MORGAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11466 UNIV OF HAWAII AT MANOA - HONOLULU 4163
 ORIGINS, EVOLUTION, AND FATE OF BROWN DWARFS
 12/12/2001 - 12/14/2002 FY02: \$22,530 Total: \$22,530
Prin. Invest.: E MARTIN
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11516 UNIV OF HAWAII AT MANOA - HONOLULU 4164
 MINERALOGICAL MAPPING OF THE MOON AND ASTEROIDS
 12/31/2001 - 12/31/2004 FY02: \$121,800 Total: \$121,800
Prin. Invest.: P G LUCEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11564 UNIV OF HAWAII AT MANOA - HONOLULU 4165
 SOLAR SYSTEM BEYOND NEPTUNE
 02/08/2002 - 02/14/2005 FY02: \$60,000 Total: \$60,000
Prin. Invest.: D C JEWITT
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11591 UNIV OF HAWAII AT MANOA - HONOLULU 4166
 ORIGIN OF METEORITE PARENT BODIES AND THE MOON
 01/10/2002 - 11/30/2004 FY02: \$340,000 Total: \$340,000
Prin. Invest.: K KEIL
Tech. Officer: GSFC/D SENSKE
CASE Category: 12 – CHEMISTRY

NAG 5 11782 UNIV OF HAWAII AT MANOA - HONOLULU 4167
 DEVELOPMENT OF CRITICAL ELEMENTS OF A DUST TELE- SCOPE
 02/27/2002 - 02/28/2005 FY02: \$248,700 Total: \$248,700
Prin. Invest.: E GRUEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11938 UNIV OF HAWAII AT MANOA - HONOLULU 4168
 FUSE OBSERVATIONS OF LMC AND SMC O3-4 STARS: THE PHYSICAL
 PARAMETERS OF THE HOTTEST STARS
 03/28/2002 - 03/31/2003 FY02: \$23,750 Total: \$23,750
Prin. Invest.: R KUDRITZKI
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11996 UNIV OF HAWAII AT MANOA - HONOLULU 4169
 SCALABLE ALGORITHMS FOR FAST ANALYSIS OF MEGAPIXEL CMB MAPS
 AND LARGE ASTRONOMICAL DATABASES.
 04/11/2002 - 04/14/2005 FY02: \$124,867 Total: \$124,867
Prin. Invest.: I SZAPUDI
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12101 UNIV OF HAWAII AT MANOA - HONOLULU 4170
 NOVEL TECHNIQUES FOR FAST CMB ANALYSIS
 04/24/2002 - 04/30/2005 FY02: \$115,802 Total: \$115,802
Prin. Invest.: I SZAPUDI
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12145 UNIV OF HAWAII AT MANOA - HONOLULU 4171
 THERMAL EMISSION SPECTROSCOPY OF PARTICULATE MARTIAN ANA-
 LOGUE MATERIALS
 05/14/2002 - 05/14/2005 FY02: \$22,000 Total: \$22,000
Prin. Invest.: V E HAMILTON
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12198 UNIV OF HAWAII AT MANOA - HONOLULU 4172
 SEEING DOUBLE: DO THE X-RAY LUMINOUS EARLY A STARS HAVE ACTIVE
 BINARY COMPANIONS?
 05/15/2002 - 05/31/2003 FY02: \$32,300 Total: \$32,300
Prin. Invest.: T SIMON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12207 UNIV OF HAWAII AT MANOA - HONOLULU 4173
 REPLACEMENT OF THE TELESCOPE CONTROL SYSTEM FOR THE IRTF
 06/05/2002 - 06/30/2005 FY02: \$390,000 Total: \$390,000
Prin. Invest.: A T TOKUNAGA
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12214 UNIV OF HAWAII AT MANOA - HONOLULU 4174
 QUASI-BIENNIAL OSCILLATION MODULATION OF EDDIES IN THE TROPICAL
 STRATOSPHERE
 05/16/2002 - 05/14/2005 FY02: \$30,403 Total: \$30,403
Prin. Invest.: K HAMILTON
Tech. Officer: GSFC/P DECOLA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12236 UNIV OF HAWAII AT MANOA - HONOLULU 4175
 SMALL OUTER SOLAR SYSTEM BODIES: OBSERVATIONS AND MODELING
 05/31/2002 - 05/31/2005 FY02: \$170,499 Total: \$170,499
Prin. Invest.: K J MEECH
Tech. Officer: GSFC/J J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12406 UNIV OF HAWAII AT MANOA - HONOLULU 4176
 SEARCH FOR NEAR EARTH OBJECTS WITH SMALL APHELION DISTANCES
 08/01/2002 - 08/14/2005 FY02: \$166,000 Total: \$166,000
Prin. Invest.: D THOLEN
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12485 UNIV OF HAWAII AT MANOA - HONOLULU 4177
 SPECTRAL VARIATIONS IN MARTIAN DARK REGIONS & THE SEARCH FOR
 THE SOURCE REGIONS OF SNC METEORITES
 08/26/2002 - 08/31/2005 FY02: \$22,691 Total: \$22,691
Prin. Invest.: V HAMILTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12486 UNIV OF HAWAII AT MANOA - HONOLULU 4178
 PETROLOGIC & EXPERIMENTAL EVALUATION OF AN IGNEOUS ORIGIN FOR
 MAGNETIC ANOMALIES ON MARS
 08/26/2002 - 08/31/2004 FY02: \$35,000 Total: \$35,000
Prin. Invest.: J HAMMER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12506 UNIV OF HAWAII AT MANOA - HONOLULU 4179
 CONSTRAINING THE ORIGINS OF LAYERING IN THE VALLES MARINERIS:
 COMPARING TES AND MOLA
 08/21/2002 - 08/31/2005 FY02: \$45,800 Total: \$45,800
Prin. Invest.: S ANDERSON
Tech. Officer: GSFC/H FREY
CASE Category: 11 – ASTRONOMY

NAG 5 12508 UNIV OF HAWAII AT MANOA - HONOLULU 4180
 CHARACTERIZATION OF 2003 MER LANDING SITES USING MOLA AND MOLA
 DATA
 08/21/2002 - 08/31/2003 FY02: \$29,000 Total: \$29,000
Prin. Invest.: S ANDERSON
Tech. Officer: GSFC/H FREY
CASE Category: 11 – ASTRONOMY

NAG 8 1798 UNIV OF HAWAII AT MANOA - HONOLULU 4181
 RESEARCH, "CURVATURE-BASED WAVEFRONT SENSOR FOR USE ON
 EXTENDED, ARBITRARY, LOW CONTRAST SCENES"
 04/25/2001 - 04/24/2004 FY02: \$67,000 Total: \$282,000
Prin. Invest.: B J LABONTE
Tech. Officer: MSFC/A KEYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 2 98077 UNIV OF HAWAII AT MANOA - HONOLULU 4182
 DEVELOPMENT OF ADVANCED NEAR INFRARED FOCAL PLANE TECHNOL-
 OGY
 08/04/1998 - 06/30/2003 FY02: \$2,498,554 Total: \$6,196,660
Prin. Invest.: D N HALL
Tech. Officer: ARC/K W HODAPP
CASE Category: 11 – ASTRONOMY

NAS 5 99180 UNIV OF HAWAII AT MANOA - HONOLULU 4183
 LASER RANGING OPERATION, REPAIR & MAINTENANCE OF LURE OBSER-
 VATORY FACILITY, MAUI, HI.
 05/16/1999 - 05/15/2003 FY02: \$660,000 Total: \$1,810,000
Prin. Invest.: D O'GARA
Tech. Officer: GSFC/J MCGARRY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NASW 5062 UNIV OF HAWAII AT MANOA - HONOLULU 4184
 OPERATION AND MAINTENANCE OF THE INFRARED TELESCOPE FACILITY
 01/31/1996 - 01/31/2001 FY02: -\$93,879 Total: \$14,822,261
Prin. Invest.: D N HALL, R JOSEPH
Tech. Officer: HQ/E BARKER
CASE Category: 11 – ASTRONOMY

NCC 1 315 UNIV OF HAWAII AT MANOA - HONOLULU 4185
 SIZE RESOLVED AEROSOL NUCLEI AND PHYSICO-CHEMISTRY FOR PEM-
 TROPICS B ABOARD P-3B, REF NRA-97-MTPE-13
 08/17/1998 - 08/31/2002 FY02: \$0 Total: \$346,930
Prin. Invest.: A D CLARKE, V KAPUSTIN
Tech. Officer: LARC/J M HOELL, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 416 UNIV OF HAWAII AT MANOA - HONOLULU 4186
 AEROSOL PHYSICO-CHEMISTRY: P-3B AIRCRAFT MEASUREMENTS FOR
 TRACE-P. NRA00-OES-01.
 09/25/2000 - 09/30/2003 FY02: \$262,556 Total: \$480,381
Prin. Invest.: A D CLARKE
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 696 UNIV OF HAWAII AT MANOA - HONOLULU 4187
 FLAME DESIGN - A NOVEL APPROACH TO CLEAN, EFFICIENT DIFFUSION
 FLAMES
 03/25/1999 - 01/13/2003 FY02: \$16,873 Total: \$62,889
Prin. Invest.: B CHAO
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 373 UNIV OF HAWAII AT MANOA - HONOLULU 4188
 PARTICIPATION IN THE COMPOSITE INFRARED SPECTROMETER (CIRS)
 PROJECT AS CO-INVESTIGATOR
 01/12/1999 - 01/14/2003 FY02: \$10,000 Total: \$28,000
Prin. Invest.: T C OWEN
Tech. Officer: GSFC/G L BJORAKER
CASE Category: 11 – ASTRONOMY

NCC 5 461 UNIV OF HAWAII AT MANOA - HONOLULU 4189
 QUANTITATIVE ANALYSIS OF HOT SPOTS USING EO-1 & LAND SAT 7.
 02/28/2000 - 09/30/2002 FY02: \$24,873 Total: \$79,238
Prin. Invest.: L P FLYNN
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 538 UNIV OF HAWAII AT MANOA - HONOLULU 4190
 THE NASA INFRARED TELESCOPE FACILITY: SOLAR SYSTEM OBSERVA-
 TIONS AND MISSION SUPPORT
 02/12/2001 - 01/31/2006 FY02: \$3,296,046 Total: \$6,494,505
Prin. Invest.: R KUDRITZKI
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30179 UNIV OF HAWAII AT MANOA - HONOLULU 4191
 PHYSICAL MODELING OF MULTI-SPECTRAL DATA TO CHARACTERIZE
 DEPTH & BOTTOM-TYPE IN NEARSHORE MARINE CA
 08/12/1999 - 08/31/2001 FY02: -\$1,988 Total: \$20,012
Prin. Invest.: C FLETCHER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30207 UNIV OF HAWAII AT MANOA - HONOLULU 4192
 SOURCES AND ISOTOPIC COMPOSITIONS OF NITROUS OXIDE FROM THE
 SUBTROPIC NORTH PACIFIC & EASTERN TROPIC
 08/19/1999 - 12/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B POPP
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40021 UNIV OF HAWAII AT MANOA - HONOLULU 4193
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM.
 02/13/1997 - 01/31/2001 FY02: -\$412 Total: \$1,432,842
Prin. Invest.: D TAYLOR
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40076 UNIV OF HAWAII AT MANOA - HONOLULU 4194
 HAWAII SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/08/2001 - 01/31/2005 FY02: \$422,500 Total: \$1,010,824
Prin. Invest.: G TAYLOR
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50175 UNIV OF HAWAII AT MANOA - HONOLULU 4195
 A COMPLETE SAMPLE OF X-RAY SELECTED GALAXY CLUSTERS FROM
 THE ROSAT NORTECLIPTIC POLE SURVEY
 05/22/1998 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J HENRY, MULLIS
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 5 50319 UNIV OF HAWAII AT MANOA - HONOLULU 4196
 THE CHANGING FACE OF A NEW VOLCANIC LANDSCAPE SYSTEM: RATES,
 CAUSES & HAZARDS/STUDENT: JOHN BAILEY
 08/16/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: P MOUGINIS-MARK
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50357 UNIV OF HAWAII AT MANOA - HONOLULU 4197
 A STUDY OF PLANETARY SYSTEM FORMATION & EVOLUTION WITH A DUAL
 CHANNEL ADAPTIVE OPTICS IMAGING POLAR
 05/14/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D JEWITT
Tech. Officer: GSFC/K E BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50396 UNIV OF HAWAII AT MANOA - HONOLULU 4198
 AN INFRARED SEARCH FOR THE ORIGINS OF ELLIPTICAL GALAXIES
 STUDENT: BARRY ROTHBERG
 06/12/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R JOSEPH
Tech. Officer: HQ/K BLANDING
CASE Category: 11 – ASTRONOMY

IDAHO

NAG 5 7537 BOISE STATE UNIV 4199
 INVESTIGATION OF PHYSICAL PROCESS DYNAMICS DURING COLD SEA-
 SON FLOODING.
 06/18/1998 - 06/30/2002 FY02: \$0 Total: \$109,909
Prin. Invest.: P DAWSON
Tech. Officer: GSFC/E ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10982 **IDAHO STATE UNIV** **4200**
 WILDFIRE EFFECTS ON RANGELAND ECOSYSTEMS AND LIVE STOCK
 GRAZING IN IDAHO
 06/12/2001 - 12/14/2003 FY02: \$150,011 Total: \$498,900
Prin. Invest.: K T WEBER
Tech. Officer: GSFC/W TURNER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12301 **IDAHO STATE UNIV** **4201**
 DETECTION, PREDICTION, IMPACT AND MANAGEMENT OF INVASIVE
 PLANTS USING GPS
 06/24/2002 - 05/31/2005 FY02: \$1,500,000 Total: \$1,500,000
Prin. Invest.: K T WEBER
Tech. Officer: GSFC/W TURNER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9052 **UNIV OF IDAHO - MOSCOW, IDAHO** **4202**
 NOVA ONLINE ESS
 02/14/2000 - 09/14/2003 FY02: \$84,999 Total: \$234,833
Prin. Invest.: M R ODELL
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9846 **UNIV OF IDAHO - MOSCOW, IDAHO** **4203**
 STUDY OF LAND-ATMOSPHERE INTERACTIONS USING SATELLITE DATA
 ASSIMILATION
 08/01/2000 - 07/31/2002 FY02: \$0 Total: \$19,084
Prin. Invest.: R J QUALLS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9876 **UNIV OF IDAHO - MOSCOW, IDAHO** **4204**
 LAND SURFACE MODELING & DATA ASSIMILATION WITH IN SITU & REMOTE
 SENSING DATA FROM CASES-97
 08/22/2000 - 07/14/2003 FY02: \$28,446 Total: \$150,434
Prin. Invest.: R QUALLS
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10210 **UNIV OF IDAHO - MOSCOW, IDAHO** **4205**
 LEWIS & CLARK REDISCOVERY PROJECT: LIFE-LONG LEARNING ONLINE
 (L3)
 01/03/2001 - 09/30/2003 FY02: \$0 Total: \$1,831,000
Prin. Invest.: J A TEASDALE
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11112 **UNIV OF IDAHO - MOSCOW, IDAHO** **4206**
 VALIDATION OF THE ATMOSPHERIC INFRARED SOUNDER (AIRS) OVER
 THE ANTARCTIC PLATEAU (AQUA-0080-033) NR
 07/12/2001 - 08/31/2004 FY02: \$118,556 Total: \$217,875
Prin. Invest.: V P WALDEN
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11495 **UNIV OF IDAHO - MOSCOW, IDAHO** **4207**
 FRACTURE & STRESS EVOLUTION ON EUROPA: NEW INSIGHT INTO
 FRACTURE INTERPRETATION & ICE THICKNESS ESTI
 12/27/2001 - 12/31/2003 FY02: \$35,000 Total: \$35,000
Prin. Invest.: S KATTENHORN
Tech. Officer: GSFC/D SENSEKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11589 **UNIV OF IDAHO - MOSCOW, IDAHO** **4208**
 LEWIS & CLARK REDISCOVERY PROJECT: LIFE LONG LEARNING ONLINE
 (L3)
 01/24/2002 - 12/31/2002 FY02: \$1,831,000 Total: \$1,831,000
Prin. Invest.: J TEASDALE
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11734 **UNIV OF IDAHO - MOSCOW, IDAHO** **4209**
 "ULTRA-LOW POWER HIGH PERFORMANCE CMOS VLSI"
 03/12/2002 - 03/31/2004 FY02: \$1,097,198 Total: \$1,097,198
Prin. Invest.: G MAKI
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11805 **UNIV OF IDAHO - MOSCOW, IDAHO** **4210**
 "HIGH PERFORMANCE LOSSY DATA COMPRESSION VLSI ARCHITEC-
 TURES"
 03/12/2002 - 03/31/2004 FY02: \$502,799 Total: \$502,799
Prin. Invest.: G MAKI
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11970 **UNIV OF IDAHO - MOSCOW, IDAHO** **4211**
 LOW POWER, RADIATION-TOLERANT RECONFIGURABLE PROCESSOR
 04/09/2002 - 04/14/2004 FY02: \$543,955 Total: \$543,955
Prin. Invest.: G DONOHOE
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1174 **UNIV OF IDAHO - MOSCOW, IDAHO** **4212**
 ANALYZING THE IMPACT OF RISK AND TASK ANALYSIS AND HUMAN
 FACTORS PRINCIPLES ON THE OUTCOME OF ...
 04/24/2000 - 04/14/2003 FY02: \$135,533 Total: \$396,203
Prin. Invest.: L T OSTROM
Tech. Officer: ARC/B G KANKE
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 5 395 **UNIV OF IDAHO - MOSCOW, IDAHO** **4213**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/13/1999 - 05/31/2002 FY02: \$0 Total: \$508,298
Prin. Invest.: R GILL
Tech. Officer: HQ/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 577 **UNIV OF IDAHO - MOSCOW, IDAHO** **4214**
 IDAHO NASA EPSCOR PROGRAM
 08/17/2001 - 07/31/2004 FY02: \$383,334 Total: \$508,334
Prin. Invest.: J TEASDALE
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40108 **UNIV OF IDAHO - MOSCOW, IDAHO** **4215**
 IDAHO SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/02/2001 - 02/28/2005 FY02: \$275,081 Total: \$807,406
Prin. Invest.: J TEASDALE
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

ILLINOIS

NAG 5 12091	CHICAGO STATE UNIV	4216			
SATURDAY ACADEMY FOR SPACE SCIENCE					
05/03/2002 - 05/31/2005	FY02: \$100,000		Total: \$100,000		
<i>Prin. Invest.:</i> J RICHARD					
<i>Tech. Officer:</i> GSFC/C HOLLINGSWORTH					
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER					
NCC 2 5414	DEPAUL UNIV	4217			
DEVELOPING, EVALUATING & APPLYING A COMPUTATIONAL MODEL OF INFORMATION NAVIGATION					
12/19/2000 - 02/14/2003	FY02: \$21,372		Total: \$38,292		
<i>Prin. Invest.:</i> C S MILLER					
<i>Tech. Officer:</i> ARC/R W REMINGTON					
<i>CASE Category:</i> 22 – COMPUTER SCIENCE					
NCC 5 272	DEPAUL UNIV	4218			
OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM					
02/24/1998 - 06/30/2002	FY02: \$0		Total: \$865,000		
<i>Prin. Invest.:</i> C C NARASIMHAN					
<i>Tech. Officer:</i> GSFC/J ROSENDHAL					
<i>CASE Category:</i> 11 – ASTRONOMY					
NCC 5 641	DEPAUL UNIV	4219			
DEPAUL SPACE SCIENCE CENTER					
04/04/2002 - 06/30/2007	FY02: \$315,000		Total: \$315,000		
<i>Prin. Invest.:</i> C C					
<i>Tech. Officer:</i> GSFC/P SAKIMOTO					
<i>CASE Category:</i> 11 – ASTRONOMY					
NAG 8 1827	FINCH UNIV HEALTH SCI - CHICAGO MED SCHL	4220			
CRYSTALLIZATION OF THE MITOCHONDRIAL METABOLITE TRANSPORT PROTEINS					
09/13/2001 - 11/30/2004	FY02: \$250,000		Total: \$322,000		
<i>Prin. Invest.:</i> R S KAPLAN					
<i>Tech. Officer:</i> MSFC/B GUYNES					
<i>CASE Category:</i> 59 – LIFE SCIENCE, OTHER					
NAG 3 2743	ILLINOIS INST OF TECHNOLOGY	4221			
THERMAL CONTROL AND ENHANCEMENT OF HEAT TRANSFER CAPACITY OF CRYOGENIC CAPILLARY PUMPED LOOP AND HE					
03/19/2002 - 09/13/2002	FY02: \$10,000		Total: \$10,000		
<i>Prin. Invest.:</i> J SEYED-YAGOOBI					
<i>Tech. Officer:</i> GRC/M M HASAN					
<i>CASE Category:</i> 46 – MECHANICAL ENGR					
NAG 5 12370	ILLINOIS INST OF TECHNOLOGY	4222			
ELECTROHYDRODYNAMIC CONDUCTION PUMPING OF CRYOGENIC FLUIDS					
07/12/2002 - 12/14/2002	FY02: \$12,800		Total: \$12,800		
<i>Prin. Invest.:</i> J S YAGOOBI					
<i>Tech. Officer:</i> GSFC/J DIDION					
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR					
NCC 3 798	ILLINOIS INST OF TECHNOLOGY	4223			
MODELING NONLINEAR ACOUSTIC STANDING WAVES IN RESONATORS: THEORY AND EXPERIMENT					
05/16/2000 - 04/30/2003	FY02: \$60,087		Total: \$160,087		
<i>Prin. Invest.:</i> D RAMAN					
<i>Tech. Officer:</i> GRC/B M STEINERZ					
<i>CASE Category:</i> 46 – MECHANICAL ENGR					
NAG 5 9584	ILLINOIS STATE UNIV	4224			
DETERMINATION OF THE MAGNETOTAIL CURRENT SHEET STRUCTURE USING NONLINEAR DYNAMICS MODELING AND GEOTA					
05/25/2000 - 05/31/2003	FY02: \$55,296		Total: \$159,285		
<i>Prin. Invest.:</i> D HOLLAND					
<i>Tech. Officer:</i> GSFC/J SHARBER					
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER					
NAG 2 1512	JUDSON COLL-ELGIN ILLINOIS	4225			
EFFECTS OF OSCILLATORY ACCELERATIONS ON BACTERIAL PROLIFERATION & RESPONSE TO ANTIBIOTICS					
08/17/2001 - 07/31/2003	FY02: \$63,575		Total: \$129,464		
<i>Prin. Invest.:</i> E A JUERGENSMEYER					
<i>Tech. Officer:</i> ARC/M M AVERNER, ARC/R D MACELROY					
<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)					
NAG 1 02004	KNOX COLL	4226			
CALIBRATION OF ECO BADGE TEST-STRIPS FOR OZONE MEASUREMENT FOR GLOBE					
11/15/2001 - 09/30/2002	FY02: \$15,996		Total: \$15,996		
<i>Prin. Invest.:</i> L C BUSH					
<i>Tech. Officer:</i> LARC/J FISHMAN, LARC/R J DEYOUNG					
<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE					
NCC 8 244	NORTHEASTERN ILLINOIS UNIV	4227			
PRMTE COMMERCIALY FNDD RSRH AND TECH. DEV. IN THE FLD OF ADVNCD MATEIALS PROCESSING UTIL.MICROGRAVI					
01/14/2002 - 10/31/2002	FY02: \$2,170,000		Total: \$2,170,000		
<i>Prin. Invest.:</i> A SACCO JR.					
<i>Tech. Officer:</i> MSFC/J SAMS					
<i>CASE Category:</i> 49 – ENGINEERING, OTHER					
NAG 1 2313	NORTHWESTERN UNIV	4228			
MECHANICS OF NANOTUBES & NANOTUBE/POLYMER COMPOSITES					
07/18/2000 - 07/19/2003	FY02: \$108,622		Total: \$213,856		
<i>Prin. Invest.:</i> R S RUOFF					
<i>Tech. Officer:</i> LARC/T S GATES					
<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR					
NAG 1 01058	NORTHWESTERN UNIV	4229			
SURFACE TEMPLATED GROWTH & ASSEMBLY OF CARBON NANOTUBE ARRAYS					
05/29/2001 - 12/31/2002	FY02: \$0		Total: \$100,000		
<i>Prin. Invest.:</i> C A MIRKIN					
<i>Tech. Officer:</i> LARC/J D JORDAN					
<i>CASE Category:</i> 11 – ASTRONOMY					
NAG 1 02078	NORTHWESTERN UNIV	4230			
DEPLOYMENT OF INFLATABLE STRUCTURES BY ALE FEM AND PARTICLE METHODS					
04/10/2002 - 04/30/2003	FY02: \$41,126		Total: \$41,126		
<i>Prin. Invest.:</i> W K LIU					
<i>Tech. Officer:</i> LARC/J T WANG					
<i>CASE Category:</i> 46 – MECHANICAL ENGR					
NAG 2 1522	NORTHWESTERN UNIV	4231			
MATHEMATICAL & COMPUTATIONAL ANALYSIS OF CENTRAL CARBON PATHWAYS FOR EFFICIENT METABOLIC ENGINEERING					
09/14/2001 - 09/14/2003	FY02: \$128,059		Total: \$128,059		
<i>Prin. Invest.:</i> V HATZIMANIKATI					
<i>Tech. Officer:</i> ARC/J HINES, ARC/P FUNG					
<i>CASE Category:</i> 43 – CHEMICAL ENGR					

NAG 3 1823 **NORTHWESTERN UNIV** **4232**
 COARSENING IN SOLID-LIQUID MIXTURES
 04/01/1996 - 05/31/2001 FY02: \$0 Total: \$837,375
Prin. Invest.: P W VOORHEES
Tech. Officer: GRC/T K GLASGOW
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 1892 **NORTHWESTERN UNIV** **4233**
 THE MICROMECHANICS OF THE MOVING CONTACT LINE
 06/01/1996 - 05/31/2001 FY02: \$0 Total: \$320,000
Prin. Invest.: S LICHTER
Tech. Officer: GRC/M WEISLOGEL
CASE Category: 13 – PHYSICS

NAG 3 2113 **NORTHWESTERN UNIV** **4234**
 COMPLEX DYNAMICS IN MARANGONI CONVECTION WITH ROTATION
 03/04/1998 - 01/06/2003 FY02: \$0 Total: \$370,000
Prin. Invest.: H RIECKE
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2209 **NORTHWESTERN UNIV** **4235**
 FILTRATION COMBUSTION FOR MICROGRAVITY APPLICATIONS: (1) SMOLDERING (2) COMBUSTION SYNTHESIS OF A
 11/17/1998 - 11/11/2002 FY02: \$119,700 Total: \$506,200
Prin. Invest.: B J MATKOWSKY
Tech. Officer: GRC/S A GOGOKLU
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2364 **NORTHWESTERN UNIV** **4236**
 COMPETING INSTABILITIES AND THE SPATIO-TEMPORAL DYNAMICS OF INTERFACIAL WAVE PATTERNS
 03/20/2000 - 11/30/2003 FY02: \$95,000 Total: \$225,250
Prin. Invest.: M SILBER
Tech. Officer: GRC/C E NIEDERHAUS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2369 **NORTHWESTERN UNIV** **4237**
 INTERFACIAL DYNAMICS INTERFACIAL DYNAMICS
 04/03/2000 - 11/30/2003 FY02: \$87,030 Total: \$223,613
Prin. Invest.: D H DAVIS
Tech. Officer: GRC/H C DEGROH
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2474 **NORTHWESTERN UNIV** **4238**
 COARSENING IN SOLID-LIQUID MIXTURES-2 (CSLM-2) COARSENING IN SOLID-LIQUID MIXTURES-2 (CSLM-2)
 07/24/2000 - 11/30/2005 FY02: \$234,977 Total: \$455,447
Prin. Invest.: P W VOORHEES
Tech. Officer: GRC/W B DUVAL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2485 **NORTHWESTERN UNIV** **4239**
 ATOMIC-SCALE STUDIES OF EVOLVING MICROSTRUCTURES OF NICKEL-BASED SUPERALLOYS: A GRADUATE TRAINING
 08/22/2000 - 08/31/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: D N SEIDMAN
Tech. Officer: GRC/R D NOEBE
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2511 **NORTHWESTERN UNIV** **4240**
 MODELING MICROGRAVITY NON-PREMIXED COMBUSTION SYSTEMS
 12/07/2000 - 11/15/2004 FY02: \$99,000 Total: \$169,000
Prin. Invest.: D MATALON
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2628 **NORTHWESTERN UNIV** **4241**
 DEVELOPMENT OF HIGH-CONDUCTIVE POLYELECTROLYTES FOR LI BATTERIES
 06/01/2001 - 12/31/2003 FY02: \$87,367 Total: \$177,367
Prin. Invest.: D F SHRIVER
Tech. Officer: GRC/R S BALDWIN
CASE Category: 12 – CHEMISTRY

NAG 5 5094 **NORTHWESTERN UNIV** **4242**
 THE DEVELOPMENT OF A FOCUSING SYSTEM FOR 40-100 KEV X-RAYS
 11/22/1996 - 03/31/2003 FY02: \$5,501 Total: \$502,501
Prin. Invest.: M P ULMER
Tech. Officer: GSFC/L W GURKIN
CASE Category: 13 – PHYSICS

NAG 5 7011 **NORTHWESTERN UNIV** **4243**
 THEORETICAL STUDIES OF X-RAY BURSTS IN ACCRETING NEUTRON STARS - ATP
 02/18/1998 - 02/14/2003 FY02: \$0 Total: \$211,710
Prin. Invest.: R E TAAM
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8294 **NORTHWESTERN UNIV** **4244**
 LESSER THARSIS VOLCANOES: STYLES OF ERUPTION AND RELATIONS TO THARIS FLOOD VOLCANISM
 02/23/1999 - 03/31/2003 FY02: \$0 Total: \$132,200
Prin. Invest.: M S ROBINSON
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9188 **NORTHWESTERN UNIV** **4245**
 A MULTI-WAVELENGTH STUDY OF THE INNER 50 PC-REGION AT THE GALACTIC GALACTIC CENTER (LTS99)
 03/07/2000 - 03/14/2005 FY02: \$30,026 Total: \$105,451
Prin. Invest.: F YUSEF-ZADEH
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9272 **NORTHWESTERN UNIV** **4246**
 SMALL-SCALE STRUCTURE IN THE DIFFUSE INTERSTELLAR MEDIUM (LTS99)
 03/16/2000 - 03/14/2003 FY02: \$94,730 Total: \$276,625
Prin. Invest.: D MEYER
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10306 **NORTHWESTERN UNIV** **4247**
 ANDEAN MOUNTAIN BUILDING: AN INTEGRATED TOPOGRAPHIC, GPS, SEISMOLOGICAL AND NUMERICAL STUDY (SENH99)
 01/30/2001 - 03/14/2003 FY02: \$24,999 Total: \$74,999
Prin. Invest.: S STEIN
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NASA'S UNIVERSITY PROGRAM

ILLINOIS

NAG 5 10323 **NORTHWESTERN UNIV** **4248**
 SMALL-SCALE INTERSTELLAR STRUCTURE TOWARD THE OPEN CLUSTER
 CHI PERSEI (FUSE 00)
 01/30/2001 - 01/31/2003 FY02: \$0 Total: \$71,700
Prin. Invest.: D M MEYER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10324 **NORTHWESTERN UNIV** **4249**
 THE PHYSICAL CHARACTER OF SMALL-SCALE INTERSTELLAR STRUC-
 TURES (FUSE 00)
 01/30/2001 - 01/31/2003 FY02: \$0 Total: \$45,100
Prin. Invest.: J T LAUROESCH
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10465 **NORTHWESTERN UNIV** **4250**
 ANOMALOUS OXYGEN AND KRYPTON ABUNDANCES IN INTER- STELLAR
 GAS (FUSE 00)
 03/02/2001 - 02/28/2003 FY02: \$0 Total: \$66,200
Prin. Invest.: D M MEYER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10598 **NORTHWESTERN UNIV** **4251**
 COLLABORATIVE EFFORT BETWEEN NASA AND PROFESSOR ME L ULMER
 03/16/2001 - 03/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: M ULMER
Tech. Officer: GSFC/W ZHANG
CASE Category: 11 – ASTRONOMY

NAG 5 10847 **NORTHWESTERN UNIV** **4252**
 ALBEDO, COLOR, AND TOPOGRPAHIC STUDIES OF THE MOON AND
 MERCURY
 05/03/2001 - 05/14/2002 FY02: \$0 Total: \$31,000
Prin. Invest.: M S ROBINSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11396 **NORTHWESTERN UNIV** **4253**
 BINARY STARS AND GLOBAL CLUSTER DYNAMICS
 01/24/2002 - 09/30/2002 FY02: \$77,049 Total: \$77,049
Prin. Invest.: F A RASIO
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11457 **NORTHWESTERN UNIV** **4254**
 GAN PHOTO-CATHODE STRUCTURES FOR DETECTION AND IMA GING IN
 THE UV
 12/17/2001 - 12/31/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: M P ULMER
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12018 **NORTHWESTERN UNIV** **4255**
 QUANTITATIVE STUDIES IN PLANETARY VOLCANISM
 04/11/2002 - 04/14/2005 FY02: \$32,100 Total: \$32,100
Prin. Invest.: M S ROBINSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 12044 **NORTHWESTERN UNIV** **4256**
 BINARY STARS AND GLOBULAR CLUSTER DYNAMICS
 04/17/2002 - 04/14/2005 FY02: \$81,340 Total: \$81,340
Prin. Invest.: F A RASIO
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12157 **NORTHWESTERN UNIV** **4257**
 ANALYSIS OF MARS MAGNETIC LINEATIONS FOR TRUE POLA R WANDER,
 REVERSALS, & CRUSTAL ACCRETION
 05/08/2002 - 05/14/2005 FY02: \$46,424 Total: \$46,424
Prin. Invest.: D JURDY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12587 **NORTHWESTERN UNIV** **4258**
 LUNAR POLAR INVESTIGATIONS
 09/18/2002 - 09/14/2004 FY02: \$56,000 Total: \$56,000
Prin. Invest.: B BUSSEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1660 **NORTHWESTERN UNIV** **4259**
 EVOLUTION OF DENDRITE MORPHOLOGY DURING ISOTHERMAL COARS-
 ENING
 04/24/2000 - 11/30/2003 FY02: \$100,000 Total: \$235,000
Prin. Invest.: J ALKEMPER
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1053 **NORTHWESTERN UNIV** **4260**
 RESEARCH FOR ROTATION MEMBRANE WATER PURIFICATION
 12/10/1998 - 12/14/2002 FY02: \$0 Total: \$520,029
Prin. Invest.: R M LUEPTOW
Tech. Officer: JSC/N PACKMAN
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1297 **NORTHWESTERN UNIV** **4261**
 PILOT STUDY: ACOUSTIC ATTENUATION AS A REA-TIME GA SEOUS PRO-
 CESS CONTROL MONITOR
 05/01/2001 - 06/30/2002 FY02: \$0 Total: \$56,758
Prin. Invest.: R M LUEPTOW
Tech. Officer: JSC/D RUSSO
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 9 1398 **NORTHWESTERN UNIV** **4262**
 ADVANCING ROTATING MEMBRANE WATER PURIFICATION FOR HUMAN
 LIFE SUPPORT IN SPACE
 02/20/2002 - 02/19/2005 FY02: \$174,158 Total: \$174,158
Prin. Invest.: R N LUEPTOW
Tech. Officer: JSC/K DAUES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 9 02003 **NORTHWESTERN UNIV** **4263**
 THERMAL IONIZATION MASS SPECTROMETER
 02/07/2002 - 03/30/2002 FY02: \$226,174 Total: \$226,174
Prin. Invest.: K MCKEEGAN
Tech. Officer: JSC/E STANSBERRY
CASE Category: 56 – MEDICL

NCC 1 01002 **NORTHWESTERN UNIV** **4264**
 NANO-, MICRO- & MACRO-MECHANICS OF NANOREINFORCED POLYMERIC MATERIALS
 12/13/2000 - 08/31/2003 FY02: \$74,699 Total: \$148,166
Prin. Invest.: L C BRINSON
Tech. Officer: LARC/T S GATES
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 02007 **NORTHWESTERN UNIV** **4265**
 MICROMECHANICS-CONTINUUM-NUMERICAL MODELING OF SHAPE MEMORY ALLOYS
 01/16/2002 - 01/15/2005 FY02: \$41,207 Total: \$41,207
Prin. Invest.: L C BRINSON
Tech. Officer: LARC/T L TURNER, LARC/K P SHEPHERD
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 2 1013 **NORTHWESTERN UNIV** **4266**
 PROPHECY: A HIERARCHICAL TOOL FOR MODELING & ANALYZING PARALLEL SCIENTIFIC APPLICATIONS
 01/27/1998 - 09/30/2002 FY02: \$0 Total: \$269,931
Prin. Invest.: V E TAYLOR
Tech. Officer: ARC/A GRADY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1098 **NORTHWESTERN UNIV** **4267**
 AN INVESTIGATION OF THE EFFECTS OF OUTSOURCING MAINTENANCE ON TASK PERFORMANCE
 03/15/1999 - 06/30/2002 FY02: \$21,584 Total: \$316,720
Prin. Invest.: E J CZEPIEL
Tech. Officer: ARC/B G KANKI, ARC/M CONNORS
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 3 870 **NORTHWESTERN UNIV** **4268**
 SYNTHESIS, MICROSTRUCTURE AND PROPERTIES OF NICKEL ALUMINIDE FOAMS
 02/28/2001 - 12/31/2002 FY02: \$60,000 Total: \$109,967
Prin. Invest.: D C DUNAND
Tech. Officer: GRC/M V NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 3 52378 **NORTHWESTERN UNIV** **4269**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT RESEARCHERS PROGRAM
 06/21/2001 - 08/31/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D N SEIDMAN
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 88 **NORTHWESTERN UNIV** **4270**
 DEVELOPMENT OF A MOVING GRID RETARDER FOR SUBMILLI METER POLARIMETRY OF SGR B2 (STUDENT: DAVID CHUS)
 05/26/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: G NOVAK
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 90 **NORTHWESTERN UNIV** **4271**
 HIGH DETECTION EFFICIENCY PHOTON COUNTERS AT 1064N M AND THEIR USE IN A NOVEL QUANTUM IMAGING SCHEME
 06/03/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P KUMAR
Tech. Officer: GSFC/M S BURRELL
CASE Category: 45 – ELECTRICAL ENGR

NGT 5 30456 **NORTHWESTERN UNIV** **4272**
 HETEROGENEOUS NOX CHEMISTRY ON METAL OXIDE SURFACES STUDIED USING NON-LINEAR OPTICAL SPECTROSCOPY
 08/27/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: F GEIGER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30471 **NORTHWESTERN UNIV** **4273**
 DATA MINING TECHNIQUES FOR STREAMING DATA STUDENT: YI QIAO
 08/27/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: P SCHEUERMANN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50198 **NORTHWESTERN UNIV** **4274**
 IMPROVED FEM DYNAMIC SUBSTRUCTURING THROUGH WAVE-BASED JOINT MODELS
 06/18/1998 - 02/28/2002 FY02: \$0 Total: \$60,500
Prin. Invest.: T IGUSA
Tech. Officer: HQ/A NURRIDIN
CASE Category: 46 – MECHANICAL ENGR

NGT 5 50263 **NORTHWESTERN UNIV** **4275**
 RAPIDLY PROPAGATING BUOYANT FILTRATION COMBUSTION WAVES WITH APPLICATIONS TO SMOLDERING & COMBUSTION
 07/09/1999 - 12/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B J MATKOWSKY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50368 **NORTHWESTERN UNIV** **4276**
 THE EFFECT OF GRAIN BOUNDARIES DURING COARSENING IN SOLID-LIQUID MIXTURES (STUDENT: DAVID ROW)
 06/18/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P VOORHEES
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50405 **NORTHWESTERN UNIV** **4277**
 INSTABILITIES IN FLAMES SPREADING OVER LIQUID FUELS (STUDENT: TANYA TICKEL)
 07/30/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M MATALON
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7662 **SOUTHERN ILLINOIS UNIV - CARBONDALE** **4278**
 COMPREHENSIVE MODELS OF THE NEAR-EARTH MAGNETIC FIELD: INTERPRETATION OF THE LITHOSPHERE
 09/09/1998 - 09/14/2002 FY02: \$0 Total: \$111,000
Prin. Invest.: D RAVAT
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7771 **SOUTHERN ILLINOIS UNIV - CARBONDALE** **4279**
 GEOLOGIC INTERPRETATION OF SATELLITE ALTITUDE CRUSTAL MAGNETIC ANOMALY DATA
 11/12/1998 - 10/31/2002 FY02: \$0 Total: \$133,000
Prin. Invest.: D RAVAT
Tech. Officer: GSFC/P T TAYLOR
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9832 SOUTHERN ILLINOIS UNIV - CARBONDALE 4280
 GEOLOGICAL ANALYSIS IF THE MARTIAN CRUSTAL MAGNETIC ANOMALIES
 07/26/2000 - 07/31/2003 FY02: \$22,000 Total: \$64,000
Prin. Invest.: D RAVAT
Tech. Officer: GSFC/P TAYLOR
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 8 1812 SOUTHERN ILLINOIS UNIV - CARBONDALE 4281
 ANISOTROPIC EFFECT IN LAMINATE COMPOSITES USING LASER HEATING
 05/08/2001 - 06/30/2002 FY02: \$0 Total: \$38,000
Prin. Invest.: T CHU
Tech. Officer: MSFC/S RUSSELL
CASE Category: 49 – ENGINEERING, OTHER

NGT 1 01026 SOUTHERN ILLINOIS UNIV - CARBONDALE 4282
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/12/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: J SCOTT
Tech. Officer: LARC/R TRIPATHI, LARC/J WILSON
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 50321 SOUTHERN ILLINOIS UNIV - CARBONDALE 4283
 ASSESSING MASS WASTING & LANDSLIDE SUSCEPTIBILITY USING GIS &
 REMOTELY SENSED IMAGERY, SANTA CRUZ IS
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: N PINTER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 2 6050 UNIV OF CHICAGO 4284
 CONFERENCE: THE DEVELOPMENTAL BASIS OF EVOLUTIONARY CHANGE
 05/25/2001 - 04/30/2002 FY02: \$0 Total: \$18,583
Prin. Invest.: N H PATEL
Tech. Officer: ARC/R D MAC-ELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 3228 UNIV OF CHICAGO 4285
 ABUNDANCES AND PHYSICAL CONDITIONS FOR INDIVIDUALS INTERSTEL-
 LAR CLOUDS
 05/07/1996 - 04/30/2001 FY02: \$0 Total: \$479,600
Prin. Invest.: D E WELTY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 3687 UNIV OF CHICAGO 4286
 ACCRETION AND OUTFLOW PHENOMENA IN YOUNG STELLAR O
 01/15/1997 - 01/14/2003 FY02: \$0 Total: \$557,400
Prin. Invest.: A KONIGL
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4476 UNIV OF CHICAGO 4287
 CHEMICAL ASPECTS OF THE ORIGIN OF THE SOLAR SYSTEM
 06/09/1997 - 11/30/2002 FY02: \$0 Total: \$1,081,000
Prin. Invest.: D GROSSMAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4953 UNIV OF CHICAGO 4288
 TURBULENT CONVECTION AND ITS ROLE IN ACOUSTIC EMIS
 06/23/1997 - 04/30/2002 FY02: \$0 Total: \$364,844
Prin. Invest.: D CATTANEO
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 5179 UNIV OF CHICAGO 4289
 ORIGINS OF GALACTIC COSMIC RADIATION: TESTING ALTERNATE MODELS
 WITH RADIOACTIVE & STABLE ISOTOPE
 03/09/1998 - 03/31/2002 FY02: \$0 Total: \$116,000
Prin. Invest.: J A SIMPSON
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5223 UNIV OF CHICAGO 4290
 GRANT NAG5-5223 - HIGH ENERGY ANTIMATTER TELESCOPE (HEAT) PI DR.
 DIETRICH MULLER
 03/16/1999 - 11/30/2002 FY02: \$45,000 Total: \$530,000
Prin. Invest.: D MULLER
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5229 UNIV OF CHICAGO 4291
 GRANT NAG5-5229 STUDIES OF THE COSMIC RADIATION AT HIGH ENER-
 GIES PI PROF SWORDY
 03/16/1999 - 11/30/2002 FY02: \$320,000 Total: \$1,072,000
Prin. Invest.: SWORDY
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5305 UNIV OF CHICAGO 4292
 EXPERIMENTS IN HIGH ENERGY ASTROPHYSICS: THE TRACER PROJECT
 01/09/2001 - 11/30/2003 FY02: \$400,000 Total: \$800,000
Prin. Invest.: D MULLER
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6405 UNIV OF CHICAGO 4293
 STRUCTURE, KINEMATICS & ABUNDANCES IN LOCAL ISM (LTSA)
 10/10/1997 - 10/14/2002 FY02: \$74,200 Total: \$337,299
Prin. Invest.: P FRISCH
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6972 UNIV OF CHICAGO 4294
 MASS LOSS KINETICS AND ISOTOPE FRACTIONATION OF MOL TEN CAI
 COMPOSITIONS
 03/13/1998 - 05/31/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: F M RICHTER
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7307 UNIV OF CHICAGO 4295
 KINETICS OF VOLATILIZATION OF INTERSTELLAR GRAINS
 04/22/1998 - 03/31/2001 FY02: -\$916 Total: \$157,884
Prin. Invest.: L GROSSMAN
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7731 UNIV OF CHICAGO 4296
 RADIATIVE-DYNAMIC PROBLEMS RELATED TO THE ATMOSPHERE OF
 EARLY MARS
 09/24/1998 - 09/30/2002 FY02: \$0 Total: \$219,256
Prin. Invest.: R PIERREHUMBERT
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

ILLINOIS

NASA'S UNIVERSITY PROGRAM

NAG 5 7986 **UNIV OF CHICAGO** **4297**
 GALAXY CLUSTERS AS COSMOLOGICAL PROBES: ANALYSES OF X-RAY,
 LENSING, AND SUNYAEV ZEL'DOVICH MEASUREMENTS
 01/03/1999 - 12/31/2003 FY02: \$129,404 Total: \$511,306
Prin. Invest.: J E CARLSTROM
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8032 **UNIV OF CHICAGO** **4298**
 ASTROPHYSICAL STUDIES WITH IMP SATELLITE DATA
 01/19/1999 - 03/31/2002 FY02: \$0 Total: \$240,297
Prin. Invest.: C LOPATE
Tech. Officer: GSFC/J KING
CASE Category: 11 – ASTRONOMY

NAG 5 8163 **UNIV OF CHICAGO** **4299**
 THE JOURNEY OF THE SUN - A VIRTUAL REALITY SIMULATION
 02/08/1999 - 01/31/2003 FY02: \$0 Total: \$363,125
Prin. Invest.: P C FRISCH
Tech. Officer: GSFC/P HUNTER
CASE Category: 11 – ASTRONOMY

NAG 5 8539 **UNIV OF CHICAGO** **4300**
 PRIOR GRANT:NAG5-3253 CONTINUATION OF MAP SCIENCE SUPPORT
 ACTIVITIES BEING IMPLEMENTED BY THE MAP
 08/17/1999 - 08/14/2004 FY02: \$91,981 Total: \$399,704
Prin. Invest.: S MEYER
Tech. Officer: GSFC/C BENNETT
CASE Category: 11 – ASTRONOMY

NAG 5 8708 **UNIV OF CHICAGO** **4301**
 RADIO INTERFEROMETRIC STUDIES OF COMETS AND ASTEROIDS
 07/20/1999 - 12/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: P PALMER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9016 **UNIV OF CHICAGO** **4302**
 PROPOSAL TO THE NASA ESS HPCC PROGRAM
 02/01/2000 - 01/31/2001 FY02: -\$4,399 Total: \$24,936
Prin. Invest.: D OLSON
Tech. Officer: GSFC/D SPICER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9063 **UNIV OF CHICAGO** **4303**
 DISK-DRIVEN OUTFLOWS IN ACTIVE GALACTIC NUCLEI - ATP-99
 02/14/2000 - 02/14/2003 FY02: \$64,097 Total: \$183,242
Prin. Invest.: A KONIGL
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9303 **UNIV OF CHICAGO** **4304**
 LABORATORY STUDIES OF HETEROGENEOUS CHEMISTRY IN THE UPPER
 TROPOSPHERE. NRA-97-OASTT-01 DATED JANUARY
 03/22/2000 - 03/31/2002 FY02: \$0 Total: \$76,130
Prin. Invest.: D ABBATT
Tech. Officer: GSFC/R LAWRENCEQ
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9378 **UNIV OF CHICAGO** **4305**
 MASS LOSS KINETICS AND ISOTOPE FRACTIONATION OF MOLTEN CAI
 COMPOSITIONS
 04/03/2000 - 03/31/2003 FY02: \$60,000 Total: \$177,000
Prin. Invest.: F RICHTER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9510 **UNIV OF CHICAGO** **4306**
 REFRACTORY INCLUSIONS IN CARBONACEOUS CHONDRITES
 04/25/2000 - 04/30/2003 FY02: \$94,000 Total: \$274,000
Prin. Invest.: A M DAVIS
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9583 **UNIV OF CHICAGO** **4307**
 SEARCH FOR NEW VIBRATIONAL AND ELECTRONIC SPECTRA OF MOLECULAR
 IONS OF ASTROPHYSICAL INTEREST
 05/09/2000 - 05/14/2001 FY02: \$0 Total: \$65,940
Prin. Invest.: T OKA
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9800 **UNIV OF CHICAGO** **4308**
 SIDEROPHILE ELEMENT MICROANALYSIS BY LASER ABLATION ICPMS
 07/14/2000 - 06/30/2003 FY02: \$60,000 Total: \$160,000
Prin. Invest.: M HUMAYUN
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10370 **UNIV OF CHICAGO** **4309**
 ABUNDANCES AND PHYSICAL CONDITIONS IN THE SMC ISM (FUSE 00)
 02/08/2001 - 04/30/2003 FY02: \$0 Total: \$64,700
Prin. Invest.: D E WELTY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10634 **UNIV OF CHICAGO** **4310**
 ISOTOPIC STUDIES OF THE MOON AND METEORITES
 03/17/2001 - 03/14/2002 FY02: \$0 Total: \$170,000
Prin. Invest.: R CLAYTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10759 **UNIV OF CHICAGO** **4311**
 STUDIES OF GAMMA-RAY BURSTS (LTSA 2000)
 04/23/2001 - 04/30/2002 FY02: \$0 Total: \$63,000
Prin. Invest.: D Q LAMB
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10831 **UNIV OF CHICAGO** **4312**
 FAST DYNAMOS AND THE ORIGIN OF SMALL SCALE PHOTO SPHERIC
 FIELDS
 04/26/2001 - 04/30/2004 FY02: \$110,799 Total: \$217,850
Prin. Invest.: F CATTANEO
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10840 **UNIV OF CHICAGO** **4313**
 CMB AND ITS RELATION TO LARGE-SCALE STRUCTURE (ATP 2000)
 05/11/2001 - 05/14/2004 FY02: \$70,885 Total: \$139,706
Prin. Invest.: W HU
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10878	UNIV OF CHICAGO	4314	NAG 5 11793	UNIV OF CHICAGO	4322
COSMIC RAY INTERSTELLAR PROPAGATION (ATP 2000)			NEW NUCLEAR TECHNIQUE FOR WATER, HYDROGEN AND DEUTERIUM		
05/08/2001 - 05/31/2004	FY02: \$22,012	Total: \$43,094	02/28/2002 - 02/28/2004	FY02: \$114,998	Total: \$114,998
<i>Prin. Invest.:</i> J J CONNELL			<i>Prin. Invest.:</i> T E ECONOMOU		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/J BOYCE		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11005	UNIV OF CHICAGO	4315	NAG 5 11860	UNIV OF CHICAGO	4323
BOUNDARY CONDITIONS OF THE HELIOSPHERE: FLUCTUATIONS IN			ASTROPHYSICAL STUDIES WITH IMP SATELLITE DATA.		
NEARBY INTERSTELLAR GAS			04/01/2002 - 03/31/2003		
06/05/2001 - 05/31/2004	FY02: \$83,346	Total: \$163,254	FY02: \$17,199	Total: \$17,199	
<i>Prin. Invest.:</i> P C FRISCH			<i>Prin. Invest.:</i> C LOPATE		
<i>Tech. Officer:</i> GSFC/W J WAGNER			<i>Tech. Officer:</i> GSFC/J KING		
<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11043	UNIV OF CHICAGO	4316	NAG 5 11903	UNIV OF CHICAGO	4324
PATHFINDER ALPHA PROTON X-RAY SPECTROMETER DATA ANALYSIS &			CONSTRUCT NEXT GENERATION NOBEL GAS MASS SPECTRO- METER		
INTERPRETATION			FOR ULTIMATELY SMALL SAMPLES		
06/13/2001 - 05/31/2002	FY02: -\$623	Total: \$109,377	04/04/2002 - 03/31/2004	FY02: \$358,000	Total: \$358,000
<i>Prin. Invest.:</i> T ECONOMOU			<i>Prin. Invest.:</i> R S LEWIS		
<i>Tech. Officer:</i> GSFC/J M BOYCE			<i>Tech. Officer:</i> GSFC/J BOYCE		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11380	UNIV OF CHICAGO	4317	NAG 5 11999	UNIV OF CHICAGO	4325
UNIV OF CHICAGO TOPHAT COLLABORATION			JOURNEY OF THE SUN: A VIRTUAL REALITY SIMULATION.		
10/30/2001 - 04/30/2002	FY02: \$30,000	Total: \$30,000	05/01/2002 - 04/30/2003	FY02: \$85,000	Total: \$85,000
<i>Prin. Invest.:</i> S S MEYER			<i>Prin. Invest.:</i> P C FRISCH		
<i>Tech. Officer:</i> GSFC/E S CHENG			<i>Tech. Officer:</i> GSFC/P E HUNTER		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11413	UNIV OF CHICAGO	4318	NAG 5 12153	UNIV OF CHICAGO	4326
ABUNDANCES AND PHYSICAL CONDITIONS IN THE INTER- STELLAR			ULTRA-HIGH ENERGY PARTICLES FROM SPACE		
MEDIUM OF THE MAGELLANIC CLOUDS.			05/13/2002 - 05/14/2003		
12/20/2001 - 04/30/2007	FY02: \$102,560	Total: \$102,560	FY02: \$5,000	Total: \$5,000	
<i>Prin. Invest.:</i> D E WELTY			<i>Prin. Invest.:</i> A OLINTO		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/M SALAMON		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11443	UNIV OF CHICAGO	4319	NAG 9 1096	UNIV OF CHICAGO	4327
ANALYSIS OF TOPHAT DATA			GENESIS PHASE C/D		
12/19/2001 - 12/31/2002	FY02: \$90,000	Total: \$90,000	04/02/1999 - 04/11/2002	FY02: \$0	Total: \$69,100
<i>Prin. Invest.:</i> S MEYER			<i>Prin. Invest.:</i> M HUMAYYO		
<i>Tech. Officer:</i> GSFC/G STRINGFELLOW			<i>Tech. Officer:</i> JSC/K CYR		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER		
NAG 5 11568	UNIV OF CHICAGO	4320	NAG 9 1306	UNIV OF CHICAGO	4328
ISOTOPIC STUDIES OF THE MOON AND METEORITES			SUPPORT DATA ACQUISITION FROM SPADUS INSTRUMENT		
02/21/2002 - 03/14/2005	FY02: \$210,000	Total: \$210,000	05/23/2001 - 09/30/2002	FY02: \$0	Total: \$29,413
<i>Prin. Invest.:</i> R N CLAYTON			<i>Prin. Invest.:</i> A J TUZZOLINO		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> JSC/E G STANSBERY		
<i>CASE Category:</i> 12 – CHEMISTRY			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NAG 5 11588	UNIV OF CHICAGO	4321	NAG 9 1436	UNIV OF CHICAGO	4329
CHEMICAL ASPECTS OF THE ORIGIN OF THE SOLAR SYSTEM			SUBSTRATE COMPOSITION FOR GENESIS MSSION MATERIALS		
01/10/2002 - 11/30/2004	FY02: \$230,000	Total: \$230,000	06/25/2002 - 06/30/2005	FY02: \$84,000	Total: \$84,000
<i>Prin. Invest.:</i> L GROSSMAN			<i>Prin. Invest.:</i> M HUMAYUN		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> JSC/N ROBERTSON		
<i>CASE Category:</i> 12 – CHEMISTRY			<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER		
NAG 5 11588	UNIV OF CHICAGO	4321	NCC 2 1103	UNIV OF CHICAGO	4330
CHEMICAL ASPECTS OF THE ORIGIN OF THE SOLAR SYSTEM			NUMERICAL EXPERIMENTS ON THE DYNAMICS OF GALAXIES		
01/10/2002 - 11/30/2004	FY02: \$230,000	Total: \$230,000	04/01/1999 - 08/31/2001	FY02: \$0	Total: \$5,000
<i>Prin. Invest.:</i> L GROSSMAN			<i>Prin. Invest.:</i> R N MILLER		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> ARC/B F SMITH		
<i>CASE Category:</i> 12 – CHEMISTRY			<i>CASE Category:</i> 11 – ASTRONOMY		

NCC 5 653 **UNIV OF CHICAGO** **4331**
 FREQUENCY SELECTIVE BOLOMETER DEMONSTRATION FOR THE EDGE MISSION
 08/21/2002 - 09/30/2004 FY02: \$51,061 Total: \$51,061
Prin. Invest.: S S MEYER
Tech. Officer: GSFC/C SAVINELL
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 86 **UNIV OF CHICAGO** **4332**
 MEASUREMENTS OF ANISOTROPY IN THE COSMIC MICROWAVE BACKGROUND WITH THE TOPHAT-SPINNER TELESCOPE/STU
 05/20/1999 - 06/30/2002 FY02: -\$357 Total: \$65,643
Prin. Invest.: S MEYER
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 50173 **UNIV OF CHICAGO** **4333**
 X-RAY AND SUNYAEV-ZEL'DOVICH IMAGING OF GALAXY CLUSTERS AS A COSMOLOGICAL PROBE
 05/22/1998 - 08/31/2001 FY02: -\$1,333 Total: \$64,667
Prin. Invest.: J E CARLSTROM, REESE
Tech. Officer: HQ/A NURRIDIN
CASE Category: 11 – ASTRONOMY

NGT 8 52906 **UNIV OF CHICAGO** **4334**
 CONSTRAINING COSMOLOGY WITH THE CHANGDRA AND XMM OBSERVATORIES
 05/25/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J CARLSTROM
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 11 – ASTRONOMY

NGT 8 52921 **UNIV OF CHICAGO** **4335**
 GRADUATE STUDENT RESEARCH PROGRAM - FOR GRAD STUDENT DASIUIKE NAGAI
 07/03/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J CARLSTROM
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 11 – ASTRONOMY

NAG 1 01065 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4336**
 TELECOLLABORATIVE DESIGN & SIMULATION IN IMMERSIVE VIRTUAL ENVIRONMENT
 05/29/2001 - 11/30/2004 FY02: \$0 Total: \$61,000
Prin. Invest.: P BANERJEE
Tech. Officer: LARC/C A SANDRIDGE
CASE Category: 46 – MECHANICAL ENGR

NAG 2 1358 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4337**
 AN ULTRASTRUCTURAL STUDY OF DEVELOPMENT IN VESTIBULAR HAIR CELLS, & THEIR CELLULAR RESPONSES TO HYP
 07/23/1999 - 06/30/2003 FY02: \$65,137 Total: \$374,020
Prin. Invest.: A LYSAKOWSKI
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2450 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4338**
 DESIGN OF GEAR DRIVES WITH HIGH GEAR RATIO DESIGN OF GEAR DRIVES WITH HIGH GEAR RATIO
 06/09/2000 - 09/30/2003 FY02: \$40,000 Total: \$160,000
Prin. Invest.: D L LITVIN
Tech. Officer: GRC/R F HANDSCHUH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2456 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4339**
 MOLTEN-METAL DROPLET DEPOSITION ON A MOVING SUBSTRATE IN MICROGRAVITY: AIDING THE DEVELOPMENT OF NO
 06/08/2000 - 11/30/2003 FY02: \$78,108 Total: \$194,384
Prin. Invest.: D M MEGARIDIS
Tech. Officer: GRC/W B DUVAL
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9427 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4340**
 ANTARCTIC DRY VALLEY LAKES: ANALOGS OF ANCIENT MARTIAN LACUSTRINE SYSTEMS
 04/11/2000 - 04/14/2003 FY02: \$67,200 Total: \$197,702
Prin. Invest.: P DORAN
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10334 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4341**
 CARRIER LIFE TIME ENHANCEMENT USING HGC/DTE/CDZ/NTE STRAINED-LAYER SUPERLATTICES FOR NEAR ROOM
 01/31/2001 - 01/31/2004 FY02: \$266,331 Total: \$523,564
Prin. Invest.: C GREIN
Tech. Officer: GSFC/R MARTINEAU
CASE Category: 13 – PHYSICS

NAG 5 10398 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4342**
 HIGH SPEED/HIGH ACCURACY MICRO-MIRRORS FOR ADAPTABLE SURFACES AND MULTIPLE SHUTTERS
 02/13/2001 - 02/29/2004 FY02: \$159,541 Total: \$326,924
Prin. Invest.: A FEINERMAN
Tech. Officer: GSFC/M DUTTA
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1473 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4343**
 MICROGRAVITY INVESTIGATION OF DYNAMIC OXYGEN ABSORPTION IN MOLTEN SOLDER JETTING
 04/13/1998 - 01/31/2002 FY02: \$16,000 Total: \$374,333
Prin. Invest.: C MEGARIDIS
Tech. Officer: MSFC/C TALLEY
CASE Category: 46 – MECHANICAL ENGR

NCC 3 655 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4344**
 EXPERIMENTS AND MODEL DEVELOPMENT FOR INVESTIGATION OF SOOTING AND RADIATION EFFECTS IN MICROGRAVITY
 12/29/1998 - 10/25/2001 FY02: \$0 Total: \$191,606
Prin. Invest.: Y CHOI
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 688 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4345**
 GRAVITATIONAL EFFECTS ON PARTIALLY-PREMIXED FLAMES GRAVITATIONAL EFFECTS ON PARTIALLY-PREMIXED FLAME
 03/16/1999 - 03/09/2003 FY02: \$121,054 Total: \$383,562
Prin. Invest.: D K PURI
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 694 **UNIV OF ILLINOIS - CHICAGO CIRCLE** **4346**
 THE EXTINCTION OF LOW STRAIN RATE DIFFUSION FLAMES BY AN AGENT IN MICROGRAVITY
 03/22/1999 - 03/21/2003 FY02: \$14,390 Total: \$86,866
Prin. Invest.: I K PURI
Tech. Officer: GRC/S L OLSON
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 50214 UNIV OF ILLINOIS - CHICAGO CIRCLE 4347
 EXPERIMENTAL INVESTIGATION OF ENVIRONMENT OXYGEN CONTENT IN
 SOLDIER JET TECHNOLOGY (STUDENT: ERIC
 07/22/1998 - 07/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: C M MEGARIDIS
Tech. Officer: HQ/A NURRIDIN
CASE Category: 46 – MECHANICAL ENGR

NGT 5 50406 UNIV OF ILLINOIS - CHICAGO CIRCLE 4348
 REGULATION OF PROTEIN SYNTHESIS BY STRAIN INDUCED SIGNALING
 EVENTS
 07/31/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: K ESSER
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2221 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4349
 EVALUATION INTERACTIONS BETWEEN CHEMICAL AND CLIMATE PRO-
 CESSSES IN THE TROPOSPHERE & STRATOSPHER
 08/20/1999 - 07/31/2002 FY02: \$20,000 Total: \$188,770
Prin. Invest.: D J WUBBLES
Tech. Officer: LARC/G MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01026 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4350
 DEFINING THE RELATIONSHIP BETWEEN HUMAN ERROR CLASSES AND
 TECHNOLOGY INTERVENTION STRATEGIES
 02/01/2001 - 12/31/2001 FY02: \$1 Total: \$85,077
Prin. Invest.: D A WIEGMANN, E M RANTANEN
Tech. Officer: LARC/B J BOLAND
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01035 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4351
 DEV OF NANOCRYSTALLINE TIA1 ALLOYS FOR SPACE APPLICATIONS
 02/21/2001 - 09/30/2002 FY02: \$1 Total: \$67,197
Prin. Invest.: R S AVERBACK
Tech. Officer: LARC/S J HALES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01114 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4352
 JOHN C. HOUBOLT PAPERS
 08/16/2001 - 08/20/2003 FY02: \$0 Total: \$33,560
Prin. Invest.: W J MAHER
Tech. Officer: LARC/R E MCKINLEY, LARC/W P GIBERT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02013 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4353
 DEV OF NANOCRYSTALLINE TIAI ALLOYS FOR SPACE APPLICATIONS
 12/07/2001 - 12/06/2002 FY02: \$67,650 Total: \$67,650
Prin. Invest.: R S AVERBACK, P BELLON
Tech. Officer: LARC/S J HALES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02032 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4354
 DEFINING THE RELATIONSHIP BETWEEN HUMAN ERROR CLAS SES AND
 TECHNOLOGY INTERVENTIOIN STRATEGIES
 01/14/2002 - 12/31/2002 FY02: \$97,499 Total: \$97,499
Prin. Invest.: D A WIEGMANN
Tech. Officer: LARC/V K CRISP
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02071 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4355
 THE PRIMARY FLIDHT DISPLAY AND ITS PATHWAY GUIDANCE: WORKLOAD,
 PERFORMANCE & SITUATION AWARE
 03/12/2002 - 10/11/2002 FY02: \$72,891 Total: \$72,891
Prin. Invest.: C WICKENS
Tech. Officer: LARC/L J PRINZEL, LARC/R COMSTOCK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1120 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4356
 SEAMLESS DISPLAYS FOR AIRCRAFT LANDING
 03/27/1997 - 05/31/2002 FY02: \$23,750 Total: \$411,043
Prin. Invest.: C D WICKENS
Tech. Officer: ARC/D C FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1282 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4357
 INCREMENTAL TRANSFER OF TRAINING EFFECTIVENESS OF AVIATION
 TRAINING DEVICES
 01/13/1999 - 01/31/2002 FY02: \$20,828 Total: \$299,087
Prin. Invest.: H L TAYLOR, G L BRADSHAW, T W EMANUEL
Tech. Officer: ARC/I BARSHI
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1406 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4358
 QOS PROGRAMMING AND DEVELOPMENT ENVIRONMENT
 05/08/2000 - 05/31/2003 FY02: \$75,000 Total: \$275,000
Prin. Invest.: K NAHRSTEDT
Tech. Officer: ARC/K A FREEMEN
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1424 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4359
 NEXT GENERATION MODELING OF DAMAGE TOLERANCE FOR R ISK
 ASSESSMENT & MITIGATION IN HIGH PERFORMANCE S
 07/20/2000 - 10/14/2002 FY02: \$200,000 Total: \$468,858
Prin. Invest.: R H DODDS
Tech. Officer: ARC/T L PANONTIN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 1535 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4360
 ATTENTIONA DN AVIATION DISPLAY LAYOUT: RESERCH AND MODELING
 02/26/2002 - 02/28/2003 FY02: \$127,500 Total: \$127,500
Prin. Invest.: C D WICKENS
Tech. Officer: ARC/D FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 3 2122 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4361
 FLUID PHYSICS OF FOAM EVOLUTION AND FLOW FLUID PHYSICS OF FOAM
 EVOLUTION AND FLOW
 02/13/1998 - 01/06/2003 FY02: \$0 Total: \$400,345
Prin. Invest.: H AREF
Tech. Officer: GRC/B S SINGH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2135 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4362
 SMART ICING SYSTEMS SMART ICING SYSTEMS
 03/05/1998 - 11/30/2002 FY02: \$410,000 Total: \$1,805,000
Prin. Invest.: M B BRAGG, P G VOUHARIS, N B SURTER
Tech. Officer: GRC/T H BOND, GRC/M G PETAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2263 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4363
 WIDEBAND CDMA FOR A SATCOM BASED AVIONICS NETWORK WIDEBAND
 CDMA FOR A SATCOM BASED AVIONICS NETWORK
 05/03/1999 - 03/31/2002 FY02: \$0 Total: \$108,598
Prin. Invest.: U MADHOW
Tech. Officer: GRC/K S CHUN
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2314 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4364
 DEVELOPMENT OF A NEW SHAPE OPTIMIZATION TOOL FOR 3 D TRAN-
 SONIC COMPRESSORS BASED ON NAVIER-STOKES PH
 12/30/1999 - 10/31/2002 FY02: \$35,000 Total: \$124,808
Prin. Invest.: K D LEE
Tech. Officer: GRC/E R MCFARLAND
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2516 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4365
 SMOLDER-EDGE-WAVES AND EDGE-FLAMES SMOLDER-EDGE-WAVES AND
 EDGE-FLAMES
 12/22/2000 - 11/30/2004 FY02: \$79,980 Total: \$144,891
Prin. Invest.: J D BUCKMASTER
Tech. Officer: GRC/M C HICKS
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 3 2555 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4366
 RECONFIGURABLE ANTENNAS FOR HIGH DATA RATE MULTI-B EAM COM-
 MUNICATION SYSTEMS
 03/01/2001 - 02/28/2004 FY02: \$67,933 Total: \$169,682
Prin. Invest.: D BERNHARD
Tech. Officer: GRC/R R ROMANOVSKY
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2599 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4367
 DEEP ET CHING OF AIN USING INDUCTIVELY-COUPLED-PLA SMA REACTIVE
 ION ETCHING METHOD
 04/27/2001 - 09/30/2002 FY02: -\$400 Total: \$14,600
Prin. Invest.: I ADESIDA
Tech. Officer: GRC/R S OKOJIE
CASE Category: 12 – CHEMISTRY

NAG 3 2623 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4368
 VIRTUAL ICING RESEARCH TUNNEL VIRTUAL ICING RESEARCH TUNNEL
 05/31/2001 - 05/31/2004 FY02: \$79,115 Total: \$126,895
Prin. Invest.: E LOTH
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2661 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4369
 NANOPOROUS SILICON CARBIDE FOR NANOLECTROMECHANIC AL SYS-
 TEMS APPLICATIONS
 12/31/2001 - 12/11/2004 FY02: \$99,970 Total: \$99,970
Prin. Invest.: I ADESIDA
Tech. Officer: GRC/L G MATUS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2662 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4370
 JET NOISE PHYSICS AND MODELING USING FIRST-PRINCIP LES SIMULA-
 TIONS
 12/22/2001 - 12/11/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: J FREUND
Tech. Officer: GRC/J E BRIDGES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2747 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4371
 DEEP ETCHING OF WIDE BANDGAP SEMICONDUCTORS USING INDUC-
 TIVELY
 04/12/2002 - 12/31/2002 FY02: \$60,000 Total: \$60,000
Prin. Invest.: I ADESIDA
Tech. Officer: GRC/R S OKOJIE
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2764 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4372
 THREE-DIMENSIONAL REFLECTION-MATE NEWR-FIELD MICRO SCOOPY FOR
 MICROFLUIDIC PHENOMA
 04/08/2002 - 03/12/2006 FY02: \$20,000 Total: \$20,000
Prin. Invest.: P S CARNEY
Tech. Officer: GRC/D G FISHER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2791 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4373
 TECHNOLOGIES FOR IMPROVEMENT OF THE OTIS PROGRAM TECHNOLO-
 GIES FOR IMPROVEMENT OF THE OTIS PROGRAM
 07/09/2002 - 07/04/2004 FY02: \$59,989 Total: \$59,989
Prin. Invest.: B CONWAY
Tech. Officer: GRC/J P RIEHL
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 2040 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4374
 EOSDIS VERSION O STANDARD DATA FORMAT SUPPORT
 07/16/1992 - 12/31/2001 FY02: \$0 Total: \$3,384,897
Prin. Invest.: M FOLK
Tech. Officer: GSFC/C CARLISLE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 5241 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4375
 A SOUNDING ROCKET INVESTIGATION PI DR. C GARDNER
 02/12/1999 - 02/08/2003 FY02: \$0 Total: \$105,690
Prin. Invest.: C GARDNER
Tech. Officer: GSFC/W JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5368 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4376
 LAYERS IN THE EQUATORIAL MESOSPHERE, MOTIONS AND A EROSL
 ROCKET AND RADAR STUDY (LEMMA)
 06/19/2002 - 06/10/2005 FY02: \$21,123 Total: \$21,123
Prin. Invest.: E KUDEKIE
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5377 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4377
 INVESTIGATION OF DC ELECTRIC FIELDS, WINDS, AND PL ASMA DENSITY
 STRUCTUREIN THE NIGHTTIME EQUATORIAL
 06/19/2002 - 06/10/2005 FY02: \$9,000 Total: \$9,000
Prin. Invest.: E KUDEKI
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 7152 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4378
 ROTATING AND BINARY NEUTRON STARS IN GENERAL RELAT IVITY - ATP
 03/05/1998 - 03/14/2001 FY02: -\$270 Total: \$165,866
Prin. Invest.: S L SHAPIRO
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8104 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4379
 ORIGIN OF X-RAY EMISSION FROM PLANETARY NEBULAE-AD P 98
 02/05/1999 - 10/31/2002 FY02: \$0 Total: \$78,000
Prin. Invest.: U CHU
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8418 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4380
 SUPERNOVA FALLBACK AND THE EMERGENCE OF BLACK HOLE S AND
 NEUTRON STARS (ATP 98)
 03/25/1999 - 04/30/2002 FY02: \$0 Total: \$189,000
Prin. Invest.: S L SHAPIRO
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8424 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4381
 X-RAY SPECTRA AND VARIABILITY OF ACCRETING NEUTRON STARS- ATP-
 98
 04/15/1999 - 10/14/2002 FY02: \$0 Total: \$298,030
Prin. Invest.: F K LAMB
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8479 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4382
 EARLY EVOLUTION: THE UNIVERSAL ANCESTOR AND ORIGIN OF MODERN
 CELL
 05/04/1999 - 04/30/2003 FY02: \$0 Total: \$500,140
Prin. Invest.: G OLSEN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8521 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4383
 RADIO INTERFEROMETRIC STUDIES OF COMETS & ASTEROID
 06/25/1999 - 06/30/2001 FY02: \$0 Total: \$60,000
Prin. Invest.: L SYNDER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8555 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4384
 MULTISCALE ESTIMATION, ERROR PROPAGATION AND SCALE EFFECTS IN
 THE DYNAMICAL RESPONSE OF SOIL-MOISTUR
 06/21/1999 - 06/30/2003 FY02: \$89,260 Total: \$198,304
Prin. Invest.: P KUMAR
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8569 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4385
 THE WAVES EXPLORER
 05/25/1999 - 08/31/2001 FY02: \$0 Total: \$800,000
Prin. Invest.: G R SWENSON
Tech. Officer: GSFC/M MELLOTT
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8740 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4386
 SIMULATION OF TURBULENT MIXING AND PROPAGATION OF NUCLEAR
 BURNING IN THE SURFACE LAYERS OF ACCRETING
 08/12/1999 - 07/31/2003 FY02: \$24,000 Total: \$71,000
Prin. Invest.: F LAMB
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8781 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4387
 INTEGRATED BIOMIMETIC SENSORS USING ARTIFICIAL HAIR CELLS
 08/27/1999 - 08/31/2003 FY02: \$104,236 Total: \$413,321
Prin. Invest.: C LIU
Tech. Officer: GSFC/S DAVIDSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8871 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4388
 CORE ANGULAR MOMENTUM & THE IERS COORDINATING CTR/ SUB-
 CENTERS ACTIVITY FOR MONITORING GLOBAL GEOPHY
 10/19/1999 - 08/31/2002 FY02: \$0 Total: \$59,200
Prin. Invest.: X SONG
Tech. Officer: GSFC/B F CHAO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9180 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4389
 EVOLUTIONARY MODELS OF COLD, MAGNETIZED, INTERSTEL LAR
 CLOUDS (ATP 99)
 03/07/2000 - 03/14/2003 FY02: \$51,125 Total: \$153,201
Prin. Invest.: C F GAMMIE
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10011 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4390
 HOT GAS IN AND AROUND THE SUPERGIANT SHELL LMC-2
 09/25/2000 - 09/30/2002 FY02: \$0 Total: \$49,400
Prin. Invest.: Y CHU
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10037 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4391
 HOT GAS IN WIND BLOWN BUBBLES
 09/27/2000 - 09/30/2002 FY02: \$0 Total: \$34,000
Prin. Invest.: Y CHU
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10042 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4392
 NGC 7009: TESTING THE WIND-WIND INTERACTION FORMATION OF
 PLANETARY NEBULAE
 09/27/2000 - 09/30/2002 FY02: \$0 Total: \$33,200
Prin. Invest.: Y CHU
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10072 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4393
 GRAVITY WAVE STUDIES AT ALBUQUERQUE, NM
 10/23/2000 - 10/31/2003 FY02: \$66,500 Total: \$100,100
Prin. Invest.: G R SWENSON
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10182 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4394
 HOT GAS IN PLANETARY NEBULAE FUSE 2000
 01/25/2001 - 01/31/2003 FY02: \$0 Total: \$59,700
Prin. Invest.: R A GRUENDL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10303 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4395
 MAPPING HOT GAS IN A PRISTINE H, SC II REGION - FUSE - 2000
 01/25/2001 - 01/31/2003 FY02: \$0 Total: \$68,100
Prin. Invest.: Y CHU
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10491 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4396
 RADIO INTERFEROMETRIC IMAGING OF COMETS
 02/27/2001 - 02/28/2004 FY02: \$34,300 Total: \$66,900
Prin. Invest.: L SNYDER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10754 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4397
 GRAVITY WAVES AND AIRGLOW PHASE MEASUREMENTS STUDY
 04/20/2001 - 04/30/2002 FY02: \$0 Total: \$49,879
Prin. Invest.: G SWENSON
Tech. Officer: GSFC/F HERREO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10781 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4398
 ROTATING AND BINARY STARS IN GENERAL RELATIVITY (A TP 2000)
 04/20/2001 - 04/30/2004 FY02: \$93,783 Total: \$183,098
Prin. Invest.: S L SHAPIRO
Tech. Officer: GSFC/R J OLIVERSON
CASE Category: 11 – ASTRONOMY

NAG 5 10942 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4399
 A TROPOSPHERE/STRATOSPHERE/MESOSPHERE GCM STUDY OF EEP ON
 ATMOSPHERIC CHEMICAL COMPOSITION & TROPOS
 05/15/2001 - 06/30/2003 FY02: \$150,472 Total: \$263,268
Prin. Invest.: M E SCHLESINGER
Tech. Officer: GSFC/J F SPANN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11011 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4400
 INTERFEROMETRIC OBSERVATIONS OF MID-LATITUDE SPORADIC-E RA-
 DAR ECHOES ATFT MACON, NC, & A STUDY
 06/07/2001 - 06/14/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: E KUDEKI
Tech. Officer: GSFC/R PFAFF
CASE Category: 11 – ASTRONOMY

NAG 5 11016 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4401
 CONTACT BINARY STARS (ATP 2000)
 06/12/2001 - 06/14/2004 FY02: \$41,169 Total: \$82,623
Prin. Invest.: R F WEBBINK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11159 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4402
 HOT BUBBLES IN EVOLVED SUPERNOVA REMNANTS
 08/06/2001 - 08/14/2002 FY02: \$0 Total: \$22,034
Prin. Invest.: J R DICKEL
Tech. Officer: GSFC/R MUTSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11389 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4403
 A STOCHASTIC APPROACH TO PARAMETERIZATIONS OF MICR OPHYSICS
 FOR MESOSCALEMODELS: APPLICATIONS TO QUA
 11/26/2001 - 07/31/2004 FY02: \$164,150 Total: \$164,150
Prin. Invest.: G M MCFARQUHAR
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11415 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4404
 GALAXY CLUSTER EVOLUTION AND COSMOLOGY (ADP 2001)
 01/07/2002 - 12/31/2006 FY02: \$105,349 Total: \$105,349
Prin. Invest.: J J MOHR
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11460 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4405
 SUPPORT RESEARCH AND SCIENCE REQUIREMENTS AND CAPA BILITIES
 AND THE INSTRUMENT FUNCTIONS NEEDED
 12/07/2001 - 12/14/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: D MEIXNER
Tech. Officer: GSFC/D C MATHER
CASE Category: 11 – ASTRONOMY

NAG 5 11644 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4406
 LARGE DUST SHELLS AROUND EVOLVED STARS (ADP 2001)
 01/30/2002 - 01/31/2004 FY02: \$48,942 Total: \$48,942
Prin. Invest.: A SPECK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11756 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4407
 CLOUD RESOLVING MODEL SIMULATIONS OF WATER AND ENERGY BUD-
 GETS FOR THE INDIAN OCEAN REGION: EFFECT
 02/28/2002 - 02/28/2005 FY02: \$90,000 Total: \$90,000
Prin. Invest.: G M MCFARQUHAR
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12030 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4408
 RAPID X-RAY VARIABILITY OF ACCRETING NEUTRON STARS
 04/12/2002 - 04/14/2005 FY02: \$96,738 Total: \$96,738
Prin. Invest.: F LAMB
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12132 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4409
 ADVANCED METHODS FOR OPTIMAL TRAJECTORY DESIGN.
 05/06/2002 - 05/14/2003 FY02: \$40,793 Total: \$40,793
Prin. Invest.: V COVERSTONE
Tech. Officer: GSFC/D FOLTA
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 12228 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4410
 MULTLI-FUNCTION STOCHASTIC OPTIMIZATION FOR SPACE MISSION DE-
 SIGN
 05/30/2002 - 05/31/2003 FY02: \$20,848 Total: \$20,848
Prin. Invest.: V COVERSTONE
Tech. Officer: GSFC/S P HUGHES
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 12255 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4411
 O VI FROM THE CAT'S EYE NEBULA
 06/06/2002 - 06/14/2003 FY02: \$52,400 Total: \$52,400
Prin. Invest.: M A GUERRERO
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12334 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4412
 EARLY EVOLUTION: THE UNIVERSAL ANCESTOR AND THE O RIGIN OF
 MODERN CELLS
 07/08/2002 - 06/30/2005 FY02: \$261,382 Total: \$261,382
Prin. Invest.: G L OLSEN
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1249 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4413
 ADAPTIVE GRID METHODS FOR PHASE FIELD MODELS OF MICROSTRUCTURE DEVELOPMENT
 04/16/1996 - 08/15/2001 FY02: \$0 Total: \$490,000
Prin. Invest.: J A DANTZIG
Tech. Officer: MSFC/P DOTY, MSFC/R POWER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1376 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4414
 R/S "PARTICLE INTERACTION POTENTIALS & PROTEIN CRYSTAL QUALITY UNDER DR. CHARLES F. ZUKOSKI."
 07/01/1997 - 11/30/2000 FY02: -\$1,647 Total: \$444,353
Prin. Invest.: C F ZOKOSKI
Tech. Officer: MSFC/J R ROGERS, MSFC/J P DOWNEY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1453 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4415
 MODELS OF MAGNETIC DAMPING FOR BRIDGMAN SEMI- CONDUCTOR CRYSTAL GROWTH
 05/20/1998 - 01/31/2003 FY02: \$14,067 Total: \$372,400
Prin. Invest.: J S WALKER
Tech. Officer: MSFC/C TALLEY
CASE Category: 13 – PHYSICS

NAG 8 1471 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4416
 COLLOIDAL STABILITY IN COMPLEX FLUIDS
 04/23/1998 - 01/31/2003 FY02: \$16,667 Total: \$383,000
Prin. Invest.: J A LEWIS
Tech. Officer: MSFC/P M DOTY
CASE Category: 13 – PHYSICS

NAG 8 1657 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4417
 RESEARCH ENTITLED, "PHASE FIELD MODELING OF MICROSTRUCTURE IN MICROGRAVITY
 06/14/2000 - 11/30/2003 FY02: \$60,000 Total: \$167,000
Prin. Invest.: J A DANTZIG, N D GOLDEFELD
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1705 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4418
 MODELS TO OPTIMIZE THE BENEFITS OF ROTATING MAGNETIC FIELDS FOR SEMICONDUCTOR CRYSTAL GROWTH IN SP
 06/09/2000 - 11/30/2002 FY02: \$34,000 Total: \$125,750
Prin. Invest.: J S WALKER
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1751 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4419
 ADVANCED MODELING OF LOW CYCLE FATIGUE CRACK GROWTH IN METALS
 10/31/2000 - 10/30/2004 FY02: \$160,348 Total: \$324,848
Prin. Invest.: R H DODDS, JR, P SOFRONIS, K D HJELMSTAD
Tech. Officer: MSFC/B MCGILL, MSFC/G R SWANSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1760 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4420
 PREDICTION OF PROPERTIES LIQUID HELIUM FROM COMPUTER SIMULATION
 04/26/2001 - 04/30/2005 FY02: \$63,000 Total: \$144,000
Prin. Invest.: D M CEPERLEY
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1803 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4421
 OPTIMAL TRAJECTORY ANALYSIS FOR FUTURE PROPULSION SYSTEMS
 04/16/2001 - 04/14/2002 FY02: \$0 Total: \$49,894
Prin. Invest.: V L COVERSTON
Tech. Officer: MSFC/K SORENSON
CASE Category: 13 – PHYSICS

NAG 9 1371 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4422
 YAW CONTROL OF A LIFTING BODY RE-ENTRY VEHICLE AT HIGH ANGLE OF ATTACK
 07/27/2001 - 08/01/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M BRAGG
Tech. Officer: JSC/R BURTON
CASE Category: 41 – AERONAUTICAL ENGR

NAS 2 02057 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4423
 A NON LINEAR OPTICAL COHERENCE TOMOGRAPHY SYSTEM FOR BIOMOLECULAR DETECTION AND INTERVENTION
 12/21/2001 - 12/20/2004 FY02: \$517,335 Total: \$517,335
Prin. Invest.: S A BOPPART
Tech. Officer: ARC/J W HINES, ARC/P P FUNG
CASE Category: 56 – MEDICAL

NCC 1 309 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4424
 EVAL PEM-TROPICS B OBSERVAT: UNCERTAIN ANALYSES & EFFECTS ON DEEP CONVECTIVE MIX'G ON TROPOSPH CHEM
 07/22/1998 - 07/31/2001 FY02: -\$1 Total: \$108,368
Prin. Invest.: D WUEBBLER, D WUEBBLES
Tech. Officer: LARC/J L RAPER, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1214 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4425
 COMPUTATIONAL MODEL OF PILOT SITUATION AWARENESS ERRORS
 02/08/2001 - 12/14/2001 FY02: \$0 Total: \$55,525
Prin. Invest.: C D WICKENS, J MCCARLEY
Tech. Officer: ARC/B BEARD
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1230 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4426
 STOCHASTIC ANYTIME SEARCH WITH APPLICATIONS IN AUTONOMOUS PLANNING & SCHEDULING
 03/25/2001 - 11/30/2002 FY02: \$100,000 Total: \$175,000
Prin. Invest.: B J WAH
Tech. Officer: ARC/R MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1293 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4427
 SYNTHETIC VISION SYSTEM HUMAN FACTORS ANALYSIS
 10/31/2001 - 11/30/2002 FY02: \$36,665 Total: \$36,665
Prin. Invest.: C WICKENS
Tech. Officer: ARC/B L BEARD, ARC/D FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 3 852 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4428
 EXPERIMENTAL STUDY OF ICED AIRFOIL AERODYNAMICS
 01/23/2001 - 12/17/2003 FY02: \$120,000 Total: \$242,663
Prin. Invest.: M BRAGG
Tech. Officer: GRC/H E ADDY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 599 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4429
 PROVIDE HDF SUPPORT FOR THE ESDIS PROJECT AND THE EOSDIS
 STANDARD DATA FORMAT.
 11/20/2001 - 12/31/2004 FY02: \$735,000 Total: \$735,000
Prin. Invest.: M J FOLK
Tech. Officer: GSFC/R ULLMAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 615 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4430
 DEVELOPMENT OF AN INTEROPERABILITY BASED ENVIRONMENT FOR
 ADAPTIVE MESHES (IBeam)
 02/25/2002 - 02/24/2005 FY02: \$356,000 Total: \$356,000
Prin. Invest.: P E SAYLOR
Tech. Officer: GSFC/J FISCHER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NGT 2 52244 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4431
 NON-LINEAR ALFVEN WAVES, AMBIPOLAR DIFFUSION & STAR FORMATION
 08/05/1998 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: T MOUSCHOVIAS
Tech. Officer: ARC/A BARNES
CASE Category: 11 – ASTRONOMY

NGT 2 52271 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4432
 FUNCTIONALLY GRADED MATERIAL APPLICATIONS TO ADVANCE THERMAL
 PROTECTION SYSTEMS
 09/14/2000 - 09/14/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: G H PAULINO
Tech. Officer: ARC/T L PANONTIN
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 3 52345 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4433
 GRADUATE STUDENT RESEARCHERS PROGRAM
 07/28/1998 - 08/20/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J S MOORE
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 43 – CHEMICAL ENGR

NGT 3 52357 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4434
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE-
 SEARCH PROGRAM
 07/15/1999 - 09/30/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: M BRAGGS
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 84 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4435
 NEW GRANT FOR GSRP STUDENT - DANIEL BULLOK
 05/18/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P SAYLOR
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 134 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4436
 AN OBJECT-ORIENTED MULTIGRID FRAMEWORK (STUDENT: DANIEL
 BULLOK)
 06/07/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: P E SAYLOR
Tech. Officer: GSFC/M S BURRELL
CASE Category: 21 – MATHEMATICS

NGT 5 138 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4437
 INCORPORATING FLASH INTO I-BEAA: REFACTORED SCIENTIFIC SOFT-
 WARE STUDENT: BRADLEY JONES
 06/20/2002 - 08/14/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R JOHNSON
Tech. Officer: GSFC/M S BURRELL
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 30433 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4438
 KNOWLEDGE DISCOVERY FROM REMOTE SENSING OBSERVATIONS
 (STUDENT: AMANDA WHITE)
 08/15/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: P KUMAR
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30434 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4439
 IMPROVED CLOUD CLIMATOLOGIES OVER POLAR REGIONS FROM EOS-
 TERRA DATA (STUDENT: MICHAEL WILSON)
 08/15/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L GIROLAMO
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40030 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4440
 NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 12/19/1996 - 01/31/2001 FY02: -\$23,483 Total: \$1,797,504
Prin. Invest.: W C SOLOMON
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40073 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4441
 ILLINOIS SPACE GRANT COLL & FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$475,000 Total: \$958,894
Prin. Invest.: W C SOLOMON
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50228 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4442
 SOFTWARE-IMPLEMENTED ADAPTIVE FAULT TOLERANCE THROUGH DYN-
 AMICALLY RECONFIGURABLE AGENTS
 10/29/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R K IYER
Tech. Officer: HQ/S MCGEE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50326 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4443
 BIOGEOCHEMICAL CYCLES & CLIMATE CHANGE; POTENTIAL FEEDBACKS
 & INTERACTIONS/STUDENT: VAISHALI NAIK
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D WUEBBLES
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50343 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4444
 NUMERICAL STUDIES OF GENERAL RELATIVISTIC MAGNETO-HYDRODY-
 NAMICS AS APPLIED TO ACTIVE GALACTIC NUCLEI
 05/14/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R GAMMIE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52912 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4445
 ORBITAL PROPAGATION OF MOMENTUM EXCHANGE TETHER SYSTEMS
 07/01/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: V COVERSTONE
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 41 – AERONAUTICAL ENGR

NGT 9 33 UNIV OF ILLINOIS AT URBANA-CHAMPAIGN 4446
 TRAINING GRANT
 06/04/1998 - 03/08/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: S R WHITE
Tech. Officer: JSC/D G SICKOREZ
CASE Category: 42 – ASTRONAUTICAL ENGR

INDIANA

NAG 5 11261 BALL STATE UNIV 4447
 INNOVATIVE USES OF HYPERSPECTRAL IMAGERY FOR MONITORING
 SPATIALLY DISTRIBUTED ECOSYSTEM
 08/27/2001 - 08/31/2004 FY02: \$125,929 Total: \$189,040
Prin. Invest.: A F RAHMAN
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2588 INDIANA STATE UNIV 4448
 NANOSTRUCTURED SINGLE-ION SOLID POLYMER ELECTROLYTES FOR
 LITHIUM BATTERIES
 04/30/2001 - 06/30/2004 FY02: \$90,927 Total: \$185,927
Prin. Invest.: D W ZWANZIGER
Tech. Officer: GRC/D BRITTON
CASE Category: 12 – CHEMISTRY

NAG 3 2399 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4449
 NEW COMPUTATIONAL METHOD FOR MASSIVELY PARALLEL COMPUTATIONAL
 FLUID DYNAMICS
 04/19/2000 - 12/31/2002 FY02: \$66,744 Total: \$189,516
Prin. Invest.: D HSU
Tech. Officer: GRC/M LIOU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2762 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4450
 WAVE FAN AND HYBRID PULSE DETONATION ENGINE WAVE FAN AND
 HYBRID PULSE DETONATION ENGINE
 04/09/2002 - 12/08/2002 FY02: \$60,333 Total: \$60,333
Prin. Invest.: D NALIM
Tech. Officer: GRC/D PALAC
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1586 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4451
 SELF RENEWAL REPLICATION OF HEMATOPOIETIC STEM CELLS IN MICRO-
 GRAVITY
 03/01/1999 - 11/30/2002 FY02: \$180,000 Total: \$645,300
Prin. Invest.: C M TRAYCOFF
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 50203 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4452
 PARATHYROID HORMONE MODULATES THE RESPONSE OF OSTEOBLAST-
 LIKE CELLS TO MECHANICAL STIMULATION
 07/01/1998 - 06/30/2001 FY02: -\$9,028 Total: \$30,572
Prin. Invest.: R L DUCN
Tech. Officer: HQ/A NURRIDIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 50291 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4453
 EFFECTS OF INTEGRIN-EXTRACELLULAR MATRIX ADHESION IN FLUID
 SHEAR-INDUCED PROSTAGLAND IN METABOLISM
 07/06/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: F PAVALKO
Tech. Officer: GSFC/K BLANDING
CASE Category: 56 – MEDICL

NGT 5 50366 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4454
 ACTIVATION, ADAPTATION AND RESTORATION OF THE MECHANICAL
 RESPONSE OF OSTEOBLASTS TO FLUID SHEAR/STU
 06/12/2001 - 06/30/2004 FY02: \$24,000 Total: \$44,400
Prin. Invest.: R DUNCAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50373 INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS 4455
 CAPILLARY FRACTAL PERFUSION PATTERNS MAY PROTECT THE LUNG
 DURING MICROGRAVITY/STUDENT:ERIC JARYSZAK
 06/26/2001 - 06/30/2004 FY02: \$0 Total: \$22,000
Prin. Invest.: W WAGNER
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1449 INDIANA UNIV - BLOOMINGTON 4456
 HYPERGRAVITY EFFECTS ON THE MATERNAL-FETAL SYSTEM
 10/19/2000 - 10/14/2001 FY02: -\$18,689 Total: \$5,051
Prin. Invest.: J R ALBERTS
Tech. Officer: ARC/A E RONCA, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 4295 INDIANA UNIV - BLOOMINGTON 4457
 3D SIMULATIONS OF GRAVITATIONAL INSTABILITIES IN PROTOSTELLAR
 DISKS
 04/04/1997 - 06/30/2002 FY02: \$0 Total: \$183,000
Prin. Invest.: D H DURISEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 5224 INDIANA UNIV - BLOOMINGTON 4458
 HEAT HIGH ENERGY ANTIMATTER TELESCOPE PI PROF. JAMES MUSSER
 02/03/1999 - 11/30/2002 FY02: \$50,000 Total: \$469,200
Prin. Invest.: J MUSSER
Tech. Officer: WFF/B MERRIT
CASE Category: 11 – ASTRONOMY

NAG 5 6773 INDIANA UNIV - BLOOMINGTON 4459
 COBE AND THE STRUCTURE OF THE GALACTIC INTERSTELLAR MEDIUM
 01/22/1998 - 07/31/2002 FY02: \$0 Total: \$125,600
Prin. Invest.: STEIMAN-CAMERON
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7619 INDIANA UNIV - BLOOMINGTON 4460
 FUNDING FOR "LITHOSPHERIC RHEOLOGY AND GEODYNAMIC PRO-
 CESSSES FROM INTEGRATION OF GEODETIC, GRAVITY AN
 07/24/1998 - 09/30/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: M W HAMBURGER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

INDIANA

NASA'S UNIVERSITY PROGRAM

NAG 5 9236 **INDIANA UNIV - BLOOMINGTON** **4461**
 FUSE OBSERVATIONS OF GALACTIC AND LMC NOVAE IN OUT BURST -
 FUSE
 03/09/2000 - 03/14/2003 FY02: \$0 Total: \$27,330
Prin. Invest.: S SHORE
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9369 **INDIANA UNIV - BLOOMINGTON** **4462**
 PETROLOGIC EVOLUTION OF LUNAR AND METEORITE PARENT BODY
 REGOLITH
 04/03/2000 - 03/31/2001 FY02: -\$4 Total: \$13,996
Prin. Invest.: A BASU
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10459 **INDIANA UNIV - BLOOMINGTON** **4463**
 PETROLOGIC EVOLUTION OF LUNAR & METEORITE PARENT BODY RE-
 GOLITH
 02/21/2001 - 02/28/2004 FY02: \$20,458 Total: \$40,916
Prin. Invest.: A BASU
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11964 **INDIANA UNIV - BLOOMINGTON** **4464**
 EVOLUTION AND APPEARANCE OF YOUNG STELLAR DISKS WITH GRAVI-
 TATIONAL INSTABILITIES
 04/03/2002 - 06/30/2005 FY02: \$68,149 Total: \$68,149
Prin. Invest.: R DURISEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12360 **INDIANA UNIV - BLOOMINGTON** **4465**
 TESTING THE RNA WORLD WITH METABOLIC RIBOZYMES IN VITRO AND
 INSIDE CELLS
 07/09/2002 - 06/30/2005 FY02: \$132,988 Total: \$132,988
Prin. Invest.: D H BURKE
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1770 **INDIANA UNIV - BLOOMINGTON** **4466**
 THEORETICAL STUDIES OF LORENTZ AND CPT SYMMETRY
 05/01/2001 - 08/31/2005 FY02: \$54,000 Total: \$102,000
Prin. Invest.: V A KOSTELECKY
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 9 01103 **INDIANA UNIV - BLOOMINGTON** **4467**
 CYCLOTRON FACILITY-HIGH ENERGY RADIATION EFFECTS TESTING
 06/27/2001 - 09/30/2005 FY02: \$60,000 Total: \$1,584,477
Prin. Invest.: J CAMERON
Tech. Officer: JSC/W CULPEPPER
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1035 **INDIANA UNIV - BLOOMINGTON** **4468**
 CASE-BASED CAPTURE & REUSE OF AEROSPACE DESIGN RATIONALE
 05/07/1998 - 07/31/2001 FY02: -\$1,044 Total: \$391,048
Prin. Invest.: D B LEAKE
Tech. Officer: ARC/M E LIVINGSTON, ARC/W VAN DALSEM
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1216 **INDIANA UNIV - BLOOMINGTON** **4469**
 INTEGRATED OINTELLIGENT SUPPORT FOR KNOWLEDGE CAPTURE,
 REFINEMENT AND SHARING
 03/08/2001 - 02/28/2003 FY02: \$187,620 Total: \$335,620
Prin. Invest.: D B LEAKE
Tech. Officer: ARC/M G SHAFTO, ARC/W J CLANCEY
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 334 **INDIANA UNIV - BLOOMINGTON** **4470**
 HUMAN AND PHYSICAL DIMENSIONS OF LAND USE/COVER CHANGE IN
 ANAZONIA: FOREST REGENERATION AND LANDSCAPE
 06/16/1998 - 12/31/2002 FY02: \$217,105 Total: \$789,034
Prin. Invest.: E MORAN
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 01009 **INDIANA UNIV - BLOOMINGTON** **4471**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/05/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: S D JOHNSON
Tech. Officer: LARC/P S MINER
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 873 **MANCHESTER COLL** **4472**
 INTERCALATION OF GRAPHITE FIBERS FOR SPACE POWER APPLICATIONS
 03/13/2001 - 08/31/2002 FY02: \$0 Total: \$15,668
Prin. Invest.: G W CLARK
Tech. Officer: GRC/C HUNG
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 01027 **PURDUE UNIV** **4473**
 MECHANISMS OF BOUNDARY-LAYER TRANSITION ON RESUABLE LAUNCH
 VEHICLES
 02/05/2001 - 01/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: S P SCHNEIDER
Tech. Officer: LARC/S A BERRY, LARC/J N MOSS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01073 **PURDUE UNIV** **4474**
 MODELING OF NANO MATERIALS MY 1/3
 05/09/2001 - 12/31/2003 FY02: \$85,000 Total: \$165,000
Prin. Invest.: C T SUN
Tech. Officer: LARC/TS GATES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01083 **PURDUE UNIV** **4475**
 AUTONOMOUS NAVIGATION FOR ALTERNATE ACCESS TO THE INTERNA-
 TIONAL SPACE STATION
 05/18/2001 - 05/17/2003 FY02: \$0 Total: \$49,283
Prin. Invest.: J L GARRISON
Tech. Officer: LARC/J ANTOL
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 01115 **PURDUE UNIV** **4476**
 DESIGN METHODS AND OPTIMIZATION FOR MORPHING AIRCRAFT
 08/15/2001 - 08/14/2004 FY02: \$100,033 Total: \$120,033
Prin. Invest.: W A CROSSLEY, T A WEISSHAAR
Tech. Officer: LARC/S L PADULA, LARC/J L ROGERS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02047 **PURDUE UNIV** **4477**
 MECHANISMS OF BOUNDARY-LAYER TRANSITION OF REUSABLE LAUNCH VEHICLES
 01/31/2002 - 01/31/2005 FY02: \$60,000 Total: \$60,000
Prin. Invest.: S P SCHNEIDER
Tech. Officer: LARC/S A BERRY, LARC/J N MOSS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02064 **PURDUE UNIV** **4478**
 BUCKLING STABILITY OF DISBONDED COMPOSITE STRUCTURES
 03/19/2002 - 03/18/2003 FY02: \$57,000 Total: \$57,000
Prin. Invest.: H KIM
Tech. Officer: LARC/J H STARNES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1344 **PURDUE UNIV** **4479**
 A GRAVIRESPONSIVE TIME-KEEPING PROTEIN OF THE PLAN T & ANIMAL CELL SURFACE
 07/21/1999 - 07/31/2003 FY02: \$107,860 Total: \$608,094
Prin. Invest.: D J MORRE
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1389 **PURDUE UNIV** **4480**
 ELUCIDATING THE MECHANISM OF MECHANICAL-STRESS INHIBITION OF PLANT GROWTH
 12/21/1999 - 05/31/2003 FY02: \$0 Total: \$41,407
Prin. Invest.: C MITCHELL
Tech. Officer: ARC/R MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1542 **PURDUE UNIV** **4481**
 A PROPOSAL FOR INFRASTRUCTURE TO SUPPORT NANOTECHNOLOGY RESEARCH AT PURDUE UNIV
 03/26/2002 - 03/31/2003 FY02: \$3,000,000 Total: \$3,000,000
Prin. Invest.: J A COOPER
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYYAPPAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 1730 **PURDUE UNIV** **4482**
 3-D UNSTEADY AERODYNAMICS AND AEROELASTICITY OF ADVANCED TURBOPROPS
 02/01/1995 - 06/30/2001 FY02: -\$3,779 Total: \$529,456
Prin. Invest.: S FLEETER
Tech. Officer: GRC/D H BUFFUM
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2095 **PURDUE UNIV** **4483**
 ON THE DEVELOPMENT OF SUPERSONIC JET NOISE PREDICTION METHODOLOGY
 12/22/1997 - 11/30/2001 FY02: \$0 Total: \$104,186
Prin. Invest.: A S LYRINTZIS
Tech. Officer: GRC/J R SCOTT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2217 **PURDUE UNIV** **4484**
 SCRAMJET SCALING AND INTERACTIONS TESTING SCRAMJET SCALING AND INTERACTIONS TESTING
 12/15/1998 - 11/30/2001 FY02: -\$1,024 Total: \$190,056
Prin. Invest.: S MURTHY
Tech. Officer: GRC/S R THOMAS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2336 **PURDUE UNIV** **4485**
 INVESTIGATION OF CRITICAL HEAT FLUX IN REDUCED GRAVITY USING PHOTOMICROGRAPHIC TECHNIQUES
 02/22/2000 - 11/30/2003 FY02: \$80,000 Total: \$196,000
Prin. Invest.: I MUDAWAR
Tech. Officer: GRC/M HANSAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2413 **PURDUE UNIV** **4486**
 MHD BYPASS ENERGY CYCLE FOR JET ENGINE MHD BYPASS ENERGY CYCLE FOR JET ENGINE
 06/28/2000 - 12/31/2001 FY02: -\$5 Total: \$69,995
Prin. Invest.: S MURTHY
Tech. Officer: GRC/I BLANKSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2532 **PURDUE UNIV** **4487**
 THE 15TH INTERNATIONAL SYMPOSIUM ON AIR BREATHING ENGINES (ISABE)
 01/24/2001 - 06/30/2002 FY02: \$0 Total: \$5,100
Prin. Invest.: S MURTHY
Tech. Officer: GRC/M THARP
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2536 **PURDUE UNIV** **4488**
 THREE-DIMENSIONAL UNSTEADY AERODYNAMICS AND AEROELASTICITY OF ADVANCED TURBOPROPS
 03/01/2001 - 02/28/2003 FY02: \$33,972 Total: \$79,972
Prin. Invest.: D FLEETER
Tech. Officer: GRC/E MCFARLAND
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2550 **PURDUE UNIV** **4489**
 ROBUST SATELLITE COMMUNICATIONS FOR AIR TRAFFIC CONTROL SPSS #D135
 02/27/2001 - 09/30/2002 FY02: \$60,000 Total: \$120,000
Prin. Invest.: D S LEHNERT
Tech. Officer: GRC/K CHUN
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2635 **PURDUE UNIV** **4490**
 A LASER SCANNING PSP/TSP SYSTEM FOR PROPULSION APPLICATIONS
 06/20/2001 - 06/30/2002 FY02: \$0 Total: \$49,242
Prin. Invest.: D P SULLIVAN
Tech. Officer: GRC/T BENCIC
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2681 **PURDUE UNIV** **4491**
 SCRAMJET SCALING AND INTERACTIONS #0ED87 SCRAMJET SCALING AND INTERACTIONS 0ED87
 01/10/2002 - 12/16/2004 FY02: \$81,751 Total: \$81,751
Prin. Invest.: S FRANKEL
Tech. Officer: GRC/S THOMAS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2715 **PURDUE UNIV** **4492**
 STUDY OF CO-CURRENT AND COUNTER-CURRENT GAS LIQUID TWO-PHASE FLOW THROUGH PACKED BED IN MICROGRAVITY
 02/21/2002 - 11/30/2005 FY02: \$80,533 Total: \$80,533
Prin. Invest.: D T REVANKAR
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

INDIANA

NASA'S UNIVERSITY PROGRAM

NAG 3 2770 **PURDUE UNIV** **4493**
 GRANULAR FLOW AROUND IMMERSED OBJECTS SPS #ODY12 GRANULAR
 FLOW AROUND IMMERSED OBJECTS SPS #ODY12
 04/17/2002 - 05/31/2006 FY02: \$93,500 Total: \$93,500
Prin. Invest.: D R WASSGREN
Tech. Officer: GRC/R WILKINSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 4 227 **PURDUE UNIV** **4494**
 DESIGN, FABRICATION, AND TESTING OF A ROCKET-BASED COMBINED
 CYCLE FLIGHT EXPERIMENT
 05/29/2002 - 01/31/2003 FY02: \$135,520 Total: \$135,520
Prin. Invest.: D E ANDERSON
Tech. Officer: DFRC/N PALUMBO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 3965 **PURDUE UNIV** **4495**
 STUDY ON APPLICATIONS OF SATELLITE DATA TO UNDERST SEA INTER-
 ACTIONS
 03/03/1997 - 01/31/2001 FY02: -\$1 Total: \$266,111
Prin. Invest.: C A CLAYSON
Tech. Officer: GSFC/R KAKAR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 3992 **PURDUE UNIV** **4496**
 THE ANALYSIS AND PARAMETERIZATION OF SHORTWAVE RAD ATMO-
 SPHERES
 02/26/1997 - 05/31/2002 FY02: \$0 Total: \$296,000
Prin. Invest.: D HARSHVARDHAN
Tech. Officer: GSFC/K H BERGMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7727 **PURDUE UNIV** **4497**
 QUANTIFYING THE INDIRECT RADIATIVE FORCING OF SULF ATE AERO-
 SOLS BY A HYBRID TECHNIQUE.
 10/21/1998 - 10/14/2002 FY02: \$0 Total: \$284,508
Prin. Invest.: H HARSHVARDHAN
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8155 **PURDUE UNIV** **4498**
 LABORATORY STUDIES OF DIACETYLENE AND CYANOACETYLE NE PHO-
 TOCHEMISTRY: ROUTES TO COMPLEX MOLECULES
 02/17/1999 - 11/30/2002 FY02: \$0 Total: \$324,406
Prin. Invest.: T ZWIER
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9098 **PURDUE UNIV** **4499**
 LONG-TERM X-RAY VARIABILITY OF CYG X-1: ORBITAL MO DULATION,
 INTENSITY DIPS, FLARES, STATE TRANSIT
 02/18/2000 - 02/28/2002 FY02: -\$35 Total: \$19,964
Prin. Invest.: W CUI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9822 **PURDUE UNIV** **4500**
 A COMPARISON OF THE IMPACT OF PRECIPITATION ON THE TROPICAL
 PACIFIC & NORTH INDIAN OCEAN MIXED LAYER
 07/24/2000 - 11/30/2002 FY02: \$80,000 Total: \$274,194
Prin. Invest.: C A CLAYTON
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9998 **PURDUE UNIV** **4501**
 RELATIVISTIC ASTROPHYSICS IN BLACK HOLE & LOW-MASS NEUTRON
 STAR X-RAY BINARIES - LTSA98
 09/21/2000 - 01/31/2004 FY02: \$54,473 Total: \$159,790
Prin. Invest.: W CUI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10061 **PURDUE UNIV** **4502**
 AN EXPERIMENTAL ECONOMIC ANALYSIS OF NASA'S MISSION ACQUI-
 SITION PROCESS
 10/31/2000 - 10/31/2001 FY02: -\$795 Total: \$139,205
Prin. Invest.: C NOUSSAIR
Tech. Officer: GSFC/P ULRICH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10262 **PURDUE UNIV** **4503**
 FORMATION & EARLY EVOLUTION OF THE SOLAR SYSTEM
 01/09/2001 - 12/31/2003 FY02: \$22,700 Total: \$45,100
Prin. Invest.: B PICKETT
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10422 **PURDUE UNIV** **4504**
 CHEMICAL STUDIES OF METEORITES
 02/15/2001 - 02/28/2003 FY02: \$0 Total: \$80,000
Prin. Invest.: M LIPSCHUTZ
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10735 **PURDUE UNIV** **4505**
 PROBING PREBIOTIC PROCESSES WITH PEPTIDE SELF REPL ICATION
 04/19/2001 - 04/30/2004 FY02: \$130,000 Total: \$260,000
Prin. Invest.: J A CHMIELEWSKI
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10747 **PURDUE UNIV** **4506**
 OPTIMIZATION OF GPS TRACKING LOOPS FOR SPACECRAFT NAVIGATION
 IN HEO/GEO ORBITS.
 04/17/2001 - 05/31/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: J L GARRISON
Tech. Officer: GSFC/J A LEITNER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11080 **PURDUE UNIV** **4507**
 MOLA-SUPPORTED PRECISION GEOSPATIAL PROCESSING OF MOCA IM-
 AGES:MODELS, ALGORITHMS AND EVALUATION
 08/06/2001 - 08/14/2003 FY02: \$53,000 Total: \$106,000
Prin. Invest.: J SHAN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11747 **PURDUE UNIV** **4508**
 INVESTIGATION OF THE FUNDAMENTAL PROPERTIES OF FOR WARD
 SCATTERED GPS SIGNALS FOR OCEANOGRAPHIC R
 02/25/2002 - 02/28/2005 FY02: \$140,272 Total: \$140,272
Prin. Invest.: J GARRISON
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11839 **PURDUE UNIV** **4509**
 APPLICATION OF DYNAMICAL SYSTEMS THEORY, CONTROL METHODS, &
 OPTIMIZATION STRATEGIES TO TRAJECTORY
 04/17/2002 - 09/30/2004 FY02: \$78,000 Total: \$78,000
Prin. Invest.: K C HOWELL
Tech. Officer: GSFC/D FOLTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12065 **PURDUE UNIV** **4510**
 MODEL IMPROVEMENT AND VALIDATION FOR GPS CODE TRACKING IN
 HIGH EARTH ORBITS (HEO)
 04/24/2002 - 12/31/2002 FY02: \$38,549 Total: \$38,549
Prin. Invest.: J L GARRISON
Tech. Officer: GSFC/R CARPENTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12098 **PURDUE UNIV** **4511**
 LABORATORY STUDIES OF PHOTOCHEMICAL ROUTES TO AROMATIC RING
 FORMATION IN THE ATMOSPHERES OF TITAN AND
 04/29/2002 - 04/30/2005 FY02: \$104,472 Total: \$104,472
Prin. Invest.: T ZWIER
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12551 **PURDUE UNIV** **4512**
 MODEL FUNCTION DEVELOPMENT FOR THE RETRIEVAL OF OCEAN
 SURFACE PROPERTIES FROM SCATTERED GPS SIGNALS
 09/09/2002 - 09/14/2005 FY02: \$125,239 Total: \$125,239
Prin. Invest.: J GARRISON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12562 **PURDUE UNIV** **4513**
 CHICAGO NASA SATURDAY ACADEMY
 09/16/2002 - 09/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S BAST
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1233 **PURDUE UNIV** **4514**
 RESEARCH "DEVELOPMENT OF ATMOSPHERIC PHYSICAL RET. USING
 SATELLITE DATA FROM MICROWAVE SOUNDING, ETC
 12/04/1996 - 01/21/2002 FY02: \$0 Total: \$198,156
Prin. Invest.: G W PETTY
Tech. Officer: MSFC/B L APENTA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1515 **PURDUE UNIV** **4515**
 VARIABILITY AND PREDICTABILITY OF LAND-ATMOSPHERE INTERACTIONS:
 OBSERVATIONAL AND MODELING STUDIES
 05/15/1998 - 05/31/2002 FY02: \$0 Total: \$168,057
Prin. Invest.: R OGLESBY
Tech. Officer: MSFC/J ARNOLD
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 8 1691 **PURDUE UNIV** **4516**
 EXPERIMENTAL AND NUMERICAL INVESTIGATIONS OF GROWTH MOR-
 PHOLOGIES OF PERITECTIC REACTIONS
 06/01/2000 - 11/30/2003 FY02: \$80,000 Total: \$196,000
Prin. Invest.: D JOHNSON
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1782 **PURDUE UNIV** **4517**
 RESEARCH GRANT ENTITLED "MAGNETIC FIELD GRADIENT LEVITATION
 SYSTEM FOR PHYSICS AND BIOPHYSICS"
 04/30/2001 - 04/29/2005 FY02: \$95,000 Total: \$205,000
Prin. Invest.: N M LAVRENDEAN
Tech. Officer: GRC/Y R HICKS
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1833 **PURDUE UNIV** **4518**
 ENGINEERING A RIBOZYME FOR DIFFRACTIVE PROPERTIES
 09/05/2001 - 11/30/2004 FY02: \$210,000 Total: \$250,000
Prin. Invest.: B L GOLDEN
Tech. Officer: MSFC/B V GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1856 **PURDUE UNIV** **4519**
 IMPROVED PRELIMINARY DESIGN ANALYSIS PROCESS FOR HIGH PRES-
 SURE ROCKET COMBUSTORS
 12/12/2001 - 12/31/2003 FY02: \$160,000 Total: \$160,000
Prin. Invest.: W ANDERSON
Tech. Officer: MSFC/A REEB
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1869 **PURDUE UNIV** **4520**
 "ZERO-GRAVITY VALIDATION OF SURFACE-TENSION PROPELLANT FOR
 ROCKET-GRADE HYDROGEN PEROXIDE"
 06/03/2002 - 06/03/2003 FY02: \$29,472 Total: \$29,472
Prin. Invest.: S H COLLICOTT
Tech. Officer: MSFC/R UNGER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1870 **PURDUE UNIV** **4521**
 DEVELOPMENT OF A PARTIAL DESIGN DATABASE FOR ADVANCED HYDRO-
 GEN PEROXIDE ENGINES
 06/03/2002 - 06/03/2003 FY02: \$150,147 Total: \$150,147
Prin. Invest.: W E ANDERSON
Tech. Officer: MSFC/R UNGER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1876 **PURDUE UNIV** **4522**
 STUDY OF LONG LIFE THRUSTER
 07/18/2002 - 03/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: W ANDERSON
Tech. Officer: MSFC/H TRINH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1281 **PURDUE UNIV** **4523**
 HUMAN FACTORS RESEARCH/ORGANIZATIONAL LEARNING USING THE
 INTRANET
 03/07/2001 - 12/31/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: G SALVENDY
Tech. Officer: JSC/B J WOOLFORD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1292 **PURDUE UNIV** **4524**
 CONTROL CREW NETWORK COMMUNICATIONS DURING ROUTINE & NON-
 ROUTINE EVENTS
 05/14/2001 - 09/30/2002 FY02: \$86,189 Total: \$231,807
Prin. Invest.: B S CALDWELL
Tech. Officer: JSC/B WOOLFORD
CASE Category: 42 – ASTRONAUTICAL ENGR

INDIANA

NASA'S UNIVERSITY PROGRAM

NAG 9 1385 **PURDUE UNIV** **4525**
 COLD WIRE MEASUREMENTS IN THE BODY FLAP CAVITY OF AN X-38
 MODEL
 09/24/2001 - 09/30/2002 FY02: \$0 Total: \$10,493
Prin. Invest.: S P SCHNEIDER
Tech. Officer: JSC/C H CAMPBELL, JSC/S M FITZGERALD
CASE Category: 41 – AERONAUTICAL ENGRN

NAG13 00001 **PURDUE UNIV** **4526**
 EVALUATING REMOTE SENSING TECHNOLOGY FOR SITE SPECIFIC AGRICULTURE AND NATIONAL RESOURCES
 02/18/2000 - 03/19/2003 FY02: \$205,513 Total: \$687,856
Prin. Invest.: C J JOHANNSEN
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 00008 **PURDUE UNIV** **4527**
 SIMULATION AND VISUALIZATION OF CAVITATING VENTURI FLOWS - REF #SPS0D086
 01/29/2001 - 03/31/2002 FY02: -\$247 Total: \$49,753
Prin. Invest.: D HEISTER
Tech. Officer: SSC/R E FIELD
CASE Category: 41 – AERONAUTICAL ENGRN

NAG13 02037 **PURDUE UNIV** **4528**
 IMPROVED MODELING OF CAVITATING VENTURI FLOWS SPS #OEK37
 03/07/2002 - 11/30/2002 FY02: \$60,000 Total: \$60,000
Prin. Invest.: D D HEISTER
Tech. Officer: SSC/R FIELD
CASE Category: 41 – AERONAUTICAL ENGRN

NAG13 02038 **PURDUE UNIV** **4529**
 FIELD TEST METHODS FOR HYDROGEN PEROXIDE STABILITY MARGIN SPS #OEM16
 04/03/2002 - 02/17/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D ANDERSON
Tech. Officer: SSC/W ST CYR
CASE Category: 41 – AERONAUTICAL ENGRN

NCC 1 01042 **PURDUE UNIV** **4530**
 COMBINATORIAL MULTIOBJECTIVE OPTIMIZATION USING GENETIC ALGORITHMS
 04/10/2001 - 04/09/2002 FY02: \$0 Total: \$30,003
Prin. Invest.: W A CROSSLEY
Tech. Officer: LARC/S L PADULA, LARC/J L ROGERS
CASE Category: 41 – AERONAUTICAL ENGRN

NCC 2 1245 **PURDUE UNIV** **4531**
 MACHINE LEARNING & DATA MINING FOR IMPROVED INTELLIGENT DATA UNDERSTANDING OF HIGH DIMENSIONAL EART
 04/05/2001 - 02/28/2003 FY02: \$221,000 Total: \$354,000
Prin. Invest.: C BRODLEY
Tech. Officer: ARC/C A HLAVKA, ARC/J COUGHLAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1363 **PURDUE UNIV** **4532**
 INST FOR NANO-ELECTRONICS AND COMPUTING
 09/25/2002 - 08/31/2007 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: S DATTA
Tech. Officer: ARC/H PATRIDGE, ARC/M MEYYAPPAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 5 358 **PURDUE UNIV** **4533**
 DYNAMICAL SYSTEMS THEORY, NUMERICAL METHODS, OPTIMIZATION STRATEGIES & THEIR APPLICATION TO TRAJEC
 08/26/1998 - 07/31/2003 FY02: \$50,000 Total: \$349,347
Prin. Invest.: K C HOWELL
Tech. Officer: GSFC/D FOLTA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 627 **PURDUE UNIV** **4534**
 YR. 1 OF 1; REOB. FUNDS FROM NCC5-361 UMBC DUE PI TRANSFER TO PURDUE
 02/08/2002 - 06/14/2003 FY02: \$53,939 Total: \$53,939
Prin. Invest.: D S EBERT
Tech. Officer: GSFC/A ROBERTS
CASE Category: 22 – COMPUTER SCIENCE

NGT 1 52198 **PURDUE UNIV** **4535**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 07/08/1998 - 10/31/2001 FY02: -\$4,408 Total: \$61,593
Prin. Invest.: G L ROTH
Tech. Officer: LARC/D W BARTLETT
CASE Category: 41 – AERONAUTICAL ENGRN

NGT 2 52285 **PURDUE UNIV** **4536**
 THE ROLE OF DIFFERENTIAL GENE EXPRESSION IN MECHANODWARFING OF PLANTS
 09/25/2001 - 05/31/2003 FY02: \$0 Total: \$22,000
Prin. Invest.: C A MITCHELL
Tech. Officer: ARC/C A CONLEY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 3 52382 **PURDUE UNIV** **4537**
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM SPS #OEM 82
 07/10/2002 - 07/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J P SULLIVAN
Tech. Officer: GRC/F MONTEGANI
CASE Category: 41 – AERONAUTICAL ENGRN

NGT 5 30163 **PURDUE UNIV** **4538**
 DEVELOPMENT, EVALUATION, AND APPLICATION OF A FAST TIME RESPONSE MASS SPECTROMETRIC METHOD FOR QU
 08/31/1998 - 08/31/2001 FY02: \$0 Total: \$65,600
Prin. Invest.: P B SHEPSON, BARKET
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40114 **PURDUE UNIV** **4539**
 INDIANA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$256,250 Total: \$512,500
Prin. Invest.: D ANDRISANI
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50222 **PURDUE UNIV** **4540**
 MODELING MULTITHREADING ON MIMD COMPUTERS
 09/25/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: L H JAMIESON, TEANY
Tech. Officer: HQ/A NURRIDIN
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 50275 **PURDUE UNIV** **4541**
 LOW-THRUST GRAVITY-ASSIST TRAJECTORY DESIGN STUDENT: THERESA
 J. DEBBAN
 06/20/2000 - 12/31/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: J M LONGUSKI
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50336 **PURDUE UNIV** **4542**
 SPECTROSCOPY & KINETICS OF METASTABLE DIACETYLENE: IMPROVING
 MODELS OF TITAN'S ATMOSPHERIC CHEMI
 05/04/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: T ZWEIR
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8077 **TAYLOR UNIV** **4543**
 SOURCE-LOSS/CONE INVESTIGATION
 01/20/1999 - 01/31/2002 FY02: \$0 Total: \$124,994
Prin. Invest.: H D VOSS
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11982 **TAYLOR UNIV** **4544**
 SOURCE-LOSS/CONE INVESTIGATION (SEPS)
 04/23/2002 - 04/30/2005 FY02: \$20,000 Total: \$20,000
Prin. Invest.: H VOSS
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12454 **TAYLOR UNIV** **4545**
 CHARGING OF AEROSOLS AND PARTICLES IN THE POLAR SU MMER
 MESOPHERE (CAPPS)
 08/19/2002 - 08/31/2005 FY02: \$19,283 Total: \$19,283
Prin. Invest.: H D FOSS
Tech. Officer: GSFC/R A GOLDBERG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2240 **UNIV OF NOTRE DAME** **4546**
 ADVANCED INFO TECHNOLOGY IN SIMULATION BASED LIFE CYCLE DE-
 SIGN UNDER UNCERTAINTY - NRA-98-LARC-8
 09/20/1999 - 09/30/2002 FY02: \$1 Total: \$143,271
Prin. Invest.: J E RENAUD
Tech. Officer: LARC/J L ROSEY
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 01020 **UNIV OF NOTRE DAME** **4547**
 ACOUSTIC SOURCE MODELING AND CONTROL FOR HIGH BY-PASS JET
 ENGINES
 01/24/2001 - 01/31/2002 FY02: \$0 Total: \$63,380
Prin. Invest.: T C CORKE, F O THOMAS
Tech. Officer: LARC/K W KINZIE
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 1 02045 **UNIV OF NOTRE DAME** **4548**
 ACOUSTIC SOURCE MODELLING AND CONTROL FOR HIGH BY- PASS JET
 ENGINES
 01/28/2002 - 01/31/2003 FY02: \$70,000 Total: \$70,000
Prin. Invest.: T C CORKE, F O THOMAS
Tech. Officer: LARC/K W KINZIE
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 3 2213 **UNIV OF NOTRE DAME** **4549**
 MECHANISTIC STUDIES OF COMBUSTION AND STRUCTURE FO RMATION
 DURING SYNTHESIS OF ADVANCED MATERIALS
 01/15/1999 - 11/17/2002 FY02: \$90,000 Total: \$360,125
Prin. Invest.: A VARMA
Tech. Officer: GRC/R FRIEDMAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2366 **UNIV OF NOTRE DAME** **4550**
 DIFFUSIVE COARSENING OF LIQUID FOAMS IN MICROGRAVI TY
 03/28/2000 - 11/30/2003 FY02: \$75,928 Total: \$201,143
Prin. Invest.: D A GLAZIER
Tech. Officer: GRC/F P CHIARMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2384 **UNIV OF NOTRE DAME** **4551**
 EXPERIMENTAL AND THEORETICAL STUDIES OF WET GRANUL AR MEDIA
 04/06/2000 - 11/30/2003 FY02: \$19,799 Total: \$89,646
Prin. Invest.: D BARBASI
Tech. Officer: GRC/J H AGUI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2418 **UNIV OF NOTRE DAME** **4552**
 NASA GRADUATE STUDENT DOCTORAL BUDGET PROJECT NASA GRADU-
 ATE STUDENT DOCTORAL BUDGET PROJECT
 05/09/2000 - 12/01/2001 FY02: -\$59,055 Total: \$193,445
Prin. Invest.: S JOHNSON
Tech. Officer: GRC/R LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2696 **UNIV OF NOTRE DAME** **4553**
 FUNDAMENTAL STUDIES ON TWO-PHASE GAS-LIQUID FLOWS THROUGH
 PACKED-BEDS IN MICROGRAVITY
 01/29/2002 - 11/30/2005 FY02: \$34,999 Total: \$34,999
Prin. Invest.: D J MCCREADY
Tech. Officer: GRC/B MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2701 **UNIV OF NOTRE DAME** **4554**
 MICROCIRCULATION ANOMALIES IN MICROGRAVITY BLOOD F LOW
 02/04/2002 - 10/31/2005 FY02: \$86,700 Total: \$86,700
Prin. Invest.: D CHANG
Tech. Officer: GRC/R ANSAH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9364 **UNIV OF NOTRE DAME** **4555**
 SUPERNOVAE AND THE UNIVERSE (LTSA - 99)
 04/25/2000 - 04/30/2005 FY02: \$0 Total: \$221,152
Prin. Invest.: P GARNAVICH
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9731 **UNIV OF NOTRE DAME** **4556**
 THE MICROLENSING PLANET SEARCH PROJECT
 06/20/2000 - 02/28/2003 FY02: \$45,000 Total: \$138,000
Prin. Invest.: D BENNET
Tech. Officer: GSFC/J BOYCE
CASE Category: 13 – PHYSICS

IOWA

NASA'S UNIVERSITY PROGRAM

NAG 5 10503 **UNIV OF NOTRE DAME** **4557**
 ERROR CONTROL CODING TECHNIQUES FOR SPACE & SATEL- LITE
 COMMUNICATIONS
 03/01/2001 - 02/28/2003 FY02: \$65,000 Total: \$135,000
Prin. Invest.: D J COSTELLO
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10638 **UNIV OF NOTRE DAME** **4558**
 GEOCHEMICAL EVOLUTION OF THE MOON & METEORITES
 03/17/2001 - 03/14/2002 FY02: -\$635 Total: \$29,365
Prin. Invest.: C NEAL
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12076 **UNIV OF NOTRE DAME** **4559**
 GEOCHEMICAL EVOLUTION OF THE MOON & METEORITES
 04/30/2002 - 04/30/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: C NEAL
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NCC 1 395 **UNIV OF NOTRE DAME** **4560**
 TURBULENT WAKE DEVELOPMENT IN PRESSURE GRADIENT
 05/08/2000 - 07/14/2001 FY02: \$0 Total: \$48,277
Prin. Invest.: R C NELSON, F O THOMAS
Tech. Officer: LARC/J B ANDERS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01054 **UNIV OF NOTRE DAME** **4561**
 TURBULENT WAKE DEVELOPMENT IN PRESSURE GRADIENT
 06/25/2001 - 07/14/2003 FY02: \$26,717 Total: \$48,717
Prin. Invest.: F O THOMAS, R C NELSON
Tech. Officer: LARC/J B ANDERS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1014 **UNIV OF NOTRE DAME** **4562**
 EXPERIMENTAL INVESTIGATION OF UNSTEADY ASPECTS OF HIGH FLOWS
 02/01/1998 - 12/31/2002 FY02: \$0 Total: \$199,080
Prin. Invest.: F O THOMAS, S OLSON, R C NELSON
Tech. Officer: ARC/J C ROSS, ARC/D SATRAN
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 466 **UNIV OF NOTRE DAME** **4563**
 FUNDAMENTAL PROCESSES OF ATOMIZATION IN FLUID-FLUID FLOWS
 04/16/1996 - 04/15/2001 FY02: -\$1,209 Total: \$518,785
Prin. Invest.: M J MCCREADY, H C CHANG, D T LEIGHTON
Tech. Officer: GRC/J B MCGUILLEN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 770 **UNIV OF NOTRE DAME** **4564**
 EFFECTS OF NONUNIFORM FLOWS ON SOUND GENERATION AND PROPAGATION
 02/10/2000 - 09/30/2001 FY02: \$0 Total: \$103,727
Prin. Invest.: D ATASSI
Tech. Officer: GRC/J R SCOTT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 775 **UNIV OF NOTRE DAME** **4565**
 ENHANCED DESIGN OF TURBO-JET LPT BY ACTIVE SEPARATION CONTROL
 02/16/2000 - 12/15/2002 FY02: \$0 Total: \$170,372
Prin. Invest.: P C CORKE
Tech. Officer: GRC/D ASHIPS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 935 **UNIV OF NOTRE DAME** **4566**
 ENHANCED DESIGN OF TURBO-JET LPT BY SEPARATION CONTROL USING
 PHASED PLASMA ACTUATORS
 01/03/2002 - 01/02/2005 FY02: \$99,982 Total: \$99,982
Prin. Invest.: D C CORKE
Tech. Officer: GRC/D E ASHIPS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 02003 **UNIV OF NOTRE DAME** **4567**
 GRADUATE STUDENT RESEARCH PROGRAM
 06/06/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: T C CORKE, E H MATLIS
Tech. Officer: LARC/M CHOUDHARI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8490 **VALPARISO UNIV** **4568**
 VALIDATION OF H2O & O3 MEASUREMENTS FROM SAGE III USING TRAJECTORY
 MAPPING & CONSTITUENT RECONSTRUCTION
 05/19/1999 - 10/31/2002 FY02: \$0 Total: \$66,156
Prin. Invest.: G A MORRIS
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

IOWA

NAG 1 1933 **IOWA STATE UNIV** **4569**
 DEVELOPMENT OF ENHANCED X-RAY INSPECTION
 05/21/1997 - 05/19/2001 FY02: -\$1 Total: \$233,900
Prin. Invest.: J GRAY, J BASART
Tech. Officer: LARC/W P WINFREE, LARC/F R PARKER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 01040 **IOWA STATE UNIV** **4570**
 NEW APPROACHES TO INVERTING NDE DATA MY 1/3
 03/15/2001 - 12/31/2003 FY02: \$60,000 Total: \$140,000
Prin. Invest.: S S UPDA, J R BOWLER
Tech. Officer: LARC/W P WINFREE
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 02098 **IOWA STATE UNIV** **4571**
 ADVANCED NON-DESTRUCTIVE EVALUATION (NDE) FOR FUTURE AEROSPACE
 SYSTEMS
 05/23/2002 - 05/31/2003 FY02: \$2,000,000 Total: \$2,000,000
Prin. Invest.: R B THOMPSON
Tech. Officer: LARC/E R GENERAZIO, LARC/W P WINFREE
CASE Category: 13 – PHYSICS

NAG 2 1471 **IOWA STATE UNIV** **4572**
 VERIFICATION OF CONTROLLERS BASED ON ADAPTIVE NEURAL NETWORKS
 05/01/2001 - 04/14/2003 FY02: \$60,000 Total: \$126,301
Prin. Invest.: A KELKAR
Tech. Officer: ARC/M R LOWRY, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2342 **IOWA STATE UNIV** **4573**
 MODELING SURFACE ICING ROUGHNESS AND SURFACE WATER TRANSPORT
 03/01/2000 - 12/31/2000 FY02: -\$747 Total: \$79,437
Prin. Invest.: A ROTHMAYER
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2540 **IOWA STATE UNIV** **4574**
 DEVELOPMENT OF CHEMICALLY AND THERMALLY ROBUST LITHIUM FAST
 ION CONDUCTING CHALCOGENIDE GLASSES
 02/08/2001 - 01/13/2003 FY02: \$24,921 Total: \$99,921
Prin. Invest.: S W MARTIN
Tech. Officer: GRC/N H HAGEDORN
CASE Category: 12 – CHEMISTRY

NAG 3 2571 **IOWA STATE UNIV** **4575**
 MODELING SURFACE ICING ROUGHNESS & SURFACE WATER TRANSPORT
 03/30/2001 - 02/25/2002 FY02: -\$157 Total: \$87,440
Prin. Invest.: A P ROTHMAYER
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2731 **IOWA STATE UNIV** **4576**
 MODELING SURFACE ICING ROUGHNESS AND SURFACE WATER TRANSPORT
 03/05/2002 - 01/31/2003 FY02: \$64,985 Total: \$64,985
Prin. Invest.: A P ROTHMAYER
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2784 **IOWA STATE UNIV** **4577**
 NON-LINEAR ANALYTICAL/NUMERICAL MODEL OF HIGH INTENSITY SOUND
 INTERACTING WITH A LIQUID
 06/17/2002 - 11/15/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: J A MANN
Tech. Officer: GRC/R C OEFTERING
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7133 **IOWA STATE UNIV** **4578**
 ATMOSPHERIC DYNAMICS DEDUCED FROM UARS USING MIDDLE ATMOSPHERE
 ISAMS CARBON MONOXIDE AND UPPER T
 03/16/1998 - 04/30/2002 FY02: \$0 Total: \$176,922
Prin. Invest.: D L STANFORD
Tech. Officer: GSFC/A DOUGLASS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7271 **IOWA STATE UNIV** **4579**
 SMALL SCALE TROPOPAUSE DYNAMICS AND TOMS TOTAL OZONE
 05/05/1998 - 05/14/2002 FY02: \$0 Total: \$239,000
Prin. Invest.: S L STANFORD
Tech. Officer: GSFC/S CHANDRA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7530 **IOWA STATE UNIV** **4580**
 ANALYSES FOR THE CLIMATOLOGY AND SHORT-TERM VARIABILITY OF
 THE ATMOSPHERIC GENERAL CIRCULATION
 06/12/1998 - 06/14/2002 FY02: \$0 Total: \$216,000
Prin. Invest.: T CHEN
Tech. Officer: GSFC/S SCHUBERT
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7561 **IOWA STATE UNIV** **4581**
 COUPLED ATMOSPHERE-SNOW MODEL EVALUATION OF REGIONAL SNOW-
 MELT
 06/29/1998 - 06/30/2002 FY02: \$0 Total: \$270,000
Prin. Invest.: W J GUTOWSKI, JR.
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8293 **IOWA STATE UNIV** **4582**
 DIAGNOSIS AND SIMULATION OF THE SOUTHEAST ASIAN-INFLUENCED
 WAVETRAIN THAT OCCURS DURING TROPICAL PACIFIC
 02/25/1999 - 02/28/2003 FY02: \$0 Total: \$101,626
Prin. Invest.: T C CHEN
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8352 **IOWA STATE UNIV** **4583**
 THEORETICAL MODELS FOR SEISMOLOGICAL STUDIES OF HOT COMPACT
 STARS (ATP98)
 03/01/1999 - 02/28/2002 FY02: \$0 Total: \$194,059
Prin. Invest.: S D KAWALER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8465 **IOWA STATE UNIV** **4584**
 THE RESPONSE OF THE SOLAR ATMOSPHERE TO TIME-VARYING AND
 SPATIALLY INHOMOGENEOUS BOUNDARY CONDITIONS
 04/21/1999 - 03/31/2003 FY02: \$0 Total: \$130,214
Prin. Invest.: L A WILLSON
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 12428 **IOWA STATE UNIV** **4585**
 EXCITATION AND WORLDWIDE IMPACT OF CIRCUMGLOBAL ATMOSPHERIC
 WAVETRAINS.
 08/02/2002 - 07/31/2003 FY02: \$35,000 Total: \$35,000
Prin. Invest.: T CHEN
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1637 **IOWA STATE UNIV** **4586**
 AN ADVANCED ENTRY GUIDANCE CONCEPT BASED ON TRAJECTORY
 REGULATION
 10/28/1999 - 01/31/2002 FY02: \$0 Total: \$105,974
Prin. Invest.: P LU
Tech. Officer: MSFC/G DUKEMAN
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1681 **IOWA STATE UNIV** **4587**
 DYNAMICAL SELECTION OF THREE-DIMENSIONAL INTERFACE PATTERNS
 IN DIRECTIONAL SOLIDIFICATION.
 05/25/2000 - 11/30/2003 FY02: \$178,000 Total: \$363,300
Prin. Invest.: R K TRIVETT
Tech. Officer: MSFC/A JACKSON
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1115 **IOWA STATE UNIV** **4588**
 EXAMINATION OF BACTERIAL MATERIALS
 05/10/1999 - 05/09/2004 FY02: \$25,000 Total: \$70,000
Prin. Invest.: P A BAZLINSKI
Tech. Officer: JSC/E K GIBSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1184 **IOWA STATE UNIV** **4589**
 EXPERIMENTS TO DETERMINE THE AERODYNAMIC COEFFICIENT OF THE
 X38 PARAFOIL
 01/28/2000 - 12/31/2002 FY02: \$0 Total: \$23,200
Prin. Invest.: L M LILJEGREN
Tech. Officer: JSC/R L BARTON, JSC/W D GOODRICH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1191 **IOWA STATE UNIV** **4590**
 RAPID SPECIFIC CHEMICAL SENSORS AND TEST KIT
 02/28/2000 - 01/31/2003 FY02: \$259,801 Total: \$751,562
Prin. Invest.: M D PORTER
Tech. Officer: JPL/D JAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 1 01038 **IOWA STATE UNIV** **4591**
 SYNTHESIS METHODS FOR ROBUST PASSIFICATION AND CONTROL - 11
 03/20/2001 - 06/15/2002 FY02: -\$4,096 Total: \$5,036
Prin. Invest.: A G KELKAR
Tech. Officer: LARC/S M JOSHI
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01039 **IOWA STATE UNIV** **4592**
 AN INTEGRATED APPROACH TO NOISE CONTROL WITH APPLICATIONS TO
 AIRCRAFT CABINS
 03/28/2001 - 01/31/2004 FY02: \$73,236 Total: \$141,299
Prin. Invest.: A G KELKAR
Tech. Officer: LARC/S M JOSHI
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01047 **IOWA STATE UNIV** **4593**
 PREDICTIVE AND NEURAL PREDICTIVE CONTROL OF UNCERTAIN SYS-
 TEMS - II
 04/17/2001 - 02/28/2003 FY02: \$1 Total: \$12,199
Prin. Invest.: A G KELKAR
Tech. Officer: LARC/P J HALEY
CASE Category: 21 – MATHEMATICS

NCC 1 02016 **IOWA STATE UNIV** **4594**
 SYNTHESIS OF ANALYTIC & COMPUTATIONAL METHODS TO ENHANCE PRE-
 DICTION OF HYPERSONIC VEHICLE FLOW FIELDS
 03/04/2002 - 03/03/2003 FY02: \$25,621 Total: \$25,621
Prin. Invest.: G R INGER
Tech. Officer: LARC/P A GNOFFO
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5349 **IOWA STATE UNIV** **4595**
 PROPOSAL FOR JOINT RESEARCH EXCHANGE BETWEEN NASA & ISU
 09/03/1999 - 12/31/2000 FY02: -\$508 Total: \$108,992
Prin. Invest.: M S GORDON
Tech. Officer: ARC/W M HUO, ARC/R L JAFFE
CASE Category: 12 – CHEMISTRY

NCC 2 5379 **IOWA STATE UNIV** **4596**
 STOKES CODE FOR COMPUTING MAGNETO-HYDRODYNAMIC FLO
 WFIELDS
 04/07/2000 - 04/30/2003 FY02: \$0 Total: \$58,000
Prin. Invest.: J C TANNEHILL
Tech. Officer: ARC/U B MEHTA
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5517 **IOWA STATE UNIV** **4597**
 NUMERICAL SIMULATION OF A SUPERSONIC MHD FLOWS USING AN
 ITERATIVE PNS ALGORITHM
 08/08/2002 - 07/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: J C TANNEHILL
Tech. Officer: ARC/U B MEHTA, ARC/S LAWRENCE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 846 **IOWA STATE UNIV** **4598**
 QUENCHING OF PARTIAL-GAS COMBUSTIBLE MIXTURES USING ELECTRIC
 PARTICULATE SUSPENSION (EPS) AND DISPERSED PARTICLES
 01/09/2001 - 12/07/2004 FY02: \$81,000 Total: \$165,996
Prin. Invest.: G M COLVER
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 46 – MECHANICAL ENGR

NCC 8 98 **IOWA STATE UNIV** **4599**
 INTERFACE PATTERN SELECTION CRITERION FOR CELLULAR STRUC-
 TURES IN DIRECTIONAL SOLIDIFICATION
 06/28/1996 - 12/31/2002 FY02: \$190,447 Total: \$1,214,990
Prin. Invest.: R K TRIVEDI
Tech. Officer: MSFC/M HAMMOND
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 9 100 **IOWA STATE UNIV** **4600**
 60 DAY DEFINITION PHASE
 08/01/1999 - 10/03/2004 FY02: \$550,000 Total: \$1,775,000
Prin. Invest.: D OLSEN
Tech. Officer: JSC/H LANE
CASE Category: 55 – AGRICULTURE

NGT 3 52380 **IOWA STATE UNIV** **4601**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT
 RESEARCHERS PROGRAM
 06/29/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D ROTHMAYER
Tech. Officer: GRC/F J MONTGOMERY
CASE Category: 49 – ENGINEERING, OTHER

NGT 4 52433 **IOWA STATE UNIV** **4602**
 GRADUATE STUDENT RESEARCH PROGRAM - FORMULATION OF A COM-
 PLETE AIRCRAFT STRUCTURAL VARIATION MODEL
 06/17/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: F R CHAVEZ
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30419 **IOWA STATE UNIV** **4603**
 INTERANNUAL VARIATION OF THE NORTH AMERICAN MONSOON RAINFALL
 STUDENT: JIN-HO YOON
 09/06/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: T CHEN
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40081 **IOWA STATE UNIV** **4604**
 IOWA STATE GRANT COLLEGE AND FELLOWSHIP PROGRAM
 02/08/2001 - 01/31/2005 FY02: \$475,000 Total: \$968,374
Prin. Invest.: W J BYRD
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52895 **IOWA STATE UNIV** **4605**
 OPTIMAL EARTH-MARS TRANSFER TRAJECTORIES USING ADVANCED PRO-
 PULSION SYSTEM
 05/25/2001 - 06/30/2002 FY02: -\$1 Total: \$21,999
Prin. Invest.: P LU
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 41 – AERONAUTICAL ENGR

NGT 8 52903 **IOWA STATE UNIV** **4606**
 MORPHOLOGICAL SELECTION DURING ALLOW SOLIDIFICATIO SOLIDIFICA-
 TION.
 05/25/2001 - 06/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: R NAPOLITANO
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2305 **UNIV OF IOWA** **4607**
 IMPACT OF MINERAL AND OTHER AEROSOLS AND ASIAN EMISSIONS ON
 THE CHEMISTRY OF THE TROPOSPHERE
 06/15/2000 - 03/31/2003 FY02: \$121,001 Total: \$332,001
Prin. Invest.: G R CARMICHAEL, H LEVY
Tech. Officer: LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02097 **UNIV OF IOWA** **4608**
 SYNTHETIC VISION DISPLAY: OPTIMAL DISPLAY CHARACTERISTICS
 05/14/2002 - 05/31/2003 FY02: \$108,333 Total: \$108,333
Prin. Invest.: T SCHNELL, K LEMOS
Tech. Officer: LARC/L J GLAAB
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 3 2128 **UNIV OF IOWA** **4609**
 PLASMA DUST CRYSTALLIZATION PLASMA DUST CRYSTALLIZATION
 02/27/1998 - 12/31/2002 FY02: \$0 Total: \$459,000
Prin. Invest.: J A GOREE
Tech. Officer: GRC/R B ROGERS
CASE Category: 13 – PHYSICS

NAG 3 2368 **UNIV OF IOWA** **4610**
 RIVULET DYNAMICS WITH VARIABLE GRAVITY AND WIND SH EAR
 04/03/2000 - 11/30/2003 FY02: \$85,430 Total: \$211,362
Prin. Invest.: D S MARSHALL
Tech. Officer: GRC/C E NIEDERHAUS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2375 **UNIV OF IOWA** **4611**
 THEORY AND SIMULATION OF GROUND-BASED AND MICROGRA VITY
 DUSTY PLASMA EXPERIMENTS
 03/28/2000 - 11/30/2003 FY02: \$95,000 Total: \$235,000
Prin. Invest.: A BHATTACHARJEE
Tech. Officer: GRC/R B ROGERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2771 **UNIV OF IOWA** **4612**
 OPTICALLY-EXCITED WAVES IN 3D DUSTY PLASMAS OPTICALLY-EXCITED
 WAVES IN 3D DUSTY PLASMAS
 04/22/2002 - 03/31/2006 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D A GOREE
Tech. Officer: GRC/R B ROGERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 5232 **UNIV OF IOWA** **4613**
 ROCKET AURORAL CORRELATOR EXPERIMENT PI DR. CRAIG KLETZING
 02/12/1999 - 02/09/2003 FY02: \$54,719 Total: \$428,376
Prin. Invest.: C A KLETZING
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5319 **UNIV OF IOWA** **4614**
 PLASMA DIAGNOSTIC FOR THE HIBAR EXPERIMENT PLASMA DIAGNOSTIC
 FOR THE HIBAR EXPERIMENT
 03/19/2001 - 02/28/2004 FY02: \$138,904 Total: \$217,870
Prin. Invest.: C A KLETZING
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 7187 **UNIV OF IOWA** **4615**
 RESTORATION AND ARCHIVING OF THE ISEE 1 AND 2 PLAS MA WAVE
 INVESTIGATION DATA SETS
 03/26/1998 - 06/30/2002 FY02: \$0 Total: \$134,117
Prin. Invest.: D ANDERSON
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 11 – ASTRONOMY

NAG 5 7390 **UNIV OF IOWA** **4616**
 GENERATION AND SCATTERING OF RADIATION OBSERVED BY VOYAGER
 IN THE OUTER HELIOSPHERE
 05/07/1998 - 02/28/2002 FY02: \$0 Total: \$43,200
Prin. Invest.: I H CAIRNS
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7684 **UNIV OF IOWA** **4617**
 FUNDING OF THE ANAYLSIS OF PLASMA MEASUREMENTS FOR THE
 GEOTAIL EXTENDED MISSION / FUNDING FOR YR 1
 09/09/1998 - 09/30/2002 FY02: \$0 Total: \$1,270,000
Prin. Invest.: L A FRANK
Tech. Officer: GSFC/D H FAIRFIELD
CASE Category: 13 – PHYSICS

NAG 5 7710 **UNIV OF IOWA** **4618**
 A PROPOSAL FOR STUDYING GEOMAGNETIC STORMS FROM THE ANALY-
 SES AND INTER. OF PLASMA WAVE DATA
 09/23/1998 - 10/31/2001 FY02: \$0 Total: \$460,000
Prin. Invest.: R R ANDERSON
Tech. Officer: GSFC/D H FAIRFIELD
CASE Category: 13 – PHYSICS

NAG 5 7712 **UNIV OF IOWA** **4619**
 FUNDING FOR VIS ON THE POLAR SPACECRAFT FOR THE EX TENDED
 MISSION
 09/28/1998 - 03/31/2002 FY02: \$0 Total: \$1,978,606
Prin. Invest.: L A FRANK
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 13 – PHYSICS

NAG 5 7943 **UNIV OF IOWA** **4620**
 POLAR PLASMA WAVE INVESTIGATION DATA ANALYSIS IN T HE EXTENDED
 MISSION
 01/27/1999 - 03/31/2002 FY02: \$0 Total: \$1,018,757
Prin. Invest.: D GURNATT
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8119 **UNIV OF IOWA** **4621**
 GGS-POLAR-HYDRA EXTENDED MISSION SCIENCE INVESTIGA TION
 01/29/1999 - 01/31/2002 FY02: \$0 Total: \$1,696,000
Prin. Invest.: J SCUDDER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8873 **UNIV OF IOWA** **4622**
 COUPLING SATELLITE REMOTE SENSING & UNSTEADY FLOW MODELING
 FOR DISCHARGE ESTIMATION
 11/16/1999 - 10/31/2002 FY02: \$29,724 Total: \$171,426
Prin. Invest.: A BRADLEY
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8918 **UNIV OF IOWA** **4623**
 ANALYSIS AND MODELING OF JOVIAN RADIO EMISSIONS OBSERVED BY
 GALILEO
 01/18/2000 - 06/30/2003 FY02: \$0 Total: \$105,000
Prin. Invest.: J MENIETTI
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9499 **UNIV OF IOWA** **4624**
 NEW GRANT EXTEND SOLAR MAX: COLLISIONLESS RECOMME NDATION
 THEORY AND HIGH RESOLUTION SIMULATIONS
 05/04/2000 - 05/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: J SCUDDER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9561 **UNIV OF IOWA** **4625**
 WAVE AND PARTICLE INTERACTIONS IN THE HIGH AND LOW -ALTITUDE
 AURORAL REGION DURING RISING SOLARACTI
 05/04/2000 - 05/14/2003 FY02: \$0 Total: \$90,041
Prin. Invest.: D GURNETT
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9664 **UNIV OF IOWA** **4626**
 GROUND-BASED RAINFALL ESTIMATION STUDIES FOR TRMM VALIDATION
 06/08/2000 - 12/14/2002 FY02: \$205,000 Total: \$413,000
Prin. Invest.: W F KRAJEWSKI
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9964 **UNIV OF IOWA** **4627**
 X-RAY EMISSION FROM SINGLE WOLF-RAYET STARS
 09/25/2000 - 08/31/2002 FY02: -\$20,357 Total: \$12,224
Prin. Invest.: R IGNACE
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9974 **UNIV OF IOWA** **4628**
 A PROPOSAL FOR CLUSTER II WIDEBAND (WBD) PLASMA WAVE INVESTI-
 GATION MISSION OPERATIONS & DATA
 09/21/2000 - 10/31/2003 FY02: \$1,511,200 Total: \$2,297,330
Prin. Invest.: D GURNETT
Tech. Officer: GSFC/M GOLDSTEIN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10329 **UNIV OF IOWA** **4629**
 BALLOONING INSTABILITIES OF COLLISIONLESS THIN CURRENT SHEETS:
 A MECHANISM FOR SUBSTORM ONSET
 01/29/2001 - 01/31/2003 FY02: \$0 Total: \$40,000
Prin. Invest.: A BHATTACHARJEE
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11117 **UNIV OF IOWA** **4630**
 PLASMA MEASUREMENTS FOR GEOTAIL
 08/08/2001 - 10/15/2001 FY02: -\$400,000 Total: \$0
Prin. Invest.: L FRANK
Tech. Officer: GSFC/D FAIRFIELD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11379 **UNIV OF IOWA** **4631**
 A PROPOSAL FOR WRAPPING UP THE ANALYSES AND INTERP RETATION
 OF PLASMA WAVE DATA FROM THE GEOTAIL
 10/25/2001 - 01/31/2002 FY02: \$35,000 Total: \$35,000
Prin. Invest.: R ANDERSON
Tech. Officer: GSFC/D FAIRFIELD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11485 **UNIV OF IOWA** **4632**
 PLASMA MEASUREMENTS FOR GEOTAIL
 12/19/2001 - 12/31/2004 FY02: \$170,000 Total: \$170,000
Prin. Invest.: L FRANK
Tech. Officer: GSFC/DFAIRFIELD
CASE Category: 11 – ASTRONOMY

NAG 5 11528 **UNIV OF IOWA** **4633**
 THE ANALYSIS OF IMAGES FROM THE VISIBLE IMAGING SY STEM ON
 POLAR SPACECRAFT FOR THE ISTP MISSION
 01/14/2002 - 12/31/2004 FY02: \$546,000 Total: \$546,000
Prin. Invest.: L FRANK
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11676 **UNIV OF IOWA** **4634**
 GGS-POLAR-HYDRA EXTENDED MISSION SCIENCE INVESTIGA TION
 01/30/2002 - 12/31/2004 FY02: \$400,000 Total: \$400,000
Prin. Invest.: J SCUDDER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11688 **UNIV OF IOWA** **4635**
 "IMPACT OF FIELD-SCALE HETEROGENEITY IN SURFACE MO ISTURE AND
 VEGETATION COVER ON REGIONAL SCALE FLU
 02/12/2002 - 01/31/2005 FY02: \$49,000 Total: \$49,000
Prin. Invest.: W EICHINGER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11707 **UNIV OF IOWA** **4636**
 PLASMA WAVE DATA FROM GEOTAIL
 02/14/2002 - 02/28/2003 FY02: \$115,195 Total: \$115,195
Prin. Invest.: R ANDERSON
Tech. Officer: GSFC/D FAIRFIELD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11867 **UNIV OF IOWA** **4637**
 ALFVEN WAVE ELECTRON ACCELERATION ON REALISTIC AUR ORAL FIELD
 LINES
 03/18/2002 - 03/14/2005 FY02: \$74,454 Total: \$74,454
Prin. Invest.: C A KLETZING
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11942 **UNIV OF IOWA** **4638**
 A PROPOSAL FOR POLAR PLASMA WAVE INVESTIGATION (PW I) DATA ANALYSIS IN THE EXTENDED MISSION
 03/29/2002 - 12/31/2004 FY02: \$174,000 Total: \$174,000
Prin. Invest.: D A GURNETT
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11969 **UNIV OF IOWA** **4639**
 AMSR VALIDATION SITE IN IOWA CITY, IOWA
 04/05/2002 - 04/14/2005 FY02: \$158,250 Total: \$158,250
Prin. Invest.: W KRAJEWSKI
Tech. Officer: GSFC/R ADLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11981 **UNIV OF IOWA** **4640**
 DATA-CENTRIC ANALYSIS OF SCIENCE RETURN FOR HUMAN- DIRECTED ROBOTIC GEOLOGY
 05/14/2002 - 05/14/2005 FY02: \$117,640 Total: \$117,640
Prin. Invest.: G W THOMAS
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1352 **UNIV OF IOWA** **4641**
 FOR RESEARCH "REAL TIME MONITORING OF PROTEIN CONCENTRATION IN SOLUTION TO CONTROL NUCLEATION...
 06/02/1997 - 08/31/2001 FY02: \$0 Total: \$573,441
Prin. Invest.: M A ARNOLD
Tech. Officer: MSFC/B GUYNES, MSFC/J MAYO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1588 **UNIV OF IOWA** **4642**
 REJUBENATION OF SPENT MEDIA VIA SUPPORTED EMULSION LIQUID MEMBRANES
 03/19/1999 - 11/30/2002 FY02: \$186,000 Total: \$696,650
Prin. Invest.: J WIENECK
Tech. Officer: MSFC/B GUYNES, MSFC/D CHAFEE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1591 **UNIV OF IOWA** **4643**
 EVALUATING OXIDATIVE STRESS IN VIRALLY-INFECTED CELLS IN SIMULATED MICROGRAVITY
 03/19/1999 - 11/30/2002 FY02: \$149,000 Total: \$525,850
Prin. Invest.: V G RODGERS
Tech. Officer: JSC/M ANDERSON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1592 **UNIV OF IOWA** **4644**
 R/S MONITORING AND CONTROL OF ROTATING WALL VESSELS AND APPLICATION TO THE STUDY OF PROSTATE
 03/30/1999 - 11/30/2002 FY02: \$292,000 Total: \$950,950
Prin. Invest.: D W MURHAMMER
Tech. Officer: JSC/S GONDA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1593 **UNIV OF IOWA** **4645**
 R/S EXTREMOPHILIC INTERFACIAL SYSTEMS FOR WASTE PROCESSING IN SPACE
 03/15/1999 - 11/30/2002 FY02: \$106,000 Total: \$422,450
Prin. Invest.: T L PEEPLES
Tech. Officer: MSFC/B GUYNES, MSFC/D CHAFEE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1835 **UNIV OF IOWA** **4646**
 NONINVASIVE NEAR-INFRARED MONITORS FOR PROTEIN CRYSTALLIZATION
 08/30/2001 - 11/30/2004 FY02: \$352,000 Total: \$476,000
Prin. Invest.: M A ARNOLD
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 1 422 **UNIV OF IOWA** **4647**
 REGIONAL SCALE FORECASTING AND EXPERIMENT-SPECIFIC EMISSION ESTIMATES OF GAS AND AEROSOL DISTRIBUTION
 09/26/2000 - 06/30/2003 FY02: \$157,548 Total: \$263,099
Prin. Invest.: G R CARMICHAEL
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 666 **UNIV OF IOWA** **4648**
 REFLIGHT OF ELF (ENCLOSED LAMINAR FLAMES) INVESTIGATION
 02/02/1999 - 01/03/2003 FY02: \$79,650 Total: \$305,225
Prin. Invest.: D CHEN
Tech. Officer: GRC/D P STOCKER
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 94 **UNIV OF IOWA** **4649**
 EQUIAXED DENDRITIC SOLIDIFICATION EXPERIMENT (EDSE)
 05/31/1996 - 05/03/2003 FY02: \$150,000 Total: \$1,066,480
Prin. Invest.: C BECKERMANN
Tech. Officer: MSFC/A JACKMAN, MSFC
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 199 **UNIV OF IOWA** **4650**
 DENDRITIC ALLOY SOLIDIFICATION EXPERIMENT (DASE)
 04/12/2000 - 11/30/2003 FY02: \$132,000 Total: \$318,250
Prin. Invest.: C BECKERMANN
Tech. Officer: GSFC/P DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 5 30199 **UNIV OF IOWA** **4651**
 ASSESSMENT OF THE IMPACT OF ASIAN EMISSIONS ON A LOCAL, REGIONAL & GLOBAL SCALE/STUDENT: SARATHG
 08/25/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: G CARMICHAEL
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50377 **UNIV OF IOWA** **4652**
 ARCHAEAL CHAPERONINS CAN BE USED TO EXTEND THE FUNCTIONAL RANGE OF CONDITIONS IN WHICH ENZYMES
 09/05/2001 - 09/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: T PEEPLES
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

KANSAS

NAG 1 02014 **KANSAS STATE UNIV** **4653**
 STIFFNESS & STRENGTH OF POLYMER NETWORK & CARBON NANOTUBE REINFORCED POLYMER NETWORK
 12/07/2001 - 12/09/2004 FY02: \$35,097 Total: \$35,097
Prin. Invest.: Y WANG
Tech. Officer: LARC/J A HINKLEY
CASE Category: 47 – METAL & MATERIALS ENGR

KANSAS

NASA'S UNIVERSITY PROGRAM

NAG 1 02041 **KANSAS STATE UNIV** **4654**
 COMPUTATIONAL MODELS FOR ELECTROSTRICTIVE GRAFT ELASTOMER
 01/18/2002 - 01/17/2005 FY02: \$49,860 Total: \$49,860
Prin. Invest.: Y WANG
Tech. Officer: LARC/J SU
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 1274 **KANSAS STATE UNIV** **4655**
 DIFFERENTIATION OF BONE MARROW MACROPHAGES IN SPAC E-PHASE A
 12/28/1998 - 09/30/2002 FY02: \$0 Total: \$586,604
Prin. Invest.: S K CHAPES
Tech. Officer: ARC/W E HINDS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2360 **KANSAS STATE UNIV** **4656**
 GELATION IN AEROSOLS: NON-MEAN-FIELD AGGREGATION KINETICS
 03/27/2000 - 11/30/2003 FY02: \$90,000 Total: \$210,000
Prin. Invest.: C SORENSEN
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 13 – PHYSICS

NAG 5 11337 **KANSAS STATE UNIV** **4657**
 SCALING UP THE ECOSYSTEM CONSEQUENCES OF FOREST EXPANSION
 IN THE GREAT PLAINS REGION
 09/07/2001 - 09/14/2004 FY02: \$47,747 Total: \$242,509
Prin. Invest.: L JOHNSON
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1687 **KANSAS STATE UNIV** **4658**
 RESEARCH ENTITLED, "NANOCRYSTAL SUPERLATTICES: SYNTHESIS AND
 PROPERTIES"
 06/01/2000 - 11/30/2003 FY02: \$70,000 Total: \$171,500
Prin. Invest.: C M KLABUNDE
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1702 **KANSAS STATE UNIV** **4659**
 RESEARCH, "CRYSTAL GROWTH OF NEW FAMILIES OF FERROELASTIC
 MATERIALS"
 06/07/2000 - 11/30/2003 FY02: \$90,000 Total: \$215,500
Prin. Invest.: M D HOLLINGSWORTH
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG10 325 **KANSAS STATE UNIV** **4660**
 USEFUL LIFE PREDICTION FOR PAYLOAD CARRIER HARDWARE
 09/19/2002 - 08/31/2003 FY02: \$95,503 Total: \$95,503
Prin. Invest.: D BEN-ARIEH
Tech. Officer: KSC/L GOSPER
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 234 **KANSAS STATE UNIV** **4661**
 ASPECTS AND CONTROL OF TIDAL SEDIMENTATION AND THE EXTRACTION
 AND MODELING OF TIDAL PARAMETERS FROM
 12/12/1997 - 09/30/2001 FY02: \$0 Total: \$75,000
Prin. Invest.: A ARCHER
Tech. Officer: GSFC/B BILLS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 01011 **UNIV OF KANSAS** **4662**
 ESTIMATION OF UNSTEADY AERODYNAMIC MODELS FROM FLIGHT TEST
 DATA
 12/08/2000 - 06/30/2003 FY02: \$65,973 Total: \$128,545
Prin. Invest.: C E LAN
Tech. Officer: LARC/J M BRANDON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 4990 **UNIV OF KANSAS** **4663**
 DEVELOPMENT OF LAND USE MAPPING AND PROTOCOL FOR A MULTI-
 TEMPORAL REMOTE SENSING APPLICATION
 06/27/1997 - 09/30/2000 FY02: -\$287 Total: \$440,144
Prin. Invest.: K P PRICE
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7053 **UNIV OF KANSAS** **4664**
 ANALYSIS OF AIRCRAFT LASER ALTIMETER DATA FROM GREENLAND
 02/25/1998 - 02/28/2002 FY02: \$0 Total: \$90,772
Prin. Invest.: D A BRAATEN
Tech. Officer: GSFC/R THOMAS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8758 **UNIV OF KANSAS** **4665**
 MEASUREMENT OF THE THICKNESS OF THE GREENLAND ICE SHEET &
 HIGH RESOLUTION MAPPING OF INTERNAL LAYERS
 08/24/1999 - 12/31/2002 FY02: \$197,488 Total: \$745,189
Prin. Invest.: S GOGINENI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9840 **UNIV OF KANSAS** **4666**
 REMOTE SENSING OF EAST ANTARCTIC ICE STREAMS
 07/26/2000 - 03/31/2002 FY02: \$0 Total: \$113,221
Prin. Invest.: S GOGINENI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9841 **UNIV OF KANSAS** **4667**
 INCUBATING COMMERCIAL REMOTE SENSING PRODUCTS
 07/28/2000 - 01/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: K P PRICE
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11106 **UNIV OF KANSAS** **4668**
 VALIDATION OF AMSR-E & AMSU/HSB LEVEL 1 BRIGHTNESS TEMPERA-
 TURES & LEVEL 2 CLOUD & PRECIPITATION
 07/13/2001 - 08/31/2004 FY02: \$84,201 Total: \$168,474
Prin. Invest.: R BENNARTZ
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11788 **UNIV OF KANSAS** **4669**
 VALIDATIONS OF AMSR SNOW DEPTH ON SEA ICE RETRIEVALS USING AN
 AIRBORNE PULSE RADAR
 02/26/2002 - 02/28/2005 FY02: \$121,584 Total: \$121,584
Prin. Invest.: S GOGINENI
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NASA'S UNIVERSITY PROGRAM

KANSAS

NAG 5 11988 **UNIV OF KANSAS** **4670**
 INCUBATING COMMERCIAL REMOTE SENSING PRODUCTS
 04/09/2002 - 03/31/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: K P PRICE
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12439 **UNIV OF KANSAS** **4671**
 RADAR SOUNDING AND AIRBORNE HIGH RESOLUTION MAPPING OF NEAR
 SURFACE LAYERS OF THE GREENLAND ICE
 08/12/2002 - 07/31/2005 FY02: \$123,081 Total: \$123,081
Prin. Invest.: P GOGINENI
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12588 **UNIV OF KANSAS** **4672**
 ICE THICKNESS MEASUREMENTS OVER THE PATAGONIAN GLACIERS AND
 THE PINE ISLAND AND THWAITES GLACIER
 09/18/2002 - 09/14/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: P KANAGARATNAM
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

NAG13 01008 **UNIV OF KANSAS** **4673**
 LINKING REMOTE SENSING, LAND USE, AND CARBON SEQUESTRATION:
 INSIGHTS LEAF TO LANDSCAPE SCALE
 09/18/2001 - 09/17/2003 FY02: \$0 Total: \$997,800
Prin. Invest.: K P PRICE
Tech. Officer: SSC/B DAVIS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99009 **UNIV OF KANSAS** **4674**
 CONSORTIUM FOR PRODUCTS AND TECHNOLOGY TO SUPPORT THE
 GREAT PLAINS AGROECOSYSTEM
 03/01/1999 - 03/01/2003 FY02: \$0 Total: \$1,550,000
Prin. Invest.: E A MARTINKO
Tech. Officer: SSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 99019 **UNIV OF KANSAS** **4675**
 REMOTE SENSING-BASED GEOSTATISTICAL MODELING FOR CONIFEROUS
 FOREST INVENTORY & CHARACTERIZATION
 08/10/1999 - 08/09/2003 FY02: \$130,000 Total: \$560,000
Prin. Invest.: M JAKUBAUSKAS
Tech. Officer: SSC/R MCKALLIP
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 1 99052 **UNIV OF KANSAS** **4676**
 DEVELOPMENT OF A HYBRID RF/LASER RADAR
 03/08/1999 - 03/07/2002 FY02: \$0 Total: \$583,648
Prin. Invest.: C ALLEN
Tech. Officer: LARC/J HILL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 3 00162 **UNIV OF KANSAS** **4677**
 NRA 99-OES-08 ESTO AIST SBI
 08/01/2000 - 08/02/2002 FY02: \$56,849 Total: \$362,311
Prin. Invest.: G, J P EVANS
Tech. Officer: GRC/K BHASIN
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 168 **UNIV OF KANSAS** **4678**
 KANSAS SPACE AND LIFE SCIENCES, GEOPHYSICAL INFORM AERONAU-
 TICS AND FLIGHT ENGINEERING TECHNOLOGY (K-
 01/27/1997 - 12/31/2002 FY02: \$0 Total: \$2,500,000
Prin. Invest.: D R DOWNING
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 415 **UNIV OF KANSAS** **4679**
 EPSCOR PREPARATION PROGRAM
 06/24/1999 - 03/01/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: D DOWNING
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 600 **UNIV OF KANSAS** **4680**
 KANSAS NASA EPSCOR PROGRAM: EXPERIMENTAL PROGRAM TO STIMU-
 LATE COMPETITIVE RESEARCH
 12/17/2001 - 11/30/2004 FY02: \$317,172 Total: \$317,172
Prin. Invest.: D R DOWNING
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 3 52361 **UNIV OF KANSAS** **4681**
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM NASA GRADUATE
 STUDENT RESEARCHERS PROGRAM
 08/18/1999 - 08/14/2002 FY02: \$16,500 Total: \$66,000
Prin. Invest.: R TAGHAVI
Tech. Officer: GRC/M MEYER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30404 **UNIV OF KANSAS** **4682**
 DETERMINATION OF THERMAL RESPONSE PATTERNS FROM LAND SUR-
 FACES & THEIR RELATIONSHIP WITH CLIMATIC
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S EGBERT
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30449 **UNIV OF KANSAS** **4683**
 DEVELOPMENT OF A MONOSTATIC/BISTATIC SYNTHETIC APERTURE RA-
 DAR SYSTEM FORTWO DIMENSIONAL MAPPING OF
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: P GOGINENI
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40065 **UNIV OF KANSAS** **4684**
 KANSAS/NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 09/16/1998 - 03/31/2001 FY02: \$0 Total: \$637,500
Prin. Invest.: D R DOWNING
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40121 **UNIV OF KANSAS** **4685**
 KANSAS SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/20/2001 - 03/31/2005 FY02: \$311,500 Total: \$524,000
Prin. Invest.: D R DOWNING
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

KENTUCKY

NASA'S UNIVERSITY PROGRAM

NGT 5 50219 UNIV OF KANSAS 4686
 DEVELOPMENT OF RADAR SYSTEM FOR ACCUMULATION MEASUREMENTS
 ESSF STUDENT: PANNIRSELVAM
 09/17/1998 - 02/28/2002 FY02: \$0 Total: \$73,839
Prin. Invest.: G S PRASAD
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50421 UNIV OF KANSAS 4687
 DEVELOPMENT OF A NEAR REAL-TIME MAPPING & MONITORING PROTOCOL FOR THE U.S. GREAT PLAINS AGRO-ECOSYSTEM
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S EGBERT
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1016 UNIV OF KANSAS MEDICAL CENTER 4688
 MICROGRAVITY & SIGNAL TRANSDUCTION PATHWAYS IN SPERMATID
 10/12/1995 - 12/31/2000 FY02: \$0 Total: \$572,927
Prin. Invest.: J S TASH
Tech. Officer: ARC/C M WINGET, ARC/G C JANHS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1491 UNIV OF KANSAS MEDICAL CENTER 4689
 LONG-TERM SIMULATED MICROGRAVITY INHIBITS SPERMATID GENESIS IN ADULT MALE RATS
 07/11/2001 - 06/30/2003 FY02: \$203,148 Total: \$314,910
Prin. Invest.: J S TASH
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 11038 UNIV OF KANSAS MEDICAL CENTER 4690
 STUDIES IN PLANETARY AERONOMY
 06/14/2001 - 08/31/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: T E CRAVENS
Tech. Officer: GSFC/D J BOGAN
CASE Category: 11 – ASTRONOMY

NAG 3 2137 WICHITA STATE UNIV 4691
 PILOT SIMULATOR TRAINING FOR AIRCRAFT ICING PILOT SIMULATOR TRAINING FOR AIRCRAFT ICING
 03/06/1998 - 08/31/2002 FY02: \$0 Total: \$1,014,319
Prin. Invest.: D ELLIS, M PAODAKIS
Tech. Officer: GRC/T H BOND
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2324 WICHITA STATE UNIV 4692
 WATER DROPLET IMPINGEMENT PROGRAM - PHASE II WATER DROPLET IMPINGEMENT PROGRAM - PHASE II
 02/01/2000 - 11/30/2002 FY02: \$85,000 Total: \$286,434
Prin. Invest.: D PAPADAKIS
Tech. Officer: GRC/C BIDWELL
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3435 WICHITA STATE UNIV 4693
 SPECTROSCOPIC PROPERTIES OF SUBSTELLAR OBJECTS
 10/01/1996 - 09/30/2003 FY02: \$82,900 Total: \$386,400
Prin. Invest.: D ALEXANDER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NCA 1 106 WICHITA STATE UNIV 4694
 GENERAL AVIATION PROGRAM/AGATE
 02/24/1995 - 02/28/2002 FY02: \$16,000 Total: \$5,223,161
Prin. Invest.: H WILLIFORD, D ELLIS
Tech. Officer: LARC/W E RICKS
CASE Category: 41 – AERONAUTICAL ENGR

NCA 3 111 WICHITA STATE UNIV 4695
 JOINT SPONSORED RESEARCH AGREEMENT - ICHING RESEARCH
 02/22/1996 - 03/31/2001 FY02: -\$5,047 Total: \$369,054
Prin. Invest.: D ELLIS
Tech. Officer: GRC/T H BOND
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 624 WICHITA STATE UNIV 4696
 TAILPLANE ICING PROGRAM - PHASE II TAILPLANE ICING PROGRAM - PHASE II
 06/08/1998 - 05/31/2002 FY02: \$0 Total: \$464,712
Prin. Invest.: M PAPADAKIS, D ELLIS
Tech. Officer: GRC/T P RATVASKY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 8 202 WICHITA STATE UNIV 4697
 "ROLE OF THE FILLER WIRE COMPOSITIONS IN CRACK NUCLEATION AND PROPAGATION OF ALUMINUM WELDS"
 06/08/2000 - 07/17/2002 FY02: \$0 Total: \$62,000
Prin. Invest.: G E TALIA
Tech. Officer: MSFC/A C NUNES, MSFC/C K RUSSELL
CASE Category: 47 – METAL & MATERIALS ENGR

KENTUCKY

NAG 5 12319 MOREHEAD STATE UNIV 4698
 DEVELOPMENT OF A HYBRID 18-METER ANTENNA SYSTEM FOR RESEARCH IN RADIO ASTRONOMY AND SATELLITE TELESCOPY
 07/17/2002 - 07/14/2003 FY02: \$500,000 Total: \$500,000
Prin. Invest.: B K MALPHRUS
Tech. Officer: GSFC/V OXENHAM
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 01036 UNIV OF KENTUCKY 4699
 DEV/APPLIC OF MAGNETOELASTIC & MAGNETOACOUSTIC REMOTE QUERY ENVIRONMENTAL SENSORS
 06/05/2001 - 06/30/2004 FY02: \$154,902 Total: \$312,672
Prin. Invest.: V SINGH, E DICKEY, C A GRIMES
Tech. Officer: LARC/C H ROLLINS
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1363 UNIV OF KENTUCKY 4700
 BIOMIMETIC DETECTION SCHEMES ON A MICROCENTRIFUGE PLATFORMS (LABCD)
 07/27/1999 - 07/14/2003 FY02: \$141,828 Total: \$840,354
Prin. Invest.: S DAUNERT
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2099 UNIV OF KENTUCKY 4701
 LARGE EDDY SIMULATION OF FLOWS IN TURBINE CASCADES USING CONSERVATIVE UPWIND-BIASED 5TH ORDER NUMERICAL SCHEMES
 12/23/1997 - 01/31/2003 FY02: \$18,430 Total: \$293,707
Prin. Invest.: P G HVANG
Tech. Officer: GRC/D E ASHPIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2567 **UNIV OF KENTUCKY** **4702**
 MAGNETICALLY ASSISTED COMBUSTION EXPERIMENT (MACE)
 03/16/2001 - 12/31/2004 FY02: \$9,000 Total: \$19,000
Prin. Invest.: K SAITO
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2613 **UNIV OF KENTUCKY** **4703**
 AN EXPERIMENTAL AND COMPUTATIONAL INVESTIGATION OF OSCILLATING AIRFOIL UNSTEADY AERODYNAMICS AT LAR
 06/06/2001 - 05/31/2005 FY02: \$113,995 Total: \$160,216
Prin. Invest.: V CAPECE
Tech. Officer: GRC/D MIN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2695 **UNIV OF KENTUCKY** **4704**
 UNSTEADY AERODYNAMIC RESPONSE OF A LINEAR CASCADE OF AIRFOILS IN SEPARATED FLOW
 01/18/2002 - 09/30/2002 FY02: \$34,077 Total: \$34,077
Prin. Invest.: D CAPICE
Tech. Officer: GRC/E R MCFARLAND
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 3841 **UNIV OF KENTUCKY** **4705**
 GAS DYNAMICS IN ACTIVE GALACTIC NUCLEI: BROAD LINE
 02/28/1997 - 02/14/2001 FY02: -\$494 Total: \$182,006
Prin. Invest.: I SHLOSMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6937 **UNIV OF KENTUCKY** **4706**
 QUANTITATIVE X-RAY - UV LINE AND CONTINUUM SPECTRO SCOPY WITH APPLICATION TO AGN
 04/29/1998 - 06/30/2001 FY02: \$0 Total: \$64,700
Prin. Invest.: G FERLAND
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8212 **UNIV OF KENTUCKY** **4707**
 FUNDAMENTAL PROBLEMS IN ASTROPHYSICAL PLASMAS (LTS A98)
 02/26/1999 - 02/28/2004 FY02: \$84,116 Total: \$317,835
Prin. Invest.: G J FERLAND
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 10518 **UNIV OF KENTUCKY** **4708**
 DUST EVOLUTION IN THE EARLY UNIVERSE AND GALACTIC SYSTEMS: OBSERVATIONAL CONSEQUENCES & COSMOLOGICAL
 03/07/2001 - 03/14/2003 FY02: \$0 Total: \$168,387
Prin. Invest.: M ELITZUR
Tech. Officer: GSFC/E DWEK
CASE Category: 11 – ASTRONOMY

NAG 5 10823 **UNIV OF KENTUCKY** **4709**
 CENTRAL REGIONS IN DISK GALAXIES (ATP 2000)
 05/01/2001 - 05/14/2004 FY02: \$67,965 Total: \$138,169
Prin. Invest.: I SHLOSMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11732 **UNIV OF KENTUCKY** **4710**
 ROBUST REQUIREMENTS TRACING VIA INTERNET SEARCH TECH HNOLOGY
 02/14/2002 - 02/28/2003 FY02: \$46,000 Total: \$46,000
Prin. Invest.: J HAYES
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12020 **UNIV OF KENTUCKY** **4711**
 THE HYDRODYNAMICS OF PHOTOIONIZED FLOWS: PROBING CONDITIONS IN STARBUST GALAXIES AND STAR-FORMING
 04/17/2002 - 04/14/2005 FY02: \$79,105 Total: \$79,105
Prin. Invest.: G J FERLAND
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAS 1 01099 **UNIV OF KENTUCKY** **4712**
 A VERIFIED DESIGN TOOL FOR LARGE APERTURE MEMBRANE TELESCOPE MIRRORS
 07/11/2001 - 01/31/2002 FY02: \$0 Total: \$126,594
Prin. Invest.: S W SMITH
Tech. Officer: LARC/R S PAPPA
CASE Category: 46 – MECHANICAL ENGR

NCC 1 385 **UNIV OF KENTUCKY** **4713**
 FIGURE CONTROL OF LIGHTWEIGHT OPTICAL STRUCTURES (NASA HQS COMPETITION)
 03/15/2000 - 12/31/2002 FY02: \$69,118 Total: \$254,118
Prin. Invest.: J A MAIN
Tech. Officer: LARC/R S PAPPA
CASE Category: 46 – MECHANICAL ENGR

NCC 2 5386 **UNIV OF KENTUCKY** **4714**
 SIMULATIONS OF CARBON NANOTUBES IN NANO-ELECTRONICS AND BIOMATERIALS APPLICATIONS
 06/08/2000 - 08/31/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: M MENON
Tech. Officer: ARC/H PATRIDGE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5405 **UNIV OF KENTUCKY** **4715**
 FUNDAMENTAL PROBLEMS IN PLASMA ASTROPHYSICS: THE THERMAL EQUILIBRIUM OF NGC 7009
 10/24/2000 - 10/31/2001 FY02: \$0 Total: \$10,250
Prin. Invest.: G J FERLAND
Tech. Officer: ARC/D GOORTVITCH
CASE Category: 11 – ASTRONOMY

NCC 2 5486 **UNIV OF KENTUCKY** **4716**
 A DEVICE APPLICATIONS OF CARBON NANOTUBES A SIMULATIONS APPROACH
 03/12/2002 - 03/14/2004 FY02: \$45,000 Total: \$45,000
Prin. Invest.: M MENON
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYYAPEAN
CASE Category: 13 – PHYSICS

NCC 2 5491 **UNIV OF KENTUCKY** **4717**
 SIMULATIONS OF SIGNAL TRANSMISSIONS AND SWITCHING IN NANOTUBE NETWORKS
 05/21/2002 - 12/31/2002 FY02: \$23,366 Total: \$23,366
Prin. Invest.: M MENON
Tech. Officer: ARC/B BIEGEL, ARC/T R GOVINDAN
CASE Category: 13 – PHYSICS

LOUISIANA

NASA'S UNIVERSITY PROGRAM

NCC 3 590 UNIV OF KENTUCKY 4718
 TURBULENCE & TRANSITION MODELING OF LOW PRESSURE T URBINE FLOWS
 12/17/1997 - 12/31/2002 FY02: \$105,690 Total: \$525,444
Prin. Invest.: G HUANG
Tech. Officer: GRC/D E ASHPIS
CASE Category: 41 – AERONAUTICAL ENGNR

NCC 3 940 UNIV OF KENTUCKY 4719
 MODELING, VALIDATION AND IMPLEMENTATION OF TURBULENCE MODELS FOR 21ST CENTURY AIRCRAFT
 02/26/2002 - 12/31/2004 FY02: \$154,570 Total: \$154,570
Prin. Invest.: D HUANG
Tech. Officer: GRC/D ASHIPS
CASE Category: 49 – ENGINEERING, OTHER

NGT 1 01006 UNIV OF KENTUCKY 4720
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/05/2001 - 06/30/2004 FY02: \$24,001 Total: \$36,001
Prin. Invest.: S W SMETH
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGNR

NGT 1 52223 UNIV OF KENTUCKY 4721
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 09/10/1999 - 08/23/2001 FY02: -\$3,212 Total: \$40,788
Prin. Invest.: M ROCHE, J MAIN
Tech. Officer: LARC/G C HORNER
CASE Category: 46 – MECHANICAL ENGR

NGT 5 71 UNIV OF KENTUCKY 4722
 GSRP TRAINING GRANT - GEORGE NELSON - SHAPE TUNING OF EXTREMELY LARGE ORBITAL TELESCOPE MIRRORS
 06/09/1998 - 11/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J A MAIN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 46 – MECHANICAL ENGR

NAG 5 11040 UNIV OF LOUISVILLE 4723
 GENERAL CIRCULATION OF PLANETARY ATMOSPHERES
 06/13/2001 - 06/14/2004 FY02: \$76,000 Total: \$167,000
Prin. Invest.: T DOWLING
Tech. Officer: GSFC/D J BOGAN
CASE Category: 11 – ASTRONOMY

NCC 2 5373 UNIV OF LOUISVILLE 4724
 MICROARRAY ANALYSIS OF MICROGRAVITY-DEPENDENT GENE EXPRESSIONS IN NORMAL HUMAN FIBROBLASTS
 03/30/2000 - 02/14/2003 FY02: \$0 Total: \$185,250
Prin. Invest.: E WANG
Tech. Officer: ARC/J W HINES, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5374 UNIV OF LOUISVILLE 4725
 CLONING AND FUNCTIONAL CHARACTERIZATION OF NOVEL GENES WHOSE EXPRESSIONS ARE MICROGRAVITY-DEPENDENT...
 03/30/2000 - 02/14/2003 FY02: \$0 Total: \$185,250
Prin. Invest.: E WANG
Tech. Officer: ARC/J W HINES, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 8762 WESTERN KENTUCKY UNIV 4726
 STARBASE NETWORK
 08/27/1999 - 09/14/2003 FY02: \$0 Total: \$1,915,000
Prin. Invest.: C H MCGRUDER, 111
Tech. Officer: GSFC/JD ROSENDHAL
CASE Category: 11 – ASTRONOMY

NCC 5 222 WESTERN KENTUCKY UNIV 4727
 TO SUPPORT THE KENTUCKY NASA EXPERIMENTAL PROGRAM COMPETITIVE RESEARCH
 08/11/1997 - 06/30/2002 FY02: \$0 Total: \$1,800,000
Prin. Invest.: R HACKNEY
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 396 WESTERN KENTUCKY UNIV 4728
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/13/1999 - 05/31/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: R HACKNEY
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 571 WESTERN KENTUCKY UNIV 4729
 KENTUCKY NASA EPSCOR PROGRAM
 07/16/2001 - 07/31/2004 FY02: \$700,000 Total: \$1,400,000
Prin. Invest.: R HACKNEY
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40051 WESTERN KENTUCKY UNIV 4730
 NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 01/30/1997 - 02/28/2002 FY02: \$0 Total: \$1,046,684
Prin. Invest.: R HACKNEY
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40105 WESTERN KENTUCKY UNIV 4731
 KENTUCKY SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$256,250 Total: \$518,900
Prin. Invest.: R HACKNEY
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

LOUISIANA

NAG 2 1320 LOUISIANA STATE UNIV - BATON ROUGE 4732
 A RADAPPERTIZATION PROTOCOL FOR SAMPLES RETURNED TO EARTH FROM MARS
 05/10/1999 - 04/14/2001 FY02: \$0 Total: \$58,800
Prin. Invest.: J R BATTISTA
Tech. Officer: ARC/D L DEVINCENZI
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 2 1460 LOUISIANA STATE UNIV - BATON ROUGE 4733
 DEVELOPMENT OF A PROTOCOL FOR STERILIZING MINERAL SAMPLES RETURNED TO EARTH FROM MARS USING GAMMA RADIATION
 03/08/2001 - 01/31/2003 FY02: \$127,534 Total: \$169,980
Prin. Invest.: J R BATTISTA
Tech. Officer: ARC/M FONDA, ARC/D DIVINCENZI
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1511 LOUISIANA STATE UNIV - BATON ROUGE 4734
 THE EFFECTS OF MICROGRAVITY ON PROTEIN-LIGAND INTERACTIONS
 07/23/2001 - 07/31/2003 FY02: \$151,899 Total: \$241,422
Prin. Invest.: V J LICATA
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 - BIOLOGY (EXCLUDING ENVIR)

NAG 3 2361 LOUISIANA STATE UNIV - BATON ROUGE 4735
 THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE STABILITY OF AN EVAPORATING CONSTRAINED VAPOR BUBB
 04/03/2000 - 11/30/2003 FY02: \$43,700 Total: \$114,900
Prin. Invest.: H WONG
Tech. Officer: GRC/J SKARDA
CASE Category: 49 - ENGINEERING, OTHER

NAG 5 5064 LOUISIANA STATE UNIV - BATON ROUGE 4736
 THE ADVANCED THIN IONIZATION CALORIMETER (ATIC) BALLOON EXPERIMENT
 05/03/1996 - 05/06/2001 FY02: -\$93 Total: \$2,481,707
Prin. Invest.: J P WEFEL
Tech. Officer: GSFC/H C NEEDLEMAN, GSFC/B A MERRITT
CASE Category: 49 - ENGINEERING, OTHER

NAG 5 5177 LOUISIANA STATE UNIV - BATON ROUGE 4737
 TRANSITION RADIATION DETECTORS FOR HIGH ENERGY MEASUREMENTS ON ACCESS
 04/24/1998 - 03/31/2002 FY02: \$0 Total: \$240,000
Prin. Invest.: M L CHERRY
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5208 LOUISIANA STATE UNIV - BATON ROUGE 4738
 ULTRA-LONG DURATION MISSION CONCEPT FOR PROPOSAL FOR A MINUTE-OF-ARC RESOLUTION GAMMA-RAY EXPERIMENT
 09/24/1998 - 11/30/2002 FY02: \$0 Total: \$210,000
Prin. Invest.: M CHERRY
Tech. Officer: WFF/B A MERRITT
CASE Category: 19 - PHYSICALSCIENCE, OTHER

NAG 5 5297 LOUISIANA STATE UNIV - BATON ROUGE 4739
 SIFTER SIFTER
 06/12/2000 - 06/30/2002 FY02: -\$199 Total: \$41,301
Prin. Invest.: M L CHERRY
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5306 LOUISIANA STATE UNIV - BATON ROUGE 4740
 ADVANCED THIN IONIZATION CALORIMETER BALLOON EXPERIMENT
 01/09/2001 - 11/30/2003 FY02: \$450,000 Total: \$795,000
Prin. Invest.: J P WEFEL
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5307 LOUISIANA STATE UNIV - BATON ROUGE 4741
 INITIAL FUNDING FOR THE ABOVE REFERENCED GRANT IN THE AMOUNT OF 55K PI: FAZELY/LSU; GRANT TITLE:
 06/05/2001 - 11/30/2003 FY02: \$55,000 Total: \$110,000
Prin. Invest.: D FAZELY
Tech. Officer: WFF/B MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5323 LOUISIANA STATE UNIV - BATON ROUGE 4742
 A WIDE-FIELD HIGH-RESOLUTION HARD X-RAY/GAMMA-RAY IMAGING TELESCOPE FOR ULTRA LONG BALLOON MISSION
 03/21/2001 - 11/30/2003 FY02: \$170,000 Total: \$302,500
Prin. Invest.: M L CHERRY
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5359 LOUISIANA STATE UNIV - BATON ROUGE 4743
 CONTINUED DEVELOPMENT OF SCINTILLATING FIBER DETECTORS FOR GAMMA-RAY ASTRONOMY.
 07/15/2002 - 04/30/2003 FY02: \$6,000 Total: \$6,000
Prin. Invest.: M CHERRY
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 - PHYSICS

NAG 5 7933 LOUISIANA STATE UNIV - BATON ROUGE 4744
 EXTRAGALACTIC INTERSTELLAR DUST ____ (LTSA - NEW)
 12/14/1998 - 12/31/2003 FY02: \$62,551 Total: \$254,540
Prin. Invest.: G C CLAYTON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 - ASTRONOMY

NAG 5 8497 LOUISIANA STATE UNIV - BATON ROUGE 4745
 NUMERICAL HYDRODYNAMICS OF MASS-TRANSFERING BINARIES (ATP - 98)
 05/18/1999 - 04/30/2003 FY02: \$0 Total: \$176,520
Prin. Invest.: J FRANK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 - ASTRONOMY

NAG 5 9203 LOUISIANA STATE UNIV - BATON ROUGE 4746
 MOVING BEYOND THE STANDARD PARADIGM/THE IMPORTANCE OF INTERSTELLAR DUST FROM THE MILKY WAY TO HIGH R
 03/16/2000 - 03/14/2003 FY02: \$43,804 Total: \$147,510
Prin. Invest.: G CLAYTON
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 - ASTRONOMY

NAG 5 9245 LOUISIANA STATE UNIV - BATON ROUGE 4747
 WORLD DELTAS: A BASELINE AND CHANGES.
 03/14/2000 - 03/31/2003 FY02: \$99,961 Total: \$297,898
Prin. Invest.: O HUH
Tech. Officer: GSFC/H FREY
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 9709 LOUISIANA STATE UNIV - BATON ROUGE 4748
 USING IR EMISSION TO CONSTRAIN THE ROLE OF DUST IN GALAXIES
 07/25/2000 - 06/30/2003 FY02: \$49,814 Total: \$148,540
Prin. Invest.: G C CLAYTON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 - ASTRONOMY

NAG 5 10185 LOUISIANA STATE UNIV - BATON ROUGE 4749
 FAR-ULTRAVIOLET INTERSTELLAR EXTINCTION IN THE LARGE MAGELLANIC CLOUD - FUSE-2000
 01/25/2001 - 01/31/2003 FY02: \$0 Total: \$73,200
Prin. Invest.: G C CLAYTON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

LOUISIANA

NASA'S UNIVERSITY PROGRAM

NAG 8 1731 **LOUISIANA STATE UNIV - BATON ROUGE** **4750**
 ADVANCED LIGHT WEIGHT MAGNET PROGRAM
 07/25/2000 - 10/31/2003 FY02: \$20,000 Total: \$114,256
Prin. Invest.: R G GOODRICH
Tech. Officer: MSFC/T ROBERTSON
CASE Category: 13 – PHYSICS

NAG 8 1845 **LOUISIANA STATE UNIV - BATON ROUGE** **4751**
 SECOND GENERATION SPACE LAUNCH INITIATIVES: AN EXPLORATION AND
 ROADMAP TOSOLVING PROBLEMS.
 07/26/2001 - 08/29/2001 FY02: \$0 Total: \$9,999
Prin. Invest.: B SARKER
Tech. Officer: MSFC/E SHAW
CASE Category: 49 – ENGINEERING, OTHER

NAS 8 01042 **LOUISIANA STATE UNIV - BATON ROUGE** **4752**
 MECHANICS OF GRANULAR MATERIAL MGM III
 03/23/2001 - 10/31/2004 FY02: \$81,536 Total: \$201,536
Prin. Invest.: K ALSHIBLI
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 2 5320 **LOUISIANA STATE UNIV - BATON ROUGE** **4753**
 SCALABLE SIMULATION& DATA MANAGEMENT FOR COMPUTATI ONAL
 NANOELECTRONICS ON THE INFORMATION POWER GRI
 05/10/1999 - 08/31/2001 FY02: \$0 Total: \$190,000
Prin. Invest.: A NAKANO
Tech. Officer: ARC/S SAINI
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5440 **LOUISIANA STATE UNIV - BATON ROUGE** **4754**
 MULTISCALE SIMULATIONS OF PROTEIN NANOTUBES ON A G RID
 07/02/2001 - 06/30/2003 FY02: \$50,000 Total: \$145,000
Prin. Invest.: P VASHISTA, R K KALIA, ANAKANO
Tech. Officer: ARC/M MEYYAPPAN, ARC/H PATRIDGE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5469 **LOUISIANA STATE UNIV - BATON ROUGE** **4755**
 CHANGES IN MICROBIAL DIVERSITY & THE OCCURANCE OF IONIZING
 RADIATION RESITANT ORGANISMS ACROSS MOIST
 10/15/2001 - 09/14/2003 FY02: \$67,763 Total: \$67,763
Prin. Invest.: F A RAINEY
Tech. Officer: ARC/C MCKAY, ARC/B SMITH
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 5484 **LOUISIANA STATE UNIV - BATON ROUGE** **4756**
 SCALABLE ALGORITHMS ON THE INFORMATION POWER GRID
 03/06/2002 - 02/28/2003 FY02: \$95,000 Total: \$95,000
Prin. Invest.: A NAKANO
Tech. Officer: ARC/S SAINI, ARC/A GRADY
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 167 **LOUISIANA STATE UNIV - BATON ROUGE** **4757**
 NASA EPSCOR PROGRAM
 11/02/1996 - 10/31/2001 FY02: \$0 Total: \$2,300,000
Prin. Invest.: J P WEFEL
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 393 **LOUISIANA STATE UNIV - BATON ROUGE** **4758**
 NASA EPSCOR PREPARATION PROGRAM
 05/13/1999 - 08/14/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: J WEFEL
Tech. Officer: HQ/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC13 02003 **LOUISIANA STATE UNIV - BATON ROUGE** **4759**
 ADAPTING AND VALIDATING PRECISION TECHNOLOGIES FOR COTTON
 PRODUCTION IN THE MID-SOUTHER U S
 02/28/2002 - 01/31/2006 FY02: \$329,209 Total: \$329,209
Prin. Invest.: B R LEONARD
Tech. Officer: SSC/R MCKELLIP
CASE Category: 55 – AGRICULTURE

NGT 5 40115 **LOUISIANA STATE UNIV - BATON ROUGE** **4760**
 LOUISIANA SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$256,250 Total: \$640,260
Prin. Invest.: J WEFEL
Tech. Officer: HQ/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52919 **LOUISIANA STATE UNIV - BATON ROUGE** **4761**
 COMPUTED TOMOGRAPHY: A POTENTIAL TECHNOLOGY TO UNDERSTAND
 FRICTION PROPERTIES OF GRANULAR MATERIA
 05/08/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: K ALSHIBLI
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 44 – CIVIL ENGR

NGT13 52743 **LOUISIANA STATE UNIV - BATON ROUGE** **4762**
 A TESTING OF REMOTE SENSING METHODS AT THE BROUSSARD MOUNDS
 ITE
 07/12/2000 - 11/30/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: B S GOODWIN
Tech. Officer: SSC/R TRAVIS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT13 52755 **LOUISIANA STATE UNIV - BATON ROUGE** **4763**
 GRADUATE STUDY RESEARCH - IMPROVEMENT OF RANS MODE LS FOR
 ENGINE FLOWS USING DIRECT NUMERICAL SIMULA
 06/24/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S ACHARYS
Tech. Officer: SSC/R TRAVIS
CASE Category: 46 – MECHANICAL ENGR

NAG 5 4293 **NORTHEAST LOUISIANA UNIV** **4764**
 ANCIENT CRUST AND LACUSTRINE PLAIN SITES FOR MARS
 04/18/1997 - 09/30/2001 FY02: -\$1,035 Total: \$28,965
Prin. Invest.: D A DE HON
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 2 1468 **SOUTHERN UNIV & A&M COLL** **4765**
 INTEGRATED APPROACH TO REASONING UNDER MULTIPLE PE RSPEC-
 TIVES
 03/28/2001 - 03/14/2003 FY02: \$112,650 Total: \$201,320
Prin. Invest.: C DEBESSONER
Tech. Officer: ARC/R MORRIS, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2076 **SOUTHERN UNIV & A&M COLL** **4766**
 KNOWLEDGE PRESERVATION FOR DESIGN OF ROCKET SYSTEM S
 09/26/1997 - 05/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: D MOREMAN, J DYER
Tech. Officer: GRC/D F NOGA
CASE Category: 22 – COMPUTER SCIENCE

NASA'S UNIVERSITY PROGRAM

LOUISIANA

NAG 4 232 **SOUTHERN UNIV & A&M COLL** **4767**
DEVELOPMENT OF COMPUTER AIDED RISK MITIGATION AND CATEGORI-
ZATION PRODUCT
08/20/2002 - 06/30/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D F MENSAH
Tech. Officer: DFRC/L DAVIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 5066 **SOUTHERN UNIV & A&M COLL** **4768**
THE ADVANCED THIN IONIZATION CALORIMETER (ATIC) BALLOON EXPERI-
MENT
06/17/1996 - 06/30/2001 FY02: \$0 Total: \$497,500
Prin. Invest.: A R FAZELY
Tech. Officer: GSFC/H C NEEDLEMAN, GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 7157 **SOUTHERN UNIV & A&M COLL** **4769**
DEVELOPMENT OF BALLOON-BORNE X-RAY/GAMMA DETECTORS FOR
STUDIES OF HIGH ENERGY ASTROPHYSICAL SOURCE
03/11/1998 - 02/28/2003 FY02: \$0 Total: \$297,660
Prin. Invest.: J STACY
Tech. Officer: GSFC/J TUELLER
CASE Category: 13 – PHYSICS

NAG 5 8552 **SOUTHERN UNIV & A&M COLL** **4770**
PROGRAM TO INCREASE THE PURSUIT OF EDUCATION AND LEARNING IN
ENGINEERING AND SCIENCE
06/15/1999 - 09/30/2001 FY02: \$0 Total: \$1,000,000
Prin. Invest.: D BAGAYOKO
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10253 **SOUTHERN UNIV & A&M COLL** **4771**
PARTNERSHIPS IN ASTRONOMY & ASTROPHYSICS EDUCATION & RE-
SEARCH AT SOUTHERN UNIV
01/10/2001 - 01/14/2004 FY02: \$185,000 Total: \$395,000
Prin. Invest.: G STACY
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 5 11936 **SOUTHERN UNIV & A&M COLL** **4772**
BUILDING THE CAPACITY OF HBCUS FOR ESTABLISHING EFFECTIVE
GLOBE PARTNERSHIPS.
03/27/2002 - 06/30/2002 FY02: \$20,000 Total: \$20,000
Prin. Invest.: D BAGAYOKO
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1495 **SOUTHERN UNIV & A&M COLL** **4773**
RELATIONSHIP BETWEEN STRUCTURE AND MAGNETIC AND ELECTRON
TRANSPORT PROPERTIES IN R1-AXMN03
06/01/1998 - 05/31/2002 FY02: \$0 Total: \$238,892
Prin. Invest.: H L LAWRENCE
Tech. Officer: MSFC/D SCHMIDT
CASE Category: 13 – PHYSICS

NAG 8 1536 **SOUTHERN UNIV & A&M COLL** **4774**
MODELING AND ANALYSIS OF HEAT-ACTIVATED THERMAL COUPLES
06/08/1998 - 06/30/2001 FY02: -\$5 Total: \$298,745
Prin. Invest.: M A STUNNLEFIELD
Tech. Officer: MSFC/G GORDON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1625 **SOUTHERN UNIV & A&M COLL** **4775**
FIBERGLAST INSTRUMENT DEVELOPMENT
09/22/1999 - 08/31/2001 FY02: \$0 Total: \$199,020
Prin. Invest.: J G STACY
Tech. Officer: MSFC/G J FISHMAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1627 **SOUTHERN UNIV & A&M COLL** **4776**
EDUCATION GRANT "AN INTEGRATED THEORY AND LAB LEARNING EXPE-
RIENCE
09/09/1999 - 09/08/2002 FY02: \$0 Total: \$140,582
Prin. Invest.: L L LAURENCE
Tech. Officer: MSFC/W J LOVE, MSFC/A C BEAM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1633 **SOUTHERN UNIV & A&M COLL** **4777**
VIRTUAL REALITY INNOVATIONS IN TRAINING AND SCIENCE, ENGINEERING
AND MATHEMATICS EDUCATION.
09/15/1999 - 09/30/2002 FY02: \$100,000 Total: \$199,354
Prin. Invest.: M C DUNN
Tech. Officer: MSFC/A BEAM, MSFC/W LOVE
CASE Category: 21 – MATHEMATICS

NAG10 322 **SOUTHERN UNIV & A&M COLL** **4778**
DEVELOPMENT OF A SMART MATERIAL INTEGRATED SENSOR THERMAL
SWITCH FOR CRYOGENIC SYSTEMS
09/04/2002 - 08/31/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D F MENSAH
Tech. Officer: KSC/B NOTARDONATO
CASE Category: 46 – MECHANICAL ENGR

NAG13 98003 **SOUTHERN UNIV & A&M COLL** **4779**
NOISE REMOVAL DECONVULTION AND VIBRATION RELAXA- TION STUDIES
TO ENHANCE PLUME DIAGNOSTIC TECH.
03/11/1998 - 05/14/2002 FY02: \$0 Total: \$299,772
Prin. Invest.: A AMINI
Tech. Officer: SSC/B B ST. CYR
CASE Category: 49 – ENGINEERING, OTHER

NAG13 98013 **SOUTHERN UNIV & A&M COLL** **4780**
MATHEMATICS AND SCIENCE ENRICHMENT ACTIVITES FOR MIDDLE AND
HIGH SCHOOL STUDENTS
07/15/1998 - 06/30/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: M SUBBLEFIELD
Tech. Officer: SSC/A JOYCE
CASE Category: 21 – MATHEMATICS

NCC 2 1344 **SOUTHERN UNIV & A&M COLL** **4781**
PREDICTIVE CALCULATION AND SIMULATION FOR NANOSEM ICONUC-
TORS AND RELATED HETEROSTRUCTURES FOR AEROS
05/29/2002 - 05/31/2003 FY02: \$53,873 Total: \$53,873
Prin. Invest.: G L ZHAO
Tech. Officer: ARC/A CARDENAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 8 156 **SOUTHERN UNIV & A&M COLL** **4782**
FOR RESEARCH ENTITLED: "STRUCTURAL MATERIALS FAILURE ANALYSIS
DATABASE"
09/28/1998 - 08/31/2001 FY02: -\$72,680 Total: \$125,958
Prin. Invest.: J DYER
Tech. Officer: MSFC/G JERMAN
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

LOUISIANA

NASA'S UNIVERSITY PROGRAM

NCC13 00010 **SOUTHERN UNIV & A&M COLL** **4783**
PROGRAM TO INCREASE PURSUIT OF EDUCATION AND LEARNING IN
ENGINEERING AND SCIENCES (PIPLINES)
09/25/2000 - 09/24/2003 FY02: \$87,000 Total: \$1,915,800
Prin. Invest.: D BAGAYOKO
Tech. Officer: SSC/R TRAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 02070 **TULANE UNIV** **4784**
TULANE INST FOR MACROMOLECULAR ENGINEERING AND SCIENCE
(TIMES)
03/25/2002 - 09/30/2003 FY02: \$1,500,000 Total: \$1,500,000
Prin. Invest.: D C DEKEEKEE, B S MITCHELL
Tech. Officer: LARC/J G SMITH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1378 **TULANE UNIV** **4785**
EFFECT OF SIMULATED MICROGRAVITY ON GENE EXPRESSION IN THE
ENTERIC PATHOGEN SALMONELLA TYPHIMURIUM
08/19/1999 - 07/31/2003 FY02: \$126,383 Total: \$461,099
Prin. Invest.: C A NICKERSON
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2689 **TULANE UNIV** **4786**
LIFE PREDICTION MODEL FOR THERMAL BARRIER COATINGS LIFE PRE-
DICTION MODEL FOR THERMAL BARRIER COATING
01/10/2002 - 08/31/2004 FY02: \$91,345 Total: \$91,345
Prin. Invest.: D A RUBINSTEIN
Tech. Officer: GRC/A M CALOMINO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2734 **TULANE UNIV** **4787**
INVESTIGATIONS OF THE INFLUENCE OF AIR-LIQUID INTERFACIAL
STRESSES ON PULMONARY EPITHELIAL CELLS
03/14/2002 - 11/30/2005 FY02: \$71,990 Total: \$71,990
Prin. Invest.: D P GAVER
Tech. Officer: GRC/P A PARSONS-WINGERT
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1362 **TULANE UNIV** **4788**
FOR RESEARCH--PRODUCTION OF 125 DIOD D3 BY RENAL EPITHELIAL
CELLS IN SIMULATED MICROGRAVITY CULTURE
06/01/1997 - 11/30/2001 FY02: \$0 Total: \$740,000
Prin. Invest.: T HAMMOND
Tech. Officer: JSC/S R GONDA
CASE Category: 56 – MEDICL

NAG 9 826 **TULANE UNIV** **4789**
CELL CULTIVATION
08/09/1995 - 01/15/2001 FY02: \$0 Total: \$424,000
Prin. Invest.: K O'CONNOR
Tech. Officer: JSC/N PELLIS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1344 **TULANE UNIV** **4790**
GENETICALLY ENGINEERED COLLAGEN II FOR SMART BIOMATERIALS
08/22/2001 - 09/30/2004 FY02: \$185,000 Total: \$229,000
Prin. Invest.: T HAMMOND
Tech. Officer: JSC/D RISEN
CASE Category: 56 – MEDICL

NAG 9 1350 **TULANE UNIV** **4791**
NOVEL TISSUE ASSEMBLIES; MODELS FOR ENTERIC PATHOGENESIS
08/08/2001 - 09/30/2004 FY02: \$116,294 Total: \$179,294
Prin. Invest.: C A NICKERSON
Tech. Officer: JSC/D RISIN
CASE Category: 56 – MEDICL

NAG 9 1351 **TULANE UNIV** **4792**
SPATIAL ORGANIZATION WITHIN PROSTATE CANCER SPHEROIDS
08/01/2001 - 09/30/2004 FY02: \$148,000 Total: \$222,000
Prin. Invest.: K C O'CONNOR, S CLEJAN, D C.R. DE KEE
Tech. Officer: JSC/D RIIN
CASE Category: 56 – MEDICL

NCC 2 1362 **TULANE UNIV** **4793**
EFFECT OF SPACEFLIGHT ON MICROBIAL GENE EXPRESSION AND VIRU-
LANCE
09/06/2002 - 08/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: C A NICKERSON
Tech. Officer: ARC/B E GIRTEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 3 946 **TULANE UNIV** **4794**
TULANE INST FOR MACROMOLECULAR ENGINEERING AND SCIENCE
(TIMES)
03/25/2002 - 09/30/2003 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: D DEKEE
Tech. Officer: GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NGT13 52722 **TULANE UNIV** **4795**
DYNAMIC PARTICLE PROCESSES & BIOGEOCHEMICAL MATERIAL FLUX IN
RIVER DOMINATED OCEAN MARGINS
07/28/1999 - 07/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B MCKEE
Tech. Officer: JSC/R TRAVIS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT13 52754 **TULANE UNIV** **4796**
GRADUATE STUDENT RESEARCH - ARCHAEOLOGICAL REMOTE SENSING
SURVEY OF THE CHUNCHUCMIL ECONOMIC REGION
06/24/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W ANDREWS
Tech. Officer: SSC/T TRAVIS
CASE Category: 71 – ANTHROPOLOGY

NAG 3 2447 **UNIV OF NEW ORLEANS** **4797**
GEOPHYSICAL FLOW EXPERIMENT IN A ROTATING SPHERICAL CAPACITOR
05/30/2000 - 11/30/2003 FY02: \$97,465 Total: \$232,480
Prin. Invest.: J HEGSETH
Tech. Officer: GRC/F P CHIARAMONTEH
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 5376 **UNIV OF NEW ORLEANS** **4798**
LIFE IN EXTREME ENVIRONMENTS RESEARCH
03/30/2000 - 03/31/2001 FY02: \$0 Total: \$15,000
Prin. Invest.: Z ROSENZWEIG
Tech. Officer: ARC/M T FLYNN, ARC/J HINES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NASA'S UNIVERSITY PROGRAM

MAINE

NCC 8 223 UNIV OF NEW ORLEANS 4799
 DEVELOPMENT OF INNOVATIVE ADVANCED COMPOSITE MFG TECHNOLOGIES UTILIZING NCAM/LOUISIANA PARTNERSHIP
 03/19/2001 - 03/18/2006 FY02: \$2,789,000 Total: \$5,489,000
Prin. Invest.: J N CRISP
Tech. Officer: MSFC/J VICKERS, MSFC/M NIEDERMEYER
CASE Category: 49 – ENGINEERING, OTHER

NGT13 52721 UNIV OF NEW ORLEANS 4800
 NUMERICAL ANALYSIS OF THERMAL STRATIFICATION AND BEYSERING IN LIQUID PROPELLANT STORAGE TANKS
 07/22/1999 - 07/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: K M AKYUZLU
Tech. Officer: SSC/R TRAVIS
CASE Category: 21 – MATHEMATICS

NGT13 52740 UNIV OF NEW ORLEANS 4801
 OPTIMIZATION OF SPACE FLIGHT SYTEM GROUND-BASED PROCESSING
 05/22/2000 - 05/31/2001 FY02: -\$3,233 Total: \$18,767
Prin. Invest.: R SAXTON
Tech. Officer: SSC/R TRAVIS
CASE Category: 49 – ENGINEERING, OTHER

NGT13 52749 UNIV OF NEW ORLEANS 4802
 FACTORS AFFECTING THE EARLY LIFE HISTORY OF FISHES IN LAKE PONTCHATRAIN, LOUISIANA
 06/08/2001 - 06/30/2004 FY02: \$23,650 Total: \$45,300
Prin. Invest.: J CORBINO
Tech. Officer: SSC/R MILLER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1423 UNIV OF SOUTHWESTERN LOUISIANA 4803
 ANALYSIS OF THE GRAVISENSING SYSTEM IN CHARA
 07/18/2000 - 06/30/2003 FY02: \$112,254 Total: \$261,248
Prin. Invest.: K H HASENSTEIN
Tech. Officer: ARC/R D MACELROY, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG10 190 UNIV OF SOUTHWESTERN LOUISIANA 4804
 RESPONSE SYSTEM OF PLANTS
 03/25/1996 - 11/30/2002 FY02: \$135,000 Total: \$712,358
Prin. Invest.: K H HASENSTEIN
Tech. Officer: KSC/W M KNOTT
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1609 XAVIER UNIV - LOUISIANA 4805
 "TEACHER AND CURRICULUM ENHANCEMENT PROGRAM"
 05/25/1999 - 05/24/2002 FY02: -\$14,051 Total: \$585,949
Prin. Invest.: R P HALE
Tech. Officer: MSFC/W LOVE
CASE Category: 21 – MATHEMATICS

NAG13 98006 XAVIER UNIV - LOUISIANA 4806
 SEEING THE EARTH: USING REMOTE SENSING TECHNOLOGIES TO STIR IMAGINATION OF STUDENTS
 04/20/1998 - 10/19/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: S O'CONNOR
Tech. Officer: JSC/R TRAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 02036 XAVIER UNIV - LOUISIANA 4807
 2002 PRE-SERVICE TEACHER INST (PST1)
 06/26/2002 - 09/30/2002 FY02: \$54,758 Total: \$54,758
Prin. Invest.: T C TAYLOR
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 70010 XAVIER UNIV - LOUISIANA 4808
 SOAR 2 SUMMER BRIDGE PROGRAM
 06/12/2002 - 05/31/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: A CHATTERS
Tech. Officer: GSFC/C COLLINGSWORTH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 90084 XAVIER UNIV - LOUISIANA 4809
 SOAR 2 SUMMER BRIDGE PROGRAM
 09/09/1997 - 04/30/2001 FY02: \$0 Total: \$590,023
Prin. Invest.: G BAKER
Tech. Officer: GSFC/L RANDOLPH
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 90086 XAVIER UNIV - LOUISIANA 4810
 SOAR 2 SUMMER BRIDGE PROGRAM
 05/07/2001 - 04/30/2002 FY02: \$0 Total: \$150,000
Prin. Invest.: A Z CHATTERS
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MAINE

NAG 5 6002 UNIV OF MAINE - ORONO 4811
 SOILS, WATER, PEOPLE, AND PIXELS: A STUDY OF NANG
 09/11/1997 - 07/14/2001 FY02: \$0 Total: \$569,993
Prin. Invest.: R RINDFUSS
Tech. Officer: HQ/A JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6041 UNIV OF MAINE - ORONO 4812
 TIME-SERIES FOREST CHANGE, LAND-COVER/LAND-USE CON ECONOMIC DRIVING FORCES IN THE NORTHERN PETEN DIS
 07/23/1997 - 07/31/2001 FY02: \$0 Total: \$232,000
Prin. Invest.: S SADER
Tech. Officer: GSFC/A JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6558 UNIV OF MAINE - ORONO 4813
 BIOLOGICAL-PHYSICAL COUPLING IN THE GULF OF MAINE: SATELLITE AND MODEL SSTUDIES IN PHYTOPLANKTON VA
 10/27/1997 - 10/31/2001 FY02: \$0 Total: \$351,586
Prin. Invest.: A C THOMAS
Tech. Officer: GSFC/J A MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6604 UNIV OF MAINE - ORONO 4814
 PHYTOPLANKTON VARIABILITY IN EASTERN BOUNDARY CURR ENTS: CONNECTIONS TO PHYSICAL FORCING
 12/11/1997 - 11/30/2002 FY02: \$0 Total: \$498,939
Prin. Invest.: A THOMAS
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 8712 UNIV OF MAINE - ORONO 4815
 MONITORING THE MESOAMERICAN BIOLOGICAL CORRIDOR
 07/26/1999 - 05/31/2003 FY02: \$0 Total: \$270,168
Prin. Invest.: S A SADER
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9913 UNIV OF MAINE - ORONO 4816
 RASCAL-A REMOTE AUTONOMOUS SYSTEM FOR THE CONTROL OF ALTIMETRY
 09/14/2000 - 09/14/2002 FY02: \$0 Total: \$12,619
Prin. Invest.: G S HAMILTON
Tech. Officer: GSFC/J ZWALLY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9959 UNIV OF MAINE - ORONO 4817
 CIS NET: IN SITU AND REMOTE MONITORING OF PRODUCTIVITY AND NUTRIENT CYCLES IN PUGET SOUND
 09/12/2000 - 12/31/2002 FY02: \$0 Total: \$147,267
Prin. Invest.: M PERRY
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10035 UNIV OF MAINE - ORONO 4818
 SURFACE GPS MEASUREMENTS FOR ICE SHEET MASS BALANCE & FIDUCIAL CONTROL OF ALTIMETRY
 10/24/2000 - 12/31/2001 FY02: \$0 Total: \$40,742
Prin. Invest.: G HAMILTON
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10620 UNIV OF MAINE - ORONO 4819
 MULTI-SENSOR & MODELING ANALYSES OF GULF OF MAINE PHYTOPLANKTON VARIABILITY
 03/19/2001 - 03/31/2004 FY02: \$91,559 Total: \$212,382
Prin. Invest.: A THOMAS
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11132 UNIV OF MAINE - ORONO 4820
 ASTTEX VALIDATION MOORING
 07/26/2001 - 07/31/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: D A BYRNE
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12385 UNIV OF MAINE - ORONO 4821
 PRIMARY PRODUCTION IN THE MIXED LAYER
 07/17/2002 - 06/30/2003 FY02: \$42,353 Total: \$42,353
Prin. Invest.: E BOSS
Tech. Officer: GSFC/M BEHRENFELD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12393 UNIV OF MAINE - ORONO 4822
 SCATTERING CHARACTERISTICS OF PHYTOPLANKTON TAXONOMIC GROUPS AND THEIR EFFECT ON REFLECTANCE
 07/19/2002 - 07/31/2005 FY02: \$39,675 Total: \$39,675
Prin. Invest.: L KARP-BOSS
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12473 UNIV OF MAINE - ORONO 4823
 A ONE YEAR PILOT STUDY FOR THE INCLUSION OF ACTIVE OPTICAL SENSORS INTO PALACE FLOATS
 08/20/2002 - 07/31/2003 FY02: \$15,292 Total: \$15,292
Prin. Invest.: E BOSS
Tech. Officer: GSFC/C TREES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 98008 UNIV OF MAINE - ORONO 4824
 FOREST MONITORING AND MULTISENSOR RESEARCH IN MAINE'S INDUSTRIAL FOREST
 04/30/1998 - 04/29/2002 FY02: \$0 Total: \$650,000
Prin. Invest.: S SADER
Tech. Officer: JSC/B GRAHAM
CASE Category: 55 – AGRICULTURE

NGT 5 30353 UNIV OF MAINE - ORONO 4825
 THE ROLE OF CLAY MINERALOGY ON SOIL C ACCUMULATION & LOSS ALONG A TROPICAL FOREST ELEVATION (CLIMATE)
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: L M MAYER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30426 UNIV OF MAINE - ORONO 4826
 DISTRIBUTION OF SNOW ACCUMULATION AND MASS BALANCE ACROSS THE WEST ANTARCTIC ICESHEET/STUDENT
 09/19/2001 - 09/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: G HAMILTON
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT13 52751 UNIV OF MAINE - ORONO 4827
 NEURAL NETWORK MODELING OF CHLOROPHYLL-A CONCENTRATION FROM REMOTE SENSING DATA
 06/08/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: W SLADE
Tech. Officer: SSC/R MILLER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9128 UNIV OF SOUTHERN MAINE 4828
 ACCESS EARTH: PROMOTING ACCESSIBILITY TO THE EARTH SYSTEM SCIENCES FOR PERSONS WITH DISABILITIES
 03/01/2000 - 02/28/2003 FY02: \$89,536 Total: \$234,813
Prin. Invest.: S M LOCKE
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MARYLAND

NAG 2 1572 BOWIE STATE UNIV 4829
 BIOMOLECULAR RECOGNITION OF FULLERNESS AND CARBON NANOTUBES
 07/24/2002 - 07/31/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: B BRADEN
Tech. Officer: ARC/A CARDENAS
CASE Category: 43 – CHEMICAL ENGR

NAG 5 2829 **BOWIE STATE UNIV** **4830**
 MODEL-BASED VQ FOR MULTISPECTRAL EARTH IMAGE DATA COMPRES-
 SION
 12/14/1994 - 06/30/2001 FY02: \$0 Total: \$164,231
Prin. Invest.: M MAREBOYANA
Tech. Officer: GSFC/J TILTON
CASE Category: 11 – ASTRONOMY

NAG 5 6476 **BOWIE STATE UNIV** **4831**
 ASSESSING THE IMPACT OF EXPANDING URBAN LAND USE ON AGRICUL-
 TURAL PRODUCTIVITY USING REMOTE S
 12/08/1997 - 09/14/2002 FY02: \$0 Total: \$471,184
Prin. Invest.: W LAWRENCE
Tech. Officer: GSFC/M L IMHOFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7669 **BOWIE STATE UNIV** **4832**
 SUPPORT FOR DATA ANALYSIS, PRESENTATION, FIELD & MEETING
 TRAVEL NASA/DOD LEGACY CENTRAL AMERICA DEPL
 09/28/1998 - 09/30/2001 FY02: \$0 Total: \$163,957
Prin. Invest.: W LAWRENCE
Tech. Officer: GSFC/M L IMHOFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8370 **BOWIE STATE UNIV** **4833**
 A FAST TRACK PLAN TOWARD TEACHER CERTIFICATION FOR THE PUBLIC
 SCHOOL SYSTEM OF PRINCE GEORGE'S C
 03/12/1999 - 08/31/2002 FY02: \$0 Total: \$600,000
Prin. Invest.: D W CRIM
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8787 **BOWIE STATE UNIV** **4834**
 TRAINING UNDERGRADUATES IN SPACE SCIENCE AND SATELLITE OPERA-
 TION AND TECHNOLOGY
 08/31/1999 - 11/30/2001 FY02: \$0 Total: \$200,000
Prin. Invest.: N WAKIM
Tech. Officer: GSFC/P CROUSE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9458 **BOWIE STATE UNIV** **4835**
 A 2000 SUMMER INST IN ENGINEERING & COMPUTER
 04/14/2000 - 10/31/2001 FY02: \$0 Total: \$207,900
Prin. Invest.: D LANGDON
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9544 **BOWIE STATE UNIV** **4836**
 GODDARD STUDENT INTERNSHIP PROGRAM (GSIP)
 05/03/2000 - 05/14/2001 FY02: \$0 Total: \$49,868
Prin. Invest.: N T WAKIM
Tech. Officer: GSFC/M S BURRELL
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 9843 **BOWIE STATE UNIV** **4837**
 PROJECT ACCESS (ACADEMY FOR THE COLLABORATIVE ENHANCEMENT
 OF STUDENT SKILLS)
 08/07/2000 - 03/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: V B GUILFORD
Tech. Officer: GSFC/C HOLLINGSWORTH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10034 **BOWIE STATE UNIV** **4838**
 CONTINUED SUPPORT OF EOS-IDS URBAN IMPACTS ON GLOBAL PRO-
 DUCTIVITY
 10/10/2000 - 12/14/2002 FY02: \$0 Total: \$59,901
Prin. Invest.: W LAWRENCE
Tech. Officer: GSFC/M L IMHOFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10697 **BOWIE STATE UNIV** **4839**
 TO MANAGE A 2001 SUMMER INST IN ENGINEERING & COMPUTER
 APPLICATIONS PROGRAM
 04/24/2001 - 07/31/2002 FY02: \$0 Total: \$207,800
Prin. Invest.: D LANGDON
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11361 **BOWIE STATE UNIV** **4840**
 BOWIE SEEKS TO INTEGRATE THE WIRE MISSION INTO ITS BSOCC
 PROGRAM TO PROVIDE OPPORTUNITIES TO ST
 09/27/2001 - 09/30/2003 FY02: \$29,847 Total: \$93,847
Prin. Invest.: N T WAKIM
Tech. Officer: GSFC/P L CROUSE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11450 **BOWIE STATE UNIV** **4841**
 "LOCATING HUMAN RISKS TO BIODIVERSITY, A CARBON BALANCE
 APPROACH"
 12/17/2001 - 12/31/2004 FY02: \$75,200 Total: \$75,200
Prin. Invest.: W LAWRENCE
Tech. Officer: GSFC/M L IMHOFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12165 **BOWIE STATE UNIV** **4842**
 A 2002 SUMMER INST IN ENGINEERING AND COMPUTER APPLICATIONS
 (SIECA) PROGRAM
 05/16/2002 - 05/14/2003 FY02: \$216,655 Total: \$216,655
Prin. Invest.: D LANGDON
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12237 **BOWIE STATE UNIV** **4843**
 PROGRAM DEVELOPMENT IN MICROELECTROMECHANICAL SYSTEMS
 (MEMS)
 05/31/2002 - 05/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: J E TAYLOR
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12553 **BOWIE STATE UNIV** **4844**
 UTILIZING COLL STUDENT SCIENCE MENTORS TO DEVELOP RESEARCH
 SKILLS OF SECONDARY PUBLIC SCHOOL STU
 09/12/2002 - 09/30/2003 FY02: \$29,970 Total: \$29,970
Prin. Invest.: P A SINSKY
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 5 232 **BOWIE STATE UNIV** **4845**
 MODEL INSTS FOR EXCELLENCE - PERIOD OF PERF
 09/22/1997 - 09/30/2000 FY02: \$0 Total: \$4,765,804
Prin. Invest.: N WAKIM
Tech. Officer: GSFC/L RANDOLPH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MARYLAND

NASA'S UNIVERSITY PROGRAM

NCC 5 446 BOWIE STATE UNIV 4846
 ANALYSIS & MODIFICATION OF NASA WEB BASED SOFTWARE
 07/10/2000 - 07/14/2001 FY02: \$0 Total: \$70,082
Prin. Invest.: D CARVALO
Tech. Officer: GSFC/H PARK
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 507 BOWIE STATE UNIV 4847
 FOLIAR OPTICAL PROPERTY MEASUREMENTS OF BOREAL SPECIES (A
 CONTINUATION OF THE BOREAL RESEARCH PROGRAM)
 08/07/2000 - 08/14/2003 FY02: \$0 Total: \$23,625
Prin. Invest.: W T LAWRENCE
Tech. Officer: GSFC/E MIDDLETON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 516 BOWIE STATE UNIV 4848
 MODEL INSTS FOR EXCELLENCE
 10/05/2000 - 09/30/2003 FY02: \$2,971,000 Total: \$4,500,000
Prin. Invest.: E J DAVIS
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12066 CAPITOL COLL 4849
 A PRE-COLL MINORITY ENGINEERING PROGRAM
 04/30/2002 - 04/30/2003 FY02: \$55,000 Total: \$55,000
Prin. Invest.: H JARRELL
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12463 CAPITOL COLL 4850
 CAPITOL COLL SPACE OPERATIONS INST
 08/19/2002 - 08/14/2005 FY02: \$407,010 Total: \$407,010
Prin. Invest.: P D SMIT
Tech. Officer: GSFC/E CHANG
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 5 400 CHARLES COUNTY COMM COLL 4851
 LABORATORY INVESTIGATION OF THE FORMATION, PROPERTIES AND
 METAMORPHISM OF PRE-SOLAR MATERIALS
 05/14/1999 - 05/31/2002 FY02: \$0 Total: \$67,586
Prin. Invest.: G KRAUSE
Tech. Officer: GSFC/J A NUTH
CASE Category: 12 – CHEMISTRY

NAG 5 11846 COPPIN STATE COLL 4852
 EDUCATION AND RESEARCH MERIT OFM PROPOSED COPPIN/ GSFC
 ACTIVITIES
 03/27/2002 - 03/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: D C WILSON
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2043 JOHNS HOPKINS UNIV 4853
 INFERRING ASPECTS OF TRANSPORT AND MIXING IN THE STRATO-
 SPHERE AND TROPOSPHERE FROM CHEMICAL TRACER
 04/01/1998 - 09/30/2001 FY02: \$0 Total: \$208,022
Prin. Invest.: D W WAUGH
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2194 JOHNS HOPKINS UNIV 4854
 DYNAMICAL COUPLING OF THE TROPOSPHERE WITH THE POLAR STRATO-
 SPHERE
 05/14/1999 - 04/30/2002 FY02: \$0 Total: \$124,376
Prin. Invest.: D W WAUGH
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2257 JOHNS HOPKINS UNIV 4855
 METHODS FOR REFLECTED GLOBAL POSITIONING SYSTEM (GPS) DATA
 COLLECTION AND ANALYSIS
 01/11/2000 - 09/30/2001 FY02: -\$603 Total: \$338,397
Prin. Invest.: M S ASHER, R K RANEY, T ELFOUHAILY
Tech. Officer: LARC/S J KATZBERG, GSFC/J L GARRISON
CASE Category: 33 – OCEANOGRAPHY

NAG 1 2270 JOHNS HOPKINS UNIV 4856
 PHOTOLYSIS RATE COEFFICIENT CALCULATIONS IN SUPPORT OF SOLVE
 CAMPAIGN
 02/17/2000 - 09/30/2001 FY02: -\$147 Total: \$187,853
Prin. Invest.: S A LLOYD
Tech. Officer: LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2304 JOHNS HOPKINS UNIV 4857
 NONDESTRUCTIVE EVALUATION OF SPACECRAFT & AIRCRAFT WIRING
 06/06/2000 - 06/30/2003 FY02: \$70,000 Total: \$220,000
Prin. Invest.: J M GREEN
Tech. Officer: LARC/W P WINFREE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 2329 JOHNS HOPKINS UNIV 4858
 COMPREHENSIVE ASSESSMENT OF HEALTH AND THE AIR- CRAFT CABIN
 ENVIRONMENT: PHASE I
 09/26/2000 - 09/30/2002 FY02: \$0 Total: \$458,005
Prin. Invest.: P S LEES
Tech. Officer: LARC/R R ARTCLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01059 JOHNS HOPKINS UNIV 4859
 INTEGRATED POWER SOURCE DEVELOPMENT
 04/12/2001 - 10/30/2001 FY02: -\$8,627 Total: \$16,373
Prin. Invest.: P D SCHWARTZ, A L LEW
Tech. Officer: LARC/Q A SHAMS
CASE Category: 45 – ELECTRICAL ENGR

NAG 2 1392 JOHNS HOPKINS UNIV 4860
 NSTARS PROJECT SUPPORT AND RESEARCH ON NEARBY STARS
 02/01/2000 - 12/31/2001 FY02: \$0 Total: \$116,988
Prin. Invest.: T HENRY
Tech. Officer: ARC/L CAROFF
CASE Category: 11 – ASTRONOMY

NAG 2 1476 JOHNS HOPKINS UNIV 4861
 KNOWLEDGE RETENTION TOOLS FOR LONG DURATION MISSIONS
 04/20/2001 - 09/30/2002 FY02: \$0 Total: \$180,000
Prin. Invest.: K J HEERES
Tech. Officer: ARC/H STEWART, ARC/M SHIRLEY
CASE Category: 22 – COMPUTER SCIENCE

NASA'S UNIVERSITY PROGRAM

MARYLAND

NAG 2 1477 **JOHNS HOPKINS UNIV** **4862**
 MINIME DIAGNOSTICS ENGINE DEVELOPMENT SUPPORT
 04/20/2001 - 10/14/2002 FY02: \$0 Total: \$150,000
Prin. Invest.: K J HEERES
Tech. Officer: ARC/M SHIRLEY, ARC/H STEWART
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1559 **JOHNS HOPKINS UNIV** **4863**
 COMPILATION OF MODEL BASED PROGRAMS FOR REACTIVE AUTONOMOUS CONTROL
 05/09/2002 - 02/28/2003 FY02: \$72,413 Total: \$72,413
Prin. Invest.: D P WATSON
Tech. Officer: ARC/M SHIRLEY, ARC/R MORRIS
CASE Category: 12 – CHEMISTRY

NAG 3 1815 **JOHNS HOPKINS UNIV** **4864**
 EXPERIMENTAL INVESTIGATION; POOL BOILING HEAT TRANSFER ENHANCEMENT IN THE PRESENCE OF ELECTRIC FIELD
 03/25/1996 - 05/14/2002 FY02: \$0 Total: \$352,889
Prin. Invest.: D HERMAN
Tech. Officer: GRC/H K NAHRA, GRC/B MOTIL
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2118 **JOHNS HOPKINS UNIV** **4865**
 PRODUCTION AND REMOVAL OF GAS BUBBLES IN MICROGRAVITY
 02/26/1998 - 08/16/2002 FY02: -\$75,866 Total: \$220,332
Prin. Invest.: H N OGUZ
Tech. Officer: GRC/H K NAHRA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2333 **JOHNS HOPKINS UNIV** **4866**
 ANALYTICAL AND EXPERIMENTAL INVESTIGATIONS OF A HYDROCARBON FUELED AIR-AUGMENTED ROCKET ENGINE CYCLE
 02/16/2000 - 07/31/2002 FY02: \$0 Total: \$301,612
Prin. Invest.: T RICE
Tech. Officer: GRC/T D SMITH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2362 **JOHNS HOPKINS UNIV** **4867**
 ACOUSTIC BUBBLE REMOVAL FROM BOILING SURFACES AND ITS OPTIMIZATION
 04/03/2000 - 11/30/2003 FY02: \$80,792 Total: \$207,044
Prin. Invest.: A PROSPERETTI
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2460 **JOHNS HOPKINS UNIV** **4868**
 DESIGN OF EXHAUST NOZZLES FOR THE RBCC-GTX CONCEPT DESIGN OF EXHAUST NOZZLES FOR THE RBCC-GTX CONCEPT
 06/09/2000 - 09/30/2002 FY02: \$110,539 Total: \$203,572
Prin. Invest.: T RICE
Tech. Officer: GRC/T D SMITH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2569 **JOHNS HOPKINS UNIV** **4869**
 PULSED DETONATION WAVE ENGINE COMPONENT DESIGN AND ANALYSIS STUDY
 03/23/2001 - 12/31/2002 FY02: \$320,001 Total: \$500,001
Prin. Invest.: P WALTRUP
Tech. Officer: GRC/H D PERKINS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2622 **JOHNS HOPKINS UNIV** **4870**
 LOW TEMPERATURE DIFFERENTIAL STIRLING ENGINE
 09/26/2001 - 09/30/2003 FY02: \$76,721 Total: \$76,721
Prin. Invest.: D MEHOKE
Tech. Officer: GRC/J G SCHREIBER
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2690 **JOHNS HOPKINS UNIV** **4871**
 MICROSAMPLE CHARACTERIZATION OF COATING FOR GRCOP 84 FOR HIGH TEMPERATURE HIGH HEAT FLUX APPLICATION
 01/11/2002 - 09/30/2004 FY02: \$97,872 Total: \$97,872
Prin. Invest.: D J HEMKER
Tech. Officer: GRC/S V RAJ
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2726 **JOHNS HOPKINS UNIV** **4872**
 ENHANCEMENT OF POOL BOILING HEAT TRANSFER AND CONTROL OF BUBBLE MOTION IN MICROGRAVITY USING ELECTRIC FIELD
 03/13/2002 - 12/30/2005 FY02: \$119,000 Total: \$119,000
Prin. Invest.: D HERMAN
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2727 **JOHNS HOPKINS UNIV** **4873**
 NOVEL NEMS STIRLING COOLER #AD-22598 NOVEL NEMS STIRLING COOLER #AD-22598
 03/07/2002 - 02/24/2004 FY02: \$93,589 Total: \$93,589
Prin. Invest.: A G DARRIN
Tech. Officer: GRC/M MORAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3255 **JOHNS HOPKINS UNIV** **4874**
 THE STRUCTURE OF ACTIVE GALACTIC NUCLEI
 06/06/1996 - 12/31/2001 FY02: \$0 Total: \$317,700
Prin. Invest.: G A KRISS
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3485 **JOHNS HOPKINS UNIV** **4875**
 DIFFUSE IONIZED GAS IN GALACTIC ENVIRONMENTS
 10/31/1996 - 10/31/2001 FY02: \$0 Total: \$561,400
Prin. Invest.: K R SEMBACH
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3503 **JOHNS HOPKINS UNIV** **4876**
 THE EVOLUTION AND CLUSTERING OF GALAXIES AT Z=1 AND Z=2
 11/27/1996 - 11/30/2002 FY02: \$0 Total: \$648,611
Prin. Invest.: A S SZALAY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4168 **JOHNS HOPKINS UNIV** **4877**
 PLANETARY AERONOMY
 03/15/1997 - 08/31/2002 FY02: \$0 Total: \$426,943
Prin. Invest.: D F STROBEL
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4261 **JOHNS HOPKINS UNIV** **4878**
 WINDOWLESS FUV LAMPS
 04/14/1997 - 12/31/2001 FY02: \$0 Total: \$202,316
Prin. Invest.: D R MCCANDLISS
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 4365 **JOHNS HOPKINS UNIV** **4879**
 CONTINUATION OF THE VOYAGER INTERSTELLAR MISSION:
 04/23/1997 - 03/31/2002 FY02: \$0 Total: \$1,900,000
Prin. Invest.: D M KRIMIGIS
Tech. Officer: GSFC/C P HOLMES
CASE Category: 13 – PHYSICS

NAG 5 4664 **JOHNS HOPKINS UNIV** **4880**
 ION CYCLOTRON WAVES: AN ISTP STUDY
 06/25/1997 - 05/31/2001 FY02: \$0 Total: \$131,931
Prin. Invest.: D J ANDERSON
Tech. Officer: GSFC/J G GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 5047 **JOHNS HOPKINS UNIV** **4881**
 WIND-WAVE-CURRENT COUPLED MODEL
 08/22/1995 - 02/14/2003 FY02: \$118,776 Total: \$465,015
Prin. Invest.: O PHILLIPS
Tech. Officer: GSFC/S R LONG, GSFC/N E HUANG
CASE Category: 33 – OCEANOGRAPHY

NAG 5 5122 **JOHNS HOPKINS UNIV** **4882**
 ROCKET AND LABORATORY EXPERIMENTS IN ASTRONOMY
 02/21/1997 - 02/28/2002 FY02: \$0 Total: \$2,031,000
Prin. Invest.: P D FELDMAN
Tech. Officer: GSFC/B J FLOWERS
CASE Category: 13 – PHYSICS

NAG 5 5198 **JOHNS HOPKINS UNIV** **4883**
 DENSITY TEMPERATURE & MEASUREMENTS FOR ICON ROCKET EXPERIMENT
 05/21/1998 - 04/11/2001 FY02: \$0 Total: \$68,805
Prin. Invest.: J H YEE
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5301 **JOHNS HOPKINS UNIV** **4884**
 GRANT ENTITLED: ALTIMETER SEA-STATE BIAS MODEL STUDY
 07/18/2000 - 07/17/2003 FY02: \$0 Total: \$74,699
Prin. Invest.: D R THOMPSON
Tech. Officer: WFF/D C VANDEMARK, WFF/D W HANCOCK
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 5314 **JOHNS HOPKINS UNIV** **4885**
 SUPPORT OF THE INTERNATIONAL WORKSHOP ENTITLED: COUPLING COASTAL OCEAN, COASTAL ATMOSPHERE WIND
 03/22/2001 - 12/31/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: E GROSS
Tech. Officer: GSFC/S R LONG, GSFC/N E HUANG
CASE Category: 33 – OCEANOGRAPHY

NAG 5 5315 **JOHNS HOPKINS UNIV** **4886**
 ROCKET AND LABORATORY STUDIES IN ASTRONOMY ROCKET AND LABORATORY STUDIES IN ASTRONOMY
 02/14/2001 - 02/28/2004 FY02: \$420,000 Total: \$840,000
Prin. Invest.: P D FELDMAN
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6113 **JOHNS HOPKINS UNIV** **4887**
 PROJECT ULYSSES HI-SCALE DATA ANALYSIS PHASE ACTIV
 07/28/1997 - 03/31/2002 FY02: \$0 Total: \$1,616,000
Prin. Invest.: R E GOLD
Tech. Officer: GSFC/V JONESS
CASE Category: 13 – PHYSICS

NAG 5 6178 **JOHNS HOPKINS UNIV** **4888**
 CRITICAL COMPARISON OF SUBSTORM TRIGGER MODELS AGA HE NEAR-EARTH TAIL
 07/28/1997 - 05/14/2002 FY02: \$0 Total: \$296,538
Prin. Invest.: D OHTANI
Tech. Officer: GSFC/D EVANS
CASE Category: 13 – PHYSICS

NAG 5 6400 **JOHNS HOPKINS UNIV** **4889**
 SPACE OBSERVATIONS OF STARBURST GALAXIES (LTSA)
 10/10/1997 - 09/30/2002 FY02: \$0 Total: \$677,200
Prin. Invest.: T HECKMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 6764 **JOHNS HOPKINS UNIV** **4890**
 MONITORING OF NGC 4151
 12/30/1997 - 12/31/2000 FY02: \$1 Total: \$45,000
Prin. Invest.: G KRISS
Tech. Officer: GSFC/R POLIDAN
CASE Category: 11 – ASTRONOMY

NAG 5 7080 **JOHNS HOPKINS UNIV** **4891**
 PYROTECHNIC ROCK CHIPPER
 03/10/1998 - 07/31/2002 FY02: \$0 Total: \$247,576
Prin. Invest.: A F CHENG
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 11 – ASTRONOMY

NAG 5 7186 **JOHNS HOPKINS UNIV** **4892**
 INFRARED INVESTIGATION OF COMETARY VOLATILES
 03/25/1998 - 02/28/2002 FY02: \$0 Total: \$200,056
Prin. Invest.: H WEAVER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7227 **JOHNS HOPKINS UNIV** **4893**
 TOMS VALIDATION AND UTLS PHOTOCHEMISTRY USING ER-2 AND GROUND BASED DATASETS
 04/14/1998 - 09/30/2001 FY02: \$0 Total: \$232,117
Prin. Invest.: S A LLOYD
Tech. Officer: GSFC/E HILSEN RATH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7361 **JOHNS HOPKINS UNIV** **4894**
 MIDDLEWORLD TRANSPORT WITHIN THREE-DIMENSIONAL MOD ELS: CHARACTERIZATION AND SENSITIVITIES TO MODEL
 05/06/1998 - 09/30/2001 FY02: \$0 Total: \$140,918
Prin. Invest.: D W WAUGH
Tech. Officer: GSFC/R W STEWART
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7552 **JOHNS HOPKINS UNIV** **4895**
 TROPOSPHERIC AND STRATOSPHERIC COMPOSITION RETRIEVALS USING THE STELLAR OCCULTATION TECHNIQUE
 06/22/1998 - 08/31/2002 FY02: \$0 Total: \$482,813
Prin. Invest.: J YEE
Tech. Officer: GSFC/J A KAYE
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 7697 **JOHNS HOPKINS UNIV** **4896**
 PROPOSAL TITLED "A PROPOSAL TO INVESTGATE OUTSTAND ING PROB-
 LEMS IN ASTRONOMY BY THE INSTRUMENT DEFIN
 09/17/1998 - 11/30/2002 FY02: \$2,410,000 Total: \$8,953,435
Prin. Invest.: H FORD
Tech. Officer: GSFC/J JELETIC
CASE Category: 11 – ASTRONOMY

NAG 5 7724 **JOHNS HOPKINS UNIV** **4897**
 QUANTITATIVE MAGNETOSHERIC DYNAMICS FROM POLAR UV AND VIS-
 IBLE IMAGERS
 09/24/1998 - 03/31/2002 FY02: -\$220 Total: \$820,980
Prin. Invest.: C I MENG
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7769 **JOHNS HOPKINS UNIV** **4898**
 GRAVITY WAVES IN JUPITER'S UPPER ATMOSPHERE
 01/15/1999 - 08/31/2001 FY02: \$0 Total: \$125,000
Prin. Invest.: D STROBEL
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7797 **JOHNS HOPKINS UNIV** **4899**
 TURBULENCE IN MAGNETOTAL PLASMA SHEET
 12/15/1998 - 12/31/2002 FY02: \$0 Total: \$272,087
Prin. Invest.: D Y LUI
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7863 **JOHNS HOPKINS UNIV** **4900**
 SATELLITE BOMBARDMENT MODEL WITH DATA CONSTRAINTS
 01/11/1999 - 12/31/2001 FY02: \$0 Total: \$174,228
Prin. Invest.: C P PARANICAS
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7920 **JOHNS HOPKINS UNIV** **4901**
 ISTP: SOLAR WIND, FORESHOCK, AND MAGNETOSHEATH PR OCESSES
 12/15/1998 - 02/28/2002 FY02: \$0 Total: \$311,000
Prin. Invest.: D G SIBECK
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7921 **JOHNS HOPKINS UNIV** **4902**
 SOLAR FILAMENTS AT 1 AU
 12/10/1998 - 09/30/2002 FY02: \$0 Total: \$278,713
Prin. Invest.: D M RUST
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NAG 5 8019 **JOHNS HOPKINS UNIV** **4903**
 CORONAL MASS EJECTION EVENTS: COMPARATIVE GEOEFFEC TIVENESS
 FROM SOLAR MINIMUM THROUGH SOLAR MAXIMU
 01/06/1999 - 12/31/2002 FY02: \$0 Total: \$238,636
Prin. Invest.: N J FOX
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8062 **JOHNS HOPKINS UNIV** **4904**
 ANALYSIS OF 3-D IMAGERY OF POLAR MESOSPHERIC CLOUD S OB-
 SERVED FROM MSX
 01/12/1999 - 01/14/2002 FY02: \$0 Total: \$185,500
Prin. Invest.: D MORRISON
Tech. Officer: GSFC/M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 8122 **JOHNS HOPKINS UNIV** **4905**
 ANALYSIS OF OPTICAL OBSERVATIONS OF TOPSIDE MOLECU LAR IONS IN
 THE POLAR REGIONS
 02/03/1999 - 12/31/2001 FY02: -\$4,859 Total: \$176,741
Prin. Invest.: J J YEE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 8149 **JOHNS HOPKINS UNIV** **4906**
 DEV. OF MISSION INDEPENDENCE DATA FORMAT FOR PARTI CLE FIELD
 MEASUREMENT WITH APPLICATIONTO AMPTE/C
 02/05/1999 - 12/31/2002 FY02: \$0 Total: \$356,989
Prin. Invest.: S R NYLUND
Tech. Officer: GSFC/P HUNTER
CASE Category: 11 – ASTRONOMY

NAG 5 8171 **JOHNS HOPKINS UNIV** **4907**
 SPATIAL VARIATIONS IN ROCK SPECTRAL PROPERTIES AT THE SAGAN
 MEMORIAL STATION
 02/22/1999 - 09/30/2002 FY02: \$0 Total: \$116,000
Prin. Invest.: S L MURCHIE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8191 **JOHNS HOPKINS UNIV** **4908**
 ENERGETIC ION INTERACTIONS WITH THE GALILEAN SATEL LITES
 04/21/1999 - 03/31/2001 FY02: \$0 Total: \$31,391
Prin. Invest.: D MAUK
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8279 **JOHNS HOPKINS UNIV** **4909**
 RECONCILING STARBURSTS AND NORMAL STAR FORMATION (ADP98)
 02/25/1999 - 05/14/2003 FY02: \$0 Total: \$48,051
Prin. Invest.: G R MEURER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8331 **JOHNS HOPKINS UNIV** **4910**
 FLARE GENESIS EXPERIMENT
 05/05/1999 - 03/31/2002 FY02: \$0 Total: \$520,789
Prin. Invest.: D M RUST
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8347 **JOHNS HOPKINS UNIV** **4911**
 OPTIMAL COADDITION OF DITHERED IMAGES USING THE KA RHUNEN-
 LOEVE TRANSFORM
 02/25/1999 - 02/28/2003 FY02: \$90,700 Total: \$265,600
Prin. Invest.: A S SZALAY
Tech. Officer: GSFC/J BREDEDAMP
CASE Category: 42 – ASTRONAUTICAL ENGR

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 8361 **JOHNS HOPKINS UNIV** **4912**
 ISTP MISSION DATA INTERFACES FOR DARN
 03/12/1999 - 04/14/2001 FY02: \$0 Total: \$340,000
Prin. Invest.: R GREEWALD
Tech. Officer: GSFC/S CURTIS
CASE Category: 11 – ASTRONOMY

NAG 5 8516 **JOHNS HOPKINS UNIV** **4913**
 MINIATURIZED ENERGETIC PARTICLE DETECTOR DEVELOP MENT
 06/14/1999 - 05/31/2003 FY02: \$0 Total: \$456,327
Prin. Invest.: R L MCNUTT
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 8548 **JOHNS HOPKINS UNIV** **4914**
 IMPLEMENTATION OF ALGORITHMS FOR HIGH SPEED AUTONO MOUS CCD
 DATA REDUCTION
 05/18/1999 - 05/14/2001 FY02: -\$2,723 Total: \$18,527
Prin. Invest.: G MURPHY
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 5 8572 **JOHNS HOPKINS UNIV** **4915**
 CLOUD & WATER VAPOR EFFECTS ON CLIMATE SENSITIVITY
 06/02/1999 - 05/31/2002 FY02: \$39,600 Total: \$539,600
Prin. Invest.: A ARKING
Tech. Officer: GSFC/W LAU
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8590 **JOHNS HOPKINS UNIV** **4916**
 STANDARDIZED SKY PARTITIONING FOR THE NEXT GENERAT ION AS-
 TRONOMY AND SPACE ARCHIVES
 06/03/1999 - 05/31/2003 FY02: \$96,664 Total: \$287,492
Prin. Invest.: A SZALAY
Tech. Officer: GSFC/P E HUNTER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8655 **JOHNS HOPKINS UNIV** **4917**
 "CROSSLINK TRANSCEIVER DEVELOPMENT IN SUPPORT OF THE
 NASA/DOD UNIV NANO-SATELLITE PROGRAM."
 08/19/1999 - 05/31/2001 FY02: \$0 Total: \$370,119
Prin. Invest.: P A STADTER
Tech. Officer: GSFC/J BRISTOW
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8665 **JOHNS HOPKINS UNIV** **4918**
 CROSSLINK NAVIGATION AND COMMUNICATION SYSTEM FOR MULTIPLE
 DISTRIBUTED SPACECRAFT.
 08/17/1999 - 08/31/2002 FY02: \$0 Total: \$474,781
Prin. Invest.: P A STADTER
Tech. Officer: GSFC/G H MUCKLOW
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 8687 **JOHNS HOPKINS UNIV** **4919**
 ADVANCED TECHNIQUES FOR ENERGETIC ION AND NEUTRAL ATOM
 TOF/IMAGING SENSORS
 07/20/1999 - 07/31/2002 FY02: \$0 Total: \$139,443
Prin. Invest.: D G MITCHELL
Tech. Officer: GSFC/G H MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8688 **JOHNS HOPKINS UNIV** **4920**
 DATA COMPRESSION FOR TIME SERIES AND SPECTRAL DATA
 07/20/1999 - 07/31/2002 FY02: \$0 Total: \$204,374
Prin. Invest.: S HAWKINS, 111
Tech. Officer: GSFC/G H MUCKLOW
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 8741 **JOHNS HOPKINS UNIV** **4921**
 ADVANCED AUTOMATION CONCEPTS IN SPACEFLIGHT DYNAMICS & SPACE
 NAVIGATION.
 08/17/1999 - 02/28/2001 FY02: -\$381 Total: \$146,894
Prin. Invest.: P STADTER
Tech. Officer: GSFC/J BRISTOW
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8862 **JOHNS HOPKINS UNIV** **4922**
 HIGH RESOLUTION IMAGING FROM THE STRATOSPHERE: AT MOSPHERIC
 SEEING AND TETHER DYNAMICS
 10/22/1999 - 10/14/2002 FY02: \$0 Total: \$10,000
Prin. Invest.: H FORD
Tech. Officer: GSFC/T GRUNER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8955 **JOHNS HOPKINS UNIV** **4923**
 ABUNDANCES IN OXYGEN-RICH SUPERNOVA REMNANTS: OBS ERVA-
 TIONAL TESTS OF U NUCLEOSYNTHESIS MODELS - FU
 01/24/2000 - 01/31/2002 FY02: -\$154 Total: \$38,346
Prin. Invest.: J A MORSE
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 8964 **JOHNS HOPKINS UNIV** **4924**
 INVESTIGATION OF MAGNETOSPHERIC WAVEGUIDE MODE USING SATEL-
 LITE & RADAR OBSERVATIONS
 02/23/2000 - 02/28/2003 FY02: \$72,585 Total: \$205,582
Prin. Invest.: K TAKAHASHI
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9012 **JOHNS HOPKINS UNIV** **4925**
 THE FAR UV-SPECTRA OF STARBURSTS - FUSE
 02/08/2000 - 01/31/2002 FY02: \$0 Total: \$120,700
Prin. Invest.: T M HECKMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9078 **JOHNS HOPKINS UNIV** **4926**
 INVESTIGATION OF THE MAGNETIC FIELD LINE STRETCHIN G AT SUB-
 STORM ONSET
 02/23/2000 - 02/28/2003 FY02: \$75,471 Total: \$223,762
Prin. Invest.: K LIU
Tech. Officer: GSFC/J SHARBER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9109 **JOHNS HOPKINS UNIV** **4927**
 SIMULATING TRANSIENT PROCESSES AT THE MAGNETOPAUSE
 02/23/2000 - 02/28/2003 FY02: \$80,737 Total: \$229,125
Prin. Invest.: H KU
Tech. Officer: GSFC/J SHARBER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9118 **JOHNS HOPKINS UNIV** **4928**
 ELECTROMAGNETIC ION CYCLOTRON WAVES ON AURORAL FIELD LINES
 02/24/2000 - 04/30/2002 FY02: \$0 Total: \$33,000
Prin. Invest.: R E ERLANDSON
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NAG 5 9186 **JOHNS HOPKINS UNIV** **4929**
 THE CLUSTERING OF GALAXIES & DARK MATTER AT INTER MEDIATE
 REDSHIFTS (ATP 99)
 03/07/2000 - 03/14/2001 FY02: \$0 Total: \$37,000
Prin. Invest.: A S SZALAY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9187 **JOHNS HOPKINS UNIV** **4930**
 PREDICTING THE SPECTRA OF GALACTIC BLACK HOLES (ATP 99)
 03/07/2000 - 03/14/2003 FY02: \$93,624 Total: \$280,157
Prin. Invest.: J H KROLIK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9219 **JOHNS HOPKINS UNIV** **4931**
 HOT MASSIVE STARS IN LOCAL GROUP GALAXIES: A MULTI WAVELENGTH
 SPECTRAL ANALYSIS.
 03/13/2000 - 03/14/2004 FY02: \$106,231 Total: \$309,955
Prin. Invest.: L BIANCHI
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9240 **JOHNS HOPKINS UNIV** **4932**
 ANALYSIS OF POLAR MESOSPHERIC CLOUDS USING SPECTRO GRAPHIC
 IMAGES ON A SATELLITE
 03/13/2000 - 02/28/2003 FY02: \$79,863 Total: \$226,250
Prin. Invest.: J CARBARY
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9296 **JOHNS HOPKINS UNIV** **4933**
 INNOVATIVE APPROACHES TO LITTORAL ALTIMETRY FOR PREDICTION &
 MONITORING OF NEAR-SHORE SEA
 04/13/2000 - 09/14/2001 FY02: \$0 Total: \$75,000
Prin. Invest.: R K RANEY
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9426 **JOHNS HOPKINS UNIV** **4934**
 SENSITIVITY OF COUPLED LAND-ATMOSPHERE BOUNDARY LAYER DY-
 NAMICS TO SURFACE HETEROGENEITY USING
 04/11/2000 - 04/30/2003 FY02: \$199,824 Total: \$534,124
Prin. Invest.: M B PARLANGE
Tech. Officer: GSFC/K H BERGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9432 **JOHNS HOPKINS UNIV** **4935**
 SPACE PHYSICS DATA MARKUP LANGUAGE
 04/18/2000 - 04/14/2003 FY02: \$118,200 Total: \$342,100
Prin. Invest.: D MORRISON
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 13 – PHYSICS

NAG 5 9456 **JOHNS HOPKINS UNIV** **4936**
 ADAPTIVE INSTRUMENT MODULE (AIM)
 04/13/2000 - 01/31/2003 FY02: \$0 Total: \$78,692
Prin. Invest.: R F CONDE
Tech. Officer: GSFC/P LUERS
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9569 **JOHNS HOPKINS UNIV** **4937**
 NEW ISTP SOLAR MAX: CONTINUED INTEGRATION OF INTE RBALL INTO
 ISTP
 05/08/2000 - 05/14/2001 FY02: -\$632 Total: \$60,357
Prin. Invest.: D G SIBECK
Tech. Officer: GSFC/M DESCH
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9719 **JOHNS HOPKINS UNIV** **4938**
 MOLECULAR AND ATOMIC LASER MASS ANALYSIS (MALMA) INSTRUMEN-
 TATION FOR IN-SITU STUDIES OF PLANETARY
 06/20/2000 - 06/30/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: R W MCENTIRE
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 9837 **JOHNS HOPKINS UNIV** **4939**
 CONTEMPORANEOUS XMM & HST OBSERVATIONS OF SEYFERT GALAXIES
 11/06/2000 - 11/14/2003 FY02: \$8,095 Total: \$22,600
Prin. Invest.: M E KAISER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9872 **JOHNS HOPKINS UNIV** **4940**
 A LOW POWER CROSSLINK TRANSCEIVER FOR NANOSAT COMMUNICA-
 TIONS EXPERIMENT
 08/10/2000 - 09/30/2001 FY02: \$0 Total: \$400,000
Prin. Invest.: P STADTER
Tech. Officer: GSFC/J BRISTOW
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9878 **JOHNS HOPKINS UNIV** **4941**
 ASTROPHYSICAL PROPERTIES OF ACCRETING BLACK HOLES IN NORMAL
 GALAXY NUCLEUCLEI_(L TSA 99)
 08/28/2000 - 08/31/2002 FY02: \$40,000 Total: \$80,000
Prin. Invest.: E COLBERT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9903 **JOHNS HOPKINS UNIV** **4942**
 ACTIVITIES TO SUPPORT SCIENCE PLANNING AND COORDI NATION IN
 ASSOCIATION WITH THE INTERNATIONAL SOLAR
 08/30/2000 - 09/30/2002 FY02: \$82,105 Total: \$160,919
Prin. Invest.: N J FOX
Tech. Officer: GSFC/R A HOFFMAN
CASE Category: 11 – ASTRONOMY

NAG 5 9910 **JOHNS HOPKINS UNIV** **4943**
 THE X-RAY PROPERTIES OF ULTRALUMINOUS GALAXIES: COSMOLOGICAL
 IMPLICATIONS
 09/05/2000 - 09/30/2002 FY02: \$0 Total: \$37,600
Prin. Invest.: T HECKMAN
Tech. Officer: GSFC/R M MUSHOTZKY
CASE Category: 11 – ASTRONOMY

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 9948 **JOHNS HOPKINS UNIV** **4944**
 STARBURST-DRIVEN OUTFLOWS & THE EVOLUTION OF DWARF GALAXIES
 09/07/2000 - 08/31/2002 FY02: \$0 Total: \$39,200
Prin. Invest.: T HECKMAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9963 **JOHNS HOPKINS UNIV** **4945**
 CHARACTERIZING THE X-RAY SPECTRUM OF THE GALACTIC HALO
 09/22/2000 - 09/30/2002 FY02: \$0 Total: \$39,900
Prin. Invest.: W BLAIR
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9968 **JOHNS HOPKINS UNIV** **4946**
 REMM, RADIATION ENVIRONMENT MINI-MONITOR. SUPPORT FOR NASA
 NANOSAT PROGRAM DEVELOPMENT OF ENVIRONME
 10/30/2000 - 12/31/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: A GARRISON-DARRIN
Tech. Officer: GSFC/J BARTH
CASE Category: 13 – PHYSICS

NAG 5 9988 **JOHNS HOPKINS UNIV** **4947**
 VALIDATION OF MSX/UVISI STELLAR OCCULTATION RETRIE VALS OF
 LOWER STRATOSPHERE/UPPER TROPOSPHERE
 10/04/2000 - 09/30/2003 FY02: \$135,988 Total: \$290,988
Prin. Invest.: J YEE
Tech. Officer: GSFC/A C AIKIN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10060 **JOHNS HOPKINS UNIV** **4948**
 SUPERDARN CONTRIBUTIONS TO TIMED/CEDAR COLLABORA- TIVE STUD-
 IES
 10/23/2000 - 10/31/2002 FY02: \$75,000 Total: \$300,000
Prin. Invest.: R A GREENWALD
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10084 **JOHNS HOPKINS UNIV** **4949**
 FLAT PLASMA SPECTROMETER
 11/07/2000 - 11/14/2002 FY02: \$0 Total: \$167,226
Prin. Invest.: J L CHAMPION
Tech. Officer: GSFC/F HERRERO
CASE Category: 13 – PHYSICS

NAG 5 10176 **JOHNS HOPKINS UNIV** **4950**
 THE PHYSICAL PROPERTIES OF THE INTRA-CLUSTER MEDIUM AT Z 1
 12/18/2000 - 12/31/2002 FY02: \$0 Total: \$8,300
Prin. Invest.: H FORD
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10234 **JOHNS HOPKINS UNIV** **4951**
 A SELF-HEALING SPACECRAFT ARCHITECTURE FOR LONG DURATION LOW
 POWER MISSION.
 01/30/2001 - 01/31/2004 FY02: \$93,000 Total: \$184,924
Prin. Invest.: B ANDREWS
Tech. Officer: GSFC/P LUERS
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10241 **JOHNS HOPKINS UNIV** **4952**
 VARIABILITY EMISSIVITY CONTROLLER CONCEPTS & RISK MITIGATION
 PATH
 01/08/2001 - 01/14/2003 FY02: \$65,000 Total: \$173,679
Prin. Invest.: R OSIANDER
Tech. Officer: GSFC/D DOUGLAS
CASE Category: 46 – MECHANICAL ENGR

NAG 5 10242 **JOHNS HOPKINS UNIV** **4953**
 GEOTAIL ENERGETIC PARTICLE AND ION COMPOSITION (EPIC) PROGRAM
 01/12/2001 - 12/31/2003 FY02: \$201,731 Total: \$631,731
Prin. Invest.: R MCENTIRE
Tech. Officer: GSFC/M ACUNA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10248 **JOHNS HOPKINS UNIV** **4954**
 INVESTIGATION OF SUPERNOVA REMNANT SHOCKS IN THE VELA-PUPPIS
 REGION
 02/12/2001 - 02/14/2003 FY02: \$0 Total: \$61,900
Prin. Invest.: R SANKRIT
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10261 **JOHNS HOPKINS UNIV** **4955**
 CONTINUED PARTICIPATION IN CRYOSAT SCIENCE ADVISORY GROUP
 01/09/2001 - 12/31/2003 FY02: \$28,522 Total: \$54,478
Prin. Invest.: R RANEY
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10281 **JOHNS HOPKINS UNIV** **4956**
 COMPARATIVE MAGNETOPHERES INVESTIGATION OF PLASMA INJEC-
 TION PHENOMENA
 01/23/2001 - 01/31/2004 FY02: \$71,323 Total: \$139,175
Prin. Invest.: B MAUK
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10285 **JOHNS HOPKINS UNIV** **4957**
 STRUCTURE OF THE MAGNETOPAUSE
 01/23/2001 - 01/31/2004 FY02: \$72,917 Total: \$142,366
Prin. Invest.: D G SIBECK
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10302 **JOHNS HOPKINS UNIV** **4958**
 THE FAR-UV SPECTRA OF POWERFUL STARBURSTS - FUSE- 00
 01/25/2001 - 01/31/2003 FY02: \$0 Total: \$103,210
Prin. Invest.: T M HECKMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10304 **JOHNS HOPKINS UNIV** **4959**
 SEARCH FOR X-RAY SPECTRAL FEATURES IN BL LAC OBJECTS MKN 180
 AND 1ES1517+656
 01/29/2001 - 01/31/2003 FY02: \$16,000 Total: \$16,500
Prin. Invest.: J H KROLIK
Tech. Officer: GSFC/R MUSHOTSKY
CASE Category: 11 – ASTRONOMY

NAG 5 10355 **JOHNS HOPKINS UNIV** **4960**
 SMALL-SCALE INTERSTELLAR STRUCTURE TOWARD THE OPEN CLUSTER
 CHI PERSEI - FUSE 00
 02/13/2001 - 02/14/2003 FY02: \$0 Total: \$10,000
Prin. Invest.: S D FRIEDMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10364 **JOHNS HOPKINS UNIV** **4961**
 CENTRAL STARS OF PLANETARY NEBULAE IN THE LARGE MAGELLANIC
 CLOUD-FUSE00
 02/05/2001 - 02/14/2002 FY02: \$0 Total: \$65,700
Prin. Invest.: L BIANCHI
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10380 **JOHNS HOPKINS UNIV** **4962**
 MOLECULAR HYDROGEN FLUORESCENCE IN IC 63 (FUSE 00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$72,500
Prin. Invest.: R SANKRIT
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10394 **JOHNS HOPKINS UNIV** **4963**
 O VI EMISSION FROM THE INTERSTELLAR MEDIUM (FUSE 00)
 02/12/2001 - 02/14/2003 FY02: \$0 Total: \$79,000
Prin. Invest.: R L SHELTON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10397 **JOHNS HOPKINS UNIV** **4964**
 "PROGRAMMABLE CIRCUIT INTERCONNECT USING MEMS LIQUID-METAL
 MICROSWITCHES".
 02/12/2001 - 02/14/2004 FY02: \$227,444 Total: \$604,333
Prin. Invest.: R EDWARDS
Tech. Officer: GSFC/P YEP
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10402 **JOHNS HOPKINS UNIV** **4965**
 DETECTOR ANALOG INTERFACE APPLICATION SPECIFIC INTEGRATED
 CIRCUIT (ASIC)
 02/27/2001 - 02/14/2003 FY02: \$161,157 Total: \$308,169
Prin. Invest.: D STROHBEHN
Tech. Officer: GSFC/J F SUTTON
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10403 **JOHNS HOPKINS UNIV** **4966**
 SYMBIOTIC BINARIES LABORATORIES FOR WIND STUDIES (FUSE 00)
 02/15/2001 - 02/14/2003 FY02: \$0 Total: \$53,000
Prin. Invest.: S R MCCANDLISS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10405 **JOHNS HOPKINS UNIV** **4967**
 FUSE SPECTROSCOPY OF HOT POST-AGB STARS IN GLOBULA R CLUS-
 TERS - FUSE
 03/28/2001 - 03/31/2003 FY02: \$0 Total: \$31,540
Prin. Invest.: W V DIXON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10464 **JOHNS HOPKINS UNIV** **4968**
 CONCEPT STUDY FOR INFRARED BASED BUS SYSTEM (IRCOM M)
 03/05/2001 - 03/14/2002 FY02: \$0 Total: \$160,000
Prin. Invest.: M G DARRIN
Tech. Officer: GSFC/P J LUERS
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10475 **JOHNS HOPKINS UNIV** **4969**
 ISTP: NONLINEAR DYNAMICS OF THE MAGNETOSPHERE FROM AURORAL
 ACTIVITY
 02/27/2001 - 02/28/2004 FY02: \$95,628 Total: \$186,766
Prin. Invest.: A LUI
Tech. Officer: GSFC/J SPAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10479 **JOHNS HOPKINS UNIV** **4970**
 ISTP: TRANSIENT EVENTS AT THE MAGNETOPAUSE & IN THE IONOSPHERE
 02/27/2001 - 02/28/2004 FY02: \$73,404 Total: \$143,327
Prin. Invest.: D G SIBECK
Tech. Officer: GSFC/J SPANN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10511 **JOHNS HOPKINS UNIV** **4971**
 A DETAILED STUDY OF TWO OPTICALLY-SELECTED, HIGH- REDSHIFT
 CLUSTERS OF GALAXIES
 03/02/2001 - 06/30/2002 FY02: -\$22,243 Total: \$20,392
Prin. Invest.: L M LUBIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10562 **JOHNS HOPKINS UNIV** **4972**
 NANOSAT CROSSLINK TRANSCEIVER FOR NEAR-TERM DISTRI BUTED
 SPACECRAFT TECHNOLOGY DEMONSTRATION MI
 03/16/2001 - 03/14/2003 FY02: \$0 Total: \$350,000
Prin. Invest.: P A STADTER
Tech. Officer: GSFC/S P HUGHES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10597 **JOHNS HOPKINS UNIV** **4973**
 PROPOSED ACTIVITIES FOR SUPERDARN GROUND-BASED INV ESTIGA-
 TION IN SUPPORT OF ISTP SOLAR MAX AND CLUST
 03/19/2001 - 03/31/2003 FY02: \$65,735 Total: \$205,735
Prin. Invest.: R GREENWALD
Tech. Officer: GSFC/S CURTIS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10647 **JOHNS HOPKINS UNIV** **4974**
 DIFFUSION & WEAK STELLAR WINDS IN HOT B SUBDWARFS - LTSA-2000
 03/27/2001 - 06/30/2003 FY02: \$0 Total: \$20,500
Prin. Invest.: P CHAYER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10650 **JOHNS HOPKINS UNIV** **4975**
 CNO ABUNDANCES IN LMC BN AND BC SUPERGIANTS (FUSE 00)
 04/04/2001 - 04/14/2003 FY02: \$0 Total: \$10,824
Prin. Invest.: A FULLERTON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 10693 **JOHNS HOPKINS UNIV** **4976**
 LASER/EVOLVED-GAS TIME-OF-FLIGHT MASS SPECTROMETER AND
 SAMPLE HANDLING SYSTEM FOR IN SITU COMPOSITIO
 04/16/2001 - 04/14/2004 FY02: \$157,419 Total: \$304,018
Prin. Invest.: W BRINCKERHOFF
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 10742 **JOHNS HOPKINS UNIV** **4977**
 PARALLEL SCANNING FOR THE NVO.
 04/12/2001 - 04/30/2004 FY02: \$105,000 Total: \$205,000
Prin. Invest.: P Z KUNZST
Tech. Officer: GSFC/P E HUNTER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10762 **JOHNS HOPKINS UNIV** **4978**
 HIGH-REDSHIFT QUASAR HOSTS AND ENVIRONMENTS (LTSA 2000)
 04/23/2001 - 04/30/2006 FY02: \$108,884 Total: \$154,256
Prin. Invest.: S RIDGWAY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10769 **JOHNS HOPKINS UNIV** **4979**
 BLACK HOLES IN ACTIVE GALACTIC NUCLEI (LTSA 2000)
 04/23/2001 - 04/30/2006 FY02: \$128,781 Total: \$223,781
Prin. Invest.: T YAQOOB
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10778 **JOHNS HOPKINS UNIV** **4980**
 STUDY FOR SPACE APPLICATION SWITCH/HUB FOR ETHERNET
 05/18/2001 - 05/30/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: P EISENREICH
Tech. Officer: GSFC/E WEBB
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10787 **JOHNS HOPKINS UNIV** **4981**
 SOLAR ENERGETIC PARTICLE EVENTS IN THE INNER HELIO SPHERE AND
 DEEP SPACE:A MODEL FOR FORECASTING PRO
 04/27/2001 - 04/30/2004 FY02: \$85,212 Total: \$166,202
Prin. Invest.: D LARIO
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10798 **JOHNS HOPKINS UNIV** **4982**
 CONCEPT STUDY FOR THE "THE PRIMORDIAL EXPLORER" PRIME MISSION
 AO-99-OSS-05
 04/30/2001 - 04/30/2003 FY02: \$0 Total: \$418,500
Prin. Invest.: D ZHENG
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10807 **JOHNS HOPKINS UNIV** **4983**
 THE GALACTIC HALO AND LOCAL BUBBLE (LTSA 2000)
 04/23/2001 - 04/30/2006 FY02: \$114,367 Total: \$183,221
Prin. Invest.: C A NORMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10836 **JOHNS HOPKINS UNIV** **4984**
 INTERPLANETARY SHOCK PREDICTION USING REAL TIME ENERGETIC
 PARTICLE OBSERVATIONS
 04/27/2001 - 04/30/2003 FY02: \$0 Total: \$80,564
Prin. Invest.: G HO
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10849 **JOHNS HOPKINS UNIV** **4985**
 GLOBAL MAGNETOSPHERE/IONOSPHERE SPECIFICATION: LOW EARTH
 ORBIT CONSTELLATION OBSERVATIONS& GLOBAL
 05/07/2001 - 05/14/2004 FY02: \$104,000 Total: \$204,000
Prin. Invest.: B J ANDERSON
Tech. Officer: GSFC/J F SPANN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10900 **JOHNS HOPKINS UNIV** **4986**
 SOLAR PROTON PENETRATION AT HIGH LATITUDES: MODEL CALCULA-
 TIONS OF CUTOFF LATITUDES & VARIATIONS WIT
 05/07/2001 - 05/14/2003 FY02: \$71,746 Total: \$139,988
Prin. Invest.: R B DECKER
Tech. Officer: GSFC/J F SPANN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10902 **JOHNS HOPKINS UNIV** **4987**
 A STATISTICAL MODEL OF HIGH-LATITUDE CONVECTION REFERENCED TO
 AURORAL BOUNDARIES
 05/07/2001 - 05/14/2003 FY02: \$85,511 Total: \$161,539
Prin. Invest.: J M RUOHONIEMI
Tech. Officer: GSFC/J F SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10916 **JOHNS HOPKINS UNIV** **4988**
 FUV AND OPTICAL SPECTROSCOPY OF HOT POST-AGB STARS IN GLOBU-
 LAR CLUSTERS
 05/10/2001 - 05/14/2003 FY02: \$0 Total: \$49,400
Prin. Invest.: W V DIXON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10921 **JOHNS HOPKINS UNIV** **4989**
 INVESTIGATING THE EXCITATION MECHANISM FOR COMETARY X-RAY, EUV,
 AND FUV EMISSIONS
 05/21/2001 - 12/31/2002 FY02: \$0 Total: \$52,500
Prin. Invest.: H A WEAVER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10922 **JOHNS HOPKINS UNIV** **4990**
 EVOLUTIONARY SYNTHESIS OF EARLY-TYPE GALAXIES (ATP 00)
 05/21/2001 - 05/31/2004 FY02: \$104,674 Total: \$210,256
Prin. Invest.: M A HOUDASHELT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10941 **JOHNS HOPKINS UNIV** **4991**
 WINTER-SUMMER ASYMMETRY OF IONOSPHERIC ELECTRO- DYNAMICS
 05/15/2001 - 05/14/2003 FY02: \$0 Total: \$38,000
Prin. Invest.: S OHTANI
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NASA'S UNIVERSITY PROGRAM

MARYLAND

NAG 5 10957 **JOHNS HOPKINS UNIV** **4992**
OBSERVATIONS OF O VI EMISSION IN THE HOT HALO OF NGC 891 (FUZE
00)
05/30/2001 - 05/31/2002 FY02: \$0 Total: \$12,006
Prin. Invest.: C HOWK
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10971 **JOHNS HOPKINS UNIV** **4993**
PREPARING FOR MULTI-SPACECRAFT MISSIONS: AURORAL SPACE-TIME
SCALES AND MAGNETOTAIL ASSIMILATION MOD
05/25/2001 - 05/31/2004 FY02: \$60,000 Total: \$119,900
Prin. Invest.: S WING
Tech. Officer: GSFC/J SPANN
CASE Category: 11 – ASTRONOMY

NAG 5 10998 **JOHNS HOPKINS UNIV** **4994**
A SOLAR BOLOMETRIC IMAGER FOR STUDYING SOLAR ENERGY INPUT TO
EARTH
06/07/2001 - 05/31/2004 FY02: \$445,629 Total: \$831,883
Prin. Invest.: D M RUST
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11029 **JOHNS HOPKINS UNIV** **4995**
TOMS DATA VALIDATION: SOLAR FLUX, QUIKTOMS AND TOTAL OZONE
RETRIEVALS AT HIGH LATITUDES.
06/25/2001 - 06/30/2004 FY02: \$44,000 Total: \$88,000
Prin. Invest.: S A LLOYD
Tech. Officer: GSFC/R MCPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11034 **JOHNS HOPKINS UNIV** **4996**
ATMOSPHERIC LOSS PROCESSES AT IO
06/20/2001 - 05/31/2002 FY02: \$0 Total: \$88,000
Prin. Invest.: B MAUK
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11035 **JOHNS HOPKINS UNIV** **4997**
RADIATION FIELD MODELING & DATA ANALYSIS IN SUPPORT OF NASA
STRATOSPHEREAND UPPER TROPOSPHERE
06/20/2001 - 06/14/2003 FY02: \$51,998 Total: \$101,953
Prin. Invest.: S A LLOYD
Tech. Officer: GSFC/M KURYLO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11051 **JOHNS HOPKINS UNIV** **4998**
SATURN'S UPPER ATMOSPHERIC STRUCTURE AS DERIVED FROM A
RE-ANALYSIS OF THE VOYAGER ULTRAVIOLET
06/20/2001 - 06/14/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: R J VERVACK, JR
Tech. Officer: GSFC/D J BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11060 **JOHNS HOPKINS UNIV** **4999**
LOW ENERGERY CHARGED PARTICLES ON THE VOYAGER INTER STELLAR
MISSION
06/28/2001 - 06/30/2003 FY02: \$0 Total: \$475,000
Prin. Invest.: S M KRIMIGIS
Tech. Officer: GSFC/V W JONES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11116 **JOHNS HOPKINS UNIV** **5000**
NEW RADIATION FACILITIES PLANNING SUPPORT.
08/06/2001 - 07/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: J KINNISON
Tech. Officer: GSFC/R REED
CASE Category: 13 – PHYSICS

NAG 5 11193 **JOHNS HOPKINS UNIV** **5001**
AN AUTOMATED SYSTEM FOR THE REDUCTION AND ANALYSIS OF X-RAY
DATA FROM GALAXIES
08/29/2001 - 01/31/2003 FY02: \$0 Total: \$72,700
Prin. Invest.: A F PTAK
Tech. Officer: GSFC/P E HUNTER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11211 **JOHNS HOPKINS UNIV** **5002**
INFERENCES FROM TOPOGRAPHY ON THE EMPLACEMENT OF FLUIDIZED
EJECTA ON MARS
08/09/2001 - 08/14/2003 FY02: \$0 Total: \$53,000
Prin. Invest.: O BARNOUIN-JHA
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11283 **JOHNS HOPKINS UNIV** **5003**
INFERRING STRATOPSPHERIC AND TROPOSPHERIC TRANSPORT FROM
CHEMICAL TRACER MEASUREMENTS
08/17/2001 - 08/31/2004 FY02: \$0 Total: \$92,581
Prin. Invest.: D WAUCH
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11297 **JOHNS HOPKINS UNIV** **5004**
DETAILED MODELING AND ANALYSIS OF THE CPFM DATASET
08/22/2001 - 08/31/2003 FY02: \$0 Total: \$52,090
Prin. Invest.: W SWARTZ
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11332 **JOHNS HOPKINS UNIV** **5005**
TIME-RESOLVED STUDY OF FLUORESCENCE IN FLUORESCENT PROTEIN
BIOSENSORS
09/28/2001 - 08/31/2002 FY02: \$0 Total: \$32,408
Prin. Invest.: J B KHURGIN
Tech. Officer: GSFC/H SHAW
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 11350 **JOHNS HOPKINS UNIV** **5006**
AURORAL INVESTIGATIONS USING THE POLAR UV AND VISI BLE IMAGERS
11/19/2001 - 11/30/2004 FY02: \$218,963 Total: \$218,963
Prin. Invest.: C MENG
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11378 **JOHNS HOPKINS UNIV** **5007**
XMM SEARCHES FOR IRON LINES IN LOW LUMINOSITY AGN: A TEST OF
ACCRETION THEORIES
10/29/2001 - 06/30/2003 FY02: \$15,011 Total: \$15,011
Prin. Invest.: A F PTAK
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 11412 **JOHNS HOPKINS UNIV** **5008**
 TIMED PHASE E - SABER FLIGHT EXPERIMENT - PAXTON.
 12/20/2001 - 12/31/2005 FY02: \$1,289,710 Total: \$1,289,710
Prin. Invest.: L PAXTON
Tech. Officer: GSFC/B A CAMPBELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11717 **JOHNS HOPKINS UNIV** **5016**
 SURFACE ABUNDANCE PATTERN OF ACCRETING WHITE DWARF S IN
 NON-INTERACTING CLOSE BINARIES_ (FUSE 00)
 02/08/2002 - 02/14/2003 FY02: \$8,000 Total: \$8,000
Prin. Invest.: J DUPUIS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11456 **JOHNS HOPKINS UNIV** **5009**
 FUV WINDOWLESS LAMPS
 12/05/2001 - 12/31/2005 FY02: \$75,000 Total: \$75,000
Prin. Invest.: S R MCCANDLISS
Tech. Officer: GSFC/PCRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11728 **JOHNS HOPKINS UNIV** **5017**
 TOMOGRAPHIC DIAGNOSIS OF THE IONIZATION CONE IN NG C 1068 (FUSE
 99)
 02/13/2002 - 02/28/2003 FY02: \$64,100 Total: \$64,100
Prin. Invest.: W ZHENG
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11570 **JOHNS HOPKINS UNIV** **5010**
 A SEARCH FOR TRACE ELEMENTS IN ULTRAMASSIVE WHITE DWARF
 PHOTOSPHERES (FUSE 00)
 01/04/2002 - 12/31/2002 FY02: \$34,195 Total: \$34,195
Prin. Invest.: J DUPUIS
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11783 **JOHNS HOPKINS UNIV** **5018**
 MINIATURE NEUTRON-ALPHA ACTIVATION SPECTROMETER
 02/26/2002 - 02/28/2004 FY02: \$200,000 Total: \$200,000
Prin. Invest.: E RHODES
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11571 **JOHNS HOPKINS UNIV** **5011**
 GEOTAIL ENERGETIC PARTICLES AND ION COMPOSITION (E PIC) PRO-
 GRAM
 01/09/2002 - 02/28/2002 FY02: \$0 Total: \$0
Prin. Invest.: R W MCENTIRE
Tech. Officer: GSFC/D FAIRFIELD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11829 **JOHNS HOPKINS UNIV** **5019**
 TECHNICAL SUPPORT FOR THE DEPLOYMENT OF RADAR AND LASER
 ALTIMETERS DURING LARA-2002
 03/04/2002 - 02/28/2003 FY02: \$181,401 Total: \$181,401
Prin. Invest.: R RANEY
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11572 **JOHNS HOPKINS UNIV** **5012**
 X-RAY SPECTROSCOPY OF LOW-LUMINOSITY ACTIVE GALACT IC NUCLEI
 WITH XMM
 01/04/2002 - 12/31/2002 FY02: \$13,239 Total: \$13,239
Prin. Invest.: A F PTAK
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11844 **JOHNS HOPKINS UNIV** **5020**
 ORIGIN AND EVOLUTION OF WHITE DWARF STARS: THE EARLY YRS (LTSA)
 04/03/2002 - 11/30/2004 FY02: \$228,238 Total: \$228,238
Prin. Invest.: J DUPUIS
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11581 **JOHNS HOPKINS UNIV** **5013**
 A STUDY OF HOT GAS IN SHOCK WAVE--INTERSTELLAR CLOUD INTERAC-
 TIONS - FUSE
 01/17/2002 - 01/31/2003 FY02: \$63,700 Total: \$63,700
Prin. Invest.: W P BLAIR
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11845 **JOHNS HOPKINS UNIV** **5021**
 EVALUATION OF SPACE RADIATION TOLERANCE OF CRITICAL LASER
 SYSTEM COMPONENTS
 03/27/2002 - 03/31/2003 FY02: \$172,461 Total: \$172,461
Prin. Invest.: B BOONE
Tech. Officer: GSFC/W S HEAPS
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 11584 **JOHNS HOPKINS UNIV** **5014**
 SOLAR FILAMENTS NEAR 1 AU
 01/16/2002 - 09/30/2005 FY02: \$95,294 Total: \$95,294
Prin. Invest.: D M RUST
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11876 **JOHNS HOPKINS UNIV** **5022**
 RESEARCH WITH THE FLARE GENESIS DATA ON VECTOR MAG NETIC
 FIELDS IN ACTIVE REGION FLUX ROPES
 03/18/2002 - 03/31/2004 FY02: \$181,965 Total: \$181,965
Prin. Invest.: D M RUST
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11670 **JOHNS HOPKINS UNIV** **5015**
 INTERMEDIATE-LUMINOSITY X-RAY OBJECTS (LTSA 2001)
 01/28/2002 - 08/31/2005 FY02: \$123,277 Total: \$123,277
Prin. Invest.: E COLBERT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11894 **JOHNS HOPKINS UNIV** **5023**
 CONTINUATION OF THE ULYSSES: HI-SCALE INVESTIGATION
 03/20/2002 - 03/31/2005 FY02: \$255,548 Total: \$255,548
Prin. Invest.: R E GOLD
Tech. Officer: GSFC/V JONES
CASE Category: 13 – PHYSICS

NAG 5 11909	JOHNS HOPKINS UNIV	5024	NAG 5 12108	JOHNS HOPKINS UNIV	5033
CLOUD & WATER VAPOR EFFECTS ON CLIMATE SENSITIVITY			A COMPREHENSIVE STUDY OF RELATIONSHIPS BETWEEN SOLAR WIND		
04/17/2002 - 04/30/2003	FY02: \$100,000	Total: \$100,000	DESTINY AND AURORAL ELECTROJECTS		
<i>Prin. Invest.:</i> A ARKING			05/09/2002 - 05/31/2004	FY02: \$65,012	Total: \$65,012
<i>Tech. Officer:</i> GSFC/D ANDERSON			<i>Prin. Invest.:</i> J SHUE		
<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE			<i>Tech. Officer:</i> GSFC/J SPANN		
			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11945	JOHNS HOPKINS UNIV	5025	NAG 5 12135	JOHNS HOPKINS UNIV	5034
STARBURST SUPERWINDS (FUSE 2001)			VARIATIONS IN THE HOT ISM (FUSE 00)		
04/01/2002 - 03/31/2003	FY02: \$34,100	Total: \$34,100	05/09/2002 - 09/30/2002	FY02: \$0	Total: \$0
<i>Prin. Invest.:</i> C HOWK			<i>Prin. Invest.:</i> C HOWK		
<i>Tech. Officer:</i> GSFC/G SONNEBORN			<i>Tech. Officer:</i> GSFC/G SONNEBORN		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11962	JOHNS HOPKINS UNIV	5026	NAG 5 12169	JOHNS HOPKINS UNIV	5035
INVESTIGATION OF TITAN'S ATMOSPHERE			TIME-OF-FLIGHT MASS SPECTROMETER TECHNOLOGY FOR IN SITU		
04/04/2002 - 04/14/2005	FY02: \$92,713	Total: \$92,713	05/09/2002 - 05/14/2004	FY02: \$129,732	Total: \$129,732
<i>Prin. Invest.:</i> X ZHU			<i>Prin. Invest.:</i> W B BRINCKERHOFF		
<i>Tech. Officer:</i> GSFC/J HILLMAN			<i>Tech. Officer:</i> GSFC/M MEYER		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11967	JOHNS HOPKINS UNIV	5027	NAG 5 12201	JOHNS HOPKINS UNIV	5036
A FUSE DETERMINATION OF THE GRAVITATIONAL REDSHIFT AND SPECTROSCOPIC MASS OF SIRIUS B			MODELING GEOSPACE PLASMA MASS DENSITY BASED ON THE FREQUENCY OF ULF WAVES		
04/03/2002 - 04/14/2003	FY02: \$5,000	Total: \$5,000	05/14/2002 - 05/14/2005	FY02: \$118,198	Total: \$118,198
<i>Prin. Invest.:</i> J KRUK			<i>Prin. Invest.:</i> K TAKAHASHI		
<i>Tech. Officer:</i> GSFC/G SONNEBORN			<i>Tech. Officer:</i> GSFC/J Q SPANN		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 12017	JOHNS HOPKINS UNIV	5028	NAG 5 12209	JOHNS HOPKINS UNIV	5037
THE DISTRIBUTION OF SHOCK VELOCITIES IN N49 - A BRIGHT SUPERNOVA REMNANT IN THE LMC			CONCEPT STUDY FOR INFRARED BASED BUS SYSTEM (IRCOM M)		
04/30/2002 - 05/14/2003	FY02: \$47,100	Total: \$47,100	06/04/2002 - 05/31/2003	FY02: \$65,000	Total: \$65,000
<i>Prin. Invest.:</i> R SANKRIT			<i>Prin. Invest.:</i> M DARRIN		
<i>Tech. Officer:</i> GSFC/G SONNEBORN			<i>Tech. Officer:</i> GSFC/P LUERS		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 45 – ELECTRICAL ENGR		
NAG 5 12050	JOHNS HOPKINS UNIV	5029	NAG 5 12213	JOHNS HOPKINS UNIV	5038
PLASMA SHEET CONVICTION AND NEAR-EARTH SUBSTORM PROCESSES			WHY DO SOME DWARF NOVAE STAND STILL?		
04/18/2002 - 04/30/2005	FY02: \$90,297	Total: \$90,297	05/20/2002 - 05/31/2003	FY02: \$99,200	Total: \$99,200
<i>Prin. Invest.:</i> S OHTANI			<i>Prin. Invest.:</i> T M HECKMAN		
<i>Tech. Officer:</i> GSFC/J SPANN			<i>Tech. Officer:</i> GSFC/G SONNEBORN		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 12051	JOHNS HOPKINS UNIV	5030	NAG 5 12224	JOHNS HOPKINS UNIV	5039
PLANETARY AERONOMY			MAGNETOSPHERES OF THE OUTER PLANETS 2002		
04/18/2002 - 04/30/2005	FY02: \$125,470	Total: \$125,470	05/21/2002 - 05/14/2003	FY02: \$36,000	Total: \$36,000
<i>Prin. Invest.:</i> D F STROBEL			<i>Prin. Invest.:</i> B MAUK		
<i>Tech. Officer:</i> GSFC/J HILLMAN			<i>Tech. Officer:</i> GSFC/T MORGAN		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 12085	JOHNS HOPKINS UNIV	5031	NAG 5 12261	JOHNS HOPKINS UNIV	5040
INTERBALL AND VEGA DATA ARCHIVING.			THE METALLICITY DEPENDENCE OF THE BESTIBILITY JUMP IN HOST-STAR WINDS.		
04/25/2002 - 04/30/2005	FY02: \$24,836	Total: \$24,836	06/04/2002 - 06/30/2003	FY02: \$11,900	Total: \$11,900
<i>Prin. Invest.:</i> D SIBECK			<i>Prin. Invest.:</i> A FULLERTON		
<i>Tech. Officer:</i> GSFC/P E HUNTER			<i>Tech. Officer:</i> GSFC/G SONNEBORN		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 12092	JOHNS HOPKINS UNIV	5032			
A HIGH-SPEED DATA ACCESS COMPONENT FOR NATIONAL VIRTRUAL OBSERVATORY DATA GRID NODE					
04/23/2002 - 04/30/2004	FY02: \$135,952	Total: \$135,952			
<i>Prin. Invest.:</i> A R THAKAR					
<i>Tech. Officer:</i> GSFC/P E HUNTER					
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER					

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 12291 **JOHNS HOPKINS UNIV** **5041**
 CONTINUATION OF THE VOYAGER INTERSTELLAR MISSION: LECP INVESTIGATION
 06/17/2002 - 06/30/2003 FY02: \$315,000 Total: \$315,000
Prin. Invest.: S M KRIMIGIS
Tech. Officer: GSFC/M GUTATHAKURTA
CASE Category: 11 – ASTRONOMY

NAG 5 12294 **JOHNS HOPKINS UNIV** **5042**
 CENTRAL STARS OF PLANETARY NEBULAR IN THE SMALL MAGELLANIC CLOUD
 06/14/2002 - 06/30/2003 FY02: \$60,400 Total: \$60,400
Prin. Invest.: L BIANCHI
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12303 **JOHNS HOPKINS UNIV** **5043**
 IMAGE-IRIDIUM INTERCOMPARISON: BIRKELAND CURRENTS, AURORA, RING CURRENT AND PLASMASPHERE
 06/21/2002 - 06/14/2005 FY02: \$69,966 Total: \$69,966
Prin. Invest.: B J ANDERSON
Tech. Officer: GSFC/J SPANN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12354 **JOHNS HOPKINS UNIV** **5044**
 STUDIES OF ORGANIC SYNTHESIS IN HYPERVELOCITY IMPACTS WITH PULSED LASER ABLATION
 07/03/2002 - 06/30/2005 FY02: \$176,148 Total: \$176,148
Prin. Invest.: W B BRINCKERHOFF
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12363 **JOHNS HOPKINS UNIV** **5045**
 LASER ABLATION HYPERVELOCITY IMPACT SIMULATION MICROPROBE (LA-HISM) FOR STUDIES OF ORGANIC SYNTHESIS
 07/09/2002 - 07/14/2004 FY02: \$92,387 Total: \$92,387
Prin. Invest.: W B BRINCKERHOFF
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12423 **JOHNS HOPKINS UNIV** **5046**
 ABSORPTION-EMISSION LINE STUDY OF THE NORTHEAST CYGNUS LOOP (FUSE 2001)
 08/06/2002 - 08/14/2003 FY02: \$16,100 Total: \$16,100
Prin. Invest.: W P BLAIR
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12448 **JOHNS HOPKINS UNIV** **5047**
 KINEMATICS AND COMPOSITION OF O-RICH MATERIAL IN PUPPIS A
 08/15/2002 - 08/14/2003 FY02: \$36,900 Total: \$36,900
Prin. Invest.: W P BLAIR
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12456 **JOHNS HOPKINS UNIV** **5048**
 TRACING THE MOLECULAR ENVIRONMENTS OF HERBIG AESTARS WITH FUSE.
 09/03/2002 - 08/31/2003 FY02: \$7,000 Total: \$7,000
Prin. Invest.: G WILLIGER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12479 **JOHNS HOPKINS UNIV** **5049**
 SOLAR ENERGETIC ELECTRONS AS PREDICTORS OF GEO-EFFECTIVE CME-DRIVEN SHOCKS AND SOLAR ENERGETIC
 08/21/2002 - 08/14/2005 FY02: \$90,801 Total: \$90,801
Prin. Invest.: D HAGGERTY
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12481 **JOHNS HOPKINS UNIV** **5050**
 THE HALO'S O VI INTENSITY (FUSE 01)
 08/21/2002 - 08/31/2003 FY02: \$63,400 Total: \$63,400
Prin. Invest.: R L SHELTON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12518 **JOHNS HOPKINS UNIV** **5051**
 THE YOUNGEST, MASSIVE STAR CLUSTERS IN M33
 08/21/2002 - 08/31/2003 FY02: \$24,400 Total: \$24,400
Prin. Invest.: L BIANCHI
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12525 **JOHNS HOPKINS UNIV** **5052**
 RESEARCH AND ACTIVITIES TO SUPPORT SCIENCE PLANNING AND COORDINATION IN ASSOCIATION WITH THE POLAR
 09/19/2002 - 09/30/2005 FY02: \$73,334 Total: \$73,334
Prin. Invest.: N FOX
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 13 – PHYSICS

NAG 5 12555 **JOHNS HOPKINS UNIV** **5053**
 GSFC MISSION SERVICES EVOLUTION CENTER (GMSEC) ARCHITECTURE ASSESSMENT TASK
 09/12/2002 - 09/30/2003 FY02: \$38,756 Total: \$38,756
Prin. Invest.: D P WATSON
Tech. Officer: GSFC/J BRISTOW
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12623 **JOHNS HOPKINS UNIV** **5054**
 IMPROVED SIGNAL PROCESSING STRATEGIES FOR EXTRACTING ICE THICKNESS FROM RADAR DEPTH SOUNDING MEASUREMENTS
 09/30/2002 - 09/30/2005 FY02: \$73,409 Total: \$73,409
Prin. Invest.: C LEUSCHEN
Tech. Officer: GSFC/M WEI
CASE Category: 13 – PHYSICS

NAG 8 1377 **JOHNS HOPKINS UNIV** **5055**
 R/S "NOVEL MICROGRAVITY OPTICAL TECHNIQUE FOR MOLECULARLY ENGINEERING ELECTROPHORETIC MEDIA.
 07/23/1997 - 11/30/2001 FY02: -\$1,407 Total: \$455,593
Prin. Invest.: D WIRTZ
Tech. Officer: MSFC/B GUYNES, MSFC/J MAYO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1527 **JOHNS HOPKINS UNIV** **5056**
 AXAF INTERDISCIPLINARY SCIENTIST
 03/30/1998 - 09/30/2002 FY02: \$100,000 Total: \$466,000
Prin. Invest.: R GIACCONI, C NORMAN
Tech. Officer: MSFC/M SMITH, MSFC/B HAMBRICK
CASE Category: 11 – ASTRONOMY

NAG 8 1648 **JOHNS HOPKINS UNIV** **5057**
 RBCC ACCESS TO SPACE ASSESSMENT
 11/24/1999 - 03/31/2001 FY02: -\$757 Total: \$95,826
Prin. Invest.: P J WALTRUP
Tech. Officer: MSFC/C M MC ARTHUR
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 8 1695 **JOHNS HOPKINS UNIV** **5058**
 DEVELOPMENT OF A NEUTRON SPECTROMETER TO ASSESS BIOLOGICAL
 RADIATION DAMAGE BEHIND SPACECRAFT MAT.
 05/01/2000 - 11/30/2003 FY02: \$90,000 Total: \$220,500
Prin. Invest.: R MAUER
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1146 **JOHNS HOPKINS UNIV** **5059**
 CALCIUM KINETICS DURING SPACE FLIGHT
 09/14/1999 - 09/30/2003 FY02: \$44,760 Total: \$155,085
Prin. Invest.: K O O'BRIEN
Tech. Officer: SSC/S M SMITH
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1345 **JOHNS HOPKINS UNIV** **5060**
 MODULAR LIBRARY OF SELF ASSEMBLING ARTIFICIAL PROTEINS FOR 3
 DIMENSIONAL TISSUE CULTURE
 08/01/2001 - 09/30/2004 FY02: \$137,000 Total: \$178,000
Prin. Invest.: J L HARDEN
Tech. Officer: KSC/D RISIN
CASE Category: 43 – CHEMICAL ENGR

NAG13 00045 **JOHNS HOPKINS UNIV** **5061**
 POLARIZATION DEPENDENCE OF GPS SIGNALS REFLECTED FROM THE
 OCEAN SURFACE
 10/12/2000 - 10/11/2002 FY02: \$20,212 Total: \$140,062
Prin. Invest.: D R THOMPSON
Tech. Officer: SSC/R MILLER
CASE Category: 33 – OCEANOGRAPHY

NAS 3 01146 **JOHNS HOPKINS UNIV** **5062**
 EPIREP/FIS ARCHITECTURE WORK
 04/30/2001 - 06/30/2002 FY02: \$461,317 Total: \$651,439
Prin. Invest.: L BACHMAN
Tech. Officer: GRC/G CHOMOS
CASE Category: 49 – ENGINEERING, OTHER

NAS 5 00166 **JOHNS HOPKINS UNIV** **5063**
 DEVELOPMENT OF SOLID STATE UV SOURCE/ORIGINAL POP 7/13/01
 06/14/2000 - 07/25/2003 FY02: \$97,016 Total: \$370,867
Prin. Invest.: J KANG
Tech. Officer: GSFC/F SELDON- JONES
CASE Category: 45 – ELECTRICAL ENGR

NAS 5 01072 **JOHNS HOPKINS UNIV** **5064**
 SUN EARTH CONNECTION LIVING WITH A STAR PROGRAM LETTER
 CONTRACT.
 12/21/2000 - 12/20/2012 FY02: \$5,430,225 Total: \$6,877,225
Prin. Invest.: N AVAILABLE
Tech. Officer: GSFC/J E ROBINSON
CASE Category: 11 – ASTRONOMY

NAS 5 30403 **JOHNS HOPKINS UNIV** **5065**
 SPACE TELESCOPE IMAGING SPECTROGRAPH PROGRAM SUPPORT
 02/04/1988 - 06/30/2003 FY02: \$110,000 Total: \$2,905,865
Prin. Invest.: W MOOS
Tech. Officer: GSFC/D VITABLANO
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 32865 **JOHNS HOPKINS UNIV** **5066**
 DESIGN & DEVELOPMENT OF ADVANCED CAMERA SCIENCE
 08/25/1995 - 06/30/2003 FY02: \$118,500 Total: \$3,844,177
Prin. Invest.: D FORD, D I ILLINGWORTH
Tech. Officer: GSFC/C KREBS
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 5 32985 **JOHNS HOPKINS UNIV** **5067**
 PHASE C/D DESIGN AND DEVELOPMENT OF THE FAR ULTRA- VOILET
 SPECTROSCOPIC EXPLORER (FUSE) MISSION
 11/22/1995 - 06/30/2003 FY02: \$6,604,369 Total: \$147,242,755
Prin. Invest.: H W MOOS
Tech. Officer: GSFC/D R MENGERS
CASE Category: 11 – ASTRONOMY

NAS 5 97179 **JOHNS HOPKINS UNIV** **5068**
 TIMED PHASE C/D LETTER CONTRACT
 06/16/1997 - 01/06/2006 FY02: \$8,983,594 Total: \$129,114,458
Prin. Invest.: D GRANT
Tech. Officer: GSFC/J J WOLFF
CASE Category: 11 – ASTRONOMY

NAS 5 97271 **JOHNS HOPKINS UNIV** **5069**
 AEROSPACE RESEARCH, DESIGN, AND DEVELOPMENT TASKS FOR NASA
 10/01/1997 - 12/31/2018 FY02: \$130,223,302 Total: \$336,982,787
Prin. Invest.: T COUGHLIN
Tech. Officer: GSFC/J WOLFF
CASE Category: 11 – ASTRONOMY

NCC 1 01019 **JOHNS HOPKINS UNIV** **5070**
 ADAPTIVE DATA ANALYSIS AND PROCESSING TECHNOLOGY (ADAPT)--NRA-
 99-OES-08
 01/16/2001 - 03/10/2004 FY02: \$78,000 Total: \$237,017
Prin. Invest.: M A DARRIN, M A DARRIN
Tech. Officer: LARC/M E BEATTY, III
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 812 **JOHNS HOPKINS UNIV** **5071**
 USING SURFACTANTS TO CONTROL BUBBLE GROWTH COALESCENCE IN
 NUCLEATE POOL BOILING
 07/06/2000 - 05/31/2004 FY02: \$78,070 Total: \$230,010
Prin. Invest.: K J STEBE
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 961 **JOHNS HOPKINS UNIV** **5072**
 TESTING AND MODELING OF MICRO AND NANO SCALE STRUCTURAL
 MATERIALS SYSTEMS
 05/02/2002 - 10/31/2002 FY02: \$22,500 Total: \$22,500
Prin. Invest.: D N SHARPE
Tech. Officer: GRC/N N NEMETH
CASE Category: 46 – MECHANICAL ENGR

MARYLAND

NASA'S UNIVERSITY PROGRAM

NCC 5 447 **JOHNS HOPKINS UNIV** **5073**
 COOPERATIVE RESEARCH IN HIGH ENERGY ASTROPHYSICS BETWEEN
 JHU AND GSFC
 12/21/1999 - 12/31/2002 FY02: \$184,368 Total: \$686,880
Prin. Invest.: E T VISHNIAC
Tech. Officer: GSFC/K E WEAVER
CASE Category: 11 – ASTRONOMY

NCC 5 500 **JOHNS HOPKINS UNIV** **5074**
 ATMOSPHERIC TRANSPORT: COMPARISON OF OBSERVATIONS AND MOD-
 ELS
 05/08/2000 - 05/14/2003 FY02: \$5,202 Total: \$74,701
Prin. Invest.: D WAUGH
Tech. Officer: GSFC/A R DOUGLASS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 635 **JOHNS HOPKINS UNIV** **5075**
 INTEGRATED DISCRETE EVENT CONTROLLER FOR AUTONOMOU DISTRIB-
 UTED SPACECRAFT COORDINATION
 02/28/2002 - 02/28/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: P A STADTER
Tech. Officer: GSFC/J BRISTOW
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 40079 **JOHNS HOPKINS UNIV** **5076**
 MARYLAND SPACE GRANT COLL & FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$475,000 Total: \$971,673
Prin. Invest.: R C HENRY
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50259 **JOHNS HOPKINS UNIV** **5077**
 PROTEIN CRYSTALLIZATION AT INTERFACE STUDENT: JEFREY ERICKSON
 07/07/1999 - 06/30/2001 FY02: -\$1,221 Total: \$42,779
Prin. Invest.: K J STEBE
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50268 **JOHNS HOPKINS UNIV** **5078**
 SURFACTANT FACILITATED SPREADING
 07/08/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: K J STEBE, VAN NGUYE
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50328 **JOHNS HOPKINS UNIV** **5079**
 THE IMPACT OF DATA CONSTRAINTS IN GLOBAL CLIMATE MODELS
 (STUDENT: ANDREA MOLOD)
 08/17/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: D WAUGH
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50372 **JOHNS HOPKINS UNIV** **5080**
 SYNTHESIS, GROWTH KINETICS, AND ASSEMBLY OF NANO PARTICLES
 06/13/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P C SEARSON
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 50 **JOHNS HOPKINS UNIV** **5081**
 AN INVESTIGATION OF THE ADDITIVITY AND LINEARITY
 07/05/2000 - 07/09/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: J DICELLO
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 56 – MEDICL

NGT 9 65 **JOHNS HOPKINS UNIV** **5082**
 MICROMECHANICAL RESPONSE OR LIVING CELLS TO CYTOSK ELETAL
 REORGANIZATION
 08/06/2002 - 07/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D WIRTZ
Tech. Officer: JSC/C SAMS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 10230 **LOYOLA COLL** **5083**
 APPLICATION OF GRADIENT-DESCENT IMAGE REGISTRATION TO SATEL-
 LITE IMAGERY.
 01/16/2001 - 04/30/2002 FY02: \$0 Total: \$24,811
Prin. Invest.: P EASTMAN
Tech. Officer: GSFC/J LE MOIGNE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12313 **LOYOLA COLL** **5084**
 SYSTEM ENGINEERING ISSUES IN IMPLEMENTATION OF IMAGE REGISTRA-
 TION ALGORITHMS WITH EMPHASIS ON
 07/12/2002 - 12/14/2004 FY02: \$14,824 Total: \$14,824
Prin. Invest.: P D EASTMAN
Tech. Officer: GSFC/J LEMOIGNE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 7136 **MORGAN STATE UNIV** **5085**
 CHARACTERIZATION AND SIMULATION OF GALLIUM NITRIDE ULTRAVIOLET
 PHOTODETECTORS
 03/16/1998 - 08/30/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: C J SCOTT
Tech. Officer: GSFC/B MOTT
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 8574 **MORGAN STATE UNIV** **5086**
 SEM MULTIPURPOSE FACILITY/PHASE I
 07/21/1999 - 07/14/2002 FY02: \$0 Total: \$1,098,252
Prin. Invest.: H WILLIAMS
Tech. Officer: GSFC/P HOLLOWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8857 **MORGAN STATE UNIV** **5087**
 INVESTIGATION OF THE MAGNETIC & ELECTRONIC PROPER TIES OF
 METAL & METAL OXIDE FILMS & MULTILAYER FOR
 09/28/1999 - 06/30/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: C WILLIAMS
Tech. Officer: GSFC/J CHITWOOD
CASE Category: 13 – PHYSICS

NAG 5 9215 **MORGAN STATE UNIV** **5088**
 FORGING A PARTNERSHIP: A TWENTY-FIRST CENTURY APPR OACH TO THE
 INVESTIGATION OF SCIENTIFIC& TECHNOL
 03/09/2000 - 12/14/2001 FY02: \$0 Total: \$850,000
Prin. Invest.: E DELOATCH
Tech. Officer: GSFC/G SOFFEN
CASE Category: 49 – ENGINEERING, OTHER

NASA'S UNIVERSITY PROGRAM

MARYLAND

NAG 5 9710 **MORGAN STATE UNIV** **5089**
 A PROPOSAL FOR NASA-RELATED RESEARCH CAPACITY BUILDING AND
 OUTREACH BUILDING AND OUTREACH AT MORGAN
 06/29/2000 - 03/31/2002 FY02: \$0 Total: \$1,600,000
Prin. Invest.: D N WILLIAMS
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10104 **MORGAN STATE UNIV** **5090**
 SPACE TECHNOLOGY 5 PROJECT. APPLICATION OF PRODUCTION DESIGN
 CONSIDERATIONS TO NANO-SATELLITES
 12/13/2000 - 12/14/2001 FY02: \$0 Total: \$5,000
Prin. Invest.: G CHEN
Tech. Officer: GSFC/J OBERRIGHT
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10913 **MORGAN STATE UNIV** **5091**
 DEVELOPING A SSPA UTILIZING WIDE BAND GAP SEMICONDUCTOR
 MATERIAL
 05/22/2001 - 09/30/2001 FY02: \$0 Total: \$13,244
Prin. Invest.: C WHITE
Tech. Officer: GSFC/D NGUYEN
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10934 **MORGAN STATE UNIV** **5092**
 IMAGE REGISTRATION AND FUSION FOR FUTURE FORMATION FLYING
 SYSTEMS
 06/06/2001 - 06/14/2004 FY02: \$18,000 Total: \$36,000
Prin. Invest.: D COLE-RHODES
Tech. Officer: GSFC/J MOIGNE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10947 **MORGAN STATE UNIV** **5093**
 A PROPOSAL CAPACITY BUILDING FOR NASA RELATED AND OUTREACH AT
 MORGAN STATE UNIV
 05/25/2001 - 03/31/2003 FY02: \$0 Total: \$1,600,000
Prin. Invest.: E N ISUK
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11229 **MORGAN STATE UNIV** **5094**
 EXAMINE SAMPLES OF CARBON NANOTUBES.
 08/15/2001 - 08/14/2002 FY02: \$0 Total: \$3,000
Prin. Invest.: E C HAMMOND
Tech. Officer: GSFC/P TAYLOR
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11405 **MORGAN STATE UNIV** **5095**
 "FORGING A PARTNERSHIP"
 12/03/2001 - 12/14/2002 FY02: \$850,000 Total: \$850,000
Prin. Invest.: E DELOATCH
Tech. Officer: GSFC/J BENNETT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11837 **MORGAN STATE UNIV** **5096**
 DESIGN OF HIGH SPEED COMPARATOR ARCHITECTURES FOR ANALOG-
 TO-DIGITAL CONVERTERS.
 03/11/2002 - 03/14/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: C T JOHNSON-BEY
Tech. Officer: GSFC/J PIEMEIER
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 11852 **MORGAN STATE UNIV** **5097**
 A PLANNING GRANT PROPOSAL FOR FACULTY RESEARCH DEVELOPMENT
 AND CAPACITY BUILDING FOR NASA-RELATED R
 03/12/2002 - 03/14/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: E ISUK
Tech. Officer: GSFC/D MENCAHN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1847 **MORGAN STATE UNIV** **5098**
 POLYMERIZATION OF ADVANCED THERMOSETS IN MICROGRAVITY TO
 DEVELOP ULTRA LOW POLYMERS
 08/06/2001 - 07/31/2002 FY02: \$99,925 Total: \$199,891
Prin. Invest.: A KENNEDY
Tech. Officer: MSFC/E ORDONEZ
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 998 **MORGAN STATE UNIV** **5099**
 SMART-SENSOR DESIGN INCORPORATING SIGNAL PROCESSING FOR
 DATA-COMPRESSION AND FEATURE ENHANCEMENT
 03/31/1998 - 12/31/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: J E WHITNEY
Tech. Officer: JSC/K KRISHEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 532 **MORGAN STATE UNIV** **5100**
 NRTS CONTINUATION/MUSPIN NRTS PROGRAM.
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$700,000
Prin. Invest.: W LUPTON
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 565 **MORGAN STATE UNIV** **5101**
 SIGE ADC FOR DIGITAL MICROWAVE RADIOMETRY
 06/22/2001 - 12/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: C WHITE
Tech. Officer: GSFC/J PIEDMEIER
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 5342 **SALISBURY STATE UNIV** **5102**
 UNDERSTANDING TAXONOMIC AND PHYSIOLOGICAL PROPERTIES OF
 PHYTOPLANKTON
 10/31/2001 - 12/31/2002 FY02: \$7,500 Total: \$7,500
Prin. Invest.: T JONES
Tech. Officer: WFF/T MOISAN
CASE Category: 33 – OCEANOGRAPHY

NCC 5 488 **TOWSON STATE UNIV** **5103**
 MULTI-AGENT SYSTEMS IN SPACECRAFT: INTELLIGENT AGENTS AND
 AGENT COMMUNICATION MANAGEMENT
 04/14/2000 - 08/31/2002 FY02: \$0 Total: \$49,205
Prin. Invest.: B N NAG
Tech. Officer: GSFC/W TRUSZKOWSKI
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 6249 **U OF MD CTR FOR ENVIR SCI - CAMBRIDGE** **5104**
 TIMES-SCALES OF LAND-USE CHANGE AND EXPORT OF NITROGEN
 TO THE COASTAL ZONE
 08/19/1997 - 08/31/2001 FY02: \$0 Total: \$350,351
Prin. Invest.: P R FISHER
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 6286 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5105
 REMOTE OBSERVATIONS AND MODELING OF PHYTOPLANKTON
 09/10/1997 - 08/31/2002 FY02: \$0 Total: \$753,539
Prin. Invest.: L HARDING
Tech. Officer: GSFC/J HARDING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6387 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5106
 MODELLING N2 AND CO2 FIXATION BY THE OCEANIC DIAZO TROPHIC
 CYANOBACTERIUMTRICHODESMIUM
 10/18/1997 - 09/30/2001 FY02: \$0 Total: \$239,144
Prin. Invest.: R G HOOD
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7602 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5107
 REMOTE OBSERVATIONS IN THE CHOPTANK RIVER INDEX SI TE: OCEAN
 COLOR, SALINITY, TEMPERATURE AND C
 07/21/1998 - 08/31/2002 FY02: \$0 Total: \$447,423
Prin. Invest.: L W HARDING
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11083 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5108
 EFFECTS OF LAND USE, SOILS & HUMAN POPULATIONS ON EXPORT OF
 WATER, C, N, & P FROM THE MID-ATLANTIC
 07/19/2001 - 08/14/2004 FY02: \$143,247 Total: \$224,868
Prin. Invest.: T FISHER
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11302 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5109
 INDICES OF NUTRIENT ENRICHMENT IN U.S. ATLANTIC ES TUARIES
 FROMREMOTE SENSING OF OCEAN COLOR AND
 08/30/2001 - 08/31/2005 FY02: \$72,963 Total: \$145,926
Prin. Invest.: L HARDING
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 00195 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5110
 R&D TO SUPPORT GSFC'S SIMBIOS PROJECT
 12/18/2000 - 11/30/2002 FY02: \$101,387 Total: \$216,100
Prin. Invest.: L W HARDING
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NCC 5 493 U OF MD CTR FOR ENVIR SCI - CAMBRIDGE 5111
 REMOTE SENSING OF FOREST COMPOSITION AND STRUCTURE IN THE
 CENTRAL APPALACHIANS USING EO-1 HYPE
 04/19/2000 - 09/30/2003 FY02: \$55,898 Total: \$192,177
Prin. Invest.: P A TOWNSEND
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 2 1195 UNIV OF MD - BIOTECH INST - COLLEGE PARK 5112
 OCCURRENCE OF V CHOLERA IN THE BAY OF BENGAL & AP PPLICATION
 OF REMOTE SENSING METHODS FOR PREDICTIO
 03/26/1998 - 02/28/2003 FY02: \$0 Total: \$141,067
Prin. Invest.: R R COLWELL
Tech. Officer: ARC/B L WOOD, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 175 UNIV OF MD - BIOTECH INST - COLLEGE PARK 5113
 R/S MICROBIAL RESISTANCE TO SOLAR RADIATION: DNA DAMAGE AND
 APPLICATION OF REPAIR ENZYMES IN BIOTEC
 01/15/1999 - 11/05/2001 FY02: -\$50,740 Total: \$238,760
Prin. Invest.: J DI RUAGIERO
Tech. Officer: JSC/S GONDA
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 1 2024 UNIV OF MARYLAND - COLL PARK 5114
 DIRECT MEASUREMENTS OF TROPOSPHERIC OZONE FROM TOMS DATA
 03/26/1998 - 01/31/2001 FY02: -\$1 Total: \$351,000
Prin. Invest.: R D HUDSON
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2285 UNIV OF MARYLAND - COLL PARK 5115
 INTERACTION OF A BOUNDARY LAYER WITH A TURBULANT WAKE
 03/30/2000 - 03/31/2003 FY02: \$59,979 Total: \$164,932
Prin. Invest.: U PIOMELLI
Tech. Officer: LARC/C L STREETT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01084 UNIV OF MARYLAND - COLL PARK 5116
 WHIRL FLUTTER OF TWO BLADED PROPELLOR/PYLON SYSTEM
 05/17/2001 - 03/14/2002 FY02: \$19,501 Total: \$59,501
Prin. Invest.: I CHOPRA
Tech. Officer: LARC/A S POTOTZKY, LARC/R G KVATERNIK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1352 UNIV OF MARYLAND - COLL PARK 5117
 MECHANOSENSITIVE CHANNELS IN BACTERIA: FUNCTIONAL DOMAINS &
 MECHANISMS OF GATING
 07/27/1999 - 07/31/2003 FY02: \$62,746 Total: \$421,801
Prin. Invest.: S I SUKHAREV
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1405 UNIV OF MARYLAND - COLL PARK 5118
 QUAD TILTROTOR COMPUTATIONAL FLUID DYNAMICS PROGRA M
 04/28/2000 - 04/30/2003 FY02: \$310,000 Total: \$899,999
Prin. Invest.: F SCHMITZ, J BAEDER
Tech. Officer: ARC/R A STRAWN, ARC/C TUNG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1407 UNIV OF MARYLAND - COLL PARK 5119
 DYNAMICS OF HELICOPTERS WITH ON-BLADE CONTROLS
 05/22/2000 - 05/31/2003 FY02: \$20,000 Total: \$91,849
Prin. Invest.: R CELI
Tech. Officer: ARC/M B TISCHER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1536 UNIV OF MARYLAND - COLL PARK 5120
 MODEL BASED HAZARD ANALYSIS METHOD AND SIMULATION TOOL
 02/13/2002 - 02/14/2003 FY02: \$158,000 Total: \$158,000
Prin. Invest.: A MOSLEH
Tech. Officer: ARC/M SHIRLEY
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 2 1549 UNIV OF MARYLAND - COLL PARK 5121
 RUNWAY INDEPENDENT AIRCRAFT (RIA) OPERATIONAL NOIS E
 PREDICTION/VALIDATION
 04/12/2002 - 04/14/2003 FY02: \$175,000 Total: \$175,000
Prin. Invest.: F H SCHMITZ
Tech. Officer: ARC/W A DECKER, ARC/J A SCHROEDER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1577 **UNIV OF MARYLAND - COLL PARK** **5122**
 NEURAL NETWORK BASED ROBUST INDIVIDUAL BALDE CONTR OLLER
 08/13/2002 - 07/31/2003 FY02: \$35,125 Total: \$35,125
Prin. Invest.: I CHOPRA
Tech. Officer: ARC/W WARBRODT, ARC/S KOTTAPOLLI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2139 **UNIV OF MARYLAND - COLL PARK** **5123**
 SPECTRAL ELEMENT SIMULATIONS OF THERMAL CONVECTIO N IN A
 ROTARING HEMISPHERICAL SHELL WILL RADIAL G
 03/17/1998 - 01/05/2001 FY02: \$0 Total: \$101,000
Prin. Invest.: A DEANE
Tech. Officer: GRC/A CHAIT
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2206 **UNIV OF MARYLAND - COLL PARK** **5124**
 INVESTIGATION OF POD BOILING HEAT TRANSFER MECHANI SMAS IN
 MICROGRAVITY USING AN ARRAY OF SURFACE MO
 10/28/1998 - 05/31/2001 FY02: -\$188 Total: \$177,112
Prin. Invest.: J KIM
Tech. Officer: GRC/J B MCQUILLEN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2223 **UNIV OF MARYLAND - COLL PARK** **5125**
 ROBUST DIAGNOSIS OF PLANETARY GEARTRAIN FAULTS ROBUST DIAG-
 NOSIS OF PLANETARYGEARTRAIN FAULTS
 01/08/1999 - 10/31/2002 FY02: \$40,000 Total: \$284,015
Prin. Invest.: D J PINES
Tech. Officer: GRC/D G LEWICKI
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2337 **UNIV OF MARYLAND - COLL PARK** **5126**
 DATA-BASE ON FUEL AIR MIXING AND COMBUSTION FOR NA TIONAL
 COMBUSTION
 02/24/2000 - 02/02/2005 FY02: \$135,587 Total: \$280,094
Prin. Invest.: A K GUPTA
Tech. Officer: GRC/R R TACINA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2479 **UNIV OF MARYLAND - COLL PARK** **5127**
 GEOPHYSICAL FLOW EXPERIMENT IN A ROTATING SPHERICA L CAPACI-
 TOR, UM #000508-7778
 07/26/2000 - 11/30/2003 FY02: \$45,035 Total: \$102,521
Prin. Invest.: D DEANE
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2480 **UNIV OF MARYLAND - COLL PARK** **5128**
 PROPULSION/AIRFRAME INTEGRATION FOR HYPERSONIC ACC ESS-TO-
 SPACE
 07/27/2000 - 09/30/2001 FY02: \$0 Total: \$74,306
Prin. Invest.: D J LEWIS
Tech. Officer: GRC/D T PALAC
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2568 **UNIV OF MARYLAND - COLL PARK** **5129**
 MATERIAL PROPERTIES GOVERNING COOCURRENT FLAME SPR EAD IN
 MICROGRAVITY
 03/20/2001 - 11/30/2004 FY02: \$100,000 Total: \$200,000
Prin. Invest.: J L TORERO
Tech. Officer: GRC/G A RUFF
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2736 **UNIV OF MARYLAND - COLL PARK** **5130**
 GRANULAR FLOW INSTABILITIES: TRANSIENTS, AGING AND SEGREGATION
 DYNAMICS.
 03/15/2002 - 11/30/2005 FY02: \$93,511 Total: \$93,511
Prin. Invest.: W LOSERT
Tech. Officer: GRC/J H AGUI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2805 **UNIV OF MARYLAND - COLL PARK** **5131**
 PACKAGE TECHNOLOGY EVALUATION FOR HIGH TEMPERATURE SIC ELEC-
 TRONICS AND MEMSPRESSURE
 09/09/2002 - 12/31/2002 FY02: \$39,686 Total: \$39,686
Prin. Invest.: D MCCLUSKEY
Tech. Officer: GRC/R S OKOJIE
CASE Category: 46 – MECHANICAL ENGR

NAG 5 3361 **UNIV OF MARYLAND - COLL PARK** **5132**
 ISO DATA ANALYSIS IN PROGRAM FOR RESEARCH TO BE CO NDUCTED AT
 THE UMD
 08/28/1996 - 08/31/2001 FY02: -\$29,774 Total: \$166,426
Prin. Invest.: D G CURRLA
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3454 **UNIV OF MARYLAND - COLL PARK** **5133**
 TERRESTRIAL MONITORING AT HIGH SPATIAL RESOLUTION: THE ROLE OF
 LANDSAT-TYPESENSORS IN MISSION.....
 10/07/1996 - 06/01/2002 FY02: \$0 Total: \$1,695,179
Prin. Invest.: S N GOWARD
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3678 **UNIV OF MARYLAND - COLL PARK** **5134**
 TROPOSPHERIC CONVECTION AND STRATOSPHERE-TROPOSPHE ON
 PHOTOCHEMISTRY, AEROSOLS, AND CLIMATE
 01/04/1997 - 01/14/2001 FY02: \$0 Total: \$830,000
Prin. Invest.: K E PICKERING
Tech. Officer: GSFC/M D HALL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 3836 **UNIV OF MARYLAND - COLL PARK** **5135**
 LOW LUMINOSITY ACCRETION ONTO COMPACT OBJECTS
 02/11/1997 - 08/14/2001 FY02: \$0 Total: \$219,000
Prin. Invest.: J L WANG
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3840 **UNIV OF MARYLAND - COLL PARK** **5136**
 MAGNETOHYDRODYNAMIC MODELS OF THE COLD INTERSTELLA
 02/14/1997 - 02/14/2002 FY02: \$0 Total: \$217,500
Prin. Invest.: E C OSTRICKER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3960 **UNIV OF MARYLAND - COLL PARK** **5137**
 THE EFFECT OF VARIATIONS IN PACIFIC FRESH-WATER AN INDIAN OCEAN
 02/18/1997 - 01/31/2002 FY02: \$0 Total: \$350,884
Prin. Invest.: R WAJSOWICZ
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 4056 UNIV OF MARYLAND - COLL PARK 5138
 SATELLITE BASED IDENTIFICATION OF LINKED VEGETATIO SURFACE
 TEMPERATURE ANOMALY AREAS
 03/11/1997 - 03/14/2001 FY02: -\$5,641 Total: \$394,709
Prin. Invest.: J R TOWNSHEND
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4080 UNIV OF MARYLAND - COLL PARK 5139
 OBSERVATIONS OF COMETS AND ASTEROIDS
 04/11/1997 - 11/30/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: D F A'HEARN
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 4313 UNIV OF MARYLAND - COLL PARK 5140
 A SPACE PHYSICS ANALYSIS AND PLANNING TOOL
 05/09/1997 - 12/31/2001 FY02: \$0 Total: \$312,500
Prin. Invest.: D C GOODRICH
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 4811 UNIV OF MARYLAND - COLL PARK 5141
 DEFORESTRATION AND DEGRADATION IN SOUTHERN AND CEN
 06/25/1997 - 10/31/2001 FY02: \$0 Total: \$580,000
Prin. Invest.: S PRINCE
Tech. Officer: GSFC/G C GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5155 UNIV OF MARYLAND - COLL PARK 5142
 OPTIMIZED CALORIMETER FOR ACCESS MEASUREMENTS OF Z-1-26 NU-
 CLEI AND ELECTRONS
 03/26/1998 - 03/31/2002 FY02: \$0 Total: \$247,200
Prin. Invest.: E S SEO
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5204 UNIV OF MARYLAND - COLL PARK 5143
 COSMIC-RAY ORIGIN, ACCELERATION, AND PROPAGATION SELECTED
 UNDER THE PRESIDENTIAL EARLY CAREER AWARD
 06/24/1998 - 06/30/2003 FY02: \$100,000 Total: \$500,000
Prin. Invest.: E S SEO
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5225 UNIV OF MARYLAND - COLL PARK 5144
 GRANT NAG5-5225 FOR ANTIMATTER AND COSMIC RAY STUDIES USING
 BESS. PI DR. EUN-SUK SEO
 03/16/1999 - 09/30/2002 FY02: \$0 Total: \$281,100
Prin. Invest.: E S SEO
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5249 UNIV OF MARYLAND - COLL PARK 5145
 COSMIC RAY ENERGETICS AND MASS (CREAM) COSMIC RAY ENERGETICS
 AND MASS (CREAM)
 03/13/2000 - 11/30/2002 FY02: \$1,060,000 Total: \$3,148,200
Prin. Invest.: E SEO
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5263 UNIV OF MARYLAND - COLL PARK 5146
 SOUNDING ROCKET EXPERIMENT TO EXPLORE ELECTRO- DYNAMICS
 COUPLING
 03/02/2000 - 02/21/2003 FY02: \$36,857 Total: \$197,134
Prin. Invest.: M A COPLAN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5308 UNIV OF MARYLAND - COLL PARK 5147
 FIRST YEAR FUNDING FOR NAG5-5308 FIRST YEAR FUNDING FOR NAG5-
 5308
 02/01/2001 - 11/30/2003 FY02: \$250,000 Total: \$500,000
Prin. Invest.: E S SEO
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5347 UNIV OF MARYLAND - COLL PARK 5148
 SEARCHING FOR ANTIMATTER AND OTHER EXOTICS USING T HE BALLOON
 BORNE EXPERIMENT WITH A SUPERCOND
 01/16/2002 - 01/07/2005 FY02: \$123,000 Total: \$123,000
Prin. Invest.: J WANG
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6004 UNIV OF MARYLAND - COLL PARK 5149
 CHARACTERIZING LAND-COVER HETEROGENEITY AND LAND-C SENSOR
 SATELLITE DATA
 08/28/1997 - 03/14/2001 FY02: -\$986 Total: \$572,948
Prin. Invest.: D DEFRIES
Tech. Officer: GSFC/G C GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6421 UNIV OF MARYLAND - COLL PARK 5150
 GLOBAL VEGETATION DYNAMICS
 09/26/1997 - 06/30/2001 FY02: -\$7,277 Total: \$686,152
Prin. Invest.: S D PRINCE
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6459 UNIV OF MARYLAND - COLL PARK 5151
 VALIDATING MODIS/MISR LAND SURFACE REFLECTING AND ALBEDO
 PRODUCTS
 10/14/1997 - 09/30/2001 FY02: -\$24 Total: \$360,505
Prin. Invest.: S LIANG
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6464 UNIV OF MARYLAND - COLL PARK 5152
 EOS VALIDATION ACTIVITY IN A DESERT ENCROACHMENT ZONE OF
 SUB-SAHEL AFRICA
 10/14/1997 - 09/30/2003 FY02: \$0 Total: \$495,819
Prin. Invest.: R PINKER
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6483 UNIV OF MARYLAND - COLL PARK 5153
 EVALUATION OF OPERATIONAL LONGWAVE RADIATION BUDGE T PARAM-
 ETERS USING THE GOES SOUNDERS
 11/18/1997 - 12/31/2001 FY02: -\$329,264 Total: \$510,584
Prin. Invest.: P ELLINGSON
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6547 **UNIV OF MARYLAND - COLL PARK** **5154**
 ORIGIN AND IMPACT OF NUCLEAR ACTIVITY IN GALAXIES (LTSA)
 10/29/1997 - 10/31/2003 FY02: \$33,300 Total: \$150,752
Prin. Invest.: S VEILLEUX
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6667 **UNIV OF MARYLAND - COLL PARK** **5155**
 EVALUATION OF ACCURACIES IN GEOPHYSICAL PARAMETERS DERIVED
 FROM PATHFINDER DATA
 12/10/1997 - 12/31/2001 FY02: \$0 Total: \$363,808
Prin. Invest.: P PINKER
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6682 **UNIV OF MARYLAND - COLL PARK** **5156**
 INTERANNUAL VARIABILITY, TRENDS, AND TRACER CORRELATIONS IN THE
 UARS DATA SET
 12/08/1997 - 11/30/2001 FY02: \$0 Total: \$158,542
Prin. Invest.: D B CONSIDINE
Tech. Officer: GSFC/A DOUGLASS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6699 **UNIV OF MARYLAND - COLL PARK** **5157**
 ENHANCED METADATA EXTRACTION FOR NASA'S REGIONAL VALIDATION
 CENTER SYSTEM.
 12/12/1997 - 03/31/2003 FY02: \$64,438 Total: \$254,208
Prin. Invest.: J JAJA
Tech. Officer: GSFC/J LEMONIGNE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 6750 **UNIV OF MARYLAND - COLL PARK** **5158**
 ANALYSIS TOOLS FOR IR LINE AND CONTINUUM OBSERVATIONS; COBE
 AND THE STRUCTURE OF THE GALACTIC I
 01/12/1998 - 01/14/2002 FY02: -\$1,693 Total: \$206,454
Prin. Invest.: M WOLFIRE
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6970 **UNIV OF MARYLAND - COLL PARK** **5159**
 MACHINE LEARNING TO IMPROVE LAND COVER CLASSIFICATIONS FROM
 MULTISENSOR AND MULTITEMPORAL DATA
 03/12/1998 - 09/30/2001 FY02: \$0 Total: \$305,083
Prin. Invest.: R E DEFRIES
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7058 **UNIV OF MARYLAND - COLL PARK** **5160**
 ICE FLOW IN THE NORTHEAST GREENLAND ICE STREAM: MEASUREMENT
 AND ANALYSIS
 03/04/1998 - 02/28/2003 FY02: \$0 Total: \$272,998
Prin. Invest.: M FAHNESTOCK
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7141 **UNIV OF MARYLAND - COLL PARK** **5161**
 PIONEER 10/11 AND ULYSSES STUDY OF ENERGETIC PARTICLES IN THE
 HELIOSPHERE
 03/12/1998 - 02/28/2001 FY02: -\$392 Total: \$329,108
Prin. Invest.: F B MCDONALD
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7145 **UNIV OF MARYLAND - COLL PARK** **5162**
 EMISSION PROCESSES ASSOCIATED WITH SOLAR TYPE III R ADIO BURSTS
 03/23/1998 - 04/14/2002 FY02: \$0 Total: \$162,414
Prin. Invest.: T GOLLA
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7263 **UNIV OF MARYLAND - COLL PARK** **5163**
 VERTICAL TRANSPORT PROCESSES IN THE SASS/GMI CHEMICAL
 TRANSPORT MODEL: DEVELOPMENT, EVALUATION, AN
 04/29/1998 - 04/30/2002 FY02: \$0 Total: \$170,883
Prin. Invest.: K PICKERING
Tech. Officer: GSFC/R W STEWART
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7419 **UNIV OF MARYLAND - COLL PARK** **5164**
 SIMULATION OF RADIOACTIVE TRACERS TO EVALUATE TRANSPORT AND
 SCAVENGING IN THE GMI CORE MODEL
 06/29/1998 - 04/30/2001 FY02: \$0 Total: \$162,321
Prin. Invest.: D CONSIDINE
Tech. Officer: GSFC/R W STEWART
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7425 **UNIV OF MARYLAND - COLL PARK** **5165**
 FUSION OF AVHRR AND SEAWIFS DATA
 05/26/1998 - 10/31/2000 FY02: -\$129 Total: \$168,645
Prin. Invest.: S D PRINCE
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7587 **UNIV OF MARYLAND - COLL PARK** **5166**
 TERRESTRIAL ENVIRONMENTAL VARIABLES DERIVED FROM EOS PLAT-
 FORM
 06/29/1998 - 07/31/2001 FY02: -\$7,173 Total: \$234,644
Prin. Invest.: S N GOWARD
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7634 **UNIV OF MARYLAND - COLL PARK** **5167**
 ISOTOPIC AND GEOCHEMICAL INVESTIGATIONS OF METEORITES
 09/10/1998 - 07/31/2002 FY02: \$0 Total: \$209,000
Prin. Invest.: R J WALKER
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7762 **UNIV OF MARYLAND - COLL PARK** **5168**
 WIND/SOHO GUEST OBSERVER PROGRAM FOR STUDY OF SOLAR ENER-
 GETIC PARTICLES AND GALACTIC
 12/24/1998 - 09/30/2002 FY02: \$0 Total: \$251,100
Prin. Invest.: F B MCDONALD
Tech. Officer: GSFC/M GUHATHAKURTA
CASE Category: 11 – ASTRONOMY

NAG 5 7842 **UNIV OF MARYLAND - COLL PARK** **5169**
 OBSERVING SYSTEM SIMULATION EXPERIMENTS AND 4DDA ASSOCIATED
 WITH CAMEX3
 11/27/1998 - 11/30/2001 FY02: \$0 Total: \$270,000
Prin. Invest.: D ZHANG
Tech. Officer: GSFC/A F NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 7958 UNIV OF MARYLAND - COLL PARK 5170
 DYNAMICS OF DUST IN THE JOVIAN SYSTEM
 01/27/1999 - 02/28/2001 FY02: \$0 Total: \$99,321
Prin. Invest.: D P HAMILTON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8033 UNIV OF MARYLAND - COLL PARK 5171
 SUPPORT OF DATA ACCESS FOR THE IMP-8 UMD EXPERIMENT
 01/19/1999 - 01/31/2002 FY02: \$0 Total: \$16,937
Prin. Invest.: F IPAVICH
Tech. Officer: GSFC/J KING
CASE Category: 11 – ASTRONOMY

NAG 5 8079 UNIV OF MARYLAND - COLL PARK 5172
 A PROPOSAL TO ASSIST IN THE INTERPRETATION OF DATA FROM THE
 COSMIC RAY ISOTOPE SPECTROMETER EXPERIMENT
 01/14/1999 - 12/31/2001 FY02: \$0 Total: \$140,400
Prin. Invest.: D LUKASIAK
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NAG 5 8121 UNIV OF MARYLAND - COLL PARK 5173
 GENERATION OF A CONSISTENT TERRESTRIAL NET PRIMARY PRODUCTION
 DATA SET: PART II
 01/26/1999 - 12/31/2001 FY02: \$0 Total: \$187,510
Prin. Invest.: S D PRINCE
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8177 UNIV OF MARYLAND - COLL PARK 5174
 DISTRIBUTION OF IJRS SPECIAL ISSUE ON GLOBAL AND REGIONAL LAND
 COVER CHARACTERIZATION FROM REMOTE SENSING
 02/09/1999 - 12/31/2000 FY02: \$0 Total: \$15,037
Prin. Invest.: R DEFRIES
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8179 UNIV OF MARYLAND - COLL PARK 5175
 INTERNATIONAL FORUM ON BRDF
 02/12/1999 - 12/30/2000 FY02: -\$493 Total: \$14,500
Prin. Invest.: S LIANG
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8192 UNIV OF MARYLAND - COLL PARK 5176
 RESEARCH IN SOLAR RADIO ASTRONOMY AT SHORT WAVELENGTHS
 05/13/1999 - 05/31/2003 FY02: \$0 Total: \$342,214
Prin. Invest.: M R KUNDU
Tech. Officer: GSFC/W J WAGNER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8230 UNIV OF MARYLAND - COLL PARK 5177
 COMPARISON OF THE RADIATIVE AND PHYSIOLOGICAL EFFECTS OF
 DOUBLED CO2 ON THE GLOBAL CLIMATE AND DEVELOPMENT
 03/01/1999 - 11/30/2000 FY02: \$0 Total: \$151,808
Prin. Invest.: L BOUNOUA
Tech. Officer: GSFC/J G COLLATZ
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8263 UNIV OF MARYLAND - COLL PARK 5178
 SALINITY EFFECTS ON INTRA-SEASONAL TO INTERANNUAL VARIABILITY
 OF A COUPLED CLIMATE PREDICTION MODEL
 02/22/1999 - 12/31/2002 FY02: \$0 Total: \$429,840
Prin. Invest.: R MURTUGUDDE
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8289 UNIV OF MARYLAND - COLL PARK 5179
 DYNAMICAL DIAGNOSIS OF THE NSIPP ATMOSPHERIC AND COUPLED
 MODEL SIMULATIONS
 02/24/1999 - 02/28/2003 FY02: \$0 Total: \$302,305
Prin. Invest.: S NIGAM
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8366 UNIV OF MARYLAND - COLL PARK 5180
 SURFACE RADIATION BUDGETS FOR LBA
 03/08/1999 - 02/28/2003 FY02: \$96,435 Total: \$386,480
Prin. Invest.: R T PINKER
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8398 UNIV OF MARYLAND - COLL PARK 5181
 CONDUCT RESEARCH IN RAREFIED GAS DYNAMICS TO SUPPORT THE
 DEVELOPMENT OF NASA'S GLOBAL ELECTRODYNAMICS MODEL
 05/10/1999 - 05/14/2003 FY02: \$0 Total: \$150,000
Prin. Invest.: D J LEWIS
Tech. Officer: GSFC/J FLORA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8459 UNIV OF MARYLAND - COLL PARK 5182
 EQ-S MISSIONS OPERATIONS AND DATA ANALYSIS
 04/19/1999 - 04/14/2002 FY02: \$0 Total: \$139,871
Prin. Invest.: J DRAKE
Tech. Officer: GSFC/M HESSE
CASE Category: 13 – PHYSICS

NAG 5 8528 UNIV OF MARYLAND - COLL PARK 5183
 ENSEMBLE OCEAN-ATMOSPHERE PERTURBATIONS WITH GROWING
 ENSO USING BREEDING
 05/26/1999 - 05/31/2003 FY02: \$0 Total: \$584,118
Prin. Invest.: E KALNAY
Tech. Officer: GSFC/M RIENECKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8595 UNIV OF MARYLAND - COLL PARK 5184
 PHYSICAL & BIOGEOCHEMICAL PROCESSES WITH THE INDIA OCEAN: A
 STUDY OF ANNUAL & INTERANNUAL VARIABILITY
 06/07/1999 - 11/30/2001 FY02: \$0 Total: \$272,923
Prin. Invest.: R MURTUGUDDE
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8596 UNIV OF MARYLAND - COLL PARK 5185
 YEAR 1 FUNDING FROM HPCC/ESS PROJECT FOR PROPOSAL TITLE: AN
 ADAPTIVE MHD CODE BASED ON CHARACTERIZATION
 06/11/1999 - 06/14/2002 FY02: \$0 Total: \$146,327
Prin. Invest.: A DEANE
Tech. Officer: GSFC/J R FISCHER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8621 **UNIV OF MARYLAND - COLL PARK** **5186**
 ANALYSIS OF DATA FROM THE SWE EXPERIMENT ON THE WIND SPACE-
 CRAFT
 06/16/1999 - 03/31/2001 FY02: -\$384 Total: \$30,760
Prin. Invest.: M COPLAN
Tech. Officer: GSFC/K OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8678 **UNIV OF MARYLAND - COLL PARK** **5187**
 ROLE OF GRAY SQUIRRELS IN MAINTAINING LIFE CYCLE
 07/09/1999 - 08/31/2002 FY02: \$0 Total: \$18,885
Prin. Invest.: L W ADAMS
Tech. Officer: GSFC/D E WALTER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 8764 **UNIV OF MARYLAND - COLL PARK** **5188**
 MODELS & ALGORITHMS FOR FOREST DYNAMIC STUDIES IN SIBERIA &
 NORTHEASTERN CHINA USING MULTI-SATELLITE
 09/10/1999 - 11/30/2002 FY02: \$0 Total: \$224,080
Prin. Invest.: G SUN
Tech. Officer: GSFC/K J RANSON
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 8833 **UNIV OF MARYLAND - COLL PARK** **5189**
 THE REDSHIFT DEPENDENCE OF THE INTERACTION- ACTIVITY CONNEC-
 TION AMONG ULTRALUMINOUS STARBURST
 09/12/2000 - 09/14/2003 FY02: \$0 Total: \$17,432
Prin. Invest.: P J TEUBEN
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8842 **UNIV OF MARYLAND - COLL PARK** **5190**
 AWARD FUNDING TO THE UNIV OF MARYLAND FOR PROPOSAL ENTITLED
 "OCTOBER ASTROPHYSICS CONFER
 09/24/1999 - 09/30/2004 FY02: \$0 Total: \$75,000
Prin. Invest.: J D TRASCO
Tech. Officer: GSFC/D NORTON
CASE Category: 11 – ASTRONOMY

NAG 5 8877 **UNIV OF MARYLAND - COLL PARK** **5191**
 SOLAR CYCLE DYNAMICS STUDIES WITH SAMPEX
 11/24/1999 - 11/30/2003 FY02: \$501,372 Total: \$2,051,372
Prin. Invest.: G MASON
Tech. Officer: GSFC/T VON ROSENVINGE
CASE Category: 11 – ASTRONOMY

NAG 5 8936 **UNIV OF MARYLAND - COLL PARK** **5192**
 AN INVESTIGATION OF TROPICAL UPPER TROPOSPHERIC HUMIDITY
 01/18/2000 - 11/30/2003 FY02: \$118,587 Total: \$377,742
Prin. Invest.: A DESSLER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9075 **UNIV OF MARYLAND - COLL PARK** **5193**
 ULTRA-WIDEBAND MICROWAVE SPECTROMETERS FOR HETEROD YNE
 SPECTROSCOPY
 02/16/2000 - 02/28/2003 FY02: \$40,000 Total: \$268,000
Prin. Invest.: A HARRIS
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9108 **UNIV OF MARYLAND - COLL PARK** **5194**
 MAGNETIC RECONNECTION & ASSOCIATED WAVE & PARTICLE SIGNA-
 TURES IN COLLISIONLESS PLASMA
 02/23/2000 - 02/28/2003 FY02: \$94,796 Total: \$270,958
Prin. Invest.: J F DRAKE
Tech. Officer: GSFC/J SHARBER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9150 **UNIV OF MARYLAND - COLL PARK** **5195**
 CENTER FOR SATELLITE AND HYBRID COMMUNICATION NETWORKS, NASA
 COMMERCIAL SPACE CENTER
 03/03/2000 - 09/01/2001 FY02: \$0 Total: \$1,000,000
Prin. Invest.: J BARAS
Tech. Officer: GSFC/R DEPAULA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9151 **UNIV OF MARYLAND - COLL PARK** **5196**
 UNDERGRADUATE AND GRADUATE STUDENT TRAINING IN AERONAUTICS
 RESEARCH (STAR)
 03/02/2000 - 02/28/2001 FY02: -\$18,952 Total: \$34,846
Prin. Invest.: M GAVRILAS
Tech. Officer: GSFC/M S BURRELL
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 5 9167 **UNIV OF MARYLAND - COLL PARK** **5197**
 EVOLUTIONARY MODELS OF COLD, MAGNETIZED, INTERSTEL LAR
 CLOUDS (ATP 99)
 03/15/2000 - 03/14/2003 FY02: \$95,547 Total: \$269,050
Prin. Invest.: E OSTRIKER
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9228 **UNIV OF MARYLAND - COLL PARK** **5198**
 ESTABLISHMENT OF CENTER FOR ADVANCED INFORMATION TECHNOL-
 OGY
 03/20/2000 - 02/28/2002 FY02: \$0 Total: \$2,000,000
Prin. Invest.: G L GEOFFROY
Tech. Officer: GSFC/M PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9271 **UNIV OF MARYLAND - COLL PARK** **5199**
 PDRS IN GALAXIES: FROM THE LOCAL UNIVERSE TO HIGH Z STARBURSTS
 (LTA 99)
 03/15/2000 - 03/14/2005 FY02: \$104,060 Total: \$234,837
Prin. Invest.: M WOLFIRE
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9282 **UNIV OF MARYLAND - COLL PARK** **5200**
 MISSION OPERATIONS & DATA ANALYSIS FOR THE CELIAS/ MT OF
 EXPERIMENT
 04/06/2000 - 04/30/2003 FY02: \$60,000 Total: \$810,000
Prin. Invest.: F IPAVICH
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9319 **UNIV OF MARYLAND - COLL PARK** **5201**
 AN INTEGRATED FOREST MONITORING SYSTEM FOR CENTRAL ASIA
 03/22/2000 - 03/31/2003 FY02: \$123,695 Total: \$325,415
Prin. Invest.: N LAPORTE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 9329 UNIV OF MARYLAND - COLL PARK 5202
 INTER-ANNUAL LAND SURFACE VARIATION
 03/24/2000 - 04/30/2003 FY02: \$56,151 Total: \$438,656
Prin. Invest.: S D PRINCE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9337 UNIV OF MARYLAND - COLL PARK 5203
 IMPROVEMENTS IN LANDSAT PATHFINDER METHODS FOR MONITORING
 TROPICAL DEFORESTATION & THEIR EXTENSION
 03/27/2000 - 04/30/2003 FY02: \$122,417 Total: \$413,765
Prin. Invest.: J R TOWNSHEND
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9338 UNIV OF MARYLAND - COLL PARK 5204
 MONITORING FOREST DYNAMICS IN NORTHEASTEN CHINA IN SUPPORT
 OF GOF C
 03/31/2000 - 04/30/2003 FY02: \$108,772 Total: \$285,213
Prin. Invest.: G SUN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9339 UNIV OF MARYLAND - COLL PARK 5205
 TOWARDS METHODOLOGIES FOR GLOBAL MONITORING OF FOREST
 COVER CHARACTERISTICS WITH COARSE
 03/31/2000 - 04/30/2003 FY02: \$113,395 Total: \$305,019
Prin. Invest.: R DEFRIES
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9411 UNIV OF MARYLAND - COLL PARK 5206
 UNDERSTANDING WATER, ENERGY AND CLIMATE: A GEWEX GLOBAL
 WATER & ENERGY BUDGET PATHFINDER DATA SET
 04/10/2000 - 04/30/2003 FY02: \$71,667 Total: \$150,000
Prin. Invest.: R DUBAYAH
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9440 UNIV OF MARYLAND - COLL PARK 5207
 CONTRIBUTION OF EMISSIONS FROM BOREAL FOREST FIRES
 04/13/2000 - 04/30/2003 FY02: \$217,286 Total: \$616,237
Prin. Invest.: K KASISCHKE
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9447 UNIV OF MARYLAND - COLL PARK 5208
 TERRESTRIAL HYDROLOGY & CLIMATE STUDIES USING EOS- ERA DATA
 04/12/2000 - 04/14/2003 FY02: \$29,865 Total: \$181,837
Prin. Invest.: R DUBAYAH
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9560 UNIV OF MARYLAND - COLL PARK 5209
 2000 ASEE-NASA SUMMER FACULTY FELLOWSHIP PROGRAM (AERONAU-
 TICS AND SPACE RESEARCH)
 05/09/2000 - 09/14/2001 FY02: \$0 Total: \$309,000
Prin. Invest.: M GAVRILAS
Tech. Officer: GSFC/M S BURRELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9575 UNIV OF MARYLAND - COLL PARK 5210
 THE PHYSICAL & CHEMICAL STRUCTURE OF CIRCUMSTELLAR DISKS &
 ENVELOPES
 05/10/2000 - 04/30/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: L MUNDY
Tech. Officer: GSFC/J BOYCE
CASE Category: 13 – PHYSICS

NAG 5 9620 UNIV OF MARYLAND - COLL PARK 5211
 A GLOBAL NETWORK OF SITES FOR ASSESSING BIOGEOCHEMICAL &
 BIOPHYSICAL CONSEQUENCES OF LAND COVER DIS
 05/18/2000 - 05/14/2003 FY02: \$48,333 Total: \$280,042
Prin. Invest.: R DEFRIES
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9632 UNIV OF MARYLAND - COLL PARK 5212
 INVESTIGATIONS OF THE TROPICAL TROPOPAUSE REGION
 06/07/2000 - 05/31/2003 FY02: \$104,650 Total: \$307,618
Prin. Invest.: A DESSLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9634 UNIV OF MARYLAND - COLL PARK 5213
 IMPROVED GLOBAL SCALE MODELS FOR SURFACE RADIATION BUDGETS
 05/26/2000 - 04/30/2003 FY02: \$197,333 Total: \$436,333
Prin. Invest.: R T PINKER
Tech. Officer: GSFC/R CURAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9672 UNIV OF MARYLAND - COLL PARK 5214
 TROPOSPHERIC CONVECTION & STRATOSPHERE-TROPOSPHERE EX-
 CHANGE: EFFECTS ON PHOTOCHEMISTRY, AEROSOLS
 06/12/2000 - 05/31/2003 FY02: \$265,023 Total: \$700,824
Prin. Invest.: K E PICKERING
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9750 UNIV OF MARYLAND - COLL PARK 5215
 "WIDE-FIELD IMAGING INTERFEROMETRY"
 07/20/2000 - 07/31/2003 FY02: \$23,500 Total: \$60,960
Prin. Invest.: L G MUNDY
Tech. Officer: GSFC/D LEISAWITZ
CASE Category: 11 – ASTRONOMY

NAG 5 9756 UNIV OF MARYLAND - COLL PARK 5216
 PERIODIC, QUASI-PERIODIC, AND BURSTING BEHAVIOR OF NEUTRON
 STAR X-RAY SOURCES
 06/28/2000 - 06/30/2002 FY02: \$0 Total: \$40,020
Prin. Invest.: M MILLER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9793 UNIV OF MARYLAND - COLL PARK 5217
 SUPRATHERMAL THROUGH ENERGETIC PARTICLE DETECTOR (STEP)
 SUBSYSTEM OF THE PACT EXPERIMENT ON THE WIN
 07/27/2000 - 01/31/2002 FY02: \$0 Total: \$62,000
Prin. Invest.: G M MASON
Tech. Officer: GSFC/T VONROSENINGE
CASE Category: 11 – ASTRONOMY

NAG 5 9809 **UNIV OF MARYLAND - COLL PARK** **5218**
 STUDY OF LAND-ATMOSPHERE INTERACTIONS USING SATEL- LITE DATA
 ASSIMILATION
 07/18/2000 - 01/31/2003 FY02: \$0 Total: \$46,561
Prin. Invest.: R DUBAYAH
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9827 **UNIV OF MARYLAND - COLL PARK** **5219**
 VARIABILITY ASSESSMENT OF TMI SNAPSHOTS & QUALITY CONTROLLING
 N-SENSOR DATA.
 08/23/2000 - 08/31/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: B KEDEM
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9890 **UNIV OF MARYLAND - COLL PARK** **5220**
 RAREFIED FLOW AERODYNAMICS FOR STABILITY & CONTROL OF
 FORMATION-FLYINGSATELLITES
 08/23/2000 - 08/31/2003 FY02: \$0 Total: \$150,000
Prin. Invest.: M J LEWIS
Tech. Officer: GSFC/M CONCHA
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 9892 **UNIV OF MARYLAND - COLL PARK** **5221**
 NASA-CENTRAL AFRICAN REGIONAL PROGRAM FOR THE ENVI RONMENT
 (CARPE) ACTIVITY
 08/24/2000 - 08/31/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: C O JUSTICE
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9893 **UNIV OF MARYLAND - COLL PARK** **5222**
 CARPE FOREST COVER & INFORMATION SYSTEM - REVISED
 08/29/2000 - 08/31/2001 FY02: \$0 Total: \$205,306
Prin. Invest.: C O JUSTICE
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9916 **UNIV OF MARYLAND - COLL PARK** **5223**
 REPROCESSING OF GOES NOAA/NESDIS SURFACE RADIATION BUDGET
 PRODUCTS FOR GCIP
 09/01/2000 - 08/31/2003 FY02: \$200,000 Total: \$300,000
Prin. Invest.: R T PINKER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9935 **UNIV OF MARYLAND - COLL PARK** **5224**
 X-RAY PERIODOCOTY & THE BROAD IRON K LINE IN IRAS 18325-5926
 09/06/2000 - 09/14/2002 FY02: \$0 Total: \$10,500
Prin. Invest.: A J YOUNG
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9961 **UNIV OF MARYLAND - COLL PARK** **5225**
 PRECISION RIGID BODY CONTROL OF A SATELLITE CONSTE LLATION.
 09/20/2000 - 09/30/2001 FY02: \$0 Total: \$70,000
Prin. Invest.: E M ATKINS
Tech. Officer: GSFC/T STENGLE
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 10090 **UNIV OF MARYLAND - COLL PARK** **5226**
 COMPARISON OF THE RADIATIVE & PHYSIOLOGICAL EFFECT OF DOUBLED
 CO2 ON THE GLOBAL CLIMATE & THE
 11/29/2000 - 12/31/2003 FY02: \$87,259 Total: \$170,062
Prin. Invest.: L BOUNOUA
Tech. Officer: GSFC/G J COLLATZ
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10097 **UNIV OF MARYLAND - COLL PARK** **5227**
 INTEGRATING RADAR DATA WITH OTHER SATELLITE IMAGERGY TO ESTI-
 MATE NET PRIMARYPRODUCTIVITY IN
 11/20/2000 - 10/31/2002 FY02: \$133,608 Total: \$275,308
Prin. Invest.: E KASISCHKE
Tech. Officer: GSFC/K PARTINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10126 **UNIV OF MARYLAND - COLL PARK** **5228**
 RECENT ADVANCES IN REMOTE SENSING OF BIOPHYSICAL VARIABLES
 12/11/2000 - 12/14/2002 FY02: \$0 Total: \$5,920
Prin. Invest.: S GOETZ
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10175 **UNIV OF MARYLAND - COLL PARK** **5229**
 MILLIMETER OBSERVATIONS OF MEV-ENERGY ELECTRONS IN CONJUNC-
 TION WITH THE HESSI MISSION
 12/18/2000 - 12/31/2002 FY02: \$68,922 Total: \$137,822
Prin. Invest.: S WHITE
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10179 **UNIV OF MARYLAND - COLL PARK** **5230**
 MICROWAVE EMISSION DEPTH IN FIRN AND LONG-TERM ACC UMULATION
 RATES FROM INTERNAL LAYER DISTRIBUTION
 01/10/2001 - 02/28/2003 FY02: \$0 Total: \$111,438
Prin. Invest.: M FAHNESTOCK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10180 **UNIV OF MARYLAND - COLL PARK** **5231**
 SOLAR FLARE PHYSICS
 01/11/2001 - 01/14/2006 FY02: \$119,571 Total: \$233,459
Prin. Invest.: E J SCHUMAHL
Tech. Officer: GSFC/B DENNIS
CASE Category: 11 – ASTRONOMY

NAG 5 10235 **UNIV OF MARYLAND - COLL PARK** **5232**
 NASA/UMD: MONITORING THE STATE OF THE RAINFOREST IN THE REPUB-
 LIC DEMOCRATIC OF THE CONGO
 02/05/2001 - 02/14/2003 FY02: \$0 Total: \$45,291
Prin. Invest.: C J TUCKER
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10298 **UNIV OF MARYLAND - COLL PARK** **5233**
 NONLOCAL KINETIC ANALYSIS OF MAGNETOTAL THIN CURR ENT SHEET
 STRUCTURE & DYNAMICS DURING SUBSTORMS
 01/24/2001 - 01/31/2004 FY02: \$78,321 Total: \$160,644
Prin. Invest.: S SHARMA
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 10388 UNIV OF MARYLAND - COLL PARK 5234
 IMPROVED SIBERIAN LANDSCAPE MAPPING USING SRTM AND VCL DATA
 02/08/2001 - 02/14/2003 FY02: \$25,000 Total: \$50,000
Prin. Invest.: G SUN
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10425 UNIV OF MARYLAND - COLL PARK 5235
 ISOTOPIC & GEOCHEMICAL INVESTIGATIONS OF METEORITES
 02/15/2001 - 07/31/2004 FY02: \$80,000 Total: \$155,000
Prin. Invest.: R WALKER
Tech. Officer: GSFC/J M BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10502 UNIV OF MARYLAND - COLL PARK 5236
 NANOTECHNOLOGY OPTICS FOR INFRARED ASTRONOMY
 02/28/2001 - 05/31/2002 FY02: -\$5,888 Total: \$5,887
Prin. Invest.: L G MUNDY
Tech. Officer: GSFC/M M FREUND
CASE Category: 11 – ASTRONOMY

NAG 5 10527 UNIV OF MARYLAND - COLL PARK 5237
 SATELLITE MAPPING OF THE AFRICAN & ASIAN ARID & SEMI-ARID
 BOUNDARIES
 03/09/2001 - 09/14/2002 FY02: \$0 Total: \$75,636
Prin. Invest.: D R TOWNSEND
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10540 UNIV OF MARYLAND - COLL PARK 5238
 MISSION OPERATIONS & DATA ANALYSIS FOR THE SOLAR WIND &
 SUPRATHERMAL ION COMPOSITION INVESTIGATION
 03/22/2001 - 03/14/2002 FY02: \$0 Total: \$175,000
Prin. Invest.: G GLOEKLER
Tech. Officer: GSFC/M ACUNA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10563 UNIV OF MARYLAND - COLL PARK 5239
 AUTOMATION OF SAMPEX ORBIT DETERMINATION
 03/19/2001 - 09/14/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: B SHAPIRO
Tech. Officer: GSFC/J TOTH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10585 UNIV OF MARYLAND - COLL PARK 5240
 CHAPMAN CONFERENCE ON STORM -SUBSTORMS RELATION SHIPS:
 TRAVEL GRANT
 03/13/2001 - 01/14/2002 FY02: \$0 Total: \$10,000
Prin. Invest.: A S SHARMA
Tech. Officer: GSFC/M GUHATHAKURTA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10596 UNIV OF MARYLAND - COLL PARK 5241
 NEW ISTEP THEORY GRANT
 03/16/2001 - 03/31/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: K PAPAPOULIS
Tech. Officer: GSFC/S CURTIS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10611 UNIV OF MARYLAND - COLL PARK 5242
 THE STRUCTURE OF YOUNG STELLAR SYSTEMS: ESTABLISHING THE
 INITIAL CONDITIONS FOR PLANET FORMATION
 03/17/2001 - 03/31/2004 FY02: \$45,000 Total: \$90,000
Prin. Invest.: L MUNDY
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10626 UNIV OF MARYLAND - COLL PARK 5243
 ADVANCED MHD MODELS FOR SOLAR WIND TURBULENCE
 03/22/2001 - 03/31/2004 FY02: \$186,628 Total: \$340,102
Prin. Invest.: A DEANE
Tech. Officer: GSFC/D GOLDSTEIN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10746 UNIV OF MARYLAND - COLL PARK 5244
 SEA ICE VARIABILITY, TRENDS AND CLIMATE CHANGE
 04/17/2001 - 04/30/2004 FY02: \$65,000 Total: \$130,000
Prin. Invest.: K Y VINNIKOV
Tech. Officer: GSFC/D CAVALIERI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10751 UNIV OF MARYLAND - COLL PARK 5245
 WITS: THE WEB INFRARED TOOLSHED.
 04/13/2001 - 04/14/2004 FY02: \$80,000 Total: \$140,000
Prin. Invest.: M G WOLFIRE
Tech. Officer: GSFC/P E HUNTER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10810 UNIV OF MARYLAND - COLL PARK 5246
 RADIO & PLASMA WAVES ASSOCIATED WITH CORONAL MASS EJECTIONS
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: T GOLLA
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 10819 UNIV OF MARYLAND - COLL PARK 5247
 APPLICATIONS IN DEPLOYMENT DYNAMICS AND CONTROL
 04/24/2001 - 09/30/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: P KRISHNAPRASAD
Tech. Officer: GSFC/D FOLTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10858 UNIV OF MARYLAND - COLL PARK 5248
 LAND COVER LAND USE CHANGE PROJECT SCIENTIST SUPPORT
 05/03/2001 - 04/30/2004 FY02: \$239,637 Total: \$437,302
Prin. Invest.: C JUSTICE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10859 UNIV OF MARYLAND - COLL PARK 5249
 INTER-COMPARISON OF GLOBAL SCALE ECOLOGICAL MODELS
 05/02/2001 - 07/31/2002 FY02: \$33,000 Total: \$100,000
Prin. Invest.: S PRINCE
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10882 UNIV OF MARYLAND - COLL PARK 5250
 PREDICTION OF THE THREE DIMENSIONAL STRUCTURE OF THE SOLAR
 WIND AT THE EARTH FROM L1 ORBIT
 05/03/2001 - 04/30/2003 FY02: \$105,907 Total: \$204,593
Prin. Invest.: C S GOODRICH
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10895 **UNIV OF MARYLAND - COLL PARK** **5251**
 TOWARDS UNDERSTANDING STARBURST GALAXIES AT LOW & HIGH
 REDSHIFT (FUZE 2000)
 05/14/2001 - 05/31/2003 FY02: \$0 Total: \$36,000
Prin. Invest.: T LANZ
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10898 **UNIV OF MARYLAND - COLL PARK** **5252**
 DEVELOPMENT OF ALGORITHMS FOR MONITORING & MAPPING FIRE
 BURNED AREAS OF NORTH AMERICA'S BOREAL & TEM
 05/22/2001 - 04/30/2003 FY02: \$53,602 Total: \$142,320
Prin. Invest.: L ZHANQUING
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10929 **UNIV OF MARYLAND - COLL PARK** **5253**
 SOLAR ULTRAVIOLET RADIATION AND THE ORIGIN OF LIFE ON EARTH
 (FUZE 2000)
 05/14/2001 - 05/31/2003 FY02: \$0 Total: \$35,000
Prin. Invest.: T LANZ
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10958 **UNIV OF MARYLAND - COLL PARK** **5254**
 ANALYSIS OF SOLAR WIND DATA FROM MTOFON SOHO & SWE ON WIND
 05/30/2001 - 12/31/2002 FY02: \$0 Total: \$25,703
Prin. Invest.: M COPLAN
Tech. Officer: GSFC/K OGILVIE
CASE Category: 13 – PHYSICS

NAG 5 10959 **UNIV OF MARYLAND - COLL PARK** **5255**
 IMPROVING HURRICANE FORECASTS THROUGH 3D RETRIEVAL & 4D VAR
 ASSIMILATION IN THE GEOS DATA SYSTEM ASS
 06/04/2001 - 06/14/2004 FY02: \$98,821 Total: \$198,821
Prin. Invest.: D ZHANG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10981 **UNIV OF MARYLAND - COLL PARK** **5256**
 INTRASEASONAL VARIABILITY IN THE INDIAN OCEAN
 05/31/2001 - 06/30/2004 FY02: \$35,002 Total: \$65,002
Prin. Invest.: R MURTUGUDDE
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11054 **UNIV OF MARYLAND - COLL PARK** **5257**
 STUDIES OF THE SOLAR MODULATION OF GALACTIC AND ANOMALOUS
 COSMIC RAYS IN THE HELIOSPHERE
 06/20/2001 - 06/14/2004 FY02: \$70,000 Total: \$140,000
Prin. Invest.: F B MCDONALD
Tech. Officer: GSFC/W J WAGNER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11091 **UNIV OF MARYLAND - COLL PARK** **5258**
 THE PROPAGATION OF HIGH-ENERGY COSMIC RAYS IN THE GALAXY
 07/06/2001 - 07/14/2004 FY02: \$60,000 Total: \$110,000
Prin. Invest.: F B MCDONALD
Tech. Officer: GSFC/F C JONES
CASE Category: 11 – ASTRONOMY

NAG 5 11149 **UNIV OF MARYLAND - COLL PARK** **5259**
 SPATIAL PREDICTIVE MODELING AND REMOTE SENSING OF LAND USE
 CHANGE IN THE CHESAPEAKE BAY WATERSHED
 07/26/2001 - 08/14/2004 FY02: \$135,338 Total: \$212,004
Prin. Invest.: N BOCKSTAEL
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11151 **UNIV OF MARYLAND - COLL PARK** **5260**
 GLOBAL 3D MODEL STUDIES OF POLAR PROCESSES & RADI ONUCLIDES
 WITH APPLICATION TO THE GLOBAL
 07/27/2001 - 07/31/2004 FY02: \$0 Total: \$77,909
Prin. Invest.: K PICKERING
Tech. Officer: GSFC/P DE COLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11161 **UNIV OF MARYLAND - COLL PARK** **5261**
 LAND USE LAND CHANGE AROUND PROTECTED AREAS IN LCL UC SITES:
 SYNTHESIS OF RATES, CONSEQUENCES FOR
 08/08/2001 - 08/14/2004 FY02: \$75,693 Total: \$101,095
Prin. Invest.: R DEFRIES
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11246 **UNIV OF MARYLAND - COLL PARK** **5262**
 EVALUATION OF ASIAN OUTFLOW USING A STRETCHED GRID CTM
 08/16/2001 - 08/14/2004 FY02: \$0 Total: \$50,343
Prin. Invest.: D ALLEN
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11247 **UNIV OF MARYLAND - COLL PARK** **5263**
 TRENDS IN TOTAL AND PROFILE OZONE SORTED BY METEOROLOGICAL
 REGIMES
 08/16/2001 - 08/14/2004 FY02: \$0 Total: \$99,999
Prin. Invest.: R HUDSON
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11251 **UNIV OF MARYLAND - COLL PARK** **5264**
 BURNED AREA MAPPING IN SOUTHERN AFRICA: CASE STUDY SYNTHESIS
 AND REGIONAL APPLICATION OF MOD
 08/20/2001 - 08/14/2004 FY02: \$181,447 Total: \$313,019
Prin. Invest.: D ROY
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11252 **UNIV OF MARYLAND - COLL PARK** **5265**
 BEYOND POTENTIAL VEGETATION: IMPROVING MODEL CARBON PROJEC-
 TIONS OF THE LAND SURFACE USING LUDAR RE
 08/20/2001 - 08/14/2004 FY02: \$163,477 Total: \$242,106
Prin. Invest.: R DUBAYAH
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11274 **UNIV OF MARYLAND - COLL PARK** **5266**
 MOORING BASED OPTICAM MEASUREMENTS IN THE TROPICAL ATLANTIC
 OCEAN
 08/22/2001 - 08/31/2002 FY02: \$0 Total: \$60,522
Prin. Invest.: A SUBRAMANIAN
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 11276 UNIV OF MARYLAND - COLL PARK 5267
 REPRESENTATION IN THE GMI MODEL AND EFFECTS ON CHE MISTRY AND CLIMATE
 08/22/2001 - 08/31/2004 FY02: \$0 Total: \$54,842
Prin. Invest.: K PICKERING
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11577 UNIV OF MARYLAND - COLL PARK 5275
 "CLIMATE STUDIES ON VARIABILITY AND PREDICTABILITY OF WATER AND ENERGY CYCLES USING A VARIABLE RES
 01/16/2002 - 01/14/2005 FY02: \$128,000 Total: \$128,000
Prin. Invest.: E BERBERY
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11291 UNIV OF MARYLAND - COLL PARK 5268
 AN INVESTIGATION OF THE INDO-PACIFIC CLIMATE IN TH E NSIPP COUPLED CLIMATE SYSTEM
 08/22/2001 - 08/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: R WAJSOWICZ
Tech. Officer: GSFC/M RIENECKER
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11600 UNIV OF MARYLAND - COLL PARK 5276
 FRESH WATER FLUXES OF THE OB' RIVER, RUSSIA: CONTR IBUTION OF SNOWPACK IN COMPLEX TERRAIN.
 01/28/2002 - 01/31/2005 FY02: \$93,000 Total: \$93,000
Prin. Invest.: K L BRUBAKER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11306 UNIV OF MARYLAND - COLL PARK 5269
 GLOBAL FOREST COVER ASSESSMENT
 08/31/2001 - 08/31/2003 FY02: \$0 Total: \$240,266
Prin. Invest.: J TOWNSHEND
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11654 UNIV OF MARYLAND - COLL PARK 5277
 GLOBAL EARTHQUAKE SATELLITE SYSTEM REQUIREMENTS DE RIVED FROM A SUITE OF SCIENTIFIC OBSERVATIONAL AN
 02/01/2002 - 01/31/2003 FY02: \$11,180 Total: \$11,180
Prin. Invest.: M HOFTON
Tech. Officer: GSFC/B F CHAO
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11313 UNIV OF MARYLAND - COLL PARK 5270
 OPTIMAL PLANNING & CONTROL OF A VIRTUAL RIGID BODY SATELLITE CONSTELLATION.
 09/05/2001 - 09/14/2002 FY02: \$0 Total: \$82,630
Prin. Invest.: R SANNER
Tech. Officer: GSFC/S STRARIN
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 11672 UNIV OF MARYLAND - COLL PARK 5278
 CARPE FOREST COVER AND INFORMATION SYSTEM
 01/30/2002 - 01/31/2003 FY02: \$253,500 Total: \$253,500
Prin. Invest.: C JUSTICE
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11399 UNIV OF MARYLAND - COLL PARK 5271
 BIODIVERSITY SURVEY OF GODDARD SPACE FLIGHT CENTER
 11/27/2001 - 11/30/2003 FY02: \$45,066 Total: \$45,066
Prin. Invest.: L W ADAMS
Tech. Officer: GSFC/D E SQUIBB
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 5 11693 UNIV OF MARYLAND - COLL PARK 5279
 ANALYSIS OF ISTEP EVENTS FOR STRONG GEOMAGNETIC ACT IVITY
 02/12/2002 - 02/14/2003 FY02: \$212,690 Total: \$212,690
Prin. Invest.: K PAPANOLOPOUS
Tech. Officer: GSFC/S A CURTIS
CASE Category: 13 – PHYSICS

NAG 5 11468 UNIV OF MARYLAND - COLL PARK 5272
 INFRARED OBSERVATIONS OF COMETARY DUST AND NUCLEI
 12/10/2001 - 01/31/2004 FY02: \$175,281 Total: \$175,281
Prin. Invest.: C M LISSE
Tech. Officer: GSFC/J J HILMAN
CASE Category: 11 – ASTRONOMY

NAG 5 11698 UNIV OF MARYLAND - COLL PARK 5280
 COUPLING SATELLITE REMOTE SENSING & UNSTEADY FLOW MODELING FOR DISCHARGEESTIMATION.
 02/12/2002 - 09/30/2002 FY02: \$8,032 Total: \$8,032
Prin. Invest.: C BIRKETT
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11523 UNIV OF MARYLAND - COLL PARK 5273
 CONTEMPORANEOUS XMM AND HST OBSERVATIONS OF SEYFER T GAL-AXIES
 01/08/2002 - 11/14/2003 FY02: \$22,600 Total: \$22,600
Prin. Invest.: C S REYNOLDS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11699 UNIV OF MARYLAND - COLL PARK 5281
 EFFECTS OF FRESHWATER FORCING ON SEASONAL-TO-INTER ANNUAL VARIABILITY OF TROPICAL OCEANS AND ECOSYST
 02/12/2002 - 09/30/2004 FY02: \$26,053 Total: \$26,053
Prin. Invest.: C BIRKETT
Tech. Officer: GSFC/A J BUSSALACCHI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11544 UNIV OF MARYLAND - COLL PARK 5274
 OXYGEN ISOTOPE STUDY OF CARBONATE AND SULFATE IN CARBON-ACEOUS CHONDRITES
 01/04/2002 - 12/31/2004 FY02: \$55,000 Total: \$55,000
Prin. Invest.: J FARGUHAR
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11700 UNIV OF MARYLAND - COLL PARK 5282
 FLOODS AND DROUGHTS IN AFRICA: RELATION TO SHORT- TERM CLIMATE VARIABILITY.
 02/12/2002 - 09/30/2004 FY02: \$91,201 Total: \$91,201
Prin. Invest.: C M BIRKETT
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11722	UNIV OF MARYLAND - COLL PARK	5283	NAG 5 11994	UNIV OF MARYLAND - COLL PARK	5292
RUBBLE PILE DYNAMICS			COMPUTATIONAL FRAMEWORK FOR LWS.		
02/11/2002 - 02/14/2005	FY02: \$45,000	Total: \$45,000	05/30/2002 - 04/30/2003	FY02: \$100,000	Total: \$100,000
<i>Prin. Invest.:</i> D C RICHARDSON			<i>Prin. Invest.:</i> C C GOODRICH		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> GSFC/P E HUNTER		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11767	UNIV OF MARYLAND - COLL PARK	5284	NAG 5 12011	UNIV OF MARYLAND - COLL PARK	5293
MAGNETOHYDRODYNAMICS OF DUSTY PROTOSTELLAR DISKS			"ELECTROMECHANICAL CHARACTERIZATION OF MEMS MATERIALS AT CRYOGENIC TEMPERATURE"		
02/21/2002 - 02/28/2005	FY02: \$50,000	Total: \$50,000	04/16/2002 - 04/30/2004	FY02: \$60,000	Total: \$60,000
<i>Prin. Invest.:</i> J M STONE			<i>Prin. Invest.:</i> R GHODSSI		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> GSFC/T T KING		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR		
NAG 5 11786	UNIV OF MARYLAND - COLL PARK	5285	NAG 5 12063	UNIV OF MARYLAND - COLL PARK	5294
BIOMASS BURNING EMISSIONS WORKSHOP			DATA ANALYSIS, SCIENTIFIC INTERPRETATION, AND MISS ION OPERATIONS FOR SOHO/CELIAS		
02/22/2002 - 02/28/2004	FY02: \$37,092	Total: \$37,092	05/07/2002 - 05/14/2004	FY02: \$400,000	Total: \$400,000
<i>Prin. Invest.:</i> E KASISCHKE			<i>Prin. Invest.:</i> F M IPAVICH		
<i>Tech. Officer:</i> GSFC/D WICKLAND			<i>Tech. Officer:</i> GSFC/J GURMAN		
<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER		
NAG 5 11812	UNIV OF MARYLAND - COLL PARK	5286	NAG 5 12073	UNIV OF MARYLAND - COLL PARK	5295
MISSION OPERATIONS AND DATA ANALYSIS (MO&DA PHASE) FOR THE SOLAR WIND AND SUPRATHERMAL ION COMPOSITION			INVESTIGATION OF DEEP CUMULUS FORMATION DURING CRYSTAL		
02/28/2002 - 03/31/2005	FY02: \$65,000	Total: \$65,000	04/23/2002 - 04/14/2004	FY02: \$48,118	Total: \$48,118
<i>Prin. Invest.:</i> G GLOECKLER			<i>Prin. Invest.:</i> A DESSLER		
<i>Tech. Officer:</i> GSFC/K OGILVIE			<i>Tech. Officer:</i> GSFC/P DECOLA		
<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NAG 5 11854	UNIV OF MARYLAND - COLL PARK	5287	NAG 5 12112	UNIV OF MARYLAND - COLL PARK	5296
STEPS TOWARD AN ULTRAVIOLET/OPTICAL FIZEAU INTERFEROMETER			LARGE AREA LIDAR REMOTE SENSING OF VEGETATION HEIGHT, VERTICAL STRUCTURE, AND BIOMASS IN T		
03/28/2002 - 03/31/2005	FY02: \$33,495	Total: \$33,495	04/30/2002 - 04/30/2005	FY02: \$49,437	Total: \$49,437
<i>Prin. Invest.:</i> L MUNDY			<i>Prin. Invest.:</i> M HOFTON		
<i>Tech. Officer:</i> GSFC/K CARPENTER			<i>Tech. Officer:</i> GSFC/S B LUTHCKE		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE		
NAG 5 11872	UNIV OF MARYLAND - COLL PARK	5288	NAG 5 12130	UNIV OF MARYLAND - COLL PARK	5297
RESEARCH IN SOLAR RADIO ASTRONOMY AT SHORT WAVELENGTHS			THE CONTRIBUTION OF SATELLITE RADAR ALTIMETRY TO THE DETERMINATION OF RIVER DISCHARGE AND LAKE/RES		
03/15/2002 - 05/31/2003	FY02: \$30,000	Total: \$30,000	04/30/2002 - 09/30/2002	FY02: \$37,000	Total: \$37,000
<i>Prin. Invest.:</i> M R KUNDU			<i>Prin. Invest.:</i> C BIRKETT		
<i>Tech. Officer:</i> GSFC/W WAGNER			<i>Tech. Officer:</i> GSFC/P R HOUSER		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NAG 5 11939	UNIV OF MARYLAND - COLL PARK	5289	NAG 5 12136	UNIV OF MARYLAND - COLL PARK	5298
ALTIMETRIC REMOTE SENSING OF THE AMAZON: CONTRIBUTION TO SURFACE WATER DYNAMICS			2002 ASEE-NASA SUMMER FACULTY FELLOWSHIP PROGRAM (AERONAUTICS AND SPACE RESEARCH)		
03/28/2002 - 06/30/2003	FY02: \$97,962	Total: \$97,962	05/01/2002 - 04/30/2003	FY02: \$389,909	Total: \$389,909
<i>Prin. Invest.:</i> C BIRKETT			<i>Prin. Invest.:</i> M GAVRILAS		
<i>Tech. Officer:</i> GSFC/P R HOUSER			<i>Tech. Officer:</i> GSFC/M S BURRELL		
<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11952	UNIV OF MARYLAND - COLL PARK	5290	NAG 5 12149	UNIV OF MARYLAND - COLL PARK	5299
EVALUATION OF SOFTWARE ENGINEERING METHODOLOGIES			BIOMASS BURNING OVER NORTH AMERICA		
04/08/2002 - 04/14/2003	FY02: \$125,000	Total: \$125,000	05/10/2002 - 05/15/2003	FY02: \$36,808	Total: \$36,808
<i>Prin. Invest.:</i> D SMIDTS			<i>Prin. Invest.:</i> I CSISZAR		
<i>Tech. Officer:</i> GSFC/L H ROSENBERG			<i>Tech. Officer:</i> GSFC/G GUTMAN		
<i>CASE Category:</i> 42 – AERONAUTICAL ENGR			<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE		
NAG 5 11956	UNIV OF MARYLAND - COLL PARK	5291			
CHEMICAL TRACER TRANSPORT IN CRYSTAL-FACE: MESOSCALE FORECASTS AND CLOUD MODEL ANALYSIS					
03/29/2002 - 03/31/2004	FY02: \$134,213	Total: \$134,213			
<i>Prin. Invest.:</i> K PICKERING					
<i>Tech. Officer:</i> GSFC/P DECOLA					
<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER					

NAG 5 12175 **UNIV OF MARYLAND - COLL PARK** **5300**
 INTEGRATED NUMERICAL SIMULATION OF THE SOLAR-TERRE STRIAL
 ENVIRONMENT FORTHE LIVING WITH A STAR
 05/13/2002 - 05/14/2005 FY02: \$537,567 Total: \$537,567
Prin. Invest.: C C GOODRICH
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTIINTERDISCIPL, OTHER

NAG 5 12246 **UNIV OF MARYLAND - COLL PARK** **5301**
 STUDY OF THE CIRCULATIONS THAT CONNECT THE TROPICAL, SUBTROPICAL,
 ANDE SUBPOLAR REGIONS IN THE PAC
 06/20/2002 - 06/14/2005 FY02: \$101,264 Total: \$101,264
Prin. Invest.: A BUSALACCHI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12276 **UNIV OF MARYLAND - COLL PARK** **5302**
 MICROPHYSICS AND FLUID MODELING OF MAGNETOSPHERIC DYNAMICS
 06/18/2002 - 06/30/2005 FY02: \$46,500 Total: \$46,500
Prin. Invest.: J DRAKE
Tech. Officer: GSFC/M HESSE
CASE Category: 13 – PHYSICS

NAG 5 12337 **UNIV OF MARYLAND - COLL PARK** **5303**
 EMPIRICAL ESTIMATES OF PROTEROZOIC CO2 LEVELS BY IN-SITU ION
 MICROPROBE CARBON ISOTOPE ANALYSIS OF
 07/15/2002 - 06/30/2005 FY02: \$41,880 Total: \$41,880
Prin. Invest.: A KAUFMAN
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12350 **UNIV OF MARYLAND - COLL PARK** **5304**
 EXPERIMENTAL INVESTIGATION OF PHOTOCHEMICAL SULFUR ISOTOPE
 EFFECTS: APPLICATIONS TO EARTH'S EAR
 07/03/2002 - 06/30/2005 FY02: \$67,501 Total: \$67,501
Prin. Invest.: J FARQUHAR
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12375 **UNIV OF MARYLAND - COLL PARK** **5305**
 MODELING OCEANIC AND COUPLED PROCESSES RELEVANT TO
 SEASONAL-TO- INTERANNUAL VARIABILITY
 08/09/2002 - 07/31/2005 FY02: \$80,000 Total: \$80,000
Prin. Invest.: R C WAJSOWICZ
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12376 **UNIV OF MARYLAND - COLL PARK** **5306**
 ON THE ROLE OF OCEAN SALINITY VARIABILITY ON THE P RECONDITION-
 ING OF MAJOR WARM EVENTS IN THE TR
 07/15/2002 - 07/14/2005 FY02: \$44,792 Total: \$44,792
Prin. Invest.: R MURTUGUDDE
Tech. Officer: GSFC/S HAKKINEN
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12383 **UNIV OF MARYLAND - COLL PARK** **5307**
 THE FORMATION MECHANISM OF HELIUM-RICH SUBDWARF B STARS
 07/17/2002 - 06/30/2003 FY02: \$15,100 Total: \$15,100
Prin. Invest.: T LANZ
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12414 **UNIV OF MARYLAND - COLL PARK** **5308**
 SUPPORT, CHARACTERIZATION, ASSESSMENT, PORTOTYPING AND DISTRI-
 BUTION OF GLOBAL LAND PRODUCTS FROM THE
 08/02/2002 - 07/31/2007 FY02: \$147,574 Total: \$147,574
Prin. Invest.: D ROY
Tech. Officer: GSFC/E J MASUOKA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12417 **UNIV OF MARYLAND - COLL PARK** **5309**
 DYNAMICAL DIAGNOSIS OF THE NSIPP ATMOSPHERIC SIMUL ATIONS AND
 PREDICTIONS
 08/01/2002 - 07/31/2005 FY02: \$73,000 Total: \$73,000
Prin. Invest.: S NIGAM
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12464 **UNIV OF MARYLAND - COLL PARK** **5310**
 METHODOLOGIES AND TOOLS FOR SYNTHESIS AND MANAGEME NT OF
 NASA GLOBAL PRECIPITATION MEASUREMENT (
 08/21/2002 - 09/30/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: M AUSTIN
Tech. Officer: GSFC/D EVERETT
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 12480 **UNIV OF MARYLAND - COLL PARK** **5311**
 DBA AND DAB WHITE DWARFS (FUSE 2001)
 08/21/2002 - 08/31/2003 FY02: \$38,000 Total: \$38,000
Prin. Invest.: T LANZ
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12494 **UNIV OF MARYLAND - COLL PARK** **5312**
 ESTABLISHING A SOFTWARE METRICS CAPABILITY OF NASA PAPAC
 PROJECTS
 08/22/2002 - 10/14/2002 FY02: \$0 Total: \$0
Prin. Invest.: V BASILI
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12499 **UNIV OF MARYLAND - COLL PARK** **5313**
 INVESTIGATION OF SURFACE CONTAMINATION CHEMISTRY O N OPTICAL
 COMPONENT SURFACE COATINGS
 09/09/2002 - 09/14/2003 FY02: \$90,316 Total: \$90,316
Prin. Invest.: A CHRISTOU
Tech. Officer: GSFC/J ABSHIRE
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 12550 **UNIV OF MARYLAND - COLL PARK** **5314**
 OBSERVATION OF CALCIUM AND SEARCH FOR NEW SPECIES IN MERCURY'S
 ATMOSPHERE
 09/06/2002 - 08/14/2004 FY02: \$136,402 Total: \$136,402
Prin. Invest.: R KILLEN
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12566 **UNIV OF MARYLAND - COLL PARK** **5315**
 ORIGINS OF THE ATMOSPHERES OF MERCURY AND THE MOON
 09/11/2002 - 05/31/2004 FY02: \$121,876 Total: \$121,876
Prin. Invest.: R M KILLEN
Tech. Officer: GSFC/J HILLMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1440 **UNIV OF MARYLAND - COLL PARK** **5316**
 SEARCH FOR SPIN-MASS INTERACTION WITH A SUPER- CONDUCTING
 DIFFERENTIAL ANGULAR ACCELEROMETER
 02/02/1998 - 12/31/2002 FY02: \$140,000 Total: \$541,000
Prin. Invest.: H J PAIK, M V MOODY
Tech. Officer: MSFC/J W POE
CASE Category: 13 – PHYSICS

NAG 8 1755 **UNIV OF MARYLAND - COLL PARK** **5317**
 STUDIES OF RADIO JETS AND THE NARROW LINE REGIONS OF ACTIVE
 GALAXIES WITH THE ADVANCED X-RAY ASTROPH
 01/16/2001 - 09/30/2002 FY02: \$100,000 Total: \$224,000
Prin. Invest.: A S WILSON
Tech. Officer: MSFC/M SMITH
CASE Category: 11 – ASTRONOMY

NAG 8 1762 **UNIV OF MARYLAND - COLL PARK** **5318**
 THEORY OF PHASE TRANSITIONS AND SIMULATIONS IN USPERFLUID
 HELIUM OF COSMOLOGICAL PHENOMENA
 04/26/2001 - 02/01/2005 FY02: \$84,166 Total: \$168,332
Prin. Invest.: R FERRELL
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1180 **UNIV OF MARYLAND - COLL PARK** **5319**
 GRANT DEVELOPEMENT/TESTING OF MECH COUNTERSPRESSURE SPACE
 SUIT GLOVE
 12/14/1999 - 12/31/2002 FY02: \$149,500 Total: \$442,500
Prin. Invest.: D L AKIN
Tech. Officer: JSC/B WOOLFORD
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1290 **UNIV OF MARYLAND - COLL PARK** **5320**
 RESEARCH IN SPACE & TELEROBOTICS
 04/04/2001 - 03/31/2002 FY02: \$0 Total: \$500,000
Prin. Invest.: D AKIN
Tech. Officer: JSC/C CULBERT
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1920 **UNIV OF MARYLAND - COLL PARK** **5321**
 COMPUTER SIMULATIONS OF THE VARIABLE SPECIFIC IMPU LSE MAGNE-
 TOPLASMA ROCKET
 06/23/2000 - 12/31/2001 FY02: \$0 Total: \$130,000
Prin. Invest.: R SAGDEEV
Tech. Officer: JSC/F R CHANG-DIAZ
CASE Category: 13 – PHYSICS

NAG13 02009 **UNIV OF MARYLAND - COLL PARK** **5322**
 THE USE OF SATELLITE OCEAN COLOR DATA FOR COASTAL WATER
 QUALITY MONITORING
 12/10/2001 - 09/23/2004 FY02: \$349,143 Total: \$349,143
Prin. Invest.: A SUBRAMANIAM
Tech. Officer: SSC/G FLETCHERT
CASE Category: 33 – OCEANOGRAPHY

NAG13 02010 **UNIV OF MARYLAND - COLL PARK** **5323**
 REMOTE SENSING APPLICATIONS TO FOREST RESOURCE ASS ESSMENT
 12/10/2001 - 09/16/2004 FY02: \$400,000 Total: \$400,000
Prin. Invest.: S J GOETZ
Tech. Officer: SSC/T M STANLEY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 98001 **UNIV OF MARYLAND - COLL PARK** **5324**
 ENHANCING EARTH SYSTEM SCIENCES USING COMMERCIAL TERRES-
 TRIAL REMOTE SENSING SYSTEMS
 11/03/1997 - 02/24/2003 FY02: \$206,008 Total: \$1,003,023
Prin. Invest.: S GOWARD
Tech. Officer: SSC/J JENNER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99011 **UNIV OF MARYLAND - COLL PARK** **5325**
 MID ATLANTIC RESAC CONSORTIUM SAME
 03/01/1999 - 02/28/2003 FY02: \$0 Total: \$1,730,000
Prin. Invest.: S D PRINCE
Tech. Officer: SSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 00192 **UNIV OF MARYLAND - COLL PARK** **5326**
 R & D TO SUPPORT GSFC'S SIMBIOS PROJECT
 12/18/2000 - 11/30/2002 FY02: \$177,720 Total: \$438,541
Prin. Invest.: A SUBRAMANIAM
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 31365 **UNIV OF MARYLAND - COLL PARK** **5327**
 EOS EXECUTION PHASE
 01/02/1992 - 06/14/2003 FY02: \$783,100 Total: \$5,247,490
Prin. Invest.: C JUSTICE
Tech. Officer: GSFC/H OSEROFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 96060 **UNIV OF MARYLAND - COLL PARK** **5328**
 DEFINITION PHASE ACTIVITIES ASSOCIATED WITH THE MODIS INSTRU-
 MENT OF THE EOS
 07/25/1996 - 06/14/2003 FY02: \$443,000 Total: \$2,334,000
Prin. Invest.: J TOWNSHEND
Tech. Officer: GSFC/D TOLL
CASE Category: 11 – ASTRONOMY

NAS 5 96062 **UNIV OF MARYLAND - COLL PARK** **5329**
 DEFINITION PHASE ACTIVITIES ASSOCIATED WITH MODIS INSTRUMENT OF
 THE EOS
 07/02/1996 - 06/14/2003 FY02: \$342,277 Total: \$2,438,839
Prin. Invest.: E VERMONTE
Tech. Officer: GSFC/D TOLL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 97160 **UNIV OF MARYLAND - COLL PARK** **5330**
 VEGETATION CANOPY LIDAR MISSION FOR ESSP
 05/15/1997 - 09/30/2002 FY02: \$665,153 Total: \$34,733,833
Prin. Invest.: R DUBAYAH
Tech. Officer: GSFC/J ROBINSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 99211 **UNIV OF MARYLAND - COLL PARK** **5331**
 AWARD - SAMPEX MISSION SUPPORT
 08/27/1999 - 08/26/2003 FY02: \$90,000 Total: \$360,000
Prin. Invest.: W FOURNEY
Tech. Officer: GSFC/T STENGLE
CASE Category: 41 – AERONAUTICAL ENGR

MARYLAND

NASA'S UNIVERSITY PROGRAM

NASW 0004 UNIV OF MARYLAND - COLL PARK 5332
 MESSENGER DISCOVERY PROJECTS (PI'S MANAGE PROJECT ORBIT &
 EXPLOR PLANET MERCURY PHASE B
 03/14/2000 - 02/29/2004 FY02: \$16,274,145 Total: \$30,518,543
Prin. Invest.: M F A'HEARN
Tech. Officer: JPL/D JARRETT
CASE Category: 11 – ASTRONOMY

NASW 00028 UNIV OF MARYLAND - COLL PARK 5333
 JOINT US/RUSSIAN RESEARCH SPACE SCIENCES (JURRISS) PROGRAM
 SUPPORT SERVICE/OPTION DATE 8/5/2002
 12/06/2000 - 08/05/2002 FY02: \$0 Total: \$219,800
Prin. Invest.: L MUKHIN, R SAGDEEV
Tech. Officer: HQ/J BOYCE
CASE Category: 75 – POLITICAL SCIENCE

NASW 02011 UNIV OF MARYLAND - COLL PARK 5334
 KTR WILL PROVIDE SOFTWARE ENHANCEMENTS, DEVELOP TRNG MATE-
 RIALS & PRESENT WORKSHOPS ON SOFTWARE
 03/29/2002 - 09/30/2002 FY02: \$127,102 Total: \$127,102
Prin. Invest.: A MOSLEH
Tech. Officer: HQ/P BOELINER
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1129 UNIV OF MARYLAND - COLL PARK 5335
 WAVERIDER-BASED REENTRY CONFIGURATIONS FOR THE SHA RP FLIGHT
 EXPERIMENT
 07/13/1999 - 12/14/2001 FY02: \$0 Total: \$66,608
Prin. Invest.: M J LEWIS
Tech. Officer: ARC/P KOLODZIEJ, ARC/D J RASKY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1146 UNIV OF MARYLAND - COLL PARK 5336
 EVALUATION OF METHODOLOGY FOR TESTING AND ANALYSIS F OR AD-
 VANCED ROTOR SYSTEMS
 12/01/1999 - 03/31/2003 FY02: \$80,000 Total: \$376,025
Prin. Invest.: F HARRIS, I CHROPA, G PRICE
Tech. Officer: ARC/W WARMBRODT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1303 UNIV OF MARYLAND - COLL PARK 5337
 INTERSTELLAR ICES AND INTERSTELLAR POLYCYCLIC AROM ATIC HYDRO-
 CARBON ION NANOCCLUSERS
 02/06/2002 - 01/31/2003 FY02: \$81,900 Total: \$81,900
Prin. Invest.: M GUDIPATI
Tech. Officer: ARC/L ALLAMANDOLA
CASE Category: 11 – ASTRONOMY

NCC 2 5348 UNIV OF MARYLAND - COLL PARK 5338
 THE EVOLUTION OF DUST IN THE MULTIPHASE INTERSTELL AR MEDIUM
 09/01/1999 - 09/14/2001 FY02: \$0 Total: \$33,199
Prin. Invest.: M G WOLFIRE
Tech. Officer: ARC/D J HOLLENBACH, ARC/R E YOUNG
CASE Category: 11 – ASTRONOMY

NCC 3 528 UNIV OF MARYLAND - COLL PARK 5339
 CENTER FOR SATELLITE AND HYBRID COMMUNICATION NETW ORKS
 01/30/1997 - 08/31/2002 FY02: \$0 Total: \$3,430,000
Prin. Invest.: J S BARAS
Tech. Officer: GRC/J W BAGWELL, GRC/K B BHASIN
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 686 UNIV OF MARYLAND - COLL PARK 5340
 STUDIES ON THE BEHAVIOR OF HIGHLY PRE-HEATED AIR F LAMES IN
 MICROGRAVITY
 03/11/1999 - 01/11/2003 FY02: \$94,500 Total: \$368,000
Prin. Invest.: A K GUPTA
Tech. Officer: GRC/D STOCKER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 783 UNIV OF MARYLAND - COLL PARK 5341
 POOL BOILING HEAT TRANSFER MECHANISMS IN MICROGRAV ITY AND
 PARTIAL GRAVITY
 03/13/2000 - 11/30/2003 FY02: \$114,000 Total: \$309,000
Prin. Invest.: J KIM
Tech. Officer: GRC/J B MCQUILLEN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 804 UNIV OF MARYLAND - COLL PARK 5342
 FLAMMABILITY DIAGRAMS OF COMBUSTIBLE MATERIALS IN MICROGRAV-
 ITY
 05/25/2000 - 04/30/2004 FY02: \$0 Total: \$129,092
Prin. Invest.: D L
Tech. Officer: GRC/H D ROSS
CASE Category: 46 – MECHANICAL ENGR

NCC 3 919 UNIV OF MARYLAND - COLL PARK 5343
 TRANSITION FROM IGNITION TO FLAME GROWTH UNDER EXT ERNAL
 RADIATION IN D-D
 09/27/2001 - 09/30/2005 FY02: \$0 Total: \$69,300
Prin. Invest.: T KASHIWAGI
Tech. Officer: GRC/S OLSON
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 989 UNIV OF MARYLAND - COLL PARK 5344
 MARYLAND-MICHIGAN-WASHINGTON THIRD GENERATION REUS ABLE
 LAUNCH TECHNOLOGY INST (URETI)
 08/19/2002 - 08/18/2007 FY02: \$1,740,000 Total: \$1,740,000
Prin. Invest.: D LEWIS
Tech. Officer: GRC/M HYATT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 180 UNIV OF MARYLAND - COLL PARK 5345
 THIS GRANT PROVIDES POST-DOC SUPPORT, FELLOWSHIPS, LABORA-
 TORY FOR HIGH ENERGY ASTROPHYSICS
 02/06/1997 - 03/31/2002 FY02: \$800,943 Total: \$9,020,550
Prin. Invest.: J D TRASCO
Tech. Officer: GSFC/A HARDING
CASE Category: 11 – ASTRONOMY

NCC 5 190 UNIV OF MARYLAND - COLL PARK 5346
 SUPPORT OF THE EARTH SYSTEM SCIENCE INTERDISCIPLIN
 04/04/1997 - 03/31/2002 FY02: -\$356 Total: \$599,644
Prin. Invest.: D TOWNSHEND
Tech. Officer: GSFC/R C HARRISS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 238 UNIV OF MARYLAND - COLL PARK 5347
 COOPERATIVE RESEARCH AGREEMENT FOR SPACE LASER RES MD, A.
 JAMES CLARK SCHOOL OF ENGINEERING & NASA/G
 09/18/1997 - 04/30/2002 FY02: \$283,145 Total: \$2,797,200
Prin. Invest.: D CHRISTOU
Tech. Officer: GSFC/R AFZAL
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 243 **UNIV OF MARYLAND - COLL PARK** **5348**
 RANGER TELEROBOTIC FLIGHT EXPERIMENT
 11/03/1997 - 09/30/2002 FY02: \$0 Total: \$9,611,377
Prin. Invest.: D AKIN
Tech. Officer: GSFC/J PARRISH
CASE Category: 11 – ASTRONOMY

NCC 5 300 **UNIV OF MARYLAND - COLL PARK** **5349**
 A LANDCOVER EARTH SCIENCE INFORMATION PARTNERSHIP
 04/21/1998 - 12/31/2002 FY02: \$325,000 Total: \$5,417,162
Prin. Invest.: J TOWNSENDE
Tech. Officer: GSFC/M MAIDEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 353 **UNIV OF MARYLAND - COLL PARK** **5350**
 FUNDS ARE PROVIDED FOR THE GRANT PROPOSAL BY THE UNIVERSITY
 RESEARCH FOUNDATION FOR ENVIRONMENT TO
 08/04/1998 - 12/31/2001 FY02: \$0 Total: \$298,556
Prin. Invest.: C F MARTIN
Tech. Officer: GSFC/H PARK
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 372 **UNIV OF MARYLAND - COLL PARK** **5351**
 COOPERATIVE RESEARCH IN SPACE SCIENCE WITH THE UNIVERSITY OF
 MARYLAND
 12/22/1998 - 12/31/2001 FY02: \$59,145 Total: \$1,787,208
Prin. Invest.: J D TRASCO
Tech. Officer: GSFC/T KOSTIUK
CASE Category: 11 – ASTRONOMY

NCC 5 374 **UNIV OF MARYLAND - COLL PARK** **5352**
 EARTH SCIENCE INTER-DISCIPLINARY CENTER
 01/20/1999 - 10/31/2002 FY02: \$1,785,155 Total: \$4,766,477
Prin. Invest.: M BROWN
Tech. Officer: GSFC/R HARTLE, GSFC/C COTE
CASE Category: 11 – ASTRONOMY

NCC 5 408 **UNIV OF MARYLAND - COLL PARK** **5353**
 PROTOTYPE IMPLEMENTATION OF A RESEARCH ENVIRONMENT FOR
 ADVANCED LANDSAT MONITORING (REALM)
 05/17/1999 - 10/31/2002 FY02: \$0 Total: \$473,680
Prin. Invest.: S GOWARD
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 417 **UNIV OF MARYLAND - COLL PARK** **5354**
 RANGER TELEROBOTICS FLIGHT EXPERIMENT
 08/25/1999 - 08/30/2001 FY02: -\$294 Total: \$3,644,898
Prin. Invest.: D L AKIN
Tech. Officer: GSFC/D LAVERY
CASE Category: 11 – ASTRONOMY

NCC 5 449 **UNIV OF MARYLAND - COLL PARK** **5355**
 A STUDY OF THE DEVELOPMENT OF REMOTE SENSING ALGORITHMS
 02/08/2000 - 12/31/2002 FY02: \$0 Total: \$515,894
Prin. Invest.: D ROY
Tech. Officer: GSFC/E J MASUOKA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 462 **UNIV OF MARYLAND - COLL PARK** **5356**
 EO-1 VALIDATION AND EVALUATION FOR AGRICULTURAL MONITORING
 02/29/2000 - 09/30/2003 FY02: \$102,219 Total: \$344,502
Prin. Invest.: S LIANG
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 464 **UNIV OF MARYLAND - COLL PARK** **5357**
 EVALUATION OF SOFTWARE ENGINEERING METHODOLOGIES
 02/29/2000 - 11/14/2002 FY02: \$0 Total: \$633,539
Prin. Invest.: D R BASILI
Tech. Officer: GSFC/D E JAMISON
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 5 552 **UNIV OF MARYLAND - COLL PARK** **5358**
 SUMMER INST ON ATMOSPHERIC AND HYDROSPHERIC SCIENCES
 04/24/2001 - 04/30/2004 FY02: \$128,577 Total: \$243,506
Prin. Invest.: F BAER
Tech. Officer: GSFC/R HARTLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 609 **UNIV OF MARYLAND - COLL PARK** **5359**
 COOPERATIVE RESEARCH IN SPACE SCIENCE WITH THE UNIVERSITY OF
 MARYLAND
 12/19/2001 - 12/31/2005 FY02: \$393,092 Total: \$393,092
Prin. Invest.: J TRASCO
Tech. Officer: GSFC/T KOSTIUK
CASE Category: 13 – PHYSICS

NCC 5 640 **UNIV OF MARYLAND - COLL PARK** **5360**
 CENTER FOR HIGH ENERGY ASTROPHYSICS RESEARCH (CHEAR)
 03/27/2002 - 03/31/2003 FY02: \$1,123,622 Total: \$1,123,622
Prin. Invest.: J TRASCO
Tech. Officer: GSFC/A HARDING
CASE Category: 11 – ASTRONOMY

NCC 5 648 **UNIV OF MARYLAND - COLL PARK** **5361**
 VALIDATION OF LANDSAT 7 LONG TERM ACQUISITION PLAN
 06/19/2002 - 06/30/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: S N GOWARD
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 650 **UNIV OF MARYLAND - COLL PARK** **5362**
 RAPID RESPONSE PATHFINDER FOR NATURAL HAZARDS
 08/02/2002 - 07/31/2003 FY02: \$230,000 Total: \$230,000
Prin. Invest.: R A SOHLBERG
Tech. Officer: GSFC/E J MASUOKA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 8 235 **UNIV OF MARYLAND - COLL PARK** **5363**
 PROMOT COMMERCIALY FUNDED RESCH & TECH DEV IN THE FIELD OF
 SATELLITE & HYBRID COMMUNICATIONS NETWORK
 01/14/2002 - 10/31/2002 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: J BARAS
Tech. Officer: MSFC/S LAMBING
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 147 **UNIV OF MARYLAND - COLL PARK** **5364**
 MICROBIAL RESISTANCE TO SOLAR RADIATION
 12/10/2001 - 11/30/2002 FY02: \$163,739 Total: \$163,739
Prin. Invest.: J DIRUGGIERO, J M DAVILA, F T ROBB
Tech. Officer: JSC/D RISIN
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NGT 2 52273 **UNIV OF MARYLAND - COLL PARK** **5365**
 CENTER FOR ROTORCRAFT EDUCATION & RESEARCH
 01/09/2001 - 12/31/2002 FY02: \$1,059,000 Total: \$1,975,829
Prin. Invest.: CHOPRA
Tech. Officer: ARC/Y YU, ARC/A
CASE Category: 41 – AERONAUTICAL ENGR

MARYLAND

NASA'S UNIVERSITY PROGRAM

NGT 3 52367 UNIV OF MARYLAND - COLL PARK 5366
 SYNTHESIS OF MOLECULARLY DISPERSED CERAMIC POLYMER NANO-COMPOSITES
 06/14/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D C WILSON JR
Tech. Officer: GRC/F MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 30429 UNIV OF MARYLAND - COLL PARK 5374
 MODELING AND MONITORING THE IMPACT OF LAND DEGRADATION ON PRIMARY PRO-DUCTIVITY IN SOUTHERN AFRICA
 08/15/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S D PRINCE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 99 UNIV OF MARYLAND - COLL PARK 5367
 ESTIMATION OF TROPICAL FOREST ABOVEGROUND USING LARGE FOOT-PRINT LIDAR
 08/20/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R DUBAYAH, J DRAKE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30441 UNIV OF MARYLAND - COLL PARK 5375
 THE SPATIAL AND TEMPORAL DISTRIBUTION OF BIOMASS BURNING IN SOUTHERN AFRICA
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C JUSTICE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 100 UNIV OF MARYLAND - COLL PARK 5368
 GLOBAL CLIMATE CHANGE AND CHOLERA: MODELING OF CHOLERA OCCURRENCE IN SELECTED COASTAL AREAS USING S
 08/23/1999 - 05/31/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: E RUSSEK-COHEN
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30450 UNIV OF MARYLAND - COLL PARK 5376
 A NOVEL APPROACH TOWARDS GLOBAL AEROSOL CLIMATOLOGY. STUDENT: HONGQING LIU
 08/19/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R PINKER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 107 UNIV OF MARYLAND - COLL PARK 5369
 FEASIBILITY OF ATMOSPHERIC PENETRATION FOR SATELLITE FORMATION FLYING EXPERIMENTS/STUDENT: JOS SCHU
 06/07/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D PINES
Tech. Officer: GSFC/G SOFFEN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30459 UNIV OF MARYLAND - COLL PARK 5377
 IMPACTS OF LAND COVER CHANGE ON WILDBEEST MIGRATION AND ABUNDANCE IN THE SERENGETI-MARA REGION ()
 08/21/2002 - 08/31/2005 FY02: \$23,980 Total: \$23,980
Prin. Invest.: R DEFRIES
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 116 UNIV OF MARYLAND - COLL PARK 5370
 INVESTIGATION OF LIBRATED ORBITS IN THE EARTH-MOON SYSTEM (STUDENT): RAQUEL JARABEK
 06/04/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D SHAPIRO
Tech. Officer: GSFC/M S BURRELL
CASE Category: 42 – ASTRONAUTICAL ENGR

NGT 5 50217 UNIV OF MARYLAND - COLL PARK 5378
 CONVECTIVE EFFECTS ON TROPOSPHERIC OZONE CHEMISTRY STUDIED WITH A COUPLED CLOUD/CHEMISTRY MODEL
 09/15/1998 - 08/31/2001 FY02: \$0 Total: \$53,077
Prin. Invest.: K PICKERING
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30142 UNIV OF MARYLAND - COLL PARK 5371
 THE EFFECT OF WARM TROPICAL ATLANTIC SST ON EARLY SEASON CARIBBEAN RAIN-FALL
 08/27/1998 - 08/31/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: A VERNEKAR, TAYLOR
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5328 UNIV OF MARYLAND - EASTERN SHORE 5379
 RESEARCH PARTICIPATION IN AIRBORNE OCEANOGRAPHIC LIDAR ON LONG RANGE MISSIONS
 03/19/2001 - 03/31/2003 FY02: \$0 Total: \$27,623
Prin. Invest.: D R LEVIN
Tech. Officer: GSFC/W B KRABILL
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 5 30196 UNIV OF MARYLAND - COLL PARK 5372
 TORNADOES: COHERENT FLOW STRUCTURES IN ATMOSPHERIC TURBULENCE
 08/18/1999 - 02/28/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: F BAER, NAWRI
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9243 UNIV OF MARYLAND - EASTERN SHORE 5380
 PRE-COLL ACTIVITIES FOR ENHANCING MINORITY PARTICIPATION IN ENGINEERING.
 03/13/2000 - 03/14/2003 FY02: \$99,969 Total: \$294,742
Prin. Invest.: G SINGH
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30377 UNIV OF MARYLAND - COLL PARK 5373
 ANALYSIS OF MOPITT DATA FOR INVESTIGATION OF BOREAL FOREST FIRE EMISSIONS/EDWARD J. HYER
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$45,989
Prin. Invest.: E KASISCHKE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10122 UNIV OF MARYLAND - EASTERN SHORE 5381
 MATHEMATICS, ENGINEERING, SCIENCE ENRICHMENT PRE-COLL PROGRAM
 11/28/2000 - 11/30/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: T DUBE
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11861 UNIV OF MARYLAND - EASTERN SHORE 5382
 UMES/NASA COLLABORATIVE RESEARCH IN COMPUTATIONAL SCIENCES
 03/14/2002 - 03/14/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: I K DABIPI
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11897 UNIV OF MARYLAND - EASTERN SHORE 5383
 UMES STUDENT INTERNSHIPS AT NASA WALLOPS: AN OUTREACH PRO-
 POSAL
 03/20/2002 - 03/14/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: I K DABIPI
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 668 UNIV OF MARYLAND - EASTERN SHORE 5384
 EASTERN SHORE MATHEMATICS TEACHER EDUCATION PROJECT
 08/22/2002 - 08/31/2005 FY02: \$199,966 Total: \$199,966
Prin. Invest.: D SEATON
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 5339 UNIV OF MARYLAND BALTIMORE 5385
 ASSIST GSFC CODE 972 DURING CAMEX-4 PROJECT A
 07/12/2001 - 09/30/2001 FY02: \$0 Total: \$9,000
Prin. Invest.: W MCMILLAN
Tech. Officer: WFF/F SCHMIDLIN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1573 UNIV OF MARYLAND BALTIMORE 5386
 IONS AND PROTEIN ASSOCIATION: AW AND PROTEIN CRYSTALS
 01/19/1999 - 11/30/2002 FY02: \$125,000 Total: \$487,750
Prin. Invest.: K COLLINS
Tech. Officer: MSFC/B GUYNE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 5 544 UNIV OF MARYLAND BALTIMORE 5387
 IDENTIFICATION FOR RISK FACTORS FOR CHILDHOOD ASTH MA.
 03/22/2001 - 12/31/2002 FY02: \$0 Total: \$439,608
Prin. Invest.: D BLAISDELL
Tech. Officer: GSFC/J P GALLOWAY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 2022 UNIV OF MARYLAND BALTIMORE COUNTY 5388
 A CLIMATOLOGY OF TROPOSPHERIC CO OVER THE CENTRAL AND
 SOUTHEASTERN UNITED STATES AND THE SOUTHWESTERN
 03/12/1998 - 03/11/2002 FY02: \$0 Total: \$234,120
Prin. Invest.: W W MCMILLAN, G MORRIS, L STROW
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6460 UNIV OF MARYLAND BALTIMORE COUNTY 5389
 VALIDATION OF MOPITT COLUMN & PROFILE CO FROM SPAC EBORNE,
 AIRBORNE, & GROUND-BASED INTERFEROMETERS
 10/14/1997 - 09/30/2002 FY02: \$0 Total: \$317,893
Prin. Invest.: W MCMILLAN
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICALSCIENCE, OTHER

NAG 5 6675 UNIV OF MARYLAND BALTIMORE COUNTY 5390
 VALIDATION OF CLOUD OPTICAL DEPTHS RETRIEVED FROM EOS/MODIS
 DATA
 12/01/1997 - 09/30/2002 FY02: \$0 Total: \$309,020
Prin. Invest.: A MARSHAK
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6681 UNIV OF MARYLAND BALTIMORE COUNTY 5391
 ASSIMILATION OF WIND OBSERVATIONS FROM THE HIGH RE SOLUTION
 DOPPLER IMAGER
 12/05/1997 - 11/30/2001 FY02: \$0 Total: \$430,241
Prin. Invest.: D TANGBORN
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6996 UNIV OF MARYLAND BALTIMORE COUNTY 5392
 A STUDY OF UNCERTAINTIES FOR MODIS CLOUD RETRIEVAL S OF
 OPTICAL THICKNESS AND EFFECTIVE RADIUS
 02/06/1998 - 12/14/2001 FY02: \$0 Total: \$202,354
Prin. Invest.: D PLATNICK
Tech. Officer: GSFC/D STARR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7385 UNIV OF MARYLAND BALTIMORE COUNTY 5393
 X-RAY SPECTROSCOPY OF ACTIVE GALACTIC NUCLEI: (LT SA)
 05/15/1998 - 06/30/2003 FY02: \$0 Total: \$570,610
Prin. Invest.: T J TURNER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7563 UNIV OF MARYLAND BALTIMORE COUNTY 5394
 MODELING OF SHORTWAVE RADIATION FIELDS USING ATMOSPHERIC
 RADIATION MEASUREMENTS (ARM) AND LANDSAT D
 06/29/1998 - 06/30/2001 FY02: \$0 Total: \$275,720
Prin. Invest.: A MARSHAK
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7909 UNIV OF MARYLAND BALTIMORE COUNTY 5395
 TRMM PRECIPITATION RADAR: DEVELOPMENT OF A RAIN RETRIEVAL
 ALGORITHM USING GROUND VALIDATION DAT
 12/08/1998 - 12/14/2002 FY02: \$0 Total: \$278,035
Prin. Invest.: E AMITAI
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8231 UNIV OF MARYLAND BALTIMORE COUNTY 5396
 USE OF DATA FROM TRMM FIELD CAMPAIGNS IN IMPROVED INITIALIZA-
 TION AND VALIDATION OF HIGH RESOLUTION
 03/03/1999 - 03/14/2002 FY02: \$0 Total: \$156,420
Prin. Invest.: B S FERRIER
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8379 UNIV OF MARYLAND BALTIMORE COUNTY 5397
 VARIATIONAL ASSIMILATION OF TRMM-DERIVED PRECIPITATION OBSER-
 VATIONS FOR THE IMPROVEMENT OF NUMERICAL
 04/14/1999 - 04/14/2001 FY02: \$0 Total: \$50,393
Prin. Invest.: W S OLSON
Tech. Officer: GSFC/R W LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 9054 UNIV OF MARYLAND BALTIMORE COUNTY 5398
 INNOVATIVE ANALYSIS OF GRAVITY MAPPING MISSION DATA
 02/10/2000 - 12/31/2001 FY02: \$0 Total: \$50,000
Prin. Invest.: E C PAVLIS
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9346 UNIV OF MARYLAND BALTIMORE COUNTY 5399
 UNDERSTANDING TON S180? (ADP - 99)
 03/31/2000 - 06/30/2001 FY02: \$0 Total: \$20,000
Prin. Invest.: T J TURNER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9588 UNIV OF MARYLAND BALTIMORE COUNTY 5400
 LABORATORY QUANTITATIVE SPECTROSCOPY OF MOLECULES OF ATMOSPHERIC RELEVANCE
 05/11/2000 - 12/31/2002 FY02: \$78,666 Total: \$207,296
Prin. Invest.: J M SIROTA
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9645 UNIV OF MARYLAND BALTIMORE COUNTY 5401
 A COMPARATIVE STUDY OF FOREST MAPPING METHODS AND ALGORITHMS: TOWARDS OPTIMAL SOLUTIONS FOR OPERATION
 06/12/2000 - 06/30/2003 FY02: \$55,826 Total: \$180,525
Prin. Invest.: Y SOHN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9698 UNIV OF MARYLAND BALTIMORE COUNTY 5402
 IMPROVEMENT OF CONVECTIVE/STRATIFORM SEPARATION & LATENT HEATING PROFILE ESTIMATION FROM TRMM
 07/21/2000 - 06/30/2003 FY02: \$108,943 Total: \$329,906
Prin. Invest.: W S OLSON
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9699 UNIV OF MARYLAND BALTIMORE COUNTY 5403
 ORGANIZATION, STRUCTURE, AND EVOLUTION OF TROPICAL CONVECTIONS IN SOUTH CHINA SEA MONSOON AND THEIR
 07/27/2000 - 05/31/2003 FY02: \$82,000 Total: \$208,667
Prin. Invest.: J WANG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9707 UNIV OF MARYLAND BALTIMORE COUNTY 5404
 US INDIA COLLABORATIVE RESEARCH ON ENSO PREDICTABILITY
 06/16/2000 - 08/31/2003 FY02: \$0 Total: \$47,712
Prin. Invest.: A MEHTA
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9718 UNIV OF MARYLAND BALTIMORE COUNTY 5405
 INVESTIGATIONS OF MARITIME & CONTINENTAL TROPICAL CONVECTIVE SYSTEMS USING DATA FROM TRMM FIELD E
 06/19/2000 - 06/30/2003 FY02: \$90,000 Total: \$235,766
Prin. Invest.: J B HALVERSON
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9816 UNIV OF MARYLAND BALTIMORE COUNTY 5406
 CLIMATOLOGY AND EVOLUTION OF CONVECTIVE SYSTEMS COMBINING SURFACE RADAR & GEOSTATIONARY INFRARED SA
 07/21/2000 - 07/31/2003 FY02: \$75,000 Total: \$193,750
Prin. Invest.: T M RICKENBACH
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9954 UNIV OF MARYLAND BALTIMORE COUNTY 5407
 MYERHOFF SCHOLARSHIP PROGRAM
 09/08/2000 - 09/14/2005 FY02: \$400,000 Total: \$600,000
Prin. Invest.: E B BAKER
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9995 UNIV OF MARYLAND BALTIMORE COUNTY 5408
 A SPECTRAL STUDY OF A NEW CLASS OF RADIO QUASARS
 09/20/2000 - 03/31/2002 FY02: \$0 Total: \$21,878
Prin. Invest.: E S PERLMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9997 UNIV OF MARYLAND BALTIMORE COUNTY 5409
 THE PHYSICS OF EXTRAGALACTIC RADIO/OPTICAL/X-RAY JETS
 09/20/2000 - 03/14/2005 FY02: \$55,000 Total: \$156,603
Prin. Invest.: E S PERLMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10024 UNIV OF MARYLAND BALTIMORE COUNTY 5410
 DIAGNOSTICS OF THE ISM IN INTERMEDIATE REDSHIFT GALAXIES USING BACKGROUND BL LACS
 09/27/2000 - 09/30/2002 FY02: \$0 Total: \$5,080
Prin. Invest.: E S PERLMAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10086 UNIV OF MARYLAND BALTIMORE COUNTY 5411
 THE X-RAY TEMPERATURE FUNCTION AND STRUCTURE OF CLUSTERS AT Z=0.6-1
 11/07/2000 - 11/14/2002 FY02: \$0 Total: \$6,213
Prin. Invest.: E S PERLMAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10109 UNIV OF MARYLAND BALTIMORE COUNTY 5412
 HIGH RESOLUTION X-RAY PROPERTIES OF BL LACS: AN XMM SURVEY
 01/26/2001 - 01/31/2003 FY02: \$0 Total: \$45,045
Prin. Invest.: E S PERLMAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10206 UNIV OF MARYLAND BALTIMORE COUNTY 5413
 QUANTITATIVE INFRARED SPECTROSCOPY FOR STUDIES OF BROWN DWARFS & EXTRASOLAR GIANT PLANETS
 12/28/2000 - 12/31/2003 FY02: \$28,000 Total: \$58,000
Prin. Invest.: D STEVERT
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10347 UNIV OF MARYLAND BALTIMORE COUNTY 5414
 VALIDATION OF CLOUD MODEL MICROPHYSICS & RAIN RATE ESTIMATION
 WITH HIGH-RESOLUTION MICROWAVE OBSERVA
 02/01/2001 - 09/30/2002 FY02: \$0 Total: \$128,752
Prin. Invest.: G M SKOFRONICK-JACK
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10687 UNIV OF MARYLAND BALTIMORE COUNTY 5415
 CALIBRATION & NAVIGATION OF RAW INSAT IMAGERY & APPLICATION FOR
 CLIMATE VARIABILITY ANALYSES
 04/04/2001 - 04/14/2004 FY02: \$56,628 Total: \$115,778
Prin. Invest.: G I MOLNAR
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10876 UNIV OF MARYLAND BALTIMORE COUNTY 5416
 STUDY OF SOLAR AND SPECTRAL GRADIANCE VARIATIONS BASED ON
 SOHO/VIRGO AND MDI
 05/15/2001 - 11/30/2002 FY02: \$25,359 Total: \$136,748
Prin. Invest.: J M PAP
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10969 UNIV OF MARYLAND BALTIMORE COUNTY 5417
 DERIVING MICROPHYSICAL CLOUD PROFILES USING AIR- BORNE ACTIVE &
 WIDEBAND PASSIVE MICROWAVE OBSERVA
 06/06/2001 - 06/14/2004 FY02: \$49,579 Total: \$78,175
Prin. Invest.: G SKOFRONICK-JACK
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11020 UNIV OF MARYLAND BALTIMORE COUNTY 5418
 SCATTERING & ABSORPTION PROPERTIES OF NONSPHERICAL
 /INHOMOGENEOUS AEROSOLS& ICE CRYSTALS:
 06/22/2001 - 08/31/2001 FY02: -\$30,000 Total: \$0
Prin. Invest.: P YANG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11092 UNIV OF MARYLAND BALTIMORE COUNTY 5419
 UNDERSTANDING ARK 564 (ADP 2000)
 07/09/2001 - 09/30/2003 FY02: \$0 Total: \$47,536
Prin. Invest.: T J TURNER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11115 UNIV OF MARYLAND BALTIMORE COUNTY 5420
 STUDIES OF THE UPPER ATMOSPHERIC INNER CORE REGION OF HURRI-
 CANES USING THENASA ER-2 DROPWINDSONDE
 07/26/2001 - 07/31/2002 FY02: \$0 Total: \$152,789
Prin. Invest.: J B HALVERSON
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11150 UNIV OF MARYLAND BALTIMORE COUNTY 5421
 MARS WATER CONSTRAINTS FROM VOLCANIC LANDFORM TOPO GRAPHY
 07/26/2001 - 07/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: S SAKIMOTO
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11156 UNIV OF MARYLAND BALTIMORE COUNTY 5422
 BBAERI AIRS OCEAN VALIDATION EXPERIMENT: BOAVE" AQUA-0056-0064
 08/01/2001 - 08/31/2004 FY02: \$220,103 Total: \$300,542
Prin. Invest.: W MCMILLAN
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11174 UNIV OF MARYLAND BALTIMORE COUNTY 5423
 CONSTRAINTS ON WATER ON MARS FROM EXPLOSIVE VOLCAN ISM
 LANDFORM TOPOGRAPHY
 09/05/2001 - 09/30/2001 FY02: \$0 Total: \$13,000
Prin. Invest.: S SAKIMOTO
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11206 UNIV OF MARYLAND BALTIMORE COUNTY 5424
 MODELING OF SHORTWAVE RADIATION FIELDS USING ATMOS PHERIC
 RADIATION MEASUREMENTS (ARM) & LANDSAT DAT
 08/14/2001 - 06/30/2002 FY02: \$14,950 Total: \$129,155
Prin. Invest.: A MARSHAK
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11230 UNIV OF MARYLAND BALTIMORE COUNTY 5425
 OBSERVATIONALLY-BASED PROCESS EVALUATION OF MODEL TRANS-
 PORT: IMPROVING ATMOSPHERIC MODELS AND THE G
 08/16/2001 - 08/14/2004 FY02: \$0 Total: \$115,145
Prin. Invest.: S STRAHAN
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11269 UNIV OF MARYLAND BALTIMORE COUNTY 5426
 MICROPHYSICAL PROPERTIES OF CRYSTALLINE PSC PARTIC LES
 DEVRIVED FROM AIRBORNE LADAR MEASUREMENTS
 08/22/2001 - 08/31/2004 FY02: \$0 Total: \$67,295
Prin. Invest.: J REICHARDT
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11284 UNIV OF MARYLAND BALTIMORE COUNTY 5427
 STATISTICAL INVESTIGATIONS OF SUBGRID SCALE VARIAB ILITY IN THE
 UT/LS
 08/17/2001 - 08/31/2004 FY02: \$0 Total: \$73,791
Prin. Invest.: L SPARLING
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11326 UNIV OF MARYLAND BALTIMORE COUNTY 5428
 VARIATIONS IN THE SOLAR RADIATION ENERGY OUTPUT ON TIME SCALES
 OF YEARS AND THE SOLAR CYCLE
 09/05/2001 - 02/14/2003 FY02: \$20,073 Total: \$40,451
Prin. Invest.: J PAP
Tech. Officer: GSFC/C JACKSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11373 UNIV OF MARYLAND BALTIMORE COUNTY 5429
 A NEW "CLOUD MODE" FOR THE AERONET
 11/01/2001 - 10/31/2004 FY02: \$105,172 Total: \$105,172
Prin. Invest.: A MARSHAK
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

MARYLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 11598 UNIV OF MARYLAND BALTIMORE COUNTY 5430
 REMOTE SENSING OF THE RADIATIVE AND MICROPHYSICAL PROPERTIES
 OF CIRRUS CLOUDS DURING CRYSTAL-FACE W
 01/23/2002 - 01/31/2004 FY02: \$72,176 Total: \$72,176
Prin. Invest.: S PLATNICK
Tech. Officer: GSFC/M KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11601 UNIV OF MARYLAND BALTIMORE COUNTY 5431
 ANALYSIS AND VALIDATION OF THE UARS/ACRIM II SOLAR TOTAL IRRADI-
 ANCE DATA
 01/15/2002 - 01/14/2003 FY02: \$36,981 Total: \$36,981
Prin. Invest.: J M PAP
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11624 UNIV OF MARYLAND BALTIMORE COUNTY 5432
 VARIATIONS IN TOTAL SOLAR AND SPECTRAL IRRADIANCE
 02/07/2002 - 01/31/2005 FY02: \$79,395 Total: \$79,395
Prin. Invest.: J PAP
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11631 UNIV OF MARYLAND BALTIMORE COUNTY 5433
 USE OF NEW RADIATIVE TRANSFER SCHEMES & SATELLITE DATA FOR
 MORE REALISTIC CLOUD RADIATIVE FORCING &
 01/29/2002 - 01/31/2005 FY02: \$98,980 Total: \$98,980
Prin. Invest.: L OREOPOULOS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11653 UNIV OF MARYLAND BALTIMORE COUNTY 5434
 MEASUREMENT OF CARBON DIOXIDE, METHANE, AND CARBON MONOX-
 IDE WITH THE ATMOSPHERIC INFRARED SOUNDER ON
 02/06/2002 - 01/31/2005 FY02: \$139,204 Total: \$139,204
Prin. Invest.: C BARNET
Tech. Officer: GSFC/J SUSSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11798 UNIV OF MARYLAND BALTIMORE COUNTY 5435
 THE EFFECT OF SUBGRID VARIABILITY OF SNOW COVER IN VEGETATED
 REGION ON LAND ATMOSPHERE INTERACTIONS
 03/22/2002 - 03/31/2005 FY02: \$65,000 Total: \$65,000
Prin. Invest.: W NI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12064 UNIV OF MARYLAND BALTIMORE COUNTY 5436
 IMPROVEMENT OF GENERAL CIRCULATION MODEL SIMULATIONS USING
 GLOBAL OBSERVATIONS OF PRECIPITATIO
 04/24/2002 - 04/30/2005 FY02: \$67,178 Total: \$67,178
Prin. Invest.: S YANG
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12161 UNIV OF MARYLAND BALTIMORE COUNTY 5437
 SOLAR VARIABILITY, CLIMATE & SPACE WEATHER
 05/13/2002 - 05/14/2003 FY02: \$74,614 Total: \$74,614
Prin. Invest.: J M PAP
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 12162 UNIV OF MARYLAND BALTIMORE COUNTY 5438
 REANALYSIS FOR STRATOSPHERIC TRACE GAS STUDIES
 06/05/2002 - 05/31/2004 FY02: \$142,235 Total: \$142,235
Prin. Invest.: S PAWSON
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12199 UNIV OF MARYLAND BALTIMORE COUNTY 5439
 LANDSLIDE MODELING AND FORECASTING UTILIZING REMOTELY SENSED
 DATA (LANDMOD)
 05/17/2002 - 02/14/2003 FY02: \$187,429 Total: \$187,429
Prin. Invest.: M H BULMER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12227 UNIV OF MARYLAND BALTIMORE COUNTY 5440
 CENTER FOR THE ADVANCED STUDIES IN PHOTONICS RESEA RCH
 (CASPR)
 05/28/2002 - 09/30/2003 FY02: \$2,000,000 Total: \$2,000,000
Prin. Invest.: S A BASS
Tech. Officer: GSFC/A D SIMPSON
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 12238 UNIV OF MARYLAND BALTIMORE COUNTY 5441
 UNDERSTANDING AND COPING WITH THE EFFECT OF 3D CLOUD STRUC-
 TURE ON ARM DATA
 06/04/2002 - 06/14/2003 FY02: \$141,808 Total: \$141,808
Prin. Invest.: A MARSHAK
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12271 UNIV OF MARYLAND BALTIMORE COUNTY 5442
 WATER ON MARS: INFERENCES FROM MARS MOVEMENT STUD IES
 MASSMOVE
 08/01/2002 - 08/14/2004 FY02: \$48,676 Total: \$48,676
Prin. Invest.: M BULMER
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12287 UNIV OF MARYLAND BALTIMORE COUNTY 5443
 PLAINS VOLCANISM & SMALL VOLCANIC EDIFICES ON MARS
 06/13/2002 - 07/31/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: S SAKIMOTOS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 9 1190 UNIV OF MARYLAND BALTIMORE COUNTY 5444
 EFFECTS OF EXPOSURE TO HEAVY PARTICLES
 01/20/2000 - 01/19/2003 FY02: \$226,800 Total: \$562,549
Prin. Invest.: B M RABIN
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAS 1 99107 UNIV OF MARYLAND BALTIMORE COUNTY 5445
 PICASSO-CENA SCIENCE TEAM SUPPORT FOR AEROSOL RETRIEVAL
 STUDIES
 11/02/1999 - 11/01/2002 FY02: \$0 Total: \$129,187
Prin. Invest.: R M HOFF
Tech. Officer: LARC/G G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 00173 UNIV OF MARYLAND BALTIMORE COUNTY 5446
 PARTICIPATION IN THE OZONE MONITORING INSTRUMENT SCIENCE TEAM.
 06/06/2000 - 10/31/2004 FY02: \$124,842 Total: \$313,486
Prin. Invest.: O TORRES
Tech. Officer: GSFC/J C RIVERA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 00203 UNIV OF MARYLAND BALTIMORE COUNTY 5447
 R & D TO SUPPORT GSFC'S SIMBIOS PROJECT
 12/15/2000 - 11/30/2002 FY02: \$131,070 Total: \$256,084
Prin. Invest.: M WANG
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NAS 5 01110 UNIV OF MARYLAND BALTIMORE COUNTY 5448
 OZONE MONITORING INSTRUMENT (OMI) SCIENCE TEAM
 04/18/2001 - 10/31/2004 FY02: \$163,844 Total: \$291,776
Prin. Invest.: A KRUEGER
Tech. Officer: GSFC/J C RIVERA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 31378 UNIV OF MARYLAND BALTIMORE COUNTY 5449
 EOS EXECUTION PHASE
 12/16/1991 - 06/14/2003 FY02: \$500,000 Total: \$3,588,000
Prin. Invest.: L L STROW
Tech. Officer: GSFC/E R KREINS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 99141 UNIV OF MARYLAND BALTIMORE COUNTY 5450
 COMPACT HYPERSPECTRAL MAPPER FOR ENVIRONMENTAL APPLICATIONS (CHYMERA).
 02/08/1999 - 12/15/2001 FY02: \$22,585 Total: \$492,421
Prin. Invest.: S JANZ
Tech. Officer: GSFC/J HARTLEY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1252 UNIV OF MARYLAND BALTIMORE COUNTY 5451
 DISTRIBUTED DATA MINING FOR LARGE NASA DATABASES
 04/10/2001 - 02/28/2003 FY02: \$212,480 Total: \$368,480
Prin. Invest.: H KARGUPTA
Tech. Officer: ARC/J C COUGHLAN, ARC/M SCHWABACHER
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 339 UNIV OF MARYLAND BALTIMORE COUNTY 5452
 JOINT CENTER FOR EARTH SYSTEM TECHNOLOGY NEW AWARD
 07/01/1998 - 06/30/2003 FY02: \$2,471,822 Total: \$13,505,110
Prin. Invest.: D CHRISTOU, R HOFF
Tech. Officer: GSFC/R AFZAL, GSFC/C E COTE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 361 UNIV OF MARYLAND BALTIMORE COUNTY 5453
 DESKTOP STEREOSCOPIC VISUALIZATION AND ANALYSIS OF MULTI-DIMENSIONAL DATA SETS
 09/08/1998 - 12/31/2000 FY02: -\$53,939 Total: \$75,937
Prin. Invest.: D S EBERT
Tech. Officer: GSFC/A ROBERTS
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 367 UNIV OF MARYLAND BALTIMORE COUNTY 5454
 LHEA/UMBC COOPERATIVE AGREEMENT (LUCA)
 10/20/1998 - 12/31/2001 FY02: \$18,051 Total: \$1,046,656
Prin. Invest.: M J HENRIKSEN
Tech. Officer: GSFC/N E WHITE
CASE Category: 11 – ASTRONOMY

NCC 5 494 UNIV OF MARYLAND BALTIMORE COUNTY 5455
 ESTABLISHMENT OF GODDARD EARTH SCIENCE & TECHN CTR ESTABLISHING GODDARD EARTH SCIENCE AND TECHNOLOGY
 05/11/2000 - 05/10/2005 FY02: \$10,518,869 Total: \$20,305,875
Prin. Invest.: R CURRAN
Tech. Officer: GSFC/R HARTLE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 610 UNIV OF MARYLAND BALTIMORE COUNTY 5456
 LHEA/UMBC COOPERATIVE AGREEMENT (LUCA)
 12/21/2001 - 12/31/2005 FY02: \$1,021,329 Total: \$1,021,329
Prin. Invest.: M J HENRIKSEN
Tech. Officer: GSFC/N WHITE
CASE Category: 11 – ASTRONOMY

MASSACHUSETTS

NAG 1 2057 BOSTON COLL 5457
 ENHANCEMENT OF SOLID STATE LASER OUTPUT VIA INTERFEROMETRIC ENERGY TRANSFER
 04/24/1998 - 01/31/2001 FY02: -\$694 Total: \$242,277
Prin. Invest.: B DIBARTOIO, B WALSH
Tech. Officer: LARC/N P BARNES, LARC/J C BARNES
CASE Category: 13 – PHYSICS

NAG 1 01019 BOSTON COLL 5458
 INVESTIGATIONS OF FUNDAMENTAL PROCESSES IN LASER SOLIDS WITH REMOTE SENSING APPLICATIONS
 01/25/2001 - 11/30/2003 FY02: \$135,000 Total: \$277,260
Prin. Invest.: B DIBARTOLO, B WALSH
Tech. Officer: LARC/N P BARNES, LARC/J C BARNES
CASE Category: 13 – PHYSICS

NAG 1 01067 BOSTON COLL 5459
 NATO ADVANCED STUDY INST ON SPECTROSCOPY WITH SPATIALLY CONFINED STRUCTURES
 04/18/2001 - 08/17/2001 FY02: \$0 Total: \$15,000
Prin. Invest.: B DIBARTOLO
Tech. Officer: LARC/J C BARNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 02034 BOSTON COLL 5460
 INVESTIGATIONS OF FUNDAMENTAL PROCESSES IN LASER SOLIDS WITH REMOTE SENSING APPLICATIONS
 01/15/2002 - 02/20/2002 FY02: \$0 Total: \$0
Prin. Invest.: B DIBARTOLO
Tech. Officer: LARC/N P BARNES
CASE Category: 13 – PHYSICS

NAG 5 10824 BOSTON COLL 5461
 STAR FORMATION IN MSX INFRARED DARK CLOUDS (LISA 2000)
 05/01/2001 - 05/14/2002 FY02: \$0 Total: \$87,882
Prin. Invest.: S J CAREY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10833 BOSTON COLL 5462
 THE MAGNETIC STRUCTURE OF CMES: A COMPARISON OF HALO CMES WITH MAGNETIC CLOUDS AT 1 AU
 04/27/2001 - 04/30/2003 FY02: \$64,760 Total: \$129,520
Prin. Invest.: D F WEBB
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 2 1432 **BOSTON UNIV** **5463**
 INTEGRATION OF ATMOSPHERIC, LABORATORY, & SATELITE DATA TO
 ESTIMATE BIOSPHERIC SOURCES OF OXYGENATE
 08/15/2000 - 08/14/2003 FY02: \$40,390 Total: \$120,390
Prin. Invest.: R B MYNENI
Tech. Officer: ARC/C S POTTER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 5383 **BOSTON UNIV** **5471**
 SOUNDING ROCKET UV MEASUREMENT OF JUPITER'S UPPER ATMOS-
 SPHERIC DYNAMICS, THE VENUE UPPER ATMOSPHERE D
 08/20/2002 - 08/14/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: J CLARKE
Tech. Officer: WFF/J BRINTIN
CASE Category: 13 – PHYSICS

NAG 3 2143 **BOSTON UNIV** **5464**
 SONOLUMINESCENCE IN SPACE: THE CRITICAL ROLE OF B OUYANCY IN
 STABILITY AND EMISSION MECHANISMS
 04/10/1998 - 01/08/2003 FY02: \$0 Total: \$517,500
Prin. Invest.: R G HOLT, R A ROY
Tech. Officer: GRC/N R HALL
CASE Category: 13 – PHYSICS

NAG 5 6214 **BOSTON UNIV** **5472**
 MODELING AND FORECASTING EFFECTS OF LAND-USE CHANG SOCIO-
 ECONOMIC DRIVERS
 08/18/1997 - 06/30/2001 FY02: \$0 Total: \$312,042
Prin. Invest.: D K KAUFMANN
Tech. Officer: GSFC/G C GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2392 **BOSTON UNIV** **5465**
 RHEOLOGY OF FOAM NEAR THE ORDER-DISORDER PHASE TRA NSITION
 04/18/2000 - 11/30/2003 FY02: \$85,500 Total: \$215,500
Prin. Invest.: D HOLT
Tech. Officer: GRC/R B ROGERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 6658 **BOSTON UNIV** **5473**
 ULYSSES DATA ANALYSIS: MAGNETIC TOPOLOGY OF HELIO SPHERIC
 STRUCTURES
 11/20/1997 - 06/30/2001 FY02: \$0 Total: \$203,772
Prin. Invest.: N CROOKER
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 3384 **BOSTON UNIV** **5466**
 TOWARD A REFINED UNDERSTANDING OF THE HIGH-ENERGY GAMMA-RAY
 UNIVERSE
 08/28/1996 - 08/31/2001 FY02: -\$37 Total: \$364,963
Prin. Invest.: J R MATTOX
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7049 **BOSTON UNIV** **5474**
 WIND DATA ANALYSIS: GLOBAL HELIOSPHERIC STRUCTURE S
 02/26/1998 - 06/30/2002 FY02: \$0 Total: \$127,700
Prin. Invest.: N U CROOKER
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 3439 **BOSTON UNIV** **5467**
 MONITORING CHANGE IN TEMPERATE CONIFEROUS FOREST E COSYS-
 TEMS
 10/07/1996 - 12/31/2001 FY02: \$0 Total: \$915,007
Prin. Invest.: C WOODCOCK
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7217 **BOSTON UNIV** **5475**
 GEOMETRIC OPTICAL MODELING OF DIRECTIONAL THERMAL RADIANCE
 FOR IMPROVEMENT OF LAND SURFACE TEMPERATU
 04/17/1998 - 12/31/2001 FY02: \$0 Total: \$300,236
Prin. Invest.: X LI
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4246 **BOSTON UNIV** **5468**
 USE OF ENERGETIC NEUTRAL ATOMS AS DIAGNOSTICS OF M PROCESSES
 03/26/1997 - 04/30/2001 FY02: -\$8 Total: \$262,258
Prin. Invest.: D MENDILLO
Tech. Officer: GSFC/J GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 7218 **BOSTON UNIV** **5476**
 MACHINE LEARNING TO IMPROVE LAND COVER CLASSIFICATIONS FROM
 MULTISENSOR AND MULTITEMPORAL DATA
 04/09/1998 - 04/14/2001 FY02: -\$3 Total: \$84,430
Prin. Invest.: M FRIEDL
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4707 **BOSTON UNIV** **5469**
 USE OF NASA'S GLOBAL POSITIONING SYSTEM (GPS) MONI STUDIES OF
 IONOSPHERIC STRUCTURE AND VARIABILITY
 06/11/1997 - 05/31/2001 FY02: \$0 Total: \$200,000
Prin. Invest.: D MENDILLO
Tech. Officer: GSFC/M M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 7452 **BOSTON UNIV** **5477**
 SIMULATIONS AND THEORY OF THE FARLEY-BUNEMAN INSTA BILITY IN THE
 E-REGION IONOSPHERE
 07/10/1998 - 08/31/2001 FY02: \$0 Total: \$157,357
Prin. Invest.: M OPPENHEIM
Tech. Officer: GSFC/M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 5251 **BOSTON UNIV** **5470**
 A SUBORBITAL RESEARCH PROGRAM IN ULTRAVIOLET HIGH RESOLUTION
 AND IMAGING SPECTROSCOPY PI CHAKRABARTI
 02/04/2000 - 02/03/2003 FY02: \$320,000 Total: \$972,929
Prin. Invest.: S CHAKRABARTI
Tech. Officer: WFF/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 7677 **BOSTON UNIV** **5478**
 STUDIES BY THE CAMMICE INVESTIGATION TEAM DURING T HE EXTENDED
 MISSION OF GGSPOL
 09/18/1998 - 11/30/2001 FY02: -\$1,538 Total: \$1,334,069
Prin. Invest.: T FRITZ
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7706 **BOSTON UNIV** **5479**
 STUDIES OF MAGNETOSPHERIC ENERGETIC PARTICLES IN THE SOLAR
 MAXIMUM AREA
 10/01/1998 - 12/31/2002 FY02: \$0 Total: \$355,000
Prin. Invest.: H E SPENCER
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8135 **BOSTON UNIV** **5480**
 "SIGNATURES OF MAGNETOPAUSE RECONNECTION".
 01/29/1999 - 01/31/2003 FY02: \$80,000 Total: \$687,075
Prin. Invest.: G L SISCOE
Tech. Officer: GSFC/J GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 8584 **BOSTON UNIV** **5481**
 INVESTIGATION OF AERODYNAMIC AND RADIOMETRIC LAND SURFACE
 TEMPERATURES
 06/21/1999 - 06/30/2002 FY02: \$0 Total: \$65,906
Prin. Invest.: M A FRIEDL
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9110 **BOSTON UNIV** **5482**
 SUBSTORM EVOLUTION IN THE NEAR-EARTH PLASMA SHEET
 02/23/2000 - 02/28/2003 FY02: \$97,226 Total: \$279,724
Prin. Invest.: G ERICKSON
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9161 **BOSTON UNIV** **5483**
 RXTE OBSERVATIONS OF SELECTED BLAZARS - ADP - 99
 03/08/2000 - 03/14/2002 FY02: \$0 Total: \$23,580
Prin. Invest.: A MARSCHER
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9444 **BOSTON UNIV** **5484**
 SIMULATIONS & THEORY OF ELECTRON PHASE-SPACE HOLES OBSERVED
 IN THE AURORAL IONOSPHERE
 04/13/2000 - 12/31/2001 FY02: \$0 Total: \$37,000
Prin. Invest.: M OPPENHEIM
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9547 **BOSTON UNIV** **5485**
 MULTI-DECADAL PATHFINDER DATA SETS OF GLOBAL LAND BIOPHYSICAL
 VARIABLES FROM AVHRR & MODIS & THEIR
 05/16/2000 - 05/31/2002 FY02: \$0 Total: \$150,000
Prin. Invest.: R MYNENI
Tech. Officer: GSFC/DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9557 **BOSTON UNIV** **5486**
 MULTIPOINT ENERGETIC NEUTRAL ATOM IMAGING WITH POLAR GEOTAIL
 AND TIROS
 05/16/2000 - 05/14/2002 FY02: \$0 Total: \$58,999
Prin. Invest.: H SPENCE
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9562 **BOSTON UNIV** **5487**
 NEW ISTP SOLAR MAX: CUSP ENERGETIC PARTICLES
 05/09/2000 - 05/14/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: J CHEN
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9582 **BOSTON UNIV** **5488**
 A LARGE FORMAT, MINIATURIZED, PHOTON COUNTING IMAGING SYSTEM
 WITH MICRO-CHANNEL PLATE PORE-LIMITED
 05/09/2000 - 05/14/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: S CHAKRABARTI
Tech. Officer: GSFC/P CRANE
CASE Category: 13 – PHYSICS

NAG 5 10108 **BOSTON UNIV** **5489**
 THE CLUSTER RAPID ON-ORBIT OPERATIONS AND DATA VERIFICATION
 12/28/2000 - 12/31/2004 FY02: \$735,100 Total: \$1,237,100
Prin. Invest.: T FRITZ
Tech. Officer: GSFC/M GOLDSTEIN
CASE Category: 13 – PHYSICS

NAG 5 10156 **BOSTON UNIV** **5490**
 RETRIEVING LAI AND FPAR FROM MERIS DATA WITH ADVANCED ALGO-
 RITHMS
 12/18/2000 - 12/31/2003 FY02: \$87,300 Total: \$176,941
Prin. Invest.: R B MYNENI
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10286 **BOSTON UNIV** **5491**
 USE OF ENERGETIC NEUTRAL ATOMS AS DIAGNOSTICS OF MAGNETO-
 SPHERIC PROCESSES AT JUPITER
 01/23/2001 - 01/31/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: M MENDILLO
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10419 **BOSTON UNIV** **5492**
 CONSTELLATION PATHFINDER TECHNOLOGY DEVELOPMENT: SYSTEMS
 INTEGRATION AND MANUFACTURABILITY.
 03/13/2001 - 03/14/2003 FY02: \$0 Total: \$50,000
Prin. Invest.: D SPENCE
Tech. Officer: GSFC/P BUCHANAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10496 **BOSTON UNIV** **5493**
 HIGH DEFINITION IMAGES OF MERCURY'S SURFACE AND EXTENDED
 ATMOSPHERE
 02/28/2001 - 02/28/2003 FY02: \$0 Total: \$55,000
Prin. Invest.: J BAUMGARDNER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10801 **BOSTON UNIV** **5494**
 CONCEPT STUDY FOR THE "A SMALL EXPLORER MISSION FOR SPEC-
 TROSCOPY & PHOTOMETRY OF IGM'S DIFFUSE
 04/30/2001 - 09/30/2002 FY02: \$200,000 Total: \$650,000
Prin. Invest.: P CHAKRABARTI
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 10808 **BOSTON UNIV** **5495**
 INFRARED STUDIES OF 13CO CLUMPS IN THE GRS (L TSA 2 000)
 04/25/2001 - 04/30/2006 FY02: \$115,207 Total: \$215,207
Prin. Invest.: J M JACKSON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10856 **BOSTON UNIV** **5496**
 HELIOSPHERIC CURRENT SHEET STRUCTURE
 05/01/2001 - 04/30/2004 FY02: \$74,698 Total: \$146,648
Prin. Invest.: N U CROOKER
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 10881 **BOSTON UNIV** **5497**
 HELIOSPHERIC CONSEQUENCES OF CORONAL MASS EJECTION
 05/14/2001 - 05/31/2004 FY02: \$74,698 Total: \$146,648
Prin. Invest.: N U CROOKER
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11077 **BOSTON UNIV** **5498**
 IONOSPHERE VARIABILITY AND STORMS ON MARS
 08/06/2001 - 08/14/2003 FY02: \$50,000 Total: \$100,000
Prin. Invest.: M MENDILLO
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11165 **BOSTON UNIV** **5499**
 MODELING STUDIES OF TITAN'S THERMOSPHERE, IONOSPHERE, AND AURORA
 08/06/2001 - 08/14/2004 FY02: \$0 Total: \$40,198
Prin. Invest.: M MENDILLO
Tech. Officer: GSFC/D J BOGAN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11263 **BOSTON UNIV** **5500**
 LAND SURFACE ALBEDO FROM MERIS REFLECTIONS USING MODIS DIRECTIONAL FACTORS
 08/29/2001 - 12/31/2003 FY02: \$47,959 Total: \$70,566
Prin. Invest.: C SCHAAF
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11338 **BOSTON UNIV** **5501**
 THE EFFECTS OF AGRICULTURAL EXPANSION ON REGIONAL HYDROLOGY IN SE TURKEY
 09/07/2001 - 09/15/2004 FY02: \$43,350 Total: \$234,555
Prin. Invest.: G SALVUCCI
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11397 **BOSTON UNIV** **5502**
 POLAR/CAMMICE
 11/20/2001 - 11/30/2004 FY02: \$331,000 Total: \$331,000
Prin. Invest.: T FRITZ
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11454 **BOSTON UNIV** **5503**
 RESEARCH PROGRAM FOR ADVANCED MICROCHANNEL PLATE UV DETECTOR TECHNOLOGY
 12/13/2001 - 12/31/2004 FY02: \$235,000 Total: \$235,000
Prin. Invest.: S CHAKRABARTI
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11695 **BOSTON UNIV** **5504**
 "NEW SCALE APPROPRIATE DIAGNOSTICS FOR EVALUATING LAND SURFACE PARAMETERIZATIONS AND WATER BALANCE
 02/06/2002 - 02/14/2005 FY02: \$90,000 Total: \$90,000
Prin. Invest.: G D SALVUCCI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11751 **BOSTON UNIV** **5505**
 INTEGRATIVE SUN-EARTH SYSTEM STUDIES USING MAGNETOSPHERIC ENERGETIC PARTICLES.
 02/20/2002 - 02/14/2005 FY02: \$74,999 Total: \$74,999
Prin. Invest.: H SPENCE
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11790 **BOSTON UNIV** **5506**
 CROSS SECTIONS FOR THERMOSPHERIC-IONOSPHERIC NONAD IABATIC REACTIONS FROM QUASI-CLASSICAL DYNAMICS
 02/28/2002 - 02/28/2005 FY02: \$90,452 Total: \$90,452
Prin. Invest.: D COKER
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11811 **BOSTON UNIV** **5507**
 FREQUENCY-DEPENDENT TIME LAGS IN THREE BLAZARS (AD P 2001)
 03/01/2002 - 02/28/2003 FY02: \$80,444 Total: \$80,444
Prin. Invest.: A P MARSCHER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 12003 **BOSTON UNIV** **5508**
 PERIODICITY AND TURBULENCE ASSOCIATED WITH MAGNETO TAIL FLOW BURSTS
 04/12/2002 - 04/14/2005 FY02: \$83,360 Total: \$83,360
Prin. Invest.: H E SPENCE
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12095 **BOSTON UNIV** **5509**
 SATURN THERMOSPHERE-IONOSPHERE MODEL
 04/26/2002 - 04/30/2005 FY02: \$74,350 Total: \$74,350
Prin. Invest.: M MENDILLO
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12292 **BOSTON UNIV** **5510**
 UNDERSTANDING AND COPING WITH THE EFFECT OF 3D CLOUD STRUCTURE ON ARM DATA
 06/13/2002 - 06/14/2005 FY02: \$26,000 Total: \$26,000
Prin. Invest.: Y KNYZAKHIN
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1522 **BOSTON UNIV** **5511**
 DIRECT USE OF SATELLITE REMOTE SENSING IN THE ESTIMATION OF
 HYDROLOGIC TRANSPORTS.
 05/22/1998 - 09/30/2001 FY02: -\$327 Total: \$134,542
Prin. Invest.: G D SALVUCCI
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAS 5 31369 **BOSTON UNIV** **5512**
 MODERATE RESOLUTION IMAGING SPECTROMETER INVESTIGATION -
 LAND COVER CHANGES
 12/30/1991 - 06/14/2003 FY02: \$708,000 Total: \$6,097,303
Prin. Invest.: W STRAHLER
Tech. Officer: GSFC/H OSEROFF
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAS 5 96061 **BOSTON UNIV** **5513**
 MODIS
 09/27/1996 - 06/14/2003 FY02: \$410,866 Total: \$2,395,866
Prin. Invest.: R B MYNENI
Tech. Officer: GSFC/D TOLL
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 2 1233 **BOSTON UNIV** **5514**
 A BENCHMARK DATASET OF MULTIDIMENSIONAL EARTH SCIENCE SATEL-
 LITE DATA FOR TESTING OF LEARNING ALGORI
 03/30/2001 - 02/28/2003 FY02: \$110,758 Total: \$207,758
Prin. Invest.: R B MYNENI
Tech. Officer: ARC/J C OUGHLAN, ARC/S LAU
CASE Category: 22 - COMPUTER SCIENCE

NCC 9 127 **BOSTON UNIV** **5515**
 MICRO GRAVITY INDUCED CHGS IN CONTROL OF MUSCLES
 05/11/2001 - 05/31/2004 FY02: \$602,212 Total: \$702,212
Prin. Invest.: C J DE LUCA
Tech. Officer: JSC/M ANDERSON
CASE Category: 56 - MEDICL

NGT 1 52199 **BOSTON UNIV** **5516**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 07/20/1998 - 06/30/2001 FY02: -\$12,002 Total: \$53,998
Prin. Invest.: K P HARLING, B DI BARTOLO
Tech. Officer: LARC/J C BARNES, LARC/N P BARNES
CASE Category: 13 - PHYSICS

NGT 5 30223 **BOSTON UNIV** **5517**
 RELATION BETWEEN INTERANNUAL VARIABILITY IN ATMOSPHERIC CO₂,
 SEA (ENSO) AND LAND SURFACE TEMPERATUR
 09/20/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R MYNENI, L ZHOU
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 30401 **BOSTON UNIV** **5518**
 URBANIZATION AS A COMPONENT OF GLOBAL CHANGE. STUDENT: ANNE-
 MARIE SCHNEIDE
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C WOODSTOCK
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 30405 **BOSTON UNIV** **5519**
 ESTIMATION OF LAND SURFACE ENERGY BALANCE AND SUR- FACE
 PROPERTIES USING REMOTELY-SENSED OBSERVATION
 08/16/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M FRIEDL
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 30462 **BOSTON UNIV** **5520**
 RETRIEVAL OF BIOMAS AND STRUCTURAL INFORMATION OF FORESTS
 FROM LIDAR WAVEFORMS USING TIME-DEPEND
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R MYNENI
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50288 **BOSTON UNIV** **5521**
 SIMULATION OF PLASMA TURBULENCE IN THE AURORAL IONOSPHERE
 06/26/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: M OPPENHEIM
Tech. Officer: GSFC/L SMITH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50307 **BOSTON UNIV** **5522**
 GENE EXPRESSION PROFILE OF UNLOADED SKELETAL MUSCLE - STU-
 DENT: ERIC STEVENSON
 07/06/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S KANDARIAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50309 **BOSTON UNIV** **5523**
 A PROSTHETIC FOOT SOLE FOR THE MITIGATION OF BALANCE DEFICITS
 CAUSED BY REDUCED PLANTAR SENSATION
 07/07/2000 - 10/31/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: L ODDSSON
Tech. Officer: GSFC/L SMITH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 3 2386 **BRANDEIS UNIV** **5524**
 NUCLEATION OF COLLOIDAL AND PROTEIN CRYSTALS IN THE VICINITY OF
 A METASTABLE CRITICAL POINT
 04/07/2000 - 11/30/2003 FY02: \$95,000 Total: \$265,000
Prin. Invest.: D FRADEN
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 - ENGINEERING, OTHER

NAG 9 1038 **BRANDEIS UNIV** **5525**
 ADAPTATION IN ARTIFICIAL GRAVITY ENVIRONMENTS
 06/25/1998 - 08/30/2001 FY02: \$0 Total: \$617,290
Prin. Invest.: J LACKNER
Tech. Officer: JSC/C W LLOYD
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 9 1263 **BRANDEIS UNIV** **5526**
 DEVELOPING PROCEDURES FOR ALLEVIATING ASTRONAUTS POST
 FLIGHT DISTURBANCE OF POSTURE AND LOCOMOTION
 12/06/2000 - 11/30/2003 FY02: \$382,991 Total: \$692,377
Prin. Invest.: J R LACKNER
Tech. Officer: JSC/C W LLOYD
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 8559 **CLARK UNIV** **5527**
 PIXELING THE SOCIAL USING REMOTELY SENSED INFORMATION IN
 SOCIAL SCIENCE MODELS
 07/08/1999 - 06/30/2002 FY02: \$0 Total: \$344,368
Prin. Invest.: J GEOGHEGAN
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11134 **CLARK UNIV** **5528**
 LCLUC-SYPR II
 07/26/2001 - 07/31/2004 FY02: \$169,151 Total: \$268,975
Prin. Invest.: B TURNER
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1270 **CLARK UNIV** **5529**
 COFFEE HARVEST OPTIMIZATION USING UAV PLATFORMS FOR THE
 ACQUISITION OF HIGH SPATIAL RESOLUTION REAL
 06/07/2001 - 12/14/2002 FY02: \$2,064,900 Total: \$2,904,900
Prin. Invest.: S HERWITZ
Tech. Officer: ARC/S S WEGENER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 97 **CLARK UNIV** **5530**
 INTEGRATED ASSESSMENT AND PROJECTION OF LAND-USE/ COVER
 CHANGE IN THE SOUTHERN YUCATAN PENINSULAR
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B L TURNER, S MANSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30061 **CLARK UNIV** **5531**
 DIAGNOSIS OF SPATIAL AND TEMPORAL PATTERNS OF DRY LAND-
 ATMOSPHERE WATER EXCHANGE IN THE TROPICAL SAV
 09/10/1997 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: L LEWIS
Tech. Officer: GSFC/M Y WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30147 **CLARK UNIV** **5532**
 IDENTIFYING THE LAND-MANAGEMENT INSTS AND LANDSCAPE PATTERNS
 GOVERNING SAVANNA FIRE REGI
 08/31/1998 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B L TURNER,11
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30153 **CLARK UNIV** **5533**
 LINKING REMOTE SENSING AND SOCIAL ANALYSIS: CAUSAL INFLUENCES
 OF TRANSITIONING ECONOMIES ON
 08/28/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: B L TUNNER, 11, HAAN
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30197 **CLARK UNIV** **5534**
 CONSERVATION IN THE SOUTHERN YUCATAN PENINSULAR REGION,
 MEXICO: LINKING LANDSCAPE ECOLOGY AND SOCIAL
 08/18/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B L TURNER, 11
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30217 **CLARK UNIV** **5535**
 SOCIALIZING MIOMBO GEOLOGY: CHANGE IN WOODLAND USE AND ITS
 MEANING FOR SUSTAINABLE LIVELIHOODS/STUD
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B L TURNER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1796 **COLL OF THE HOLY CROSS** **5536**
 FOR RESEARCH "TRANSIENT DENDRITIC SOLIDIFICATION EXPERIMENT"
 03/07/2001 - 05/31/2003 FY02: \$138,975 Total: \$238,975
Prin. Invest.: M KOSS
Tech. Officer: MSFC/A JACKSON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 2025 **HARVARD UNIV** **5537**
 ANALYSIS OF INTERANNUAL AND LONG TERM VARIATIONS OF STRATO-
 SPHERIC TRANSPORT OF OZONE AND DEVELOP-
 03/19/1998 - 01/31/2001 FY02: -\$1 Total: \$345,000
Prin. Invest.: S C WOFYSY
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2126 **HARVARD UNIV** **5538**
 ANALYSIS AND MODELING OF PEM-TROPICS (B) DATA MY 1/3
 02/02/1999 - 12/31/2001 FY02: -\$1 Total: \$328,000
Prin. Invest.: D J JACOB, J A LOGAN
Tech. Officer: LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2307 **HARVARD UNIV** **5539**
 GLOBAL THREE-DIMENSIONAL MODELING STUDIES OF TROPOSPHERIC
 OZONE
 06/28/2000 - 03/31/2003 FY02: \$271,000 Total: \$752,001
Prin. Invest.: D J JACOB
Tech. Officer: LARC/G L MADDREA, HQ/P DE COLA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2328 **HARVARD UNIV** **5540**
 ANALYSIS OF ASIAN OUTFLOW OVER THE PACIFIC USING OBSERVATIONS
 FROM TRACE-P, NRA 00-OES-01
 09/20/2000 - 06/30/2003 FY02: \$317,771 Total: \$541,830
Prin. Invest.: D J JACOB
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01095 **HARVARD UNIV** **5541**
 CHEMISTRY, DYNAMICS, AND RADIATION OF OZONE LOSS AIRBORNE
 MEAS OF OH, HO2, NO2, ClO, BRO, IO, CLONO2
 07/18/2001 - 12/31/2003 FY02: \$1,799,000 Total: \$3,798,722
Prin. Invest.: J G ANDERSON
Tech. Officer: LARC/L R POOLE, LARC/G L MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1310 **HARVARD UNIV** **5542**
 IN SITU MEASUREMENT OF CONCENTRATION OF ATMOSPHERIC CO2 IN
 THE SGAE-3 OZONE LOSS & VALIDATION EXPER
 03/19/1999 - 12/31/2002 FY02: \$120,000 Total: \$557,000
Prin. Invest.: S C WOFYSY
Tech. Officer: ARC/C P SCOFIELD, ARC/R S HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1417 HARVARD UNIV 5543
 BIOMECHANICS OF ARABIDOPSIS THALIANA WAVY ROOT DEV ELOPMENT
 07/11/2000 - 06/30/2003 FY02: \$0 Total: \$121,609
Prin. Invest.: N M HOLBROOK
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1509 HARVARD UNIV 5544
 CONTROL OF CELL MECHANICS AND FUNCTION BY CELL MIC ROENVIRON-
 MENT
 07/26/2001 - 07/31/2003 FY02: \$229,903 Total: \$342,308
Prin. Invest.: N WANG
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2284 HARVARD UNIV 5545
 PHYSICS OF COLLOIDS IN SPACE PHYSICS OF COLLOIDS IN SPACE
 08/02/1999 - 06/30/2004 FY02: \$391,875 Total: \$1,223,000
Prin. Invest.: D WEITZ
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2376 HARVARD UNIV 5546
 MICROGRAVITY DRIVEN INSTABILITIES IN GAS-FLUIDIZED BEDS
 03/27/2000 - 11/30/2003 FY02: \$27,000 Total: \$76,000
Prin. Invest.: D A WEITZ
Tech. Officer: GRC/B MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2381 HARVARD UNIV 5547
 FABRICATION OF PHOTONIC STRUCTURE WITH COLLOIDAL ENGINEERING
 04/07/2000 - 11/30/2003 FY02: \$90,000 Total: \$226,000
Prin. Invest.: D A WHITE
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2492 HARVARD UNIV 5548
 ENGINEERING OF NOVEL BIOCOLLOIDAL SUSPENSIONS ENGINEERING OF
 NOVEL BIOCOLLOIDAL SUSPENSIONS
 10/17/2000 - 11/30/2003 FY02: \$30,000 Total: \$60,000
Prin. Invest.: D A WEITZ
Tech. Officer: GRC/D GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3645 HARVARD UNIV 5549
 EVOLUTION OF PROTEROZOIC MICROORGANISMS AND ENVIRO
 03/05/1997 - 05/31/2002 FY02: \$0 Total: \$353,808
Prin. Invest.: D H KNOLL
Tech. Officer: GSFC/M MEYER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4348 HARVARD UNIV 5550
 ABSOLUTE TRANSITION PROBABILITIES FOR LINES IN THE ASTROPHYSI-
 CAL ATOMS, MOLECULES AND IONS
 04/17/1997 - 12/31/2001 FY02: \$0 Total: \$426,197
Prin. Invest.: A H DALGARNO
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 4430 HARVARD UNIV 5551
 ISOTOPIC STUDIES OF SOLAR SYSTEMS ORIGINS
 05/06/1997 - 02/28/2003 FY02: \$0 Total: \$178,000
Prin. Invest.: D B JACOBSEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4720 HARVARD UNIV 5552
 TUNGSTEN ISOTOPE STUDIES OF METEORITES
 06/17/1997 - 03/31/2001 FY02: -\$387 Total: \$74,613
Prin. Invest.: D B JACOBSEN
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 5279 HARVARD UNIV 5553
 DEVELOPMENT OF A HARD X-RAY IMAGING DETECTOR AND SURVEY
 TELESCOPE (EXITE 3) FOR AN LDB MISSION
 05/31/2000 - 05/18/2003 FY02: \$220,000 Total: \$642,811
Prin. Invest.: G GRINDLAY
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 7039 HARVARD UNIV 5554
 STRUCTURE AND EVOLUTION OF X-RAY CLUSTERS: THEORY AND IMPLI-
 CATIONS FOR AXAF -ATP
 02/25/1998 - 02/14/2002 FY02: -\$38 Total: \$269,786
Prin. Invest.: A LOEB
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 7534 HARVARD UNIV 5555
 LONG-TERM NET ECOSYSTEM EXCHANGE AT THE BORE AS NO RTHERN
 OLD BLACK SPRUCE SITE: MECHANISMS FOR
 06/11/1998 - 05/31/2002 FY02: \$0 Total: \$1,159,850
Prin. Invest.: S C WORSY
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7616 HARVARD UNIV 5556
 FUNDING FOR 'INVESTIGATIONS OF THE GEODYNAMO USING SATELLITE
 MAGNETIC FIELD OBSERVATIONS' (SENH98-0
 07/22/1998 - 07/14/2002 FY02: \$0 Total: \$224,000
Prin. Invest.: J BLOXHAM
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7768 HARVARD UNIV 5557
 STUDYING THE SUPERNOVA HISTORY OF THE UNIVERSE WITH THE NEXT
 GENERATION SPACE TELESCOPE
 01/11/1999 - 01/14/2002 FY02: \$0 Total: \$56,348
Prin. Invest.: R KIRSHNER
Tech. Officer: GSFC/E SMITH
CASE Category: 11 – ASTRONOMY

NAG 5 7859 HARVARD UNIV 5558
 PHOTOABSORPTION CROSS SECTIONS AND THEIR TEMPERATU RE DE-
 PENDENCE FOR CO2 AND H2O IN THE 170 NM TO 20
 01/06/1999 - 12/31/2001 FY02: \$0 Total: \$183,875
Prin. Invest.: W H PARKINSON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8467 HARVARD UNIV 5559
 STUDIES OF STAR AND PLANETARY SYSTEM FORMATION
 05/03/1999 - 07/31/2001 FY02: -\$1 Total: \$20,287
Prin. Invest.: A W CAMERON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8779 HARVARD UNIV 5560
 CLOUDS AND WATER VAPOR IN THE CLIMATE SYSTEM
 08/30/1999 - 02/28/2001 FY02: -\$14,956 Total: \$883,920
Prin. Invest.: J ANDERSON
Tech. Officer: GSFC/R CURRAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10631 HARVARD UNIV 5568
 THE EVOLUTION OF ATMOSPHERIC OXYGEN AND THE COMPOSITION OF SEAWATER
 03/17/2001 - 03/14/2004 FY02: \$150,000 Total: \$300,000
Prin. Invest.: H D HOLLAND
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9019 HARVARD UNIV 5561
 1. H2 IN HH2: FLUORESCENCE OR COLLISIONS? - FUSE 2. NON-RADIATIVE SHOCKS IN THE CYGNUS LOOP - FUSE
 02/02/2000 - 01/31/2003 FY02: \$0 Total: \$61,100
Prin. Invest.: J C RAYMOND
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10780 HARVARD UNIV 5569
 MODELS OF LOW-LUMINOSITY ACCRETION FLOWS (ATP 2000)
 04/20/2001 - 04/30/2004 FY02: \$98,775 Total: \$193,164
Prin. Invest.: R NARAYAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9643 HARVARD UNIV 5562
 CHEMISTRY, AEROSOLS, AND CLIMATE: TROPOSPHERIC UNIFIED SIMULATION (CACTUS)
 06/28/2000 - 05/31/2003 FY02: \$383,333 Total: \$1,014,000
Prin. Invest.: D J JACOB
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10792 HARVARD UNIV 5570
 2001 7TH INTERNATIONAL PRECIPITATION CONFERENCE
 04/24/2001 - 12/31/2001 FY02: \$0 Total: \$27,900
Prin. Invest.: A P BARROS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9823 HARVARD UNIV 5563
 MEASUREMENT, ANALYSIS, & MODELING OF THE SPATIAL & TEMPORAL VARIABILITY OF OROGRAPHIC PRECIP.
 07/24/2000 - 11/30/2002 FY02: \$156,660 Total: \$382,080
Prin. Invest.: A P BARROS
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10906 HARVARD UNIV 5571
 THE ORIGINS OF AUTOTROPHY: DISTRIBUTION, DIVERSITY AND EVOLUTION OF RUBISCO
 05/22/2001 - 07/31/2004 FY02: \$100,247 Total: \$190,247
Prin. Invest.: C M CAVANAUGH
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 10040 HARVARD UNIV 5564
 ON THE ORIGIN OF DIPS IN 4U1915-05
 10/03/2000 - 09/30/2002 FY02: \$0 Total: \$7,400
Prin. Invest.: J E GRINDLAY
Tech. Officer: GSFC/RMUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11154 HARVARD UNIV 5572
 FLUXES OF CARBON, WATER, AND ENERGY IN A BOREAL FOREST-PEAT ECOSYSTEM: SHORT TERM VARIANCE, LONG
 08/02/2001 - 07/31/2004 FY02: \$354,769 Total: \$544,172
Prin. Invest.: S C WOFSY
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10046 HARVARD UNIV 5565
 XMM OBSERVATIONS OF LARGE CORE CLUSTERS
 09/28/2000 - 09/30/2002 FY02: \$0 Total: \$8,100
Prin. Invest.: J E GRINDLAY
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11270 HARVARD UNIV 5573
 EVALUATION AND INTERCOMPARISON OF TROPOSPHERIC CHEMISTRY SIMULATIONS FOR GLOBAL MODEL INITIATIVE (GM)
 08/22/2001 - 08/31/2004 FY02: \$0 Total: \$145,130
Prin. Invest.: D JACOB
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10105 HARVARD UNIV 5566
 X-RAY SPECTROSCOPY OF LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI WITH XMM
 12/18/2000 - 11/30/2001 FY02: -\$2,541 Total: \$2,324
Prin. Invest.: R NARAYAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11431 HARVARD UNIV 5574
 CONSTRAINTS OF CHEMICAL TRACERS ON THE GLOBAL BUDGETS OF CO2 AND CH4
 12/03/2001 - 11/30/2004 FY02: \$205,000 Total: \$205,000
Prin. Invest.: M MCELROY
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10484 HARVARD UNIV 5567
 ISOTOPIC STUDIES OF THE FORMATION & EARLY DIFFERENTIATION OF PLANETS
 03/05/2001 - 03/31/2004 FY02: \$70,000 Total: \$140,000
Prin. Invest.: S JACOBSEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11547 HARVARD UNIV 5575
 TOTAL WATER MEASUREMENTS USING IN SITU UV FRAGMENT FLUORESCENCE SPECTROSCOPY IN SUPPORT OF
 01/14/2002 - 01/31/2004 FY02: \$52,434 Total: \$52,434
Prin. Invest.: J ANDERSON
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NASA'S UNIVERSITY PROGRAM

MASSACHUSETTS

NAG 5 11548	HARVARD UNIV	5576	NCC 2 1053	HARVARD UNIV	5585
IN SITU WATER VAPOR MEASUREMENTS USING COUPLED UV FRAGMENT FLUORESCENCE/ABSORPTION SPECTROSCOPY IN S			THE PLANETARY CONTEXT OF BIOLOGICAL EVOLUTION		
01/14/2002 - 01/31/2004	FY02: \$63,833	Total: \$63,833	09/14/1998 - 06/30/2003	FY02: \$1,136,134	Total: \$3,458,303
<i>Prin. Invest.:</i> J ANDERSON			<i>Prin. Invest.:</i> A H KNOLL		
<i>Tech. Officer:</i> GSFC/D ANDERSON			<i>Tech. Officer:</i> ARC/R A GRAYMES, ARC/W W DOLCI		
<i>CASE Category:</i> 39 - ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 59 - LIFE SCIENCE, OTHER		
NAG 5 11638	HARVARD UNIV	5577	NCC 2 1236	HARVARD UNIV	5586
CO2 MEASUREMENTS FROM THE WB-57F IN CRYSTAL-FACE			PROBABILISTIC REASONING FOR COMPLEX DYNAMIC SYSTEM S		
01/22/2002 - 01/31/2004	FY02: \$50,000	Total: \$50,000	04/11/2001 - 02/28/2003	FY02: \$67,666	Total: \$133,666
<i>Prin. Invest.:</i> S C WOFSY			<i>Prin. Invest.:</i> A J PFEFFER		
<i>Tech. Officer:</i> GSFC/D ANDERSON			<i>Tech. Officer:</i> ARC/R A MORRIS, ARC/D J CLANCY		
<i>CASE Category:</i> 39 - ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 22 - COMPUTER SCIENCE		
NAG 5 11925	HARVARD UNIV	5578	NCC 2 5505	HARVARD UNIV	5587
ISOTOPIIC STUDIES OF SOLAR SYSTEM ORIGINS			COLLECTIVE INTELLIGENCE MECHANISM DESIGN FOR COMPL EX SYS- TEMS		
03/27/2002 - 03/31/2003	FY02: \$45,000	Total: \$45,000	07/24/2002 - 11/30/2002	FY02: \$40,000	Total: \$40,000
<i>Prin. Invest.:</i> S JACOBSEN			<i>Prin. Invest.:</i> D PARKES		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> ARC/K TURNER, ARC/D WOLPERT		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 22 - COMPUTER SCIENCE		
NAG 5 12041	HARVARD UNIV	5579	NCC 5 341	HARVARD UNIV	5588
THE SUNYAEV-ZEL'DOVICH EFFECT(S)			NET ECOSYSTEM EXCHANGE OF CO2 AND H2O FROM PRIMARY TROPICAL FOREST IN CENTRAL AMAZONIA		
04/17/2002 - 04/26/2002	FY02: \$0	Total: \$0	07/07/1998 - 12/31/2002	FY02: \$350,000	Total: \$1,712,000
<i>Prin. Invest.:</i> M WHITE			<i>Prin. Invest.:</i> S C WOFSY		
<i>Tech. Officer:</i> GSFC/M SALAMON			<i>Tech. Officer:</i> GSFC/D W DEERING		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 39 - ENVIRONMENTAL SCI, OTHER		
NAG 5 12140	HARVARD UNIV	5580	NCC 5 590	HARVARD UNIV	5589
GALAXY EVOLUTION IN A COSMOLOGICAL CONTEXT			CO2 BUDGET REGIONAL AIRBORNE STUDY (COBRA) - BRAZIL		
05/06/2002 - 04/30/2005	FY02: \$136,854	Total: \$136,854	11/01/2001 - 10/31/2004	FY02: \$251,901	Total: \$251,901
<i>Prin. Invest.:</i> L E HERNQUIST			<i>Prin. Invest.:</i> S C WOFSY		
<i>Tech. Officer:</i> GSFC/M SALAMON			<i>Tech. Officer:</i> GSFC/D W DEERING		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 39 - ENVIRONMENTAL SCI, OTHER		
NAG 8 1680	HARVARD UNIV	5581	NGT 5 101	HARVARD UNIV	5590
"GLASS FORMATION, NUCLEATION AND DIFFUSION IN METALLIC MELTS"			NATURAL SELECTION IN ELEMENTS OF PHOTOSYNTHESIS STUDENT: LUCAS MIX		
06/06/2000 - 11/30/2003	FY02: \$100,000	Total: \$240,000	05/25/2000 - 08/31/2003	FY02: \$24,000	Total: \$68,000
<i>Prin. Invest.:</i> F A SPAEPEN, M J AZIZ			<i>Prin. Invest.:</i> C CAVANAUGH		
<i>Tech. Officer:</i> MSFC/P DOTY			<i>Tech. Officer:</i> GSFC/G A SOFFEN		
<i>CASE Category:</i> 47 - METAL & MATERIALS ENGR			<i>CASE Category:</i> 51 - BIOLOGY (EXCLUDING ENVIR)		
NAG 8 1822	HARVARD UNIV	5582	NGT 5 30152	HARVARD UNIV	5591
RESEARCH ENTITLED, "STUDY OF METASTABILITY OF HYDROGEN AGAINST A TRANSITION TO PRESSURE"			BIOLOGICAL AND PHYSICAL CONTROLS ON EVAPOTRANSPIRATION IN A MID-LATITUDE FOREST		
06/29/2001 - 07/15/2002	FY02: \$0	Total: \$99,972	08/28/1998 - 08/31/2001	FY02: -\$13,620	Total: \$52,380
<i>Prin. Invest.:</i> I F SILVERA			<i>Prin. Invest.:</i> S C WOFSY, LIN		
<i>Tech. Officer:</i> MSFC/S D BAI			<i>Tech. Officer:</i> GSFC/M Y WEI		
<i>CASE Category:</i> 43 - CHEMICAL ENGR			<i>CASE Category:</i> 39 - ENVIRONMENTAL SCI, OTHER		
NAS 1 18946	HARVARD UNIV	5583	NGT 5 30205	HARVARD UNIV	5592
SAGE III SCIENCE SUPPORT; P.I. - WOFSY			NITRIC ACID AND NITROGEN DIOXIDE FLUX MEASUREMENTS OVER A NORTH-AMERICAN FOREST/STUDENT: CASSANDRA H		
11/28/1989 - 01/31/2005	FY02: \$82,187	Total: \$586,117	08/19/1999 - 08/31/2002	FY02: \$0	Total: \$66,000
<i>Prin. Invest.:</i> S C WOFSY			<i>Prin. Invest.:</i> S C WOFSY		
<i>Tech. Officer:</i> LARC/G MADDREA			<i>Tech. Officer:</i> GSFC/M WEI		
<i>CASE Category:</i> 19 - PHYSICAL SCIENCE, OTHER			<i>CASE Category:</i> 39 - ENVIRONMENTAL SCI, OTHER		
NAS 5 02037	HARVARD UNIV	5584			
NRA FOR R & D ENTITLED "INSTRUMENT INCUBATOR PROGRAM, ICOS, CAPS & CRDS: NEW TECHNIQUES					
03/14/2002 - 03/13/2003	FY02: \$946,850	Total: \$946,850			
<i>Prin. Invest.:</i> J ANDERSON					
<i>Tech. Officer:</i> GSFC/F PERI					
<i>CASE Category:</i> 42 - ASTRONAUTICAL ENGR					

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NGT 5 30336 HARVARD UNIV 5593
 LABORATORY STUDIES OF TROPOSPHERIC SOURCES & SINKS OF THE
 HYDROXYL RADICAL: OXIDATION OF ALKENE
 08/21/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: J ANDERSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30366 HARVARD UNIV 5594
 CHARACTERIZING THE HYDROLOGICAL AND ENVIRONMENTAL CONTROLS
 ON THE CARBONBALANCE OF BOREAL FORESTS/AL
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S WOFSY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30410 HARVARD UNIV 5595
 A NEW METHOD FOR IN SITU MEASUREMENTS OF THE ISOTO PIC
 COMPOSITION OF WATER IN THE TROPICAL UPPER
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J ANDERSON
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30466 HARVARD UNIV 5596
 UNDERSTANDING GLOBAL SOURCES OF CARBON MONOXIDE: AN INTE-
 GRATED OBSERVATIONAL STRATEGY_ STUDENT NAME
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D JACOB
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50258 HARVARD UNIV 5597
 STUDIES IN LOW TEMPERATURE ATOMIC PHYSICS USING A CRYOGENIC
 HYDROGEN MASER STUDENT: MARC HUMPHR
 07/07/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: W H PARKINSON
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52922 HARVARD UNIV 5598
 EFFECTIVENESS OF ENGINEERING DESIGN AN DTECHNOLOGY BASED
 CHALLENGES ON URBAN MIDDLE SCHOOL STUDENTS
 08/27/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R PETERKIN
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 21 – MATHEMATICS

NAG 1 2027 MASSACHUSETTS INST OF TECHNOLOGY 5599
 LARGE-SCALE STRATOSPHERIC TRANSPORT PROCESSES MY 1/3
 03/20/1998 - 08/28/2001 FY02: -\$7 Total: \$414,494
Prin. Invest.: R A PLUMB
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2122 MASSACHUSETTS INST OF TECHNOLOGY 5600
 UNSTRUCTURED MESH METHODS FOR THE SIMULATION OF HYPE RSONIC
 FLOW
 12/23/1998 - 03/31/2001 FY02: -\$1 Total: \$190,765
Prin. Invest.: J PERAIRE
Tech. Officer: LARC/K L BIBB, LARC/K J WEILMUNSTER
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 1 2152 MASSACHUSETTS INST OF TECHNOLOGY 5601
 STUDIES OF TRACE GAS CHEMICAL CYCLES USING INVERSE METHODS &
 GLOBAL CHEMICALTRANSPORT MODELS
 02/25/1999 - 12/31/2001 FY02: \$0 Total: \$428,180
Prin. Invest.: R G PRINN
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERICSCIENCE

NAG 1 2173 MASSACHUSETTS INST OF TECHNOLOGY 5602
 PHYS PROCESSES GOV'G ATMOSPHERIC TRACECONSTITUENTS MEAS'D
 FROM A/C IN PEM-TROPICS-B (NRA-97-MTPE-04)
 05/03/1999 - 02/28/2002 FY02: -\$3 Total: \$445,109
Prin. Invest.: R E NEWELL
Tech. Officer: LARC/J L RAPER, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2203 MASSACHUSETTS INST OF TECHNOLOGY 5603
 TRACER EVOLUTION AT HIGHER LATITUDES IN WINTER (SOLVE)
 06/17/1999 - 09/30/2001 FY02: -\$974 Total: \$23,846
Prin. Invest.: R PLUMB
Tech. Officer: LARC/G MADDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2239 MASSACHUSETTS INST OF TECHNOLOGY 5604
 REQUIREMENT ENGINEERING FOR SOFTWARE INTEGRITY AND SAFETY
 (NRA 98-LARC-8)
 09/23/1999 - 09/30/2002 FY02: \$0 Total: \$352,740
Prin. Invest.: N LEVESON
Tech. Officer: LARC/D E ECKMARDT
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 2275 MASSACHUSETTS INST OF TECHNOLOGY 5605
 DEVELOPMENT OF AN OUTPUT-BASED ADAPTIVE METHOD FOR MULTI-
 DIMENSIONAL EULER AND NAVIER STOKES SIMUL-
 02/29/2000 - 06/30/2002 FY02: -\$1 Total: \$165,278
Prin. Invest.: D L DARMOTAL
Tech. Officer: LARC/J L THOMAS
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 1 2306 MASSACHUSETTS INST OF TECHNOLOGY 5606
 USE OF GTE, MOZAIC, SONEX AND UARS-MLS DATA IN UNDERSTANDING
 TROPOSPHERIC CRITICAL TO MODEL DEV.
 06/08/2000 - 03/31/2003 FY02: \$90,000 Total: \$270,000
Prin. Invest.: R E NEWELL
Tech. Officer: LARC/D L MODDREA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01025 MASSACHUSETTS INST OF TECHNOLOGY 5607
 PERFORMANCE AND RELIABILITY OPTIMIZATION FOR AERO- SPACE SYS-
 TEMS SUBJECT TO UNCERTAINTY & DEGRADATIO
 02/16/2001 - 12/31/2003 FY02: \$90,636 Total: \$180,987
Prin. Invest.: D W MILLER
Tech. Officer: LARC/P G MAGHAMI
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 1 01102 MASSACHUSETTS INST OF TECHNOLOGY 5608
 ACTIVE TAILORING OF A FLEXIBLE WING USING LANGLEY MACRO-FIBER
 COMPOSITE (MFC) ACTUATORS
 06/20/2001 - 12/31/2002 FY02: \$0 Total: \$39,988
Prin. Invest.: C CESNIK
Tech. Officer: LARC/H K WILKIE
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 1 02006 MASSACHUSETTS INST OF TECHNOLOGY 5609
 INVESTIGATE AIRCRAFT DYNAMIC STATE AND INTENT RQMTS IN FUTURE
 AIR TRAFFIC CONTROL ENVIRONMENTS
 11/29/2001 - 11/30/2004 FY02: \$84,107 Total: \$84,107
Prin. Invest.: R J HANSMAN
Tech. Officer: LARC/R BARNYDT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02037 MASSACHUSETTS INST OF TECHNOLOGY 5610
 AN OUTPUT-BASED ADAPTIVE METHOD FOR MULTI- DIMENSIONAL EULER
 AND NAVIER-STOKES
 01/15/2002 - 01/15/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: D L DARMOFAL
Tech. Officer: LARC/J L THOMAS, LARC/E J NIELSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02038 MASSACHUSETTS INST OF TECHNOLOGY 5611
 IDENTIFICATION OF KEY CONSTRAINTS AND SYSTEM DYNAMICS IN THE
 NAS TO SUPPORT EVALUATION
 01/25/2002 - 01/31/2005 FY02: \$138,966 Total: \$138,966
Prin. Invest.: R J HANSMAN
Tech. Officer: LARC/R E YACKOVETSKY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02040 MASSACHUSETTS INST OF TECHNOLOGY 5612
 CAPRI: USING A GEOMETRIC FOUNDATION FOR COMPUTA- TIONAL ANALY-
 SIS AND DESIGN
 01/18/2002 - 01/17/2005 FY02: \$69,513 Total: \$69,513
Prin. Invest.: R HAIMES
Tech. Officer: LARC/W T JONES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 729 MASSACHUSETTS INST OF TECHNOLOGY 5613
 MODELING INFORMATION PROCESSING IN FLIGHT MANAGEM ENT
 08/27/1991 - 06/30/2001 FY02: \$0 Total: \$994,962
Prin. Invest.: T B SHERIDAN
Tech. Officer: ARC/S C LOZITO, ARC/E J HARTZELL
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1136 MASSACHUSETTS INST OF TECHNOLOGY 5614
 SDSI IMPLEMENTATION
 07/11/1997 - 11/30/2000 FY02: -\$2,026 Total: \$151,123
Prin. Invest.: R L RIVEST
Tech. Officer: ARC/Y K LIU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1272 MASSACHUSETTS INST OF TECHNOLOGY 5615
 APPLYING ATC AUTOMATION TO ADDRESS ENVIRONMENTAL C ONSIDER-
 ATIONS
 12/22/1998 - 05/31/2002 FY02: \$0 Total: \$486,178
Prin. Invest.: J P CLARKE
Tech. Officer: ARC/T TOBIAS, ARC/T J DAVIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1299 MASSACHUSETTS INST OF TECHNOLOGY 5616
 HUMAN PERFORMANCE CONSIDERATIONS FOR SHARED INFORM ATION IN
 DATALINKED AIR TRAFFIC MANAGEMENT SYSTEM
 03/03/1999 - 07/31/2003 FY02: \$0 Total: \$370,533
Prin. Invest.: R J HANSMAN
Tech. Officer: ARC/S C LOZITO
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1338 MASSACHUSETTS INST OF TECHNOLOGY 5617
 SOFTWARE DESIGN FOR AIR-TRAFFIC CONTROL
 07/19/1999 - 07/14/2001 FY02: -\$9,442 Total: \$91,088
Prin. Invest.: D N JACKSON, J CHAPIN
Tech. Officer: ARC/M M ESHOW, ARC/K Y TUNG-CATE
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1350 MASSACHUSETTS INST OF TECHNOLOGY 5618
 EFFECT OF GROWTH STARVATION UNDER SIMULATED MICRO- GRAVITY
 ON THE BACTERIAL STRESS & SECONDARY METAB
 07/21/1999 - 07/14/2002 FY02: \$53,842 Total: \$653,789
Prin. Invest.: A L DEMAINE
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1388 MASSACHUSETTS INST OF TECHNOLOGY 5619
 HYBRID ADAPTIVE METHODS FOR THE DEVELOPMENT OF MOD EL-BASED
 AUTONOMOUS ROBOTIC SYSTEMS
 12/01/1999 - 11/30/2001 FY02: -\$29,812 Total: \$760,188
Prin. Invest.: B C WILLIAMS
Tech. Officer: ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1425 MASSACHUSETTS INST OF TECHNOLOGY 5620
 MODELING & ANALYSIS OF MULTIPLE ALERTING SYSTEM IN TERACTIONS
 07/26/2000 - 02/28/2003 FY02: \$117,642 Total: \$288,739
Prin. Invest.: J K KUCHAR
Tech. Officer: ARC/S C LOZITO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1458 MASSACHUSETTS INST OF TECHNOLOGY 5621
 SURFACE GENERATION & CARTESIAN MESH SUPPORT
 02/27/2001 - 02/28/2003 FY02: \$50,001 Total: \$100,140
Prin. Invest.: R HAIMES
Tech. Officer: ARC/M J AFTOSMIS, ARC/G KLUPFER
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1463 MASSACHUSETTS INST OF TECHNOLOGY 5622
 SELF-DIRECTED COOPERATIVE PLANETARY ROVERS
 03/16/2001 - 02/28/2003 FY02: \$0 Total: \$270,961
Prin. Invest.: S ZILBERSTEIN
Tech. Officer: ARC/R A MORRIS, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1466 MASSACHUSETTS INST OF TECHNOLOGY 5623
 UNIFYING MODEL-BASED SEQUENCE EXECUTION & FAULT PR OTECTION
 FOR SPACE VEHICLES
 03/23/2001 - 03/14/2003 FY02: \$150,000 Total: \$621,560
Prin. Invest.: B WILLIAMS
Tech. Officer: ARC/R MORRIS, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1482 MASSACHUSETTS INST OF TECHNOLOGY 5624
 UNDERSTANDING THE DYNAMICS OF AGILE SMALL-SCALE RO TORCRAFT
 05/09/2001 - 04/30/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: E FERON
Tech. Officer: ARC/M B TISCHER, ARC/B R LAKINSMITH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1515 MASSACHUSETTS INST OF TECHNOLOGY 5625
 DEVELOPMENT OF STOCHASTIC MODELS AND MODULES AND I NTERAC-
 TIVE COMMUNICATION CAPABILITIES FOR THE MIT
 08/08/2001 - 07/31/2002 FY02: \$29,653 Total: \$94,653
Prin. Invest.: J P CLARKE
Tech. Officer: ARC/L A MEYN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1540 MASSACHUSETTS INST OF TECHNOLOGY 5626
 INTERDISCIPLINARY ANALYSIS OF PRE CAMBRIAN ANIMAL FOSSILS FROM
 SW CHINA
 03/15/2002 - 02/28/2003 FY02: \$120,701 Total: \$120,701
Prin. Invest.: Y L WANG
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1543 MASSACHUSETTS INST OF TECHNOLOGY 5627
 MODEL BASED HAZARD ANALYSIS RESEARCH
 03/20/2002 - 03/14/2003 FY02: \$222,690 Total: \$222,690
Prin. Invest.: N LEVESON
Tech. Officer: ARC/M SHIRLEY, ARC/A WANG
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 2 1548 MASSACHUSETTS INST OF TECHNOLOGY 5628
 STOCHASTIC MODELS FOR THE MIT EXTENSIBLE AIR NETWO RK SIMULA-
 TION
 04/04/2002 - 02/21/2003 FY02: \$182,876 Total: \$182,876
Prin. Invest.: J P CLARKE
Tech. Officer: ARC/L A MEYN, ARC/K ROTH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1552 MASSACHUSETTS INST OF TECHNOLOGY 5629
 MOTION PLANNING FOR AGILE MANEUVERING VEHICLES
 04/11/2002 - 04/14/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: E FERON
Tech. Officer: ARC/M TISCHLER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1554 MASSACHUSETTS INST OF TECHNOLOGY 5630
 ADVANCED NOISE ABATEMENT PROCEDURES FOR APPROACH
 04/17/2002 - 05/31/2003 FY02: \$74,977 Total: \$74,977
Prin. Invest.: J P CLARKE
Tech. Officer: ARC/L TOBIAS, ARC/T J DAVIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 1879 MASSACHUSETTS INST OF TECHNOLOGY 5631
 MODELING OF PULSED PLASMA THRUSTER PLUMES
 05/22/1996 - 11/30/2000 FY02: -\$6,554 Total: \$476,446
Prin. Invest.: J B HOWARD
Tech. Officer: GRC/J E BROOKER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2052 MASSACHUSETTS INST OF TECHNOLOGY 5632
 IDENTIFICATION AND CONTROL OF ROTATING STALL MODES IN AXIAL
 COMPRESSORS
 05/27/1997 - 03/31/2001 FY02: -\$582 Total: \$668,894
Prin. Invest.: J PADUANO
Tech. Officer: GRC/M BRIGHT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2078 MASSACHUSETTS INST OF TECHNOLOGY 5633
 AERODYNAMICS OF ADVANCED SUBSONIC TRANSPORT INTEGRATED FAN
 BYPASS DUCT SYSTEM AND ITS DESIGN
 12/18/1997 - 08/31/2001 FY02: -\$293 Total: \$210,719
Prin. Invest.: C S TAN
Tech. Officer: GRC/J J ADAMCZYK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2101 MASSACHUSETTS INST OF TECHNOLOGY 5634
 THREE-DIMENSIONAL AERODYNAMIC INSTABILITIES IN MUL TI-STAGE
 AXIAL COMPRESSORS
 12/23/1997 - 01/31/2003 FY02: \$0 Total: \$289,769
Prin. Invest.: C S TAN
Tech. Officer: GRC/K L SUDER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2155 MASSACHUSETTS INST OF TECHNOLOGY 5635
 AN INTEROMETRIC INVESTIGATION OF CONTACT LINE DYNA MICS IN
 SPREADING POLYMERMELTS AND SOLUTIONS
 04/21/1998 - 01/19/2003 FY02: \$0 Total: \$357,650
Prin. Invest.: G H MCKINLEY
Tech. Officer: GRC/N R HALL
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2178 MASSACHUSETTS INST OF TECHNOLOGY 5636
 INTEGRATED HUMAN CENTERED SYSTEMS ANALYSIS OF FUNC TIONAL
 REQUIREMENTS FOR COCKPIT ICING INFORMATION
 07/08/1998 - 12/31/2002 FY02: \$50,000 Total: \$289,975
Prin. Invest.: R J HANSMAN
Tech. Officer: GRC/A REEHORST
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2320 MASSACHUSETTS INST OF TECHNOLOGY 5637
 AEROTHERMAL PROBABILISTIC DESIGN OF COMPRESSOR BLA DES
 01/13/2000 - 03/21/2003 FY02: \$130,794 Total: \$389,349
Prin. Invest.: D M DARMOFAL
Tech. Officer: GRC/S PAI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2321 MASSACHUSETTS INST OF TECHNOLOGY 5638
 CHARACTERIZATION OF AEROMECHANICS RESPONSE AND INS TABILITY
 IN FANS, COMPRESSORS, AND TURBINE BLADES
 01/13/2000 - 01/13/2003 FY02: \$58,000 Total: \$149,034
Prin. Invest.: D S TAN
Tech. Officer: GRC/G L STEFKO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2503 MASSACHUSETTS INST OF TECHNOLOGY 5639
 INTRA-ENGINE TRACE SPECIES CHEMISTRY INTRA-ENGINE TRACE SPE-
 CIES CHEMISTRY
 11/21/2000 - 11/30/2001 FY02: -\$1,084 Total: \$91,082
Prin. Invest.: D A WAITZ
Tech. Officer: GRC/N LIU
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2506 MASSACHUSETTS INST OF TECHNOLOGY 5640
 MICROFABRICATED LIQUID ROCKET MOTORS MICROFABRICATED LIQUID
 ROCKET MOTORS
 11/21/2000 - 11/30/2002 FY02: \$133,569 Total: \$262,255
Prin. Invest.: D H EPSTEIN
Tech. Officer: GRC/S SCHNEIDER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 3 2523 MASSACHUSETTS INST OF TECHNOLOGY 5641
 CAPRI USING A GEOMETRIC FOUNDATION FOR COMPUTATIONAL ANALYSIS
 AND DESIGN
 01/17/2001 - 09/11/2002 FY02: \$0 Total: \$109,920
Prin. Invest.: R HAIMES
Tech. Officer: GRC/G FOLLEN
 CASE Category: 29 - MATH/COMPUTER SCI, OTHER

NAG 3 2678 MASSACHUSETTS INST OF TECHNOLOGY 5642
 MODELING AND INTEGRATION OF ACTIVE INTERNAL FLOW CONTROL IN
 AERO-ENGINE COMPRESSORS
 12/17/2001 - 09/30/2004 FY02: \$101,820 Total: \$101,820
Prin. Invest.: D M GREITZER
Tech. Officer: GRC/G WELCH
 CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2685 MASSACHUSETTS INST OF TECHNOLOGY 5643
 ARCHITECTURES AND PROTOCOLS FOR NASA'S FUTURE SPACE NET-
 WORKS
 01/08/2002 - 12/20/2004 FY02: \$74,898 Total: \$74,898
Prin. Invest.: D MODIANO
Tech. Officer: GRC/O SANDS
 CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2732 MASSACHUSETTS INST OF TECHNOLOGY 5644
 UNSTEADY COMPUTATIONAL CODE VALIDATION AND IMPACT OF UN-
 STEADY IMPELLER-DIFFUSER INTERACTIONS ON CENT
 03/11/2002 - 12/25/2002 FY02: \$85,000 Total: \$85,000
Prin. Invest.: D S TAN
Tech. Officer: GRC/G SKOCH
 CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2767 MASSACHUSETTS INST OF TECHNOLOGY 5645
 TURBOMACHINERY FOR LOW TO HIGH MACH NUMBER FLIGHT TURBOMA-
 CHINERY FOR LOW TO HIGH MACH NUMBER FLIGHT
 04/11/2002 - 08/31/2003 FY02: \$52,522 Total: \$52,522
Prin. Invest.: D S TAN
Tech. Officer: GRC/K SUDER
 CASE Category: 41 - AERONAUTICAL ENGR

NAG 5 3558 MASSACHUSETTS INST OF TECHNOLOGY 5646
 ACCRETING BLACK HOLES - AN ALL OUT EFFORT
 12/14/1996 - 12/14/2002 FY02: \$0 Total: \$182,003
Prin. Invest.: W H LEWIN
Tech. Officer: GSFC/D K WEST
 CASE Category: 11 - ASTRONOMY

NAG 5 3915 MASSACHUSETTS INST OF TECHNOLOGY 5647
 SOLAR SYSTEM DYNAMICS
 02/21/1997 - 09/30/2002 FY02: \$0 Total: \$613,900
Prin. Invest.: J WISDOM
Tech. Officer: GSFC/D G SENSKE
 CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 3939 MASSACHUSETTS INST OF TECHNOLOGY 5648
 SMALL MAIN-BELT SPECTROSCOPIC SURVEY
 02/12/1997 - 12/31/2001 FY02: \$0 Total: \$570,720
Prin. Invest.: D P BINZEL
Tech. Officer: GSFC/J BERGSTRALH
 CASE Category: 11 - ASTRONOMY

NAG 5 3940 MASSACHUSETTS INST OF TECHNOLOGY 5649
 STELLAR OCCULTATION STUDIES OF PLUTO, TRITON
 02/12/1997 - 11/30/2001 FY02: \$0 Total: \$494,752
Prin. Invest.: D L ELLIOT
Tech. Officer: GSFC/J BERGSTRALH
 CASE Category: 11 - ASTRONOMY

NAG 5 3974 MASSACHUSETTS INST OF TECHNOLOGY 5650
 ADVANCED GLOBAL ATMOSPHERIC GASES EXPERIMENT (AGAG)
 02/26/1997 - 01/31/2003 FY02: \$574,215 Total: \$2,911,332
Prin. Invest.: R G PRINN
Tech. Officer: GSFC/M J KURYLO
 CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 3977 MASSACHUSETTS INST OF TECHNOLOGY 5651
 COLLISION PROCESSES INVOLVING ATMOSPHERIC FREE RAD INFRARED
 ABSORBERS
 02/26/1997 - 09/30/2001 FY02: \$0 Total: \$287,633
Prin. Invest.: P STEINFELD
Tech. Officer: GSFC/P L DECOLA
 CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 4047 MASSACHUSETTS INST OF TECHNOLOGY 5652
 INVESTIGATION OF VENUS SURFACE PROPERTIES
 03/10/1997 - 12/31/2001 FY02: -\$19 Total: \$164,981
Prin. Invest.: D G FORD
Tech. Officer: GSFC/J G GRANT
 CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 4434 MASSACHUSETTS INST OF TECHNOLOGY 5653
 RESEARCH PARTICIPATION IN THE MARS ORBITING LASER
 04/28/1997 - 12/31/2002 FY02: \$0 Total: \$409,282
Prin. Invest.: G H PETTENGILL
Tech. Officer: GSFC/D E SMITH
 CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 4555 MASSACHUSETTS INST OF TECHNOLOGY 5654
 PLANETARY TECTONICS AND VOLCANISM
 06/23/1997 - 03/31/2002 FY02: \$0 Total: \$689,783
Prin. Invest.: D R ZUBER
Tech. Officer: GSFC/H BRINTON
 CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 4768 MASSACHUSETTS INST OF TECHNOLOGY 5655
 PHASE EQUILIBRIUM INVESTIGATIONS OF PLANETARY MATE
 06/09/1997 - 06/30/2001 FY02: -\$1 Total: \$179,999
Prin. Invest.: P L GROVE
Tech. Officer: HQ/J BOYCE
 CASE Category: 11 - ASTRONOMY

NAG 5 4806 MASSACHUSETTS INST OF TECHNOLOGY 5656
 MARS OBSERVER LASER ALTIMETER
 08/01/1997 - 07/31/2001 FY02: -\$4,533 Total: \$966,264
Prin. Invest.: M T ZUBER
Tech. Officer: GSFC/D E SMITH
 CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 4989 MASSACHUSETTS INST OF TECHNOLOGY 5657
 CENTER FOR QUANTITATIVE CARDIOVASCULAR PHYSIOLOGY, ANALYSIS
 06/27/1997 - 08/31/2001 FY02: \$0 Total: \$575,000
Prin. Invest.: R COHEN
Tech. Officer: GSFC/V SCHNEIDER
 CASE Category: 59 - LIFE SCIENCE, OTHER

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 5271 MASSACHUSETTS INST OF TECHNOLOGY 5658
 FIRST YEAR OF TWO YEAR EFFORT FIRST YEAR OF TWO YEAR EFFORT -
 A PROGRAM OF
 04/17/2000 - 10/01/2002 FY02: \$195,330 Total: \$935,330
Prin. Invest.: M SCHATTENBURG
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 - PHYSICS

NAG 5 5329 MASSACHUSETTS INST OF TECHNOLOGY 5659
 ADAPTATION OF GAS ELECTRON MULTIPLIER TECHNOLOGY FOR ROUTINE
 03/29/2001 - 03/31/2004 FY02: \$129,630 Total: \$259,514
Prin. Invest.: A LEVINE
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 - PHYSICS

NAG 5 5330 MASSACHUSETTS INST OF TECHNOLOGY 5660
 ADVANCED SILICON DETECTORS FOR HIGH ENERGY ASTROPHYSICS
 MISSIONS
 07/09/2002 - 07/02/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: G RICKER
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 - PHYSICS

NAG 5 6063 MASSACHUSETTS INST OF TECHNOLOGY 5661
 VERTICAL ACCURACY IMPROVEMENT FOR VLBI AND GPS
 08/01/1997 - 07/14/2001 FY02: -\$762 Total: \$272,228
Prin. Invest.: A E NIELL
Tech. Officer: GSFC/H V FREY
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 6710 MASSACHUSETTS INST OF TECHNOLOGY 5662
 PHYSICAL MECHANISMS CONTROLLING UPPER TROPOSPHERIC WATER
 VAPOR AS REVEALED BY MLS DATA FROM U
 12/17/1997 - 11/30/2001 FY02: \$0 Total: \$278,000
Prin. Invest.: D NEWELL
Tech. Officer: GSFC/A DOUGLASS
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 7012 MASSACHUSETTS INST OF TECHNOLOGY 5663
 JETS IN AGN: NUMERICAL SIMULATIONS IN RELATIVISTIC MHD - ATP
 02/19/1998 - 02/28/2003 FY02: \$0 Total: \$182,915
Prin. Invest.: M H VAN PUTTEN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 - ASTRONOMY

NAG 5 7194 MASSACHUSETTS INST OF TECHNOLOGY 5664
 ATLANTIC OCEAN PROCESSES FROM SUBPOLAR REGIONS TO THE
 SOUTHERN SUBTROPICAL GYRE: MODEL/DATA COMPAR
 03/26/1998 - 04/30/2001 FY02: \$0 Total: \$498,840
Prin. Invest.: P RIZZOLI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 7279 MASSACHUSETTS INST OF TECHNOLOGY 5665
 XTE PROPOSAL - DOES PRECESSION OF THE ACCRETION DISK OF SMC
 X-1 CAUSE A VARIATION IN THE PULSE PER
 04/15/1998 - 04/14/2001 FY02: -\$14 Total: \$10,111
Prin. Invest.: G W CLARK
Tech. Officer: GSFC/J SWANK
CASE Category: 11 - ASTRONOMY

NAG 5 7475 MASSACHUSETTS INST OF TECHNOLOGY 5666
 THE VALUE OF DISTRIBUTED MODELING TO FLOOD FORECASTING
 06/18/1998 - 08/31/2002 FY02: \$0 Total: \$382,143
Prin. Invest.: R BRASS
Tech. Officer: GSFC/E ENGMAN
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 7487 MASSACHUSETTS INST OF TECHNOLOGY 5667
 THIS PROJECT PROVIDES FUNDING TO A MIT GRANT ON "PASSIVE MICROWAVE
 STUDIES OF ATMOSPHERIC PRECIPITATION A
 06/05/1998 - 03/31/2002 FY02: \$19,582 Total: \$374,582
Prin. Invest.: D STAELIN
Tech. Officer: GSFC/J C SHIUE
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 7525 MASSACHUSETTS INST OF TECHNOLOGY 5668
 USE OF SATELLITE REMOTE SENSING TO STUDY THE ROLE OF RAINFOR-
 ESTS IN TROPICAL CLIMATE
 06/08/1998 - 12/31/2002 FY02: \$0 Total: \$311,993
Prin. Invest.: E ELTAHIR
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 7794 MASSACHUSETTS INST OF TECHNOLOGY 5669
 INTERCALIBRATION AND CROSS-CORRELATION OF ACE AND WIND SOLAR
 WIND DATA
 12/10/1998 - 09/30/2002 FY02: \$0 Total: \$203,205
Prin. Invest.: D J LAZARUS
Tech. Officer: GSFC/D C LING
CASE Category: 11 - ASTRONOMY

NAG 5 7839 MASSACHUSETTS INST OF TECHNOLOGY 5670
 STRUCTURAL DYNAMICS & CONTROLS ANALYSES, SIMULATIONS, AND
 TESTBEDS FOR THE NEXT GENERATION SPACE T
 12/16/1998 - 05/31/2002 FY02: \$0 Total: \$412,910
Prin. Invest.: D W MILLER
Tech. Officer: GSFC/G MOSIER
CASE Category: 42 - ASTRONAUTICAL ENGR

NAG 5 7857 MASSACHUSETTS INST OF TECHNOLOGY 5671
 A SYNTHESIS OF THE GLOBAL WIND OBSERVATIONS OF THE OCEANIC
 CIRCULATION
 12/10/1998 - 12/31/2001 FY02: \$0 Total: \$787,330
Prin. Invest.: C WUNSCH
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 7967 MASSACHUSETTS INST OF TECHNOLOGY 5672
 A SEARCH FOR THE SOLAR SOURCES OF HIGH-SPEED SOLAR WIND
 STREAMS
 01/15/1999 - 12/14/2002 FY02: \$0 Total: \$288,490
Prin. Invest.: D J LAZARUS
Tech. Officer: GSFC/D C LING
CASE Category: 11 - ASTRONOMY

NAG 5 8031 MASSACHUSETTS INST OF TECHNOLOGY 5673
 REDUCTION AND SCIENTIFIC ANALYSIS OF DATA FROM IMP-8
 01/19/1999 - 12/31/2002 FY02: \$0 Total: \$312,734
Prin. Invest.: A J LAZARUS
Tech. Officer: GSFC/J KING
CASE Category: 11 - ASTRONOMY

NAG 5 8045 MASSACHUSETTS INST OF TECHNOLOGY 5674
 SCIENTIFIC ANALYSIS OF DATA FOR THE ISTEP/SOLARMAX PROGRAM
 01/11/1999 - 01/14/2002 FY02: \$0 Total: \$99,954
Prin. Invest.: A J LAZARUS
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8063 MASSACHUSETTS INST OF TECHNOLOGY 5675
 PULSAR WIND NEBULAE, SPACE VELOCITIES, & SUPERNOVA REMNANT
 ASSOCIATIONS LTSA 98
 01/13/1999 - 01/14/2004 FY02: \$48,000 Total: \$192,000
Prin. Invest.: V M KASPI
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8368 MASSACHUSETTS INST OF TECHNOLOGY 5676
 FORMATION AND EVOLUTION OF BINARY SYSTEMS CONTAINING COLLAPSED STARS (ATP 98)
 03/01/1999 - 04/30/2003 FY02: \$0 Total: \$161,810
Prin. Invest.: S A RAPPAPORT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8460 MASSACHUSETTS INST OF TECHNOLOGY 5677
 THEORETICAL STUDIES OF BINARY SYSTEMS CONTAINING COLLAPSED STARS
 04/16/1999 - 07/31/2001 FY02: -\$77,049 Total: \$160,620
Prin. Invest.: F A RASIO
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8617 MASSACHUSETTS INST OF TECHNOLOGY 5678
 TWO-WAY BIOSPHERE-ATMOSPHERE INTERACTIONS: THEIR IMPLICATIONS FOR SATELLITE OBSERVATIONS OF REGIONAL
 06/14/1999 - 06/30/2002 FY02: \$25,712 Total: \$224,959
Prin. Invest.: E B ELTAHIR
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8668 MASSACHUSETTS INST OF TECHNOLOGY 5679
 DIRECT DEPOSITION OF OPTICAL BLOCKING FILTERS ON CCD X-RAY DETECTORS
 07/07/1999 - 09/30/2001 FY02: -\$47 Total: \$172,746
Prin. Invest.: M W BAUTZ
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8707 MASSACHUSETTS INST OF TECHNOLOGY 5680
 IMPLICATIONS OF LUNAR PROSPECTOR DATA FOR LUNAR GEOPHYSICS
 07/20/1999 - 07/31/2002 FY02: \$0 Total: \$172,347
Prin. Invest.: M T ZUBER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8720 MASSACHUSETTS INST OF TECHNOLOGY 5681
 INVESTIGATION OF SOLAR WIND CORRELATIONS & MODIFICATIONS NEAR EARTH USING MULTI-SPACECRAFT OBSERVATIONS
 08/03/1999 - 07/31/2002 FY02: \$0 Total: \$70,500
Prin. Invest.: J I RICHARDSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8776 MASSACHUSETTS INST OF TECHNOLOGY 5682
 RESIN-SPINNING OF SYNTHETIC POLYMER FIBERS WITH SILK-LIKE PROPERTIES
 08/31/1999 - 08/31/2003 FY02: \$131,250 Total: \$516,250
Prin. Invest.: G MCKINLEY
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8814 MASSACHUSETTS INST OF TECHNOLOGY 5683
 TEMPO OF THE PERMIAN MASS EXTINCTIONS & RECOVERIES
 09/29/1999 - 04/01/2002 FY02: \$0 Total: \$228,000
Prin. Invest.: S A BOWRING
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8887 MASSACHUSETTS INST OF TECHNOLOGY 5684
 LABORATORY STUDIES OF HOMOGENEOUS & HETEROGENEOUS CHEMICAL PROCESSES OF IMPORTANCE IN THE UPPER ATMOSPHERE
 12/02/1999 - 12/31/2002 FY02: \$199,772 Total: \$599,382
Prin. Invest.: M MOLINA
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8947 MASSACHUSETTS INST OF TECHNOLOGY 5685
 MODELING THE EXTENDED NEUTRAL ATMOSPHERE & PLASMA ENVIRONMENT NEAR SATURN/FOLLOW-ON TO NAG5-6129
 01/18/2000 - 07/14/2003 FY02: \$63,200 Total: \$185,934
Prin. Invest.: J D RICHARDSON
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9057 MASSACHUSETTS INST OF TECHNOLOGY 5686
 NEW GPS SITES ON THE ARABIAN PLATE TO EXPAND THE IGS NETWORK & TO SUPPORT MEASUREMENTS OF THE RED SEA
 02/15/2000 - 02/28/2003 FY02: \$26,390 Total: \$44,390
Prin. Invest.: R E REILINGER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9080 MASSACHUSETTS INST OF TECHNOLOGY 5687
 DEVELOPMENT OF SOLID-STATE LOCAL-OSCILLATOR SOURCE FOR TERAHERTZ FREQUENCIES
 02/17/2000 - 02/28/2003 FY02: \$144,000 Total: \$426,000
Prin. Invest.: Q HU
Tech. Officer: GSFC/S NIEBUR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9117 MASSACHUSETTS INST OF TECHNOLOGY 5688
 SELF-ORGANIZED CRITICALITY, MULTIFRACTALS, & INTERMITTENT TURBULENCE IN EARTH'S MAGNETOSPHERE
 02/24/2000 - 02/28/2003 FY02: \$48,785 Total: \$137,422
Prin. Invest.: T CHANG
Tech. Officer: GSFC/J SHARBER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9120 MASSACHUSETTS INST OF TECHNOLOGY 5689
 NEW ENERGETIC RADIO PULSARS: AN ARCHIVAL X-RAY SURVEY - ADP 99
 02/29/2000 - 02/28/2002 FY02: \$0 Total: \$29,166
Prin. Invest.: V M KASPI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 9135 MASSACHUSETTS INST OF TECHNOLOGY 5690
 RXTE OBSERVATIONS OF BLACK HOLE CANDIDATES ADP99
 02/28/2000 - 06/30/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: W H LEWIN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9143 MASSACHUSETTS INST OF TECHNOLOGY 5691
 APPLICATIONS OF AIRBORNE & ORBITAL LASER ALTIMETRY FOR COASTAL
 PROCESSES & MARINE STATIC GRAVITY
 02/29/2000 - 02/28/2002 FY02: \$0 Total: \$126,436
Prin. Invest.: M T ZURBER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9164 MASSACHUSETTS INST OF TECHNOLOGY 5692
 LONG-TERM MONITORING OF ANOMALOUS X-RAY PULSARS WITH RXTE -
 ADP 99
 03/08/2000 - 03/14/2002 FY02: -\$56 Total: \$58,209
Prin. Invest.: D CHARKRABARTY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9184 MASSACHUSETTS INST OF TECHNOLOGY 5693
 ACCRETING NEUTRON STARS AS ASTROPHYSICAL LABORATOR IES
 LTSA-99
 03/07/2000 - 03/14/2005 FY02: \$127,640 Total: \$368,384
Prin. Invest.: D CHARKRABARTY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9185 MASSACHUSETTS INST OF TECHNOLOGY 5694
 TIMING THE MILLISECOND X-RAY PULSAR WITH RXTE - ADP - 99
 03/07/2000 - 03/14/2002 FY02: \$0 Total: \$58,866
Prin. Invest.: D CHAKRABARTY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9189 MASSACHUSETTS INST OF TECHNOLOGY 5695
 X-RAY PULSAR STUDIES WITH RXTE - ADP 99
 03/08/2000 - 03/14/2003 FY02: \$0 Total: \$40,000
Prin. Invest.: S RAPPAPORT
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9211 MASSACHUSETTS INST OF TECHNOLOGY 5696
 A SEARCH FOR EVIDENCE OF NON-THERMAL EMISSION FROM THE
 SUPERNOVA REMNANTS 37A/B (ADP 99)
 03/09/2000 - 03/14/2002 FY02: -\$36 Total: \$7,673
Prin. Invest.: G ALLEN
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9235 MASSACHUSETTS INST OF TECHNOLOGY 5697
 A MEASUREMENT OF THE NON-THERMAL X-RAY EMISSION OF THE
 SUPERNOVA REMNANTRX J1713.7-3946 - ADP 99
 03/09/2000 - 03/14/2002 FY02: \$0 Total: \$8,769
Prin. Invest.: G ALLEN
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9237 MASSACHUSETTS INST OF TECHNOLOGY 5698
 A STUDY OF THE NON-THERMAL X-RAY EMISSION OF SHELL -TYPE
 SUPERNOVA REMNANTS - LTSA99
 03/09/2000 - 03/14/2005 FY02: \$109,000 Total: \$313,300
Prin. Invest.: G ALLEN
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9445 MASSACHUSETTS INST OF TECHNOLOGY 5699
 CARBONATE PLATFORM DEVELOPMENT & STROMATOLITE MORP HOGEN-
 ESIS: CONSTRAINTS ON ENVIRONMENTAL & BIOLOGIC
 05/01/2000 - 04/30/2004 FY02: \$125,000 Total: \$242,750
Prin. Invest.: J GROTZINGER
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9525 MASSACHUSETTS INST OF TECHNOLOGY 5700
 PHASE EQUILIBRIUM INVESTIGATIONS OF PLANETARY MATE RIALS
 04/28/2000 - 06/30/2003 FY02: \$65,000 Total: \$187,000
Prin. Invest.: T L GROVE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9616 MASSACHUSETTS INST OF TECHNOLOGY 5701
 SOLAR WIND ACCELERATION, HEATING, & EVOLUTION WITH WAVE-
 PARTICLE
 05/23/2000 - 04/30/2003 FY02: \$104,961 Total: \$212,402
Prin. Invest.: T CHANG
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9622 MASSACHUSETTS INST OF TECHNOLOGY 5702
 DEVELOPMENT OF 25-YEAR IMP 8 BOW SHOCK CROSSING LIST, INGES-
 TION OF THIS LISTTO CDWEB, & ENHANCEM
 05/19/2000 - 05/31/2003 FY02: \$0 Total: \$42,764
Prin. Invest.: J RICHRADSON
Tech. Officer: GSFC/J KING
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9637 MASSACHUSETTS INST OF TECHNOLOGY 5703
 THE USE OF TRMM LIS & GEOSTATIONARY IR DATA TO STU DY LAND-
 OCEAN DIFFER- ENCES IN CONVEC. & THEIR RE
 07/07/2000 - 11/30/2002 FY02: \$131,506 Total: \$274,792
Prin. Invest.: E R WILLIAMS
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9640 MASSACHUSETTS INST OF TECHNOLOGY 5704
 APPLICATIONS OF TRMM PRODUCTS IN HYDROLOGIC STUDIES OVER THE
 AMAZON REGION
 07/07/2000 - 11/30/2002 FY02: \$323,000 Total: \$769,131
Prin. Invest.: R L BRAS
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9763 MASSACHUSETTS INST OF TECHNOLOGY 5705
 OPTICAL INTERFEROMETER STUDIES OF OTHER PLANETARY SYSTEMS
 06/27/2000 - 12/31/2002 FY02: \$0 Total: \$70,000
Prin. Invest.: B F BURKE
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9962 MASSACHUSETTS INST OF TECHNOLOGY 5706
 DISENTANGLING X-RAY EMISSION PROCESSES IN VELA- LIKE PULSARS
 09/22/2000 - 01/31/2002 FY02: -\$33,886 Total: \$2,739
Prin. Invest.: B M GAENSLER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10008 MASSACHUSETTS INST OF TECHNOLOGY 5707
 STUDYING THE INTERGALACTIC MEDIUM THROUGH X-RAY ABSORPTION
 LINES
 09/25/2000 - 09/30/2003 FY02: \$0 Total: \$44,500
Prin. Invest.: C R CANIZARES
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10107 MASSACHUSETTS INST OF TECHNOLOGY 5708
 XMM OBSERVATIONS OF LOW MASS GROUPS
 12/01/2000 - 11/30/2002 FY02: \$16,200 Total: \$44,200
Prin. Invest.: D S DAVIS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10192 MASSACHUSETTS INST OF TECHNOLOGY 5709
 XMM OBSERVATIONS OF BLACK-HOLE X-RAY BINARIES IN OUTBURST
 12/28/2000 - 12/31/2002 FY02: \$11,000 Total: \$33,900
Prin. Invest.: W LEWIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10328 MASSACHUSETTS INST OF TECHNOLOGY 5710
 COMPOSITION OF HYDRATED M AND E-CLASS ASTEROIDS: A SEARCH FOR
 ANALOGS
 01/26/2001 - 01/31/2002 FY02: \$0 Total: \$23,000
Prin. Invest.: A RIVKIN
Tech. Officer: GSFC/D SENKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10389 MASSACHUSETTS INST OF TECHNOLOGY 5711
 RELIEF EVOLUTION IN TECTONICALLY ACTIVE MOUNTAIN RANGERS
 02/08/2001 - 02/14/2003 FY02: \$50,034 Total: \$100,083
Prin. Invest.: K X WHIPPLE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10440 MASSACHUSETTS INST OF TECHNOLOGY 5712
 AGENT BASED SOFTWARE FOR THE AUTONOMOUS CONTROL OF FORMA-
 TION FLYING SPACECRAFT PROPOSAL 864
 03/07/2001 - 03/14/2004 FY02: \$333,337 Total: \$699,885
Prin. Invest.: D P HOW
Tech. Officer: GSFC/N J DENNEHY
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 10444 MASSACHUSETTS INST OF TECHNOLOGY 5713
 STELLAR OCCULTATION STUDIES OF SMALL BODIES IN THE OUTER SOLAR
 SYSTEM
 02/20/2001 - 01/31/2004 FY02: \$134,100 Total: \$268,000
Prin. Invest.: J ELLIOT
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10604 MASSACHUSETTS INST OF TECHNOLOGY 5714
 WATER OF HYDRATION ON C-CLASS ASTEROIDS: DOES SIZE MATTER
 03/15/2001 - 03/14/2004 FY02: \$37,100 Total: \$73,034
Prin. Invest.: A RIVKIN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10613 MASSACHUSETTS INST OF TECHNOLOGY 5715
 HIGH SENSITIVITY OPTICAL TECHNIQUES FOR ATMOSPHERIC SPECTROS-
 COPY, KINETICS, AND REMOTE SENSING
 03/27/2001 - 03/31/2004 FY02: \$78,354 Total: \$154,475
Prin. Invest.: J I STEINFELD
Tech. Officer: GSFC/M KURYLO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10684 MASSACHUSETTS INST OF TECHNOLOGY 5716
 DYNAMICS OF LANDSCAPE CHANGE IN RAPIDLY ERODING REGIONS
 03/30/2001 - 03/31/2004 FY02: \$75,970 Total: \$151,283
Prin. Invest.: R L BRAS
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10711 MASSACHUSETTS INST OF TECHNOLOGY 5717
 A PARTICLE PHYSICS EXPERIMENT IN SPACE
 04/06/2001 - 03/31/2003 FY02: \$0 Total: \$10,000,000
Prin. Invest.: S C TING
Tech. Officer: GSFC/M SISTILLI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10728 MASSACHUSETTS INST OF TECHNOLOGY 5718
 APPLICATION OF EXPERIMENTAL PETROLOGY TO AID IN THE INTERPRE-
 TATION OF THE MARS PATHFINDER ROCK
 04/10/2001 - 04/30/2004 FY02: \$40,000 Total: \$80,000
Prin. Invest.: T GROVE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10793 MASSACHUSETTS INST OF TECHNOLOGY 5719
 ATLANTIC OCEAN PROCESSES FROM SUBPOLAR REGIONS TO THE
 SOUTHERN SUBTROPICAL GYRE: MODEL/DATA COMPAR
 04/25/2001 - 10/31/2001 FY02: \$0 Total: \$69,010
Prin. Invest.: P RIZZOLI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10815 MASSACHUSETTS INST OF TECHNOLOGY 5720
 LOW-MASS X-RAY BINARIES WITH RXTE (ADP 2000)
 05/03/2001 - 12/31/2002 FY02: \$0 Total: \$40,171
Prin. Invest.: W H LEWIN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10915 MASSACHUSETTS INST OF TECHNOLOGY 5721
 MO&DA FOR THE FARADAY CUP PORTION OF THE WIND SWE EXPERIMENT
 05/21/2001 - 05/31/2005 FY02: \$94,672 Total: \$214,672
Prin. Invest.: A LAZARUS
Tech. Officer: GSFC/K OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11113 MASSACHUSETTS INST OF TECHNOLOGY 5722
 PLANETARY TOPOGRAPHY AND GRAVITY
 07/18/2001 - 07/31/2004 FY02: \$262,499 Total: \$512,498
Prin. Invest.: M T ZUBER
Tech. Officer: GSFC/D E SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 11268 MASSACHUSETTS INST OF TECHNOLOGY 5723
 SDM VIRTUALNESS PROJECT
 08/17/2001 - 11/30/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: J KLEIN
Tech. Officer: GSFC/T MATURO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11285 MASSACHUSETTS INST OF TECHNOLOGY 5724
 LARGE-SCALE ATMOSPHERIC TRANSPORT PROCESSES
 08/17/2001 - 08/31/2004 FY02: \$0 Total: \$149,675
Prin. Invest.: R A PLUMB
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11390 MASSACHUSETTS INST OF TECHNOLOGY 5725
 MICROWAVE OBSERVATIONS PRECIPITATION AND THE ATMOSPHERE
 12/05/2001 - 12/31/2002 FY02: \$80,418 Total: \$80,418
Prin. Invest.: D STAELIN
Tech. Officer: GSFC/J C SHIUE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11536 MASSACHUSETTS INST OF TECHNOLOGY 5726
 SOLAR SYSTEM DYNAMICS
 01/03/2002 - 12/31/2004 FY02: \$123,000 Total: \$123,000
Prin. Invest.: J WISDOM
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11575 MASSACHUSETTS INST OF TECHNOLOGY 5727
 RESEARCH PARTICIPATION IN THE MARS ORBITING LASER ALTIMETER
 EXPERIMENT
 01/09/2002 - 01/14/2004 FY02: \$49,963 Total: \$49,963
Prin. Invest.: G H PETTINGHILL
Tech. Officer: GSFC/D E SMITH
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11602 MASSACHUSETTS INST OF TECHNOLOGY 5728
 DIRECT ASSIMILATION OF REMOTELY SENSED LAND SURFACE TEMPERATURE
 FOR THE ESTIMATION OF SURFACE
 01/17/2002 - 01/31/2005 FY02: \$105,000 Total: \$105,000
Prin. Invest.: D ENTEKHABI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11617 MASSACHUSETTS INST OF TECHNOLOGY 5729
 IDENTIFICATION OF AQUEOUS ALTERATION PRODUCTS ON LOW-ALBEDO
 ASTEROIDS
 01/17/2002 - 01/31/2003 FY02: \$17,200 Total: \$17,200
Prin. Invest.: A S RIVKIN
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11623 MASSACHUSETTS INST OF TECHNOLOGY 5730
 PROPAGATION OF INTERPLANETARY DISTURBANCES
 01/22/2002 - 01/31/2005 FY02: \$75,000 Total: \$75,000
Prin. Invest.: C WANG
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11650 MASSACHUSETTS INST OF TECHNOLOGY 5731
 PLANETARY GEOPHYSICS AND TECTONICS
 01/29/2002 - 03/31/2005 FY02: \$135,300 Total: \$135,300
Prin. Invest.: M T ZUBER
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11683 MASSACHUSETTS INST OF TECHNOLOGY 5732
 GALACTIC BLACK HOLE CANDIDATE GRS 1758-258 IN THE OFF/SOFT STATE
 01/31/2002 - 02/14/2003 FY02: \$23,151 Total: \$23,151
Prin. Invest.: W LEWIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11721 MASSACHUSETTS INST OF TECHNOLOGY 5733
 AN INVESTIGATION OF ENSEMBLE METHODS FOR DIRECT AS SIMULATION
 OF REMOTE SENSING DATA
 02/06/2002 - 02/14/2005 FY02: \$105,000 Total: \$105,000
Prin. Invest.: D B MCLAUGHLIN
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11746 MASSACHUSETTS INST OF TECHNOLOGY 5734
 ATLANTIC OCEAN TROPICAL/SUBTROPICAL PROCESSES FROM SEASONAL
 TO THE DECADEAL TIME SCALES: MODEL
 02/22/2002 - 02/28/2005 FY02: \$146,293 Total: \$146,293
Prin. Invest.: P RIZZOLI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11878 MASSACHUSETTS INST OF TECHNOLOGY 5735
 AN XMM-NEWTON OBSERVATION OF THE NEW GALACTIC BLACK HOLE
 XTE J1650-500
 03/15/2002 - 03/14/2003 FY02: \$24,678 Total: \$24,678
Prin. Invest.: W LEWIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11930 MASSACHUSETTS INST OF TECHNOLOGY 5736
 XMM OBSERVATIONS OF X-RAY EMISSION FROM SUPERNOVAE
 04/03/2002 - 03/31/2003 FY02: \$7,000 Total: \$7,000
Prin. Invest.: W LEWIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11933 MASSACHUSETTS INST OF TECHNOLOGY 5737
 A SYNTHESIS ON THE GLOBAL WOC OBSERVATIONS OF THE OCEANIC
 GENERAL CIRCULATION
 04/01/2002 - 03/31/2005 FY02: \$280,611 Total: \$280,611
Prin. Invest.: C WUNSCH
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12099 MASSACHUSETTS INST OF TECHNOLOGY 5738
 STUDIES OF TRACE GAS CHEMICAL CYCLES USING OBSERVATIONS,
 INVERSE METHODS AND GLOBAL CHEMICAL TRANSPORT
 07/31/2002 - 07/31/2005 FY02: \$152,821 Total: \$152,821
Prin. Invest.: R G PRINN
Tech. Officer: GSFC/P L DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12195 MASSACHUSETTS INST OF TECHNOLOGY 5739
 FORMATION CONTROL EXPERIMENTS INSIDE THE SPACE STATION
 05/23/2002 - 05/31/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: D MILLER
Tech. Officer: GSFC/R CARPENTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12355 MASSACHUSETTS INST OF TECHNOLOGY 5740
 PHYSICAL CHARACTERIZATION OF THE NEO POPULATION
 07/03/2002 - 06/30/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: R BINZEL
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12356 MASSACHUSETTS INST OF TECHNOLOGY 5741
 HYDROCARBON BIOMARKER STRATIGRAPHY OF C-ISOTOPIC EXCURSIONS MARKING CHEMICAL CHANGES IN THE OCEAN
 07/08/2002 - 06/30/2005 FY02: \$586,170 Total: \$586,170
Prin. Invest.: R SUMMONS
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12377 MASSACHUSETTS INST OF TECHNOLOGY 5742
 CON-X EVENT DRIVEN CCD IMAGER TECHNOLOGY (EDCCD)
 07/15/2002 - 07/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D RICKER
Tech. Officer: GSFC/K HARTMAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 12490 MASSACHUSETTS INST OF TECHNOLOGY 5743
 CONSTRAINING OCEANIC SOURCES AND SINKS OF CO₂ BY INVERSE MODELING: A FIRST STEP TOWARD ASSIMILATION
 08/28/2002 - 08/31/2004 FY02: \$22,897 Total: \$22,897
Prin. Invest.: M FELLOWS
Tech. Officer: GSFC/C TREES
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12515 MASSACHUSETTS INST OF TECHNOLOGY 5744
 ICAP 2002: INTERNATIONAL CONFERENCE ON ATOMIC PHYSICS
 08/27/2002 - 08/31/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: D PRITCHARD
Tech. Officer: GSFC/D SPEARS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12522 MASSACHUSETTS INST OF TECHNOLOGY 5745
 FORMATION, EVOLUTION, AND POPULATION SYNTHESIS OF BINARY SYSTEMS CONTAINING COLLAPSED STARS
 08/22/2002 - 08/31/2003 FY02: \$9,653 Total: \$9,653
Prin. Invest.: S A RAPPORT
Tech. Officer: GSFC/M SALAMON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1435 MASSACHUSETTS INST OF TECHNOLOGY 5746
 TOWARDS PRECISION EXPERIMENTS WITH BOSE-EINSTEIN CONDENSATES
 02/03/1998 - 01/31/2003 FY02: \$67,000 Total: \$406,650
Prin. Invest.: W KETTERLE
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1487 MASSACHUSETTS INST OF TECHNOLOGY 5747
 IDENTIFICATION AND CONTROL OF GRAVITY RELATED DEFECT FORMATION DURING MELT GROWTH OF ELECTROOPTIC
 02/13/1998 - 01/31/2003 FY02: \$145,002 Total: \$746,497
Prin. Invest.: A WITT
Tech. Officer: MSFC/M PURVEY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1524 MASSACHUSETTS INST OF TECHNOLOGY 5748
 DIRECT USE OF SATELLITE REMOTE SENSING IN THE ESTIMATION OF HYDROLOGIC TRANSPORTS
 05/22/1998 - 08/31/2001 FY02: -\$315 Total: \$434,386
Prin. Invest.: D ENTEKHABI
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1659 MASSACHUSETTS INST OF TECHNOLOGY 5749
 KINETIC EVOLUTION OF STABLE AND METASTABLE STATES IN PROTEIN SOLUTIONS.
 05/10/2000 - 11/30/2003 FY02: \$110,000 Total: \$274,500
Prin. Invest.: G BENEDEK
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1685 MASSACHUSETTS INST OF TECHNOLOGY 5750
 THE ROLE OF CONVECTION AND GROWTH COMPETITION IN PHASE SELECTION IN MICROGRAVITY
 05/11/2000 - 11/30/2003 FY02: \$188,000 Total: \$440,200
Prin. Invest.: M C FLEMING
Tech. Officer: MSFC/P DOTY
CASE Category: 13 – PHYSICS

NAG 8 1688 MASSACHUSETTS INST OF TECHNOLOGY 5751
 FORCES DURING MANUFACTURE AND ASSEMBLY OF MICROSCALE DISCRETE ELECTRONIC COMPONENTS.
 05/17/2000 - 11/30/2003 FY02: \$80,000 Total: \$242,962
Prin. Invest.: M CIMA
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1689 MASSACHUSETTS INST OF TECHNOLOGY 5752
 FROM OXYGEN GENERATION TO METAL PRODUCTION: IN-SITU RESOURCE UTILIZATION BY MOLTEN OXIDE ELECTROLYSIS
 06/05/2000 - 11/30/2003 FY02: \$90,000 Total: \$215,500
Prin. Invest.: R SADOWAY
Tech. Officer: MSFC/P DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1768 MASSACHUSETTS INST OF TECHNOLOGY 5753
 INCREMENTAL FUNDING FOR TOWARDS PRECISION EXPERIMENTS WITH BOSE EINSTEIN CONDENSATES II
 05/14/2001 - 05/13/2005 FY02: \$40,000 Total: \$80,000
Prin. Invest.: W KETTERLE
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1872 MASSACHUSETTS INST OF TECHNOLOGY 5754
 AUTOMATED EXTRACTION OF FLOW FEATURES
 05/29/2002 - 05/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: R HAIMES
Tech. Officer: MSFC/S MILLER DORNEY
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1003 MASSACHUSETTS INST OF TECHNOLOGY 5755
 MICROGRAVITY INVESTIGATION & CREW REACTION IN 0-G
 04/29/1998 - 08/31/2002 FY02: \$0 Total: \$268,557
Prin. Invest.: D J NEWMAN, S BECK
Tech. Officer: JSC/B WOOLFORD
CASE Category: 56 – MEDICAL

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 9 1004 MASSACHUSETTS INST OF TECHNOLOGY 5756
 ADVANCED DISPLAYS & CONTROLS FOR 6 DOF ORIENTATION
 05/06/1998 - 06/10/2002 FY02: \$0 Total: \$543,296
Prin. Invest.: C M OMAN
Tech. Officer: JSC/J DETROVE
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1089 MASSACHUSETTS INST OF TECHNOLOGY 5757
 ROBOTIC TECHNOLOGY AND FUTURE SPACE SUIT DEVELOPMENT
 03/23/1999 - 02/28/2003 FY02: \$0 Total: \$562,946
Prin. Invest.: D J NEWMAN
Tech. Officer: JSC/B J WOOLFORD
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 9 1224 MASSACHUSETTS INST OF TECHNOLOGY 5758
 FOKKER-PLANCK STUDIES OF HELICON OPERATON-VASIMR E XPERIMENT
 03/23/2000 - 01/31/2002 FY02: \$0 Total: \$145,000
Prin. Invest.: K MOLVIG, O V BATISHCHAV
Tech. Officer: JSC/F R CHANG-DIAZ
CASE Category: 13 – PHYSICS

NAG 9 1443 MASSACHUSETTS INST OF TECHNOLOGY 5759
 AUTONOMOUS BEHAVIORS BY ROBOTIC ASSISTANTS
 08/09/2002 - 07/31/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: C BREAZEAL
Tech. Officer: JSC/R T SAVELY
CASE Category: 22 – COMPUTER SCIENCE

NAG 9 1455 MASSACHUSETTS INST OF TECHNOLOGY 5760
 STUDY OF HELICON SOURCE OPERATION IN VASIMIR
 09/06/2002 - 02/28/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: K MOLVING, O BATISHCHEV
Tech. Officer: JSC/F CHANG-DIAZ
CASE Category: 13 – PHYSICS

NAS 1 02044 MASSACHUSETTS INST OF TECHNOLOGY 5761
 FUNCTIONALLY SILENT AIRCRAFT TO TRANSFORM COMMERCIAL AIR
 TRANSPORTATION
 04/12/2002 - 04/11/2004 FY02: \$56,250 Total: \$56,250
Prin. Invest.: Z S SPAKOVSKY
Tech. Officer: LARC/R H THOMAS
CASE Category: 41 – AERONAUTICAL ENGRN

NAS 2 02056 MASSACHUSETTS INST OF TECHNOLOGY 5762
 FUNDAMENTAL TECHNOLOGIES FOR DEVELOPMENT OF BIOMOL ECULAR
 SESONRS
 12/20/2001 - 12/20/2004 FY02: \$709,273 Total: \$709,273
Prin. Invest.: T M SWAGER
Tech. Officer: ARC/J W HINES, ARC/P P FUNG
CASE Category: 56 – MEDICL

NAS 3 01153 MASSACHUSETTS INST OF TECHNOLOGY 5763
 INTRA ENGINE TRACE SPECIES CHEMISTRY
 05/09/2001 - 08/10/2004 FY02: \$225,000 Total: \$450,000
Prin. Invest.: I A WAITZ
Tech. Officer: GRC/N S LIU
CASE Category: 41 – AERONAUTICAL ENGRN

NAS 5 02094 MASSACHUSETTS INST OF TECHNOLOGY 5764
 ASTRO-E2 MISSION X-RAY IMAGING SPECTROMETER CHARGE COUPLED
 DEVICE SENSOR BASES & ANALOG ELECTRONICS
 08/08/2002 - 02/28/2005 FY02: \$1,158,571 Total: \$1,158,571
Prin. Invest.: W MAYER
Tech. Officer: GSFC/D MARGOLIES
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 5 30612 MASSACHUSETTS INST OF TECHNOLOGY 5765
 ALL SKY MONITOR INSTRUMENTS
 12/15/1989 - 01/31/2003 FY02: \$800,000 Total: \$28,157,767
Prin. Invest.: H BRADT
Tech. Officer: GSFC/W DAVIS
CASE Category: 11 – ASTRONOMY

NAS 5 31376 MASSACHUSETTS INST OF TECHNOLOGY 5766
 RECURSIVE ESTIMATION OF GEOGRAPHICAL PRODUCTS WITH AIRS/AMSU
 DATA (EOS INVESTIGATION)
 01/10/1992 - 06/14/2003 FY02: \$300,000 Total: \$2,253,000
Prin. Invest.: D H STAELIN, P W ROSENKRANZ
Tech. Officer: GSFC/E KREINS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 5 99007 MASSACHUSETTS INST OF TECHNOLOGY 5767
 GLAS SCIENCE TEAM
 12/02/1998 - 12/01/2002 FY02: \$112,000 Total: \$577,000
Prin. Invest.: T A HERRING
Tech. Officer: GSFC/G SMITH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 99181 MASSACHUSETTS INST OF TECHNOLOGY 5768
 TRIANA FARADAY CUP.
 03/17/1999 - 01/01/2001 FY02: -\$74 Total: \$467,009
Prin. Invest.: A J LAZARUS
Tech. Officer: GSFC/K W OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 5 99198 MASSACHUSETTS INST OF TECHNOLOGY 5769
 POVIDE PERSONNEL, FACILITIES, & EQUIPMENT NECESSARY TO SUPPORT
 THE SPACE GEODESY PROGRAM.
 04/23/1999 - 04/22/2004 FY02: \$1,370,000 Total: \$5,312,622
Prin. Invest.: G CARRIGAN
Tech. Officer: GSFC/W WILDES
CASE Category: 31 – ATMOSPHERICSCIENCE

NAS 8 01129 MASSACHUSETTS INST OF TECHNOLOGY 5770
 CHANDRA PROGRAM - (SCIENCE INSTRUMENT) HIGH ENERGY TRANSMIS-
 SION GRATING (HETG)
 03/01/2002 - 09/30/2004 FY02: \$1,231,207 Total: \$1,231,207
Prin. Invest.: C R CANIZARES
Tech. Officer: MSFC/M C SMITH, MSFC/M S OSBURNE
CASE Category: 11 – ASTRONOMY

NAS 8 38249 MASSACHUSETTS INST OF TECHNOLOGY 5771
 AXAF (HETGS)
 07/13/1990 - 03/01/2002 FY02: \$866,549 Total: \$29,489,549
Prin. Invest.: C R CANIZARES
Tech. Officer: MSFC/M E ROSENTHAL
CASE Category: 49 – ENGINEERING, OTHER

NAS 9 00097 MASSACHUSETTS INST OF TECHNOLOGY 5772
 UNIQUE FLIGHT AND BASELINE DATA COLLECTION HARDWARE AND
 DEVELOP
 10/25/2000 - 10/25/2005 FY02: \$1,110,900 Total: \$1,885,787
Prin. Invest.: C M OMAN
Tech. Officer: JSC/D K BAUMAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NASW 4690 MASSACHUSETTS INST OF TECHNOLOGY 5773
 HIGH ENERGY TRANSIENT EXPERIMENT TO DETERMINE ORIGIN & NATURE
 OF GAMMA-RAY BURSTS
 03/30/1992 - 11/30/2002 FY02: \$1,809,649 Total: \$28,002,508
Prin. Invest.: G RICKER
Tech. Officer: HQ/D GILMAN, HQ/L KALUZIENSKI
CASE Category: 13 – PHYSICS

NCC 1 323 MASSACHUSETTS INST OF TECHNOLOGY 5774
 AEROELASTIC ANALYSIS OF ACTIVE TWIST ROTOR SYSTEM FOR HELICOPTER
 VIBRATION REDUCTION
 12/22/1998 - 10/31/2001 FY02: -\$1,481 Total: \$178,948
Prin. Invest.: C E CESNIK, N W NAGOOD
Tech. Officer: LARC/M L WILBUR, LARC/W K WILKIE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 415 MASSACHUSETTS INST OF TECHNOLOGY 5775
 PHYSICAL PROCESSES INFLUENCING ATMOSPHERIC TRACE CONSTITUENTS
 MEASURED FROM AIRCRAFT IN TRACE-P (IS NRA)
 09/21/2000 - 06/30/2003 FY02: \$364,613 Total: \$667,046
Prin. Invest.: R E NEWELL
Tech. Officer: LARC/V E DELNORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 570 MASSACHUSETTS INST OF TECHNOLOGY 5776
 PRINCIPAL INVESTIGATOR IN A BOX
 12/29/1988 - 01/31/2001 FY02: -\$38 Total: \$2,098,271
Prin. Invest.: L R YOUNG
Tech. Officer: ARC/S LAU, ARC/D A ROSENTHAL
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1121 MASSACHUSETTS INST OF TECHNOLOGY 5777
 MARSCAPE
 05/21/1999 - 12/31/2001 FY02: \$0 Total: \$150,000
Prin. Invest.: J K SALISBURY
Tech. Officer: ARC/H THOMAS
CASE Category: 46 – MECHANICAL ENGR

NCC 2 1147 MASSACHUSETTS INST OF TECHNOLOGY 5778
 IMPLEMENTATION ISSUES FOR DEPARTURE PLANNING SYSTEMS
 12/07/1999 - 11/30/2002 FY02: \$0 Total: \$490,247
Prin. Invest.: E FERON, R J HANSMAN
Tech. Officer: ARC/L TOBIAS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1209 MASSACHUSETTS INST OF TECHNOLOGY 5779
 DISTRIBUTED & CENTRALIZED CONFLICT MANAGEMENT UNDER TRAFFIC
 FLOW MANAGEMENT CONSTRAINTS
 12/04/2000 - 12/14/2002 FY02: \$66,824 Total: \$130,781
Prin. Invest.: E FERON
Tech. Officer: ARC/K BILIMORIA, ARC/B SRIDHAR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1223 MASSACHUSETTS INST OF TECHNOLOGY 5780
 APPROACHES TO HUMAN CENTERED SOFTWARE DEVELOPMENT
 03/23/2001 - 02/28/2003 FY02: \$199,756 Total: \$381,756
Prin. Invest.: N G LEVESON
Tech. Officer: ARC/P M JONES, ARC/M SHAFTO
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1235 MASSACHUSETTS INST OF TECHNOLOGY 5781
 A HYBRID DISCRETE/CONTINUOUS SYSTEM FOR HEALTH MANAGEMENT
 04/03/2001 - 02/28/2003 FY02: \$170,000 Total: \$405,000
Prin. Invest.: B C WILLIAMS
Tech. Officer: ARC/R MORRIS, ARC/D J CLANCY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1237 MASSACHUSETTS INST OF TECHNOLOGY 5782
 MULTI-RESOLUTION PLANNING IN LARGE UNCERTAIN ENVIRONMENTS
 04/06/2001 - 02/28/2003 FY02: \$92,000 Total: \$221,000
Prin. Invest.: L KAEHLING
Tech. Officer: ARC/R MORRIS, ARC/D CLANCY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1269 MASSACHUSETTS INST OF TECHNOLOGY 5783
 USING CAPRI WITHIN NASA'S INTELLIGENT SYNTHESIS ENVIRONMENT
 06/01/2001 - 04/30/2003 FY02: \$110,000 Total: \$184,975
Prin. Invest.: R HAIMES
Tech. Officer: ARC/M LIVINGSTON, ARC/D KONTINOS
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 610 MASSACHUSETTS INST OF TECHNOLOGY 5784
 THE EXTENSIONAL RHEOLOGY OF NON-NEWTONIAN MATERIAL EXTENSIONAL
 RHEOLOGY EXPERIMENT (ERE)
 04/21/1998 - 02/09/2003 FY02: \$150,000 Total: \$890,000
Prin. Invest.: G H MCKINLEY
Tech. Officer: GRC/N R HALL
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 3 632 MASSACHUSETTS INST OF TECHNOLOGY 5785
 MIT ENGINEERING INTERSHIP PROGRAM
 06/30/1998 - 06/20/2002 FY02: -\$1 Total: \$154,644
Prin. Invest.: I A WATZ
Tech. Officer: GRC/L POVINELLI
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 875 MASSACHUSETTS INST OF TECHNOLOGY 5786
 HIGH SPECIFIC IMPULSE HALL THRUSTERS
 03/21/2001 - 03/31/2004 FY02: \$257,385 Total: \$659,181
Prin. Invest.: D MARTINEZ-SANCHEZ
Tech. Officer: GRC/S OLESON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 5 244 MASSACHUSETTS INST OF TECHNOLOGY 5787
 BIOGEOCHEMICAL CYCLES USING MODELS AND DATA
 10/24/1997 - 06/30/2001 FY02: -\$196 Total: \$726,804
Prin. Invest.: J MARSHALL
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 416 MASSACHUSETTS INST OF TECHNOLOGY 5788
 SOIL MOISTURE DATA ASSIMILATION FOR CONTINENTAL-SCALE LAND
 SURFACE HYDROLOGY APPLICATIONS
 08/04/1999 - 07/31/2003 FY02: \$26,754 Total: \$243,393
Prin. Invest.: D MCLAUGHLIN
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 525 MASSACHUSETTS INST OF TECHNOLOGY 5789
 FABRICATION AND METROLOGY OF HIGH-PRECISION FOIL MIRROR
 MOUNTING ELEMENT CONSTELLATION X-PROPOSAL
 01/08/2001 - 03/31/2002 FY02: -\$83 Total: \$104,917
Prin. Invest.: M SCHATTEBURG
Tech. Officer: GSFC/R PETRE
CASE Category: 11 – ASTRONOMY

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NCC 5 625 MASSACHUSETTS INST OF TECHNOLOGY 5790
 HIGH-PERFORMANCE ADAPTIVE SIMULATION FRAMEWORK FOR SPACE-WEATHER MODELING (SWMF).
 03/06/2002 - 05/05/2003 FY02: \$513,000 Total: \$513,000
Prin. Invest.: J MARSHALL
Tech. Officer: GSFC/J FISCHER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 5 633 MASSACHUSETTS INST OF TECHNOLOGY 5791
 MICROFABRICATED X-RAY OPTICS TECHNOLOGY DEVELOPMENT FOR THE CONSTELLATION-X MISSION
 02/28/2002 - 03/31/2003 FY02: \$350,000 Total: \$350,000
Prin. Invest.: M L SCHTTENBURG
Tech. Officer: GSFC/R PETRE
CASE Category: 11 – ASTRONOMY

NCC 8 174 MASSACHUSETTS INST OF TECHNOLOGY 5792
 R/S MICROGRAVITY TISSUE ENGINEERING
 03/31/1999 - 11/30/2002 FY02: \$935,441 Total: \$3,275,204
Prin. Invest.: L FREED
Tech. Officer: JSC/N R PELLIS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 1 02016 MASSACHUSETTS INST OF TECHNOLOGY 5793
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/12/2002 - 08/31/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: K WILLCOX, T LAU
Tech. Officer: LARC/B A SINGER
CASE Category: 41 – AERONAUTICAL ENGRN

NGT 3 52360 MASSACHUSETTS INST OF TECHNOLOGY 5794
 GRADUATE STUDENT RESEARCHER PROGRAM GRADUATE STUDENT RESEARCHER PROGRAM
 07/15/1999 - 06/30/2001 FY02: -\$10,043 Total: \$33,957
Prin. Invest.: G H MCKINLEY
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 30188 MASSACHUSETTS INST OF TECHNOLOGY 5795
 THE IMPACT OF GLACIAL EROSION ON THE RELIEF STRUCTURE OF MOUNTAIN BELTS STUDENT: SIMON BROCKLEHURS
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: K X WHIPPLE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NGT 5 30189 MASSACHUSETTS INST OF TECHNOLOGY 5796
 TEMPORAL VARIABILITY OF AIR - SEA GAS FLUXES: ESTIMATION & INCORPORATION INTO AN INVERSE MODEL OF
 08/18/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J MARSHALL
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30190 MASSACHUSETTS INST OF TECHNOLOGY 5797
 ADJOINT SENSITIVITY ANALYSIS OF THE COUPLED LAND- ATMOSPHERE SYSTEM/STUDENT:STEVEN A. MARGULIS
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: D ENTEKHABI
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30212 MASSACHUSETTS INST OF TECHNOLOGY 5798
 THE SIGNATURE OF CLIMATIC & TECTONIC PROCESSES IN ALLUVIAL FANS: A NUMERICALMODELING & REMOTE SENSING
 08/20/1999 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R L BRAS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30334 MASSACHUSETTS INST OF TECHNOLOGY 5799
 MULTIPHASE AND HETEROGENEOUS PROCESSES IN ATMOSPHERIC CHEMISTRY
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: B TROUT
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30337 MASSACHUSETTS INST OF TECHNOLOGY 5800
 DYNAMICS & SCALES OF VARIABILITY IN THE LABRADOR SEA: STATE ESTIMATION USING AN EDDY-RESOLVING
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: C WUNSCH
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30339 MASSACHUSETTS INST OF TECHNOLOGY 5801
 EFFECTS OF VEGETATION DYNAMICS ON ARROYO & GULLY EVOLUTION & SUCEPTABILITY TO CLIMATE CHANGE
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R BRAS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30469 MASSACHUSETTS INST OF TECHNOLOGY 5802
 017 IMPACTS OF TROPICAL DEFORESTATION AND CLIMATE: OBSERVATIONS OF ESHALLOW CLOUDS AND RAINFALL
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R BRAS
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40075 MASSACHUSETTS INST OF TECHNOLOGY 5803
 MASSACHUSETTS SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$495,000 Total: \$970,000
Prin. Invest.: L YOUNG
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50302 MASSACHUSETTS INST OF TECHNOLOGY 5804
 COMBUSTION SYNTHESIS OF FULLERENES AND FULLERENIC NANOSTRUCTURES IN MICROGRAVITY/STUDENT: ANISH GOEL
 07/06/2000 - 06/30/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: J B HOWARD
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50306 MASSACHUSETTS INST OF TECHNOLOGY 5805
 THE KINETICS OF COMPETITIVE GROWTH DURING RAPID SOLIDIFICATION OF TERNARY STEEL ALLOYS/STUDENT JOA
 07/06/2000 - 06/30/2001 FY02: -\$1,232 Total: \$20,768
Prin. Invest.: M FLEMINGS
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50411 **MASSACHUSETTS INST OF TECHNOLOGY** **5806**
 MODEL-BASED EXECUTIVE FOR AUTONOMOUS SPACECRAFT STUDENT
 NAME: SEUNG CHUNG
 08/07/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: B C WILLIAMS
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50414 **MASSACHUSETTS INST OF TECHNOLOGY** **5807**
 INVESTIGATION OF LIGHT STORAGE IN ATOMIC ENSEMBLES STUDENT:
 JEAN A. HAGER
 08/06/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R WALSWORTH
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52880 **MASSACHUSETTS INST OF TECHNOLOGY** **5808**
 IDENTIFICATION AND CONTROL OF GRAVITY RELATED DEFECT FORMATION DURING MELT GROWTH
 09/09/1999 - 01/15/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: A WITT
Tech. Officer: MSFC/J DOWDY
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52892 **MASSACHUSETTS INST OF TECHNOLOGY** **5809**
 BALANCE OF PLANT DESIGN AND ANALYSIS FOR SPACE NUCLEAR POWER OPTIONS
 07/11/2000 - 06/30/2003 FY02: \$0 Total: \$0
Prin. Invest.: M MARTINEZ-SANCHEZ
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8635 **MT HOLYOKE COLL** **5810**
 CO2 AND CH4 EXCHANGE IN NORTHERN PEATLANDS
 07/07/1999 - 06/30/2002 FY02: \$0 Total: \$345,781
Prin. Invest.: J L BUBIER
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10238 **MT HOLYOKE COLL** **5811**
 SUMMERMATH NASA SCHOLARS PROGRAM
 01/04/2001 - 12/31/2001 FY02: \$0 Total: \$80,000
Prin. Invest.: J MORROW
Tech. Officer: GSFC/C HOLLINGSWORTH
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 5 10424 **MT HOLYOKE COLL** **5812**
 SYNCHROTRON CHARACTERIZATION OF HYDROGEN & FERRIC IRON IN MARTIAN METEORITES
 02/15/2001 - 02/28/2004 FY02: \$34,000 Total: \$68,000
Prin. Invest.: D DYAR
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11759 **MT HOLYOKE COLL** **5813**
 SUMMERMATH NASA SCHOLARS PROGRAM
 02/13/2002 - 01/31/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: J MORROW
Tech. Officer: GSFC/CHOLLINGSWORTH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1485 **NORTHEASTERN UNIV** **5814**
 R/S MODELING OF MACROSCOPIC/MICROSCOPIC TRANSPORT AND GROWTH PHENOMENA IN ZEOLITE CRYSTALS UNDER
 04/27/1998 - 05/31/2001 FY02: -\$18,943 Total: \$302,540
Prin. Invest.: A SACCO
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1668 **NORTHEASTERN UNIV** **5815**
 PHASE FIELD SIMULATIONS OF DENDRITIC GROWTH AT LOW UNDER-COOLING: CONFRONTING THEORY AND EXPERIMENT.
 05/23/2000 - 11/30/2003 FY02: \$90,000 Total: \$210,500
Prin. Invest.: A KARMA
Tech. Officer: MSFC/P DOTY
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1336 **NORTHEASTERN UNIV** **5816**
 TEAM ORIENTED ROBOTIC EXPLORATION TASKS ON SCORPIO N AND K9 PLATFORMS
 04/16/2002 - 01/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: F KIRCHNER
Tech. Officer: ARC/S COLOMBANO, ARC/M BUALAT
CASE Category: 22 – COMPUTER SCIENCE

NCC 8 139 **NORTHEASTERN UNIV** **5817**
 RESEARCH "CENTER FOR ADVANCED MICROGRAVITY MATERIALS PROCESSING (CAMMP)"
 06/27/1997 - 10/31/2001 FY02: -\$73,758 Total: \$8,839,897
Prin. Invest.: A SACCO
Tech. Officer: MSFC/M NALL
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 122 **NORTHEASTERN UNIV** **5818**
 IMAGE PROCESSING TECHNIQUES FOR SATELLITE DATA USING RECONFIGURABLE TECHNOLOGY/STUDENT: HEATHER Q
 07/09/2001 - 09/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M LEESER
Tech. Officer: GSFC/M S BURRELL
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2563 **TUFTS UNIV** **5819**
 A SOLID STATE LI-ION BATTERY WITH A CONDUCTION POLYMER ANODE
 03/13/2001 - 04/30/2003 FY02: \$41,642 Total: \$99,975
Prin. Invest.: D B GOLDNER
Tech. Officer: GRC/N HAGEDORN
CASE Category: 12 – CHEMISTRY

NAG 5 9725 **TUFTS UNIV** **5820**
 VERY LARGE ARRAY OBSERVATIONS IN SUPPORT OF HESS1
 07/06/2000 - 07/14/2001 FY02: \$0 Total: \$35,000
Prin. Invest.: K R LANG
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10350 **TUFTS UNIV** **5821**
 NASA'S COSMOS. FULLY FUNDS YEAR 1 OF 3
 02/06/2001 - 02/14/2004 FY02: \$40,000 Total: \$80,000
Prin. Invest.: K R LANG
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 11605 TUFTS UNIV 5822
 VLA OBSERVATIONS
 01/22/2002 - 01/31/2005 FY02: \$10,000 Total: \$10,000
Prin. Invest.: K LANG
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11806 TUFTS UNIV 5823
 IN-SITU PLANETARY CHEMICAL ANALYSIS LABORATORY
 02/28/2002 - 02/28/2005 FY02: \$179,500 Total: \$179,500
Prin. Invest.: S KOUNAVES
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 8 1480 TUFTS UNIV 5824
 STUDY OF DEVELOPMENT OF POLYMER STRUCTURE IN MICROGRAVITY USING ELLIPSOmetry
 02/27/1998 - 05/31/2002 FY02: \$10,695 Total: \$275,415
Prin. Invest.: P CEBE
Tech. Officer: MSFC/P M DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1699 TUFTS UNIV 5825
 RESEARCH STUDY HIEARCHICAL ASSEMBLY OF COLLAGEN
 06/05/2000 - 11/30/2003 FY02: \$110,000 Total: \$264,500
Prin. Invest.: D L KAPLAN
Tech. Officer: MSFC/P M DOTY
CASE Category: 56 – MEDICL

NAG 9 1182 TUFTS UNIV 5826
 MULTISENSOR ARRAY FOR MONITORING WATER QUALITY ON SPACE-CRAFT & PLANETARY HABITATS
 12/20/1999 - 12/19/2002 FY02: \$146,475 Total: \$354,351
Prin. Invest.: S P KOUNAVES
Tech. Officer: JPL/D JAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 5 434 TUFTS UNIV 5827
 THE SCIENCE AND ENGINEERING NASA SITE OF REMOTE SENSING (SENSORS).
 09/22/1999 - 09/30/2003 FY02: \$97,813 Total: \$397,346
Prin. Invest.: C ROGERS
Tech. Officer: GSFC/R E GABRYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1197 UNIV OF MASSACHUSETTS WORCESTER 5828
 EFFECTS OF GRAVITY ON CELL MOVEMENT & DEVELOPMENT
 04/02/1998 - 10/31/2001 FY02: \$0 Total: \$502,651
Prin. Invest.: Y L WANG
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1438 UNIV OF MASSACHUSETTS WORCESTER 5829
 THE EFFECT OF HYPERGRAVITY ON RETINOIC ACID SIGNAL ING IN THE DEVELOPING EMBRYO
 09/19/2000 - 09/30/2003 FY02: \$156,183 Total: \$402,112
Prin. Invest.: P J MACCAFFERY
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1495 UNIV OF MASSACHUSETTS WORCESTER 5830
 EFFECTS OF CHARITY ON THE STRUCTURE AND FUNCTION O F ANIMAL CELLS
 07/09/2001 - 10/31/2003 FY02: \$178,132 Total: \$277,171
Prin. Invest.: Y L WANG
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1356 UNIV OF MASSACHUSETTS WORCESTER 5831
 MICROGRAVITY AND THE BIOLOGY OF NEURAL STEM CELLS
 07/27/2001 - 09/30/2004 FY02: \$178,000 Total: \$225,000
Prin. Invest.: W J SCHWARTZ, T M SAVARESE, H PANG LOW
Tech. Officer: JSC/D RISEN
CASE Category: 56 – MEDICL

NGT 5 50374 UNIV OF MASSACHUSETTS WORCESTER 5832
 GENETIC MANIPULATION OF CELL ADHESION PROTEINS TO MODIFY MECHANICAL RESPONSEAND TISSUE REMODELI
 07/09/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: L BONASSAR
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50404 UNIV OF MASSACHUSETTS WORCESTER 5833
 CONTROLLING MECHANICS OF COLLAGEN GELS FOR CARTI- LAGE TISSUE ENGINEERING BY NON-ENZYMATIC GLYCATION
 07/30/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L BONASSAR
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2426 UNIV OF MASSACHUSETTS 5834
 PHASE CHANGE IN LOW AND JITTERING GRAVITY ENVIRONM ENT SIMULATED VIA ELECTROMAGNETIC FIELD
 05/19/2000 - 11/30/2003 FY02: \$49,534 Total: \$150,228
Prin. Invest.: D CHARMCHI
Tech. Officer: GRC/H DEGROH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8145 UNIV OF MASSACHUSETTS 5835
 AUTOMATED PROCESSING OF ISIS TOPSIDE IONOGRAMS INT O ELECTRON DENSITY PROFILES
 02/04/1999 - 12/31/2002 FY02: \$0 Total: \$391,162
Prin. Invest.: B REINISCH
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9611 UNIV OF MASSACHUSETTS 5836
 HALFWIDTHS & LINE SHIFTS OF WATER VAPOR TRANSITION IN THE 0.7 UM REGION
 05/22/2000 - 05/31/2001 FY02: -\$8 Total: \$19,992
Prin. Invest.: R GAMACHE
Tech. Officer: GSFC/D STARR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11064 UNIV OF MASSACHUSETTS 5837
 THEORY IN SUPPORT OF LABORATORY SPECTROSCOPY FOR AIRS, TES AND HIRDLS
 06/28/2001 - 06/30/2004 FY02: \$50,423 Total: \$75,580
Prin. Invest.: R R GAMACHE
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11792 UNIV OF MASSACHUSETTS 5838
 DIGITAL RADIO-FREQUENCY PLASMA WAVE INSTRUMENTS FOR MULTIPLE SATELLITE MISSIONS
 02/28/2002 - 02/28/2005 FY02: \$170,194 Total: \$170,194
Prin. Invest.: B W REINISCH
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 2 1375 UNIV OF MASSACHUSETTS - AMHERST 5839
 MICROGRAVITY EFFECTS ON SEED DEVELOPMENT AND MATURATION
 08/20/1999 - 08/31/2003 FY02: \$80,121 Total: \$453,543
Prin. Invest.: M E MUSGRAVE
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1394 UNIV OF MASSACHUSETTS - AMHERST 5840
 ON BOARD AUTONOMY FOR ROVERS
 02/07/2000 - 01/31/2003 FY02: \$0 Total: \$94,780
Prin. Invest.: S ZILBERSTEIN
Tech. Officer: ARC/J BRESINA
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1551 UNIV OF MASSACHUSETTS - AMHERST 5841
 PLAN CONTINUATION ERRORS DURING AIRCRAFT APPROACH AND LANDING: SIMPLE HEURISTICS FOR COMBINING CONFL
 05/23/2002 - 08/31/2002 FY02: \$31,085 Total: \$31,085
Prin. Invest.: D FISHER
Tech. Officer: ARC/J M ORASANU, ARC/J NOWINSKI
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 3 2452 UNIV OF MASSACHUSETTS - AMHERST 5842
 EMBEDDED SENSORS FOR CONDITION MONITORING OF HELICOPTER GEARBOXES PROPOSAL #100-1355
 06/07/2000 - 09/30/2003 FY02: \$40,000 Total: \$162,766
Prin. Invest.: D DANA
Tech. Officer: GRC/D LEWICKI
CASE Category: 46 – MECHANICAL ENGR

NAG 5 4272 UNIV OF MASSACHUSETTS - AMHERST 5843
 A CRYOGENIC FREQUENCY MULTIPLIER CHAIN FOR 1000 GH
 04/18/1997 - 12/31/2000 FY02: -\$1,088 Total: \$226,596
Prin. Invest.: D R ERICKSON
Tech. Officer: GSFC/H THRONSON
CASE Category: 11 – ASTRONOMY

NAG 5 4373 UNIV OF MASSACHUSETTS - AMHERST 5844
 PLANETARY, TECTONICS, AREAL GEOLOGY, AND GEOLOGICAL
 04/25/1997 - 01/31/2003 FY02: \$0 Total: \$207,145
Prin. Invest.: D E MCGILL
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4652 UNIV OF MASSACHUSETTS - AMHERST 5845
 SHOCK AND THERMAL HISTORY OF IRON AND CHONDRITIC MINERALS
 06/11/1997 - 02/28/2002 FY02: \$0 Total: \$522,000
Prin. Invest.: D I GOLDSTEIN
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 4999 UNIV OF MASSACHUSETTS - AMHERST 5846
 STRUCTURAL AND GEOMORPHIC EVOLUTION OF THE MARTIAN
 07/24/1997 - 07/14/2001 FY02: -\$1 Total: \$121,183
Prin. Invest.: G MCGILL
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6161 UNIV OF MASSACHUSETTS - AMHERST 5847
 UMASS PLANET EARTH EDUCATION PROGRAMS
 08/01/1997 - 10/31/2000 FY02: -\$19 Total: \$59,981
Prin. Invest.: M STERNHEIM
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8184 UNIV OF MASSACHUSETTS - AMHERST 5848
 MARTIAN POLYGONAL TERRAIN: TESTS FOR SEDIMENTARY ORIGIN OF DEPOSITS
 02/16/1999 - 03/14/2003 FY02: \$0 Total: \$51,300
Prin. Invest.: G E MCGILL
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8197 UNIV OF MASSACHUSETTS - AMHERST 5849
 SCALABLE PARALLEL STATISTICAL INFERENCE AND MODEL COMPARISON USING LARGE DATABASES
 02/04/1999 - 01/31/2003 FY02: \$0 Total: \$685,067
Prin. Invest.: M WEIENBERG
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 11 – ASTRONOMY

NAG 5 8718 UNIV OF MASSACHUSETTS - AMHERST 5850
 BOUNDARY CONDITIONS FOR THE PALEOENVIRONMENT: THE CHEMISTRY OF DENSE INTERSTELLAR CLOUDS & COMETS
 07/29/1999 - 10/14/2002 FY02: \$80,849 Total: \$240,126
Prin. Invest.: W M IRVINE
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8909 UNIV OF MASSACHUSETTS - AMHERST 5851
 STRUCTURAL AND GEOMORPHIC EVOLUTION OF THE MARTIAN CRUST
 01/04/2000 - 07/14/2003 FY02: \$41,000 Total: \$123,081
Prin. Invest.: G E MCGILL
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 8999 UNIV OF MASSACHUSETTS - AMHERST 5852
 THE HOT INTERSTELLAR MEDIUM (LTS)
 02/03/2000 - 01/31/2003 FY02: \$110,000 Total: \$315,886
Prin. Invest.: Q WANG
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9429 UNIV OF MASSACHUSETTS - AMHERST 5853
 X-RAY SOURCE POPULATION IN NEARBY DISK GALAXIES- ADP-99
 04/11/2000 - 04/14/2003 FY02: \$0 Total: \$99,684
Prin. Invest.: Q WANG
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9630 UNIV OF MASSACHUSETTS - AMHERST 5854
 DUAL POLAR DUAL FREQUENCY ANTENNA ELEMENTS FOR INTEGRATED SENSOR MODULES.
 05/25/2000 - 04/30/2001 FY02: \$0 Total: \$59,772
Prin. Invest.: K CARVER
Tech. Officer: GSFC/T A DOIRON
CASE Category: 45 – ELECTRICAL ENGR

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NAG 5 9652 UNIV OF MASSACHUSETTS - AMHERST 5855
 CONTINUED GROUND-BASED MICROWAVE MEASUREMENTS OF OZONE
 FOR THE NETWORK FOR DETECTION OF STRATOSPHER
 05/26/2000 - 12/31/2002 FY02: \$251,151 Total: \$622,164
Prin. Invest.: A PARRISH
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10515 UNIV OF MASSACHUSETTS - AMHERST 5856
 SHOCK & THERMAL HISTORY OF IRON, STONY IRON & CHON DRITIC
 METEORITES
 03/05/2001 - 03/14/2003 FY02: \$0 Total: \$80,000
Prin. Invest.: J GOLDSTEIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10649 UNIV OF MASSACHUSETTS - AMHERST 5857
 ASSESSING LANDFORMS AND LAND SURFACE CHANGE IN ACT IVE
 MOUNTAINS WITH SRTM AND ENVISAT OBSERVATION
 04/04/2001 - 04/14/2003 FY02: \$82,292 Total: \$200,007
Prin. Invest.: C C DUNCAN
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10677 UNIV OF MASSACHUSETTS - AMHERST 5858
 MILLIMETER-WAVE AND RADIO STUDIES OF SOLAR SYSTEM BODIES
 04/24/2001 - 04/30/2002 FY02: \$0 Total: \$77,200
Prin. Invest.: P SCHLOERB
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10681 UNIV OF MASSACHUSETTS - AMHERST 5859
 ENVIRONMENTAL EVOLUTION: ORIGIN OF THE CHIMERIC EUKARYOTE
 03/28/2001 - 03/31/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: L MARGULIS
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10699 UNIV OF MASSACHUSETTS - AMHERST 5860
 PRINTED CIRCUIT DUAL-POL DUAL-FREQUENCY ANTENNA ELEMENTS FOR
 ATIP INTEGRATEDSENSOR MODULES
 04/18/2001 - 09/30/2002 FY02: \$0 Total: \$82,500
Prin. Invest.: K CARVER
Tech. Officer: GSFC/T DOIRON
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10783 UNIV OF MASSACHUSETTS - AMHERST 5861
 0.2-1 KEV EMISSION FROM THE HOT INTERGALACTIC MEDIUM (ADP 2000)
 04/23/2001 - 04/30/2003 FY02: \$52,549 Total: \$98,779
Prin. Invest.: Q WANG
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11465 UNIV OF MASSACHUSETTS - AMHERST 5862
 INTEGRATED TERAHERTZ HETERODYNE FOCAL PLANE ARRAY RECEIVERS
 12/10/2001 - 12/31/2004 FY02: \$125,000 Total: \$125,000
Prin. Invest.: G NARAYANAN
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11649 UNIV OF MASSACHUSETTS - AMHERST 5863
 PLANETARY TECTONICS, AREAL GEOLOGY AND GEOLOGICAL HISTORY
 01/29/2002 - 01/31/2005 FY02: \$43,700 Total: \$43,700
Prin. Invest.: G E MCGILL
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11778 UNIV OF MASSACHUSETTS - AMHERST 5864
 SHOCK AND THERMAL HISTORY OF IRON, STONY-IRON, AND CHONDRITIC
 METEORITES
 02/21/2002 - 03/14/2005 FY02: \$81,000 Total: \$81,000
Prin. Invest.: J GOLDSTEIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11855 UNIV OF MASSACHUSETTS - AMHERST 5865
 XMM OBSERVATIONS OF X-RAY EMISSION FROM SUPERNOVAE
 03/27/2002 - 03/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: S IMMMLER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11940 UNIV OF MASSACHUSETTS - AMHERST 5866
 A DEMONSTRATION OF FREQUENCY SELECTIVE BOLOMETER ARRAY FOR
 GROUND-BASED ASTROPHYSICAL OBSERVATIONS
 04/11/2002 - 04/14/2005 FY02: \$45,900 Total: \$45,900
Prin. Invest.: G WILSON
Tech. Officer: GSFC/E S CHENG
CASE Category: 11 – ASTRONOMY

NAG 5 12038 UNIV OF MASSACHUSETTS - AMHERST 5867
 EVOLUTION AND INTERACTION OF STRUCTURE IN GALAXIES
 04/16/2002 - 04/14/2005 FY02: \$5,000 Total: \$5,000
Prin. Invest.: M D WEINBERG
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12158 UNIV OF MASSACHUSETTS - AMHERST 5868
 MARTIAN POLYGONAL TERRAIN: TESTS FOR SEDIMENTARY ORIGIN OF
 DEPOSITS
 05/08/2002 - 05/14/2003 FY02: \$23,903 Total: \$23,903
Prin. Invest.: G E MCGILL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 8 1694 UNIV OF MASSACHUSETTS - AMHERST 5869
 CAPILLARY WAVES AT INTERFACES: THE ROLE OF GRAVITY AND ELECTRIC
 FIELDS
 06/01/2000 - 11/30/2003 FY02: \$100,000 Total: \$255,000
Prin. Invest.: T P RUSSELL
Tech. Officer: MSFC/P DOTY
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1697 UNIV OF MASSACHUSETTS - AMHERST 5870
 "THIN FILM MOLECULAR SIEVE SYNTHESIS: PROCESSING MICROSTRUC-
 TURE RELATIONSHIPS & EFFECTS OF GRAVITY"
 06/06/2000 - 11/30/2003 FY02: \$100,000 Total: \$235,000
Prin. Invest.: M TSAPATIS
Tech. Officer: MSFC/P DOTY
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1379 UNIV OF MASSACHUSETTS - AMHERST 5871
 LEARNING TO EXPLOIT DYNAMICS FOR ROBOT MANIPULATORS
 08/28/2001 - 07/31/2002 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M T ROSENSTEIN
Tech. Officer: JSC/R SAVELY
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1445 UNIV OF MASSACHUSETTS - AMHERST 5872
 INSTRUCTING ROBOTIC ASSISTANTS TO ACQUIRE AUTO- NOMOUS BEHAV-
 IOR
 07/30/2002 - 07/31/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: R A GRUPEN
Tech. Officer: JSC/R SAVELY
CASE Category: 22 – COMPUTER SCIENCE

NAS 1 01058 UNIV OF MASSACHUSETTS - AMHERST 5873
 RESEARCH ENTITLED, "NEAR-QUANTUM-NOISE LIMITED HOT ELECTRON
 BOLOMETRIC HETERODYNE DETECTORS
 06/20/2001 - 06/19/2004 FY02: \$244,000 Total: \$542,000
Prin. Invest.: S K YNGVESSON
Tech. Officer: LARC/M N ABEDIN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 3 00121 UNIV OF MASSACHUSETTS - AMHERST 5874
 ALLIANCE ICING RESEARCH STUDY
 04/30/2000 - 11/15/2000 FY02: -\$117 Total: \$117,883
Prin. Invest.: S SEKELSEY
Tech. Officer: GRC/A REEHORST
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 99133 UNIV OF MASSACHUSETTS - AMHERST 5875
 TWO DIMENSIONAL SYNTHETIC APARTURE RADIOMETER.
 08/03/1999 - 09/30/2002 FY02: \$0 Total: \$201,912
Prin. Invest.: K CARVER
Tech. Officer: GSFC/D LEVINE
CASE Category: 45 – ELECTRICAL ENGR

NCC 2 1180 UNIV OF MASSACHUSETTS - AMHERST 5876
 MULTI-AGENT INFORMATION ENVIRONMENT FOR INTEGRATED DESIGN &
 ANALYSIS
 05/16/2000 - 05/14/2002 FY02: \$0 Total: \$65,918
Prin. Invest.: A DASCHMULCH
Tech. Officer: ARC/M E LIVINGSTON
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1265 UNIV OF MASSACHUSETTS - AMHERST 5877
 MULTI-AGENT REASONING & DISTRIBUTED SEARCH IN DESI GN OF
 COMPLEX AEROSPACE SYSTEMS
 05/03/2001 - 04/30/2003 FY02: \$44,700 Total: \$149,700
Prin. Invest.: A DESHMUKH
Tech. Officer: ARC/M LIVINGSTON, ARC/F J TORRES
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1311 UNIV OF MASSACHUSETTS - AMHERST 5878
 SELF DIRECTED COOPERATIVE PALNETARY ROVERS
 03/07/2002 - 02/28/2003 FY02: \$154,000 Total: \$154,000
Prin. Invest.: S ZILBERSTEIN
Tech. Officer: ARC/R A MORRIS, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1348 UNIV OF MASSACHUSETTS - AMHERST 5879
 ESTIMATING EFFECTS OF PARAMETER UNCERTAINTY ON ANA LYSIS
 NETWORKS
 06/10/2002 - 05/31/2003 FY02: \$133,481 Total: \$133,481
Prin. Invest.: A DESHMUKH
Tech. Officer: ARC/M LIVINGSTON, ARC/J E MILTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1353 UNIV OF MASSACHUSETTS - AMHERST 5880
 INTEGRATION OF INTELLIGENT PROCESS MANAGEMENT AGEN TS & THE
 INFORMATION POWER GRID
 07/15/2002 - 06/14/2003 FY02: \$189,555 Total: \$189,555
Prin. Invest.: A DESHMUKH
Tech. Officer: ARC/M LIVINGSTON, ARC/J MELTON
CASE Category: 22 – COMPUTER SCIENCE

NGT 1 02008 UNIV OF MASSACHUSETTS - AMHERST 5881
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/06/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: E B COUGHLIN, G S CONSTABLE
Tech. Officer: LARC/D L THOMSEN
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 2 52276 UNIV OF MASSACHUSETTS - AMHERST 5882
 A DECISION-THEORY APPROACH TO AUTONOMOUS PLANETARY CONTROL
 (STUDENT: DANIELSCOTT BERNSTEIN)
 06/12/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S ZILBERSTEIN
Tech. Officer: ARC/J BRESINA
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 30375 UNIV OF MASSACHUSETTS - AMHERST 5883
 REALIZING NETWORK SENSOR WEBS THROUGH THE DEVELOPM ENT OF
 THE REMOTE INSTRUMENT DEFINITION LANGU
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D MCLAUGHLIN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30412 UNIV OF MASSACHUSETTS - AMHERST 5884
 AIRBORNE CLOUD RADAR STUDIES: CLOUDSAT CALIBRATION AND
 CLOUD/PRECIPITA- TION RETRIEVAL ALGORITHM DEV
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S SEKELSKY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 32 UNIV OF MASSACHUSETTS - AMHERST 5885
 TRAINING GRANT
 06/04/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R E VAN EMMERIK
Tech. Officer: JSC/D G SICKOREZ
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 9 61 UNIV OF MASSACHUSETTS - AMHERST 5886
 TASK & SCALE APPROPRIATE CLOSED-LOOP INTERACTION I N THE FORCE
 DOMANIN
 05/28/2002 - 06/03/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R GRUPEN
Tech. Officer: JSC/R SAVELY
CASE Category: 22 – COMPUTER SCIENCE

MASSACHUSETTS

NASA'S UNIVERSITY PROGRAM

NGT13 52756 UNIV OF MASSACHUSETTS BOSTON 5887
 GRADUATE STUDENT RESEARCHERS PROGRAM - EFFECTS OF COPEPOD
 GRAZING ON COLORED DISSOLVED ORGANIC MATTE
 06/12/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J URBAN-RICH
Tech. Officer: SSC/R P TRAVIS
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 5 6605 UNIV OF MASSACHUSETTS-DARTHMOUTH 5888
 INTERANNUAL PHYSICAL AND BIOLOGICAL VARIABILITY OF F THE NORTH-
 EAST U.S. COAST
 12/11/1997 - 11/14/2000 FY02: -\$34 Total: \$148,969
Prin. Invest.: J J BISAGNI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9752 UNIV OF MASSACHUSETTS-DARTHMOUTH 5889
 REGIONAL FISHERIES APPLICATION CENTER
 06/22/2000 - 09/30/2002 FY02: \$0 Total: \$1,831,000
Prin. Invest.: B J ROTHSCHILD
Tech. Officer: GSFC/D R KAHLE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10125 UNIV OF MASSACHUSETTS-DARTHMOUTH 5890
 A PILOT INVESTIGATION OF LOW FREQUENCY CHLOROPHYLL & PIGMENT
 VARIABILITY OFF THE NORTHEAST
 12/12/2000 - 12/14/2002 FY02: \$0 Total: \$80,043
Prin. Invest.: J J BISAGNI
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 02042 UNIV OF MASSACHUSETTS-DARTHMOUTH 5891
 DEVELOPMENT OF REGIONAL FISHERIES/OCEANOGRAPHY APPLICATION
 CENTERS FOR ALASKA & MASSACHUSETTS
 06/06/2002 - 06/05/2004 FY02: \$2,000,000 Total: \$2,000,000
Prin. Invest.: W S BROWN
Tech. Officer: SSC/M GIARDINO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4046 WELLESLEY COLL 5892
 STRUCTURE AND DYNAMICS OF PLANETARY RINGS
 03/10/1997 - 09/30/2001 FY02: \$0 Total: \$174,750
Prin. Invest.: R G FRENCH
Tech. Officer: GSFC/J G GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9059 WELLESLEY COLL 5893
 LABORATORY MEASUREMENTS OF SO2 AND N2 ABSORPTION SPECTRA
 FOR PLANETARY ATMOSPHERES
 02/15/2000 - 02/28/2003 FY02: \$0 Total: \$112,921
Prin. Invest.: D STARK
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10197 WELLESLEY COLL 5894
 DYNAMICS AND STRUCTURE OF PLANETARY RINGS
 12/21/2000 - 12/31/2003 FY02: \$47,200 Total: \$93,700
Prin. Invest.: R G FRENCH
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 6455 WOODS HOLE OCEANOGRAPHIC INST 5895
 MODELING MESOSCALE BIOGEOCHEMICAL PROCESSES IN A T
 OPEX/POSEIDON DIAMOND SURROUNDING THE U.S. JGOFS
 11/04/1997 - 09/30/2001 FY02: \$0 Total: \$491,660
Prin. Invest.: D J MCGILLICUDDY
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7348 WOODS HOLE OCEANOGRAPHIC INST 5896
 STUDIES OF HEAT, SALT, AND RADIATIVE FLUXES IN THE ARCTIC USING
 SATELLITE AND BUOY OBSERVAT
 04/28/1998 - 04/30/2001 FY02: -\$33 Total: \$184,967
Prin. Invest.: J YANG
Tech. Officer: GSFC/J COMISO
CASE Category: 33 – OCEANOGRAPHY

NAG 5 7445 WOODS HOLE OCEANOGRAPHIC INST 5897
 OPTICAL CLASSIFICATION OF WATER TYPES FROM SEAWIFS DATA: A
 HYBRID APPROACH USING BOTH SEMI-AN
 06/04/1998 - 08/31/2002 FY02: \$0 Total: \$278,087
Prin. Invest.: H M SOSIK
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7770 WOODS HOLE OCEANOGRAPHIC INST 5898
 STUDIES OF ANTARCTIC SEA ICE AND SOUTHERN OCEAN TEMPERATURE
 MINIMUM LAYER USING SATELLITE AND I
 10/22/1998 - 12/31/2001 FY02: \$0 Total: \$184,956
Prin. Invest.: R A KRISHFIELD
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8868 WOODS HOLE OCEANOGRAPHIC INST 5899
 BIOLOGICAL INTERPRETATION OF OCEAN COLOR: OBSERVATIONS &
 MODELS FOR WATERS OF THE MID-ATLANTIC SHELF
 01/10/2000 - 02/28/2003 FY02: \$0 Total: \$200,000
Prin. Invest.: H SOSIK
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9422 WOODS HOLE OCEANOGRAPHIC INST 5900
 ISOTOPIC BIOGEOCHEMISTRY
 04/11/2000 - 04/30/2003 FY02: \$185,000 Total: \$544,270
Prin. Invest.: D M HAYES
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9858 WOODS HOLE OCEANOGRAPHIC INST 5901
 STUDYING THE ANNUAL & INTER-ANNUAL VARIABILITY IN OCEAN COLOR
 USING SATELLITE DATA & GLOBAL MARINE
 08/07/2000 - 09/30/2002 FY02: \$0 Total: \$114,739
Prin. Invest.: D M GLOVER
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11265 WOODS HOLE OCEANOGRAPHIC INST 5902
 REGIONAL CARBON CYCLE MODELING AT THE BERMUDA ATLANTIC
 TIME-SERIES STUDY (BATS) SITE USING AN EDDY-R
 08/31/2001 - 08/31/2004 FY02: \$47,170 Total: \$180,725
Prin. Invest.: D MCGILLICUDDY
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12403 WOODS HOLE OCEANOGRAPHIC INST 5903
 ASSESSING THE ROLE OF PHOTOCHEMICAL OXIDATION OF D OC IN THE
 UPPER OCEAN BASED ON CHARACTERIZATION O
 08/01/2002 - 07/31/2005 FY02: \$136,167 Total: \$136,167
Prin. Invest.: L TRAYKOVSKI
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12444 WOODS HOLE OCEANOGRAPHIC INST 5904
 LONG-TERM SURFACE SALINITY MEASUREMENTS
 08/12/2002 - 07/31/2005 FY02: \$60,105 Total: \$60,105
Prin. Invest.: R SCHMITT
Tech. Officer: GSFC/E LINDTSROM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12488 WOODS HOLE OCEANOGRAPHIC INST 5905
 CONSTRAINING OCEANIC COURCES AND SINKS OF C02 BY I NVERSE
 MODELING: A FIRST STOP TOWARD ASSIMILAT
 08/27/2002 - 08/31/2003 FY02: \$35,000 Total: \$35,000
Prin. Invest.: S C DONEY
Tech. Officer: GSFC/C TREES
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12520 WOODS HOLE OCEANOGRAPHIC INST 5906
 THE INFLUENCE OF IRON AVAILABILITY AND PHYSICAL FO RCING ON
 SOUTHERN OCEAN PRIMARY PRODUCTIVITY
 09/17/2002 - 08/31/2005 FY02: \$101,116 Total: \$101,116
Prin. Invest.: S DONEY
Tech. Officer: GSFC/C TREES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 00198 WOODS HOLE OCEANOGRAPHIC INST 5907
 R & D TO SUPPORT SIMBIOS PROJECT ORIGINAL POP 10/30/01
 11/06/2000 - 11/30/2002 FY02: \$165,983 Total: \$255,185
Prin. Invest.: J R MORRISON
Tech. Officer: GSFC/C R MCCLAIN
CASE Category: 33 – OCEANOGRAPHY

NCC 5 441 WOODS HOLE OCEANOGRAPHIC INST 5908
 SEASONAL-TO-INTERANNUAL VARIATIONS IN THE INDIAN OCEAN USING
 THE NSIPP OCEAN MODEL SIMULATIONS
 12/02/1999 - 11/30/2001 FY02: -\$2,778 Total: \$87,222
Prin. Invest.: L YU
Tech. Officer: GSFC/M RIENECKER
CASE Category: 33 – OCEANOGRAPHY

NGT 5 30206 WOODS HOLE OCEANOGRAPHIC INST 5909
 INTERPRETATION OF VARIABILITY IN WATER COLUMN OPTI CAL PROPER-
 TIES THROUGH SINGLE-PARTICLE ANALYSIS
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: H SOSIK
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30362 WOODS HOLE OCEANOGRAPHIC INST 5910
 IRON CYCLING IN THE CALIFORNIA CURRENT SYSTEM: GEO CHEMICAL &
 ECOLOGICAL MODELING/STUDENT: PAYAL PAR
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D M GLOVER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2395 WORCESTER POLYTECHNIC INST 5911
 STABILITY AND HEAT TRANSFER CHARACTERISTICS OF CON DENSING
 FILMS IN REDUCED GRAVITY
 04/14/2000 - 11/30/2003 FY02: \$79,935 Total: \$202,466
Prin. Invest.: D C HERMANSON
Tech. Officer: GRC/F CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2405 WORCESTER POLYTECHNIC INST 5912
 EXPERIMENTAL INVESTIGATION AND MODELING OF PULSED PLASMA
 THRUSTER PLUMES
 05/03/2000 - 04/30/2003 FY02: \$30,000 Total: \$135,538
Prin. Invest.: D GATSONIS
Tech. Officer: GRC/E J PENCIL
CASE Category: 13 – PHYSICS

NAG 3 2535 WORCESTER POLYTECHNIC INST 5913
 SPLASHING DROPLETS
 01/25/2001 - 11/30/2003 FY02: \$19,000 Total: \$44,000
Prin. Invest.: D TRYGGVASON
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2545 WORCESTER POLYTECHNIC INST 5914
 COMPUTATIONAL MODELING OF THE EFFECT OF SECONDARY FORCES ON
 THE PHASE DISTRIBUTION IN DISPERSED MULT
 02/22/2001 - 02/06/2004 FY02: \$95,000 Total: \$190,000
Prin. Invest.: D TRYGGVASON
Tech. Officer: GRC/D F CHAO
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2583 WORCESTER POLYTECHNIC INST 5915
 COMPUTATIONS OF BOILING IN MICROGRAVITY
 04/04/2001 - 04/30/2002 FY02: \$13,999 Total: \$86,499
Prin. Invest.: D TRYGGVASON
Tech. Officer: GRC/D F CHAO
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10712 WORCESTER POLYTECHNIC INST 5916
 STUDENT PROJECTS AT THE GODDARD SPACE FLIGHT CTR
 04/06/2001 - 06/30/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: F J LOOFT
Tech. Officer: GSFC/S J BRODEUR
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11755 WORCESTER POLYTECHNIC INST 5917
 STUDENT PROJECTS AT THE GODDARD SPACE FLIGHT CEN R
 02/27/2002 - 06/30/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: F J LOOFT
Tech. Officer: GSFC/S J BRODEUR
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 673 WORCESTER POLYTECHNIC INST 5918
 COMBUSTION CHARACTERISTICS OF FULLY-MODULATED, TUR BULENT
 DIFFUSION FLAMES IN REDUCED GRAVITY
 02/23/1999 - 01/13/2003 FY02: \$119,677 Total: \$422,842
Prin. Invest.: D C HERMANSON
Tech. Officer: GRC/D P STOCKER
CASE Category: 49 – ENGINEERING, OTHER

MICHIGAN

NAG 5 10118 **ALMA COLL** **5919**
 ANALYSIS OF DATA FROM THE ER-2 CLOUD PHYSICS LIDAR SYSTEM
 12/21/2000 - 12/31/2001 FY02: \$0 Total: \$15,000
Prin. Invest.: J H GIBSON
Tech. Officer: GSFC/M J MCGILL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11817 **ALMA COLL** **5920**
 ANALYSIS OF DATA FROM THE ER-2 CLOUD PHYSICS LIDAR SYSTEM YEAR
 1 OF 3.
 03/15/2002 - 03/14/2005 FY02: \$11,700 Total: \$11,700
Prin. Invest.: J H GIBSON
Tech. Officer: GSFC/M J MCGILL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10348 **CALVIN COLL** **5921**
 SIMULATION OF GLOBAL GLACIO-ISOSTAS, EARTH DEFORMATION AND
 SEA LEVEL CHANGES.
 02/05/2001 - 01/31/2003 FY02: \$32,444 Total: \$74,067
Prin. Invest.: J A CLARK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 1 01060 **HOPE COLL** **5922**
 THEORETICAL INVESTIGATION OF THERMO-MECHANICAL BEHAVIOR OF
 CARBON NANOTUBE-BASED COMPOSITES USING
 04/05/2001 - 04/04/2004 FY02: \$34,007 Total: \$86,943
Prin. Invest.: J PAWLOSKE
Tech. Officer: LARC/T S GATES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2520 **KETTERING UNIV** **5923**
 MODELING FOR UNDERSTANDING HIGH SPECIFIC IMPULSE HALL THRUSTERS
 01/08/2001 - 09/30/2003 FY02: \$61,043 Total: \$120,574
Prin. Invest.: S ROY
Tech. Officer: GRC/M MANTENIEKS
CASE Category: 13 – PHYSICS

NAG 3 2638 **KETTERING UNIV** **5924**
 ELECTRODE MODEL FOR MACHMPD THRUSTER SIMULATIONS ELECTRODE
 MODEL FOR MACHMPD THRUSTER SIMULATIONS
 06/21/2001 - 02/28/2003 FY02: \$0 Total: \$19,994
Prin. Invest.: S ROY
Tech. Officer: GRC/D REDDY
CASE Category: 46 – MECHANICAL ENGR

NAG 1 01048 **MICHIGAN STATE UNIV** **5925**
 PARAMETRIC IDENTIFICATION OF NONLINEAR DYNAMICAL SYSTEMS
 06/06/2001 - 09/30/2002 FY02: \$0 Total: \$34,799
Prin. Invest.: B F FEENY
Tech. Officer: LARC/W A SILVA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02061 **MICHIGAN STATE UNIV** **5926**
 PENALTY-BASED INTERFACE TECHNOLOGY FOR PREDICTION OF DELAMINATION
 GROWTH IN LAMINATED STRUCTURES
 03/01/2002 - 02/28/2005 FY02: \$31,299 Total: \$31,299
Prin. Invest.: R C AVERILL
Tech. Officer: LARC/C G DAVILA, LARC/J B RANSOM
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2234 **MICHIGAN STATE UNIV** **5927**
 DEVELOPMENT AND IMPLEMENTATION OF A GLOBAL BLEED BOUNDARY
 CONDITION
 03/11/1999 - 01/20/2003 FY02: \$0 Total: \$189,150
Prin. Invest.: T SHIH
Tech. Officer: GRC/D DAVIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2472 **MICHIGAN STATE UNIV** **5928**
 RESEARCHING EPOXY AND POLYIMIDE NANOCOMPOSITES USING NATURAL
 AND SYNTHETIC CLAYS
 07/07/2000 - 12/03/2002 FY02: \$60,000 Total: \$179,880
Prin. Invest.: T J PINNAVAIA
Tech. Officer: GRC/S G CAMPBELL
CASE Category: 12 – CHEMISTRY

NAG 3 2576 **MICHIGAN STATE UNIV** **5929**
 AERODYNAMICS OF AIRFOILS WITH ICE ACCRETION: CFD SIMULATIONS
 AND TECHNOLOGY ISSUES
 03/26/2001 - 11/30/2003 FY02: \$75,000 Total: \$145,000
Prin. Invest.: T SHIH
Tech. Officer: GRC/Y CHOO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 3218 **MICHIGAN STATE UNIV** **5930**
 CCD SYSTEM TECHNOLOGY FOR EXTREMELY LOW BACKGROUND OBSERVATIONS
 04/26/1996 - 09/30/2002 FY02: \$0 Total: \$497,500
Prin. Invest.: E D LOH
Tech. Officer: GSFC/E CHENG
CASE Category: 13 – PHYSICS

NAG 5 4810 **MICHIGAN STATE UNIV** **5931**
 ACQUISITION AND ANALYSIS OF LARGE QUANTITIES OF LAND MEASURING
 TROPICAL LAND COVER CHANGE (NRA-MTPE-03)
 07/30/1997 - 06/30/2001 FY02: \$0 Total: \$631,178
Prin. Invest.: D SKOLE
Tech. Officer: GSFC/D WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6538 **MICHIGAN STATE UNIV** **5932**
 CASE STUDIES AND DIAGNOSTIC MODELS OF THE INTER-ANNUAL DYNAMICS
 OF DEFORESTATION IN SOUTHEAST ASIA
 04/21/1998 - 09/30/2001 FY02: \$0 Total: \$460,000
Prin. Invest.: D SKOLE
Tech. Officer: GSFC/A JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8053 **MICHIGAN STATE UNIV** **5933**
 SOLAR CONVECTION AND OSCILLATIONS
 01/12/1999 - 03/14/2002 FY02: \$0 Total: \$252,000
Prin. Invest.: R F STEIN
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8317 **MICHIGAN STATE UNIV** **5934**
 ENHANCING PROFESSIONAL DEVELOPMENT OF LANDSCAPE ECOLOGISTS
 OF THE NEXT GENERATION
 03/26/1999 - 02/28/2001 FY02: \$0 Total: \$20,000
Prin. Invest.: J LIU
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8893 **MICHIGAN STATE UNIV** **5935**
 ATOMIC FORCE MICROSCOPE LITHOGRAPHY & BEEM INVESTIGATION OF
 CARBON NANOTUBE INTERFACES
 01/07/2000 - 01/14/2001 FY02: -\$348 Total: \$4,652
Prin. Invest.: V AYRES
Tech. Officer: GSFC/J M BENAVIDES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 9232 **MICHIGAN STATE UNIV** **5936**
 PATTERN TO PROCESS: RESEARCH AND APPLICATIONS FOR UNDER-
 STANDING MULTIPLE INTERACTIONS & FEEDBACK ON
 04/03/2000 - 04/30/2003 FY02: \$201,824 Total: \$575,974
Prin. Invest.: R WALKER
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9276 **MICHIGAN STATE UNIV** **5937**
 SYNTHESIS OF HYBRID CARBON NANOTUBE/DIAMOND FILMS
 03/16/2000 - 05/14/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: D TOMANEK
Tech. Officer: GSFC/H SHAW
CASE Category: 13 – PHYSICS

NAG 5 9286 **MICHIGAN STATE UNIV** **5938**
 GOF C DATA & INFORMATION FOR TROPICAL FOREST ASSESSMENT &
 MANAGEMENT
 03/16/2000 - 04/30/2003 FY02: \$126,631 Total: \$331,675
Prin. Invest.: J QI
Tech. Officer: HQ/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9563 **MICHIGAN STATE UNIV** **5939**
 SOLAR SURFACE CONVECTION
 05/09/2000 - 05/14/2003 FY02: \$110,000 Total: \$280,954
Prin. Invest.: R F STEIN
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 10200 **MICHIGAN STATE UNIV** **5940**
 ENHANCING PROFESSIONAL DEVELOPMENT OF LANDSCAPE ECOLOGI-
 STS OF THE NEXT GENERATION
 12/21/2000 - 12/31/2002 FY02: \$15,000 Total: \$30,000
Prin. Invest.: J LIU
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11319 **MICHIGAN STATE UNIV** **5941**
 THE FORMATION AND EVOLUTION OF GLOBULAR CLUSTER SYSTEMS AND
 IMPLICATIONS FOR THE FORMATION HISTORY
 10/23/2001 - 06/30/2005 FY02: \$255,348 Total: \$255,348
Prin. Invest.: S SEPF
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11320 **MICHIGAN STATE UNIV** **5942**
 GLOBULAR CLUSTER FORMATION (ATP 99)
 10/23/2001 - 06/30/2003 FY02: \$241,150 Total: \$241,150
Prin. Invest.: S ZEPF
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11740 **MICHIGAN STATE UNIV** **5943**
 GOF C FOREST COVER CHARACTERISTICS AND CHANGES IMPLEMENTA-
 TION TEAM MEETING PROPOSAL
 02/13/2002 - 02/14/2003 FY02: \$7,000 Total: \$7,000
Prin. Invest.: D L SKOLE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12450 **MICHIGAN STATE UNIV** **5944**
 LOCAL SOLAR MAGNETIC FIELDS
 08/20/2002 - 08/14/2005 FY02: \$52,097 Total: \$52,097
Prin. Invest.: R F STEIN
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12617 **MICHIGAN STATE UNIV** **5945**
 SIMULATING THE EFFECTS OF "PLAN COLOMBIA" ON LAND USE AND LAND
 COVER IN THE ECUADORIAN AMAZON: A COM
 09/26/2002 - 09/30/2005 FY02: \$100,445 Total: \$100,445
Prin. Invest.: J MESSINA
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1575 **MICHIGAN STATE UNIV** **5946**
 MICROGRAVITY REGULATION OF ONCOGENE EXPRESSION AND OSTEO-
 BLAST DIFFERENTIATION.
 02/17/1999 - 11/30/2002 FY02: \$137,000 Total: \$496,400
Prin. Invest.: L R MCCABE
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1690 **MICHIGAN STATE UNIV** **5947**
 INVESTIGATION OF SOLIDIFICATION PROCESS WITH CONVECTION USING
 MESHLESS METHODS & VERIFICATION
 05/16/2000 - 11/30/2003 FY02: \$100,000 Total: \$240,061
Prin. Invest.: A BERNARD, M KOCHESFAHANI, A DIAZ
Tech. Officer: MSFC/P DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1211 **MICHIGAN STATE UNIV** **5948**
 WATER DRIVEN ALTERATION OF ROCKS & MINERALS ON MARS ASTERI-
 OIDS: CLUES TO THE SEARCH FOR LIFE
 04/04/2000 - 04/09/2002 FY02: \$0 Total: \$15,496
Prin. Invest.: M A VELBEL
Tech. Officer: JSC/D S MCKAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1274 **MICHIGAN STATE UNIV** **5949**
 CENTER FOR GENOMIC AND EVOLUTIONARY STUDIES ON MICROBIAL
 LIFE AT LOW TEMPERATURE
 07/20/2001 - 06/30/2006 FY02: \$816,345 Total: \$1,192,420
Prin. Invest.: M THOMASHOW, J TIEDJE, L SEPULVEDA
Tech. Officer: ARC/R GRAYMES, ARC/W W DOLCI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 662 **MICHIGAN STATE UNIV** **5950**
 INVESTIGATION OF DIFFUSION FLAME TIP INSTABILITY IN MICROGRAVITY
 01/14/1999 - 01/03/2003 FY02: \$93,734 Total: \$367,073
Prin. Invest.: I S WICHMAN
Tech. Officer: GRC/S OLSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MICHIGAN

NASA'S UNIVERSITY PROGRAM

NCC 3 868 MICHIGAN STATE UNIV 5951
 HIGH-TEMPERATURE SHAPE-MEMORY ALLOY DEVELOPMENT FOR ACTUATION ABOVE 500 C
 02/28/2001 - 03/31/2004 FY02: \$66,730 Total: \$131,230
Prin. Invest.: D S GRUMMON
Tech. Officer: GRC/M V NATHAL
CASE Category: 47 - METAL & MATERIALS ENGR

NCC 5 291 MICHIGAN STATE UNIV 5952
 MEASUREMENT AND MODELING OF THE INTER-ANNUAL DYNAMICS OF DEFORESTATION AND REGROWTH IN THE BRAZIL
 06/16/1998 - 12/31/2002 FY02: \$262,211 Total: \$1,224,163
Prin. Invest.: D SKOLE
Tech. Officer: GSFC/D DEERING
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCC 5 303 MICHIGAN STATE UNIV 5953
 CREATIVE & INNOVATIVE WORKING PROTOTYPE EARTH SCIENCE INFORMATION PARTNERSHIPS IN SUPPORT
 04/09/1998 - 12/31/2002 FY02: \$240,000 Total: \$4,592,000
Prin. Invest.: D SKOLE
Tech. Officer: GSFC/M MAIDEN
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 1 52216 MICHIGAN STATE UNIV 5954
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/01/1999 - 06/30/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: L M HUDY, A NAGUIB
Tech. Officer: LARC/W M HUMPHREYS, JR.
CASE Category: 41 - AERONAUTICAL ENGR

NGT 5 30166 MICHIGAN STATE UNIV 5955
 MAPPING THE SPATIAL DISTRIBUTION OF BAMBOO IN A GIANT PANDA RESERVE: A STUDY OF THE RELATIONSHIP
 09/01/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J LIU
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 30340 MICHIGAN STATE UNIV 5956
 MODELING THE SOCIO-ECONOMIC DRIVERS OF LAND USE & COVER CHANGE IN SOUTH AFRICA: INTEGRATING SOCIAL S
 08/21/2000 - 08/31/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: D J CAMPBELL
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 50150 MICHIGAN STATE UNIV 5957
 AN INTEGRATED ASSESSMENT OF THE CUMULATIVE IMPACTS ARCTIC DEVELOPMENT
 09/11/1997 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: P WEBBER
Tech. Officer: HQ/A NURRIDIN
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50378 MICHIGAN STATE UNIV 5958
 ON-LINE LEARNING OF SENSOR-IMAGE STABILIZATION INSPIRED BY THE VESTIBULAR SYSTEM OF SQUIRREL
 09/17/2001 - 09/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P PIERRE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT13 52715 MICHIGAN STATE UNIV 5959
 NASA GRADUATE STUDENT RESEARCHER PROGRAM FOR STACEY A.C. NELSON
 10/01/1997 - 08/15/2001 FY02: -\$1,470 Total: \$64,530
Prin. Invest.: P SORRANO
Tech. Officer: SSC/A JOYCE
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 1 01004 MICHIGAN TECHNOLOGICAL UNIV 5960
 GRAPHITE NANOREINFORCEMENTS FOR AEROSPACE NANOCOMPOSITES
 11/24/2000 - 09/30/2003 FY02: \$74,915 Total: \$149,847
Prin. Invest.: L DRZAL
Tech. Officer: LARC/J HINKLEY, LARC/T S GATES
CASE Category: 12 - CHEMISTRY

NAG 3 2088 MICHIGAN TECHNOLOGICAL UNIV 5961
 NUMERICAL STUDIES OF THE LDI AND THE LPP/LDI GAS TURBINE COMBUSTOR CONCEPTS
 12/23/1997 - 01/28/2002 FY02: \$0 Total: \$323,636
Prin. Invest.: S L YANG
Tech. Officer: GRC/R R TACINA
CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2759 MICHIGAN TECHNOLOGICAL UNIV 5962
 NUMERICAL STUDY OF LOW-EMISSION GAS-TURBINE COMBUSTOR (PHASE V)
 04/03/2002 - 03/04/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: D YANG
Tech. Officer: GRC/P PENKO
CASE Category: 41 - AERONAUTICAL ENGR

NAG 5 5278 MICHIGAN TECHNOLOGICAL UNIV 5963
 OBSERVING AND MEASURING EARLY OPTICAL LIGHT CURVES FROM GAMMA-RAY BURSTS WITH LOTIS
 06/21/2000 - 12/31/2002 FY02: \$30,000 Total: \$50,000
Prin. Invest.: R NEMIROFF
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 6310 MICHIGAN TECHNOLOGICAL UNIV 5964
 LINEAR ADAPTIVE MIRROR TESTBED TO SUPPORT DIRECT DETECTION OF EXTRA-SOLAR PLANETS
 10/06/1997 - 06/14/2002 FY02: \$0 Total: \$224,768
Prin. Invest.: D FTACLAS
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 7051 MICHIGAN TECHNOLOGICAL UNIV 5965
 LAKE SUPERIOR ICE FIELD MEASUREMENTS FOR C-BAND SAR BACKSCATTER SIGNATURES AND ICE COVER ANALYSIS
 03/12/1998 - 07/31/2002 FY02: \$0 Total: \$144,425
Prin. Invest.: D PILANT
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 7272 MICHIGAN TECHNOLOGICAL UNIV 5966
 VOLCANIC PLUME ANALYSIS USING TOMS AND AVHRR DATA
 04/30/1998 - 03/31/2002 FY02: \$0 Total: \$132,026
Prin. Invest.: W ROSE
Tech. Officer: GSFC/A J KRUEGER
CASE Category: 31 - ATMOSPHERIC SCIENCE

NASA'S UNIVERSITY PROGRAM

MICHIGAN

NAG 5 7576 **MICHIGAN TECHNOLOGICAL UNIV** **5967**
 FUNDING FOR 'APPLICATION OF TOMS DATA TO VOLCANIC HAZARD
 MITIGATION' (SENH98-0061)
 08/04/1998 - 07/31/2002 FY02: \$0 Total: \$180,000
Prin. Invest.: G J BLUTH
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8796 **MICHIGAN TECHNOLOGICAL UNIV** **5968**
 EARTH AND SPACE SCIENCES PROJECT SERVICES FOR NASA HPCC
 09/21/1999 - 01/31/2003 FY02: \$195,027 Total: \$758,543
Prin. Invest.: D MERKEY
Tech. Officer: GSFC/J R FISCHER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10568 **MICHIGAN TECHNOLOGICAL UNIV** **5969**
 ICE-SULFUR-ASH INTERACTIONS IN VOLCANIC CLOUDS: LABORATORY
 STUDIES OF ICE NUCLEATION
 03/12/2001 - 03/14/2004 FY02: \$77,625 Total: \$160,084
Prin. Invest.: R SHAW
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11062 **MICHIGAN TECHNOLOGICAL UNIV** **5970**
 VALIDATION OF TOMS VOLCANIC AEROSOL & SO2 PRODUCTS USING
 MODIS & AVHRR
 06/27/2001 - 06/30/2004 FY02: \$95,000 Total: \$190,000
Prin. Invest.: G BLUTH
Tech. Officer: GSFC/R MVPETERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1478 **MICHIGAN TECHNOLOGICAL UNIV** **5971**
 R/S GRAVITY INDUCED SETTLING IN INTERCONNECTED LIQUID SOLID
 SYSTEMS
 02/18/1998 - 01/31/2003 FY02: \$64,000 Total: \$322,833
Prin. Invest.: T H COURTNEY
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 5 76 **MICHIGAN TECHNOLOGICAL UNIV** **5972**
 COLLEEN RILEY "TWO-DIMENSIONAL CHARACTERIZATION OF VOLCANIC
 ASH-APPLICATIONS TO REMOTE SENSING ALGO
 07/22/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: W I ROSE
Tech. Officer: GSFC/M S BURRELL
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 5 120 **MICHIGAN TECHNOLOGICAL UNIV** **5973**
 THE GROUNDING OF COMPOSITE MATERIALS & THE IMPACT ON
 EMC/STUDENT: DERIK C. LOVE
 05/31/2001 - 08/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: E ROTHWELL
Tech. Officer: GSFC/M S BURRELL
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2792 **OAKLAND UNIV** **5974**
 PROTECTION AGAINST UV & X-RAY CATARACTS USING DYNA MIC LIGHT
 SCATTERING AS A MARKER
 07/08/2002 - 06/30/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: F GIBLIN
Tech. Officer: GRC/R ANSARI
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2042 **UNIV OF MICHIGAN - ANN ARBOR** **5975**
 TROPOSPHERIC TRACE GAS BUDGETS: INTERACTIONS WITH AEROSOLS
 04/23/1998 - 02/22/2002 FY02: \$0 Total: \$343,040
Prin. Invest.: J E PENNER
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2181 **UNIV OF MICHIGAN - ANN ARBOR** **5976**
 DATA-BASED CLIMATOLOGIES AND STUDY OF THE OZONE BUDGET IN THE
 TROPOPAUSE
 03/31/1999 - 12/31/2002 FY02: \$22,299 Total: \$62,299
Prin. Invest.: M A CARROLL
Tech. Officer: LARC/G R MADDREA, LARC/L POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01032 **UNIV OF MICHIGAN - ANN ARBOR** **5977**
 DESIGN STUDY OF A SYNTHETIC THINNED APERTURE RADIO METER FOR
 HURRICANE IMPACT PREDICTION
 04/05/2001 - 06/30/2002 FY02: \$1 Total: \$65,001
Prin. Invest.: C S RUF
Tech. Officer: LARC/J W JOHNSON, LARC/R W LAWRENCE
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 1878 **UNIV OF MICHIGAN - ANN ARBOR** **5978**
 SOOT FORMATION IN FREELY-PROPAGATING LAMINAR PREMIXED FLAMES
 05/20/1996 - 06/30/2001 FY02: -\$24,192 Total: \$337,062
Prin. Invest.: G M FAETH
Tech. Officer: GRC/H D ROSS
CASE Category: 46 – MECHANICAL ENGR

NAG 3 1900 **UNIV OF MICHIGAN - ANN ARBOR** **5979**
 A STUDY OF NUCLEATE BOILING WITH FORCED CONVECTION IN MICRO-
 GRAVITY
 07/22/1996 - 07/21/2001 FY02: -\$4,188 Total: \$195,732
Prin. Invest.: P MERTE
Tech. Officer: GRC/F CHIARAMONTE
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2048 **UNIV OF MICHIGAN - ANN ARBOR** **5980**
 LAMINAR SOOT PROCESSES EXPERIMENT (LSP)
 05/06/1997 - 12/31/2000 FY02: -\$44,147 Total: \$552,080
Prin. Invest.: G M FAETH
Tech. Officer: GRC/D URBAN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2082 **UNIV OF MICHIGAN - ANN ARBOR** **5981**
 STRATEGY 2000: RECRUITMENT, RETENTION, RECOGNITION; A BALANCED
 APPROACH TO DIVERSITY AND EXCELLENCE
 09/30/1997 - 02/01/2003 FY02: \$53,500 Total: \$309,260
Prin. Invest.: D E SCOTT, J W JONES
Tech. Officer: GRC/A GONZALEZ, GRC/S A MERRITT
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2134 **UNIV OF MICHIGAN - ANN ARBOR** **5982**
 MICROSCOPIC VISUALIZATION OF FLUID FLOW IN EVAPORATION DROP-
 LETS AND ELECTRO-OSMOTIC FLOWS
 03/03/1998 - 01/05/2002 FY02: \$0 Total: \$385,850
Prin. Invest.: R G LARSON
Tech. Officer: GRC/D W GRIFFIN
CASE Category: 46 – MECHANICAL ENGR

MICHIGAN

NASA'S UNIVERSITY PROGRAM

NAG 3 2162 UNIV OF MICHIGAN - ANN ARBOR 5983
 COMPUTATIONS OF BOILING IN MICROGRAVITY COMPUTATIONS OF BOILING IN MICROGRAVITY
 04/27/1998 - 02/09/2002 FY02: -\$358 Total: \$265,642
Prin. Invest.: G TRYGGVASON, D JACQMIN
Tech. Officer: GRC/D F CHAO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2196 UNIV OF MICHIGAN - ANN ARBOR 5984
 FLUID MECHANICS OF CAPILLARY-ELASTIC INSTABILITIES IN THE MICROGRAVITY ENVIRONMENT
 09/03/1998 - 03/31/2002 FY02: \$0 Total: \$293,766
Prin. Invest.: J B GROTBORG
Tech. Officer: GRC/D F CHAO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2216 UNIV OF MICHIGAN - ANN ARBOR 5985
 USE OF LASER INDUCED FLOURESCENCE TO CHARACTERIZE DISCHARGE CATHODE EROSIONS OF AN ION ENGINE
 01/14/1999 - 01/24/2003 FY02: \$35,001 Total: \$160,000
Prin. Invest.: A D GALLIMORE
Tech. Officer: GRC/J S SOVEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2307 UNIV OF MICHIGAN - ANN ARBOR 5986
 DEVELOPMENT OF A TWO-STAGE ION THRUSTER DEVELOPMENT OF A TWO-STAGE ION THRUSTER
 12/03/1999 - 11/23/2002 FY02: \$50,000 Total: \$120,000
Prin. Invest.: A D GALLIMORE
Tech. Officer: GRC/R S JANKOVSKY
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2330 UNIV OF MICHIGAN - ANN ARBOR 5987
 LONG-TERM RELIABILITY OF HIGH-SPEED SIGE/SI HETERO JUNCTION BIPOLAR TRANSISTORS
 02/10/2000 - 02/03/2001 FY02: -\$3,932 Total: \$66,068
Prin. Invest.: P BHATTACHARYA
Tech. Officer: GRC/G PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2332 UNIV OF MICHIGAN - ANN ARBOR 5988
 COMPUTATIONAL MODELING OF THE EFFECT OF SECONDARY FORCES ON THE PHASE DISTRIBUTION IN DISPERSED MULT
 02/11/2000 - 11/30/2003 FY02: \$0 Total: \$60,000
Prin. Invest.: G TRYGGVASON
Tech. Officer: GRC/D F CHAO
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2356 UNIV OF MICHIGAN - ANN ARBOR 5989
 AGGREGATION AND GELATION IN SUSPENSIONS OF ANISOMETRIC PARTICLES: STUDIES OF COLLOIDAL PLATELETS AN
 03/15/2000 - 11/30/2003 FY02: \$85,500 Total: \$211,500
Prin. Invest.: M D SOLOMON
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2404 UNIV OF MICHIGAN - ANN ARBOR 5990
 LAMINAR SOORT PROCESSES (LSP) LAMINAR SOORT PROCESSES (LSP)
 04/27/2000 - 12/31/2002 FY02: \$202,272 Total: \$420,500
Prin. Invest.: G M FAETH
Tech. Officer: GRC/D URBAN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2406 UNIV OF MICHIGAN - ANN ARBOR 5991
 USING NONLINEARITY AND CONTACT LINES TO CONTROL FLUID FLOW IN MICROGRAVITY
 04/27/2000 - 11/30/2003 FY02: \$80,668 Total: \$187,550
Prin. Invest.: M PERLIN
Tech. Officer: GRC/C LEK
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2497 UNIV OF MICHIGAN - ANN ARBOR 5992
 MODELING THE PERFORMANCE AND LIFETIME OF ION THRUSTERS
 10/27/2000 - 10/31/2002 FY02: \$0 Total: \$50,653
Prin. Invest.: I D BOYD
Tech. Officer: GRC/G SOULAS
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 3 2530 UNIV OF MICHIGAN - ANN ARBOR 5993
 LONG TERM RELIABILITY OF HIGH SPEED SIGE/SI HETERO JUNCTION BIPOLAR TRANSISTORS
 01/23/2001 - 01/31/2003 FY02: \$70,000 Total: \$139,886
Prin. Invest.: P BHATTACHARYA
Tech. Officer: GRC/G E PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2582 UNIV OF MICHIGAN - ANN ARBOR 5994
 APPLICATION OF NANOTUBES TO WEIGHT REDUCTION IN ROCKET DRIVE SYSTEMS
 04/02/2001 - 10/01/2001 FY02: \$0 Total: \$60,032
Prin. Invest.: P P FRIEDMAN
Tech. Officer: GRC/W MORALES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2604 UNIV OF MICHIGAN - ANN ARBOR 5995
 ADVANCED VIBRATION ANALYSIS TOOLS AND NEW STRATEGIES FOR ROBUST DESIGN OF TURBINE ENGINE ROTORS
 05/23/2001 - 05/31/2005 FY02: \$98,491 Total: \$148,491
Prin. Invest.: C PIERRE
Tech. Officer: GRC/O MEHMED
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2708 UNIV OF MICHIGAN - ANN ARBOR 5996
 MICROFLUIDIC & DIELECTRIC PROCESSING OF DNA MICROFLUIDIC & DIELECTRIC PROCESSING OF DNA
 02/13/2002 - 02/04/2006 FY02: \$80,810 Total: \$80,810
Prin. Invest.: R G LARSON
Tech. Officer: GRC/D W GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2740 UNIV OF MICHIGAN - ANN ARBOR 5997
 FLUID DYNAMICS & INTERFACIAL STABILITY OF PULMONARY AIRWAY CLOSURE AND REOPENING IN MICROGRAVITY
 03/12/2002 - 02/12/2006 FY02: \$84,999 Total: \$84,999
Prin. Invest.: J B GROTBORG
Tech. Officer: GRC/C LEK
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2787 UNIV OF MICHIGAN - ANN ARBOR 5998
 NOVEL BIOMEDICAL DEVICES UTILIZING LIGHT EMITTING NANOSTRUCTURES
 05/31/2002 - 05/15/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: R S GOLDMAN
Tech. Officer: GRC/M SCARDELLETTI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2800 **UNIV OF MICHIGAN - ANN ARBOR** **5999**
 INVESTIGATION OF INLET FLOWS AT HIGH MACH NUMBERS INVESTIGATION OF INLET FLOWS AT HIGH MACH NUMBERS
 08/12/2002 - 10/31/2002 FY02: \$37,178 Total: \$37,178
Prin. Invest.: D E GEISTER
Tech. Officer: GRC/A R PORRO
CASE Category: 46 – MECHANICAL ENGR

NAG 5 2869 **UNIV OF MICHIGAN - ANN ARBOR** **6000**
 STAR FORMATION STUDIES: DYNAMICS AND INFRARED SIGN ATURES
 01/12/1995 - 07/14/2001 FY02: \$0 Total: \$225,000
Prin. Invest.: F C ADAMS
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4007 **UNIV OF MICHIGAN - ANN ARBOR** **6001**
 DYNAMICAL VARIATIONS IN THE MESOSPHERE AND LOWER T AND INTERANNUAL VARIABILITY
 03/06/1997 - 09/30/2001 FY02: \$0 Total: \$213,729
Prin. Invest.: D D SKINNER
Tech. Officer: GSFC/M M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 4381 **UNIV OF MICHIGAN - ANN ARBOR** **6002**
 STUDIES OF TENOUS PLANETARY ATMOSPHERES
 04/29/1997 - 12/31/2001 FY02: \$0 Total: \$254,455
Prin. Invest.: D R COMBI
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4589 **UNIV OF MICHIGAN - ANN ARBOR** **6003**
 A PROGRAM FOR RESEARCH IN PLANETARY ATMOSPHERES: P COUPLED CLOUD PHYSICS
 05/23/1997 - 12/31/2001 FY02: \$0 Total: \$249,000
Prin. Invest.: P K ATREYA
Tech. Officer: GSFC/R BEEBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4939 **UNIV OF MICHIGAN - ANN ARBOR** **6004**
 DIGITAL TOPOGRAPHY FROM SAR INTERFEROMETRY: DETER CORRECTION OF VEGETATION HEIGHT
 06/23/1997 - 09/30/2000 FY02: -\$1,192 Total: \$109,585
Prin. Invest.: K SARABANDI
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5030 **UNIV OF MICHIGAN - ANN ARBOR** **6005**
 SOLAR AND MAGNETOSPHERIC INPUTS TO THE MLTI REGION
 03/03/1995 - 03/05/2005 FY02: \$270,500 Total: \$773,474
Prin. Invest.: J KOZYRA
Tech. Officer: GSFC/R PLESS
CASE Category: 13 – PHYSICS

NAG 5 5049 **UNIV OF MICHIGAN - ANN ARBOR** **6006**
 TIDI - A TIMED DOPPLER INTERFEROMETER NEW AWARD
 12/04/1995 - 01/17/2006 FY02: \$750,982 Total: \$3,000,979
Prin. Invest.: T L KILLEN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5173 **UNIV OF MICHIGAN - ANN ARBOR** **6007**
 STUDY OF AN IMAGING CALORIMETER FOR ACCESS FUNDING FOR FIRST YEAR OF GRANT
 03/05/1998 - 03/31/2002 FY02: \$0 Total: \$255,000
Prin. Invest.: G TARLE
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5230 **UNIV OF MICHIGAN - ANN ARBOR** **6008**
 GRANT NAG5-5230 - HIGH ENERGY ANTIMATTER TELESCOPE (HEAT) PI PROF. GREGORY TARLE'
 03/16/1999 - 03/11/2003 FY02: \$82,000 Total: \$672,500
Prin. Invest.: G TARLE
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5262 **UNIV OF MICHIGAN - ANN ARBOR** **6009**
 FIRST YEAR OF THREE YEAR EFFORT/ SOUNDING ROCKET UV MEASUREMENTS
 04/11/2000 - 03/23/2003 FY02: \$150,000 Total: \$300,000
Prin. Invest.: J T CLARK
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5281 **UNIV OF MICHIGAN - ANN ARBOR** **6010**
 CONTEMPORANEOUS OPTICAL DETECTION OF GAMMA-RAY BURSTS
 06/14/2000 - 06/07/2003 FY02: \$295,000 Total: \$757,500
Prin. Invest.: C W AKERLOFF
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5304 **UNIV OF MICHIGAN - ANN ARBOR** **6011**
 GRANT NAG5-5304 CONSTRUCTION OF A HIGH PFR PULSED KU-BAND RADAR FOR MEASUREMENTS OF SEA SURFACE SLOP
 09/27/2000 - 02/28/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: K SARABANDI
Tech. Officer: WFF/D C VANDEMARK, WFF/E J WALSH
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 6471 **UNIV OF MICHIGAN - ANN ARBOR** **6012**
 ENERGETIC PARTICLE PROPAGATION IN THE NEW MODEL FO R THE HELIOSPHERIC MAGNETIC FIELD
 11/17/1997 - 10/31/2000 FY02: -\$1,301 Total: \$118,895
Prin. Invest.: T ZURBUCHEN
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7474 **UNIV OF MICHIGAN - ANN ARBOR** **6013**
 HIGH RESOLUTION DOPPLER IMAGER - OPERATIONS AND AL GORITHM MAINTENANCE
 06/23/1998 - 06/30/2001 FY02: \$0 Total: \$672,000
Prin. Invest.: W SKINNER
Tech. Officer: GSFC/C H JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7557 **UNIV OF MICHIGAN - ANN ARBOR** **6014**
 GGS/POLAR TIDE CO-INVESTIGATOR PROGRAM MO&DA SUPP LEMENTAL FUNDS
 06/25/1998 - 06/30/2001 FY02: \$0 Total: \$124,000
Prin. Invest.: A NAGEY
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MICHIGAN

NASA'S UNIVERSITY PROGRAM

NAG 5 7681 UNIV OF MICHIGAN - ANN ARBOR 6015
 DEFINING A CLIMATOLOGY AND THE EFFECTS OF ABSORBIN G AEROSOLS-
 :MODELS AND MEASUREMENTS
 09/04/1998 - 08/31/2002 FY02: \$0 Total: \$480,000
Prin. Invest.: J PENNER
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7858 UNIV OF MICHIGAN - ANN ARBOR 6016
 MEASUREMENT OF ABSOLUTE DIFFERENTIAL CROSS SECTIONS FOR THE
 COLLISIONS OF ELECTRONS WITH PLANETARY
 01/05/1999 - 03/31/2001 FY02: -\$675 Total: \$126,425
Prin. Invest.: D SHYN
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7860 UNIV OF MICHIGAN - ANN ARBOR 6017
 THE SOLAR SYSTEM BEYOND PLUTO
 01/06/1999 - 12/31/2001 FY02: \$0 Total: \$152,586
Prin. Invest.: D M BERNSTEIN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8080 UNIV OF MICHIGAN - ANN ARBOR 6018
 STATE-TO-STATE RATE CONSTANTS FOR COMPUTATION OF NON-LTE
 INFRARED RADIATIVE TRANSFER IN THE M
 01/15/1999 - 08/01/2002 FY02: \$0 Total: \$279,500
Prin. Invest.: D R BARKER
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NAG 5 8238 UNIV OF MICHIGAN - ANN ARBOR 6019
 MASSIVE BLACK HOLES AND THE CENTERS OF GALAXIES (L TSA98)
 02/25/1999 - 02/28/2002 FY02: \$0 Total: \$261,042
Prin. Invest.: D O RICHSTONE
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8458 UNIV OF MICHIGAN - ANN ARBOR 6020
 MODELING OF X-RAY CLUSTERS (ATP 98)
 04/15/1999 - 04/14/2003 FY02: \$0 Total: \$124,000
Prin. Invest.: A E EVRARD
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8630 UNIV OF MICHIGAN - ANN ARBOR 6021
 HIERARCHICAL INVESTIGATION OF SOCIOECONOMIC DRIVER OF DEC-
 ADAL SCALE LAND-COVER CHANGES IN THE UPPER
 08/11/1999 - 04/30/2001 FY02: \$0 Total: \$73,879
Prin. Invest.: D G BROWN
Tech. Officer: GSFC/J RANSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8661 UNIV OF MICHIGAN - ANN ARBOR 6022
 MOISTURE TRANSPORT AND RADIOBRIGHTNESS MODELS FOR COMPLEX
 VEGETATION
 07/01/1999 - 06/30/2003 FY02: \$37,087 Total: \$344,137
Prin. Invest.: A W ENGLAND
Tech. Officer: GSFC/P T HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8715 UNIV OF MICHIGAN - ANN ARBOR 6023
 DYNAMICS IN THE COMET ENVIRONMENT
 08/03/1999 - 06/30/2003 FY02: \$0 Total: \$70,500
Prin. Invest.: D J SCHEERES
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8719 UNIV OF MICHIGAN - ANN ARBOR 6024
 HIERARCHICAL INVESTIGATION OF SOCIOECONOMIC DRIVERS OF DEC-
 ADAL SCALE LAND-COVER CHANGES IN THE UPPER
 08/02/1999 - 04/30/2001 FY02: -\$3 Total: \$51,247
Prin. Invest.: D G BROWN
Tech. Officer: GSFC/J RANSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8845 UNIV OF MICHIGAN - ANN ARBOR 6025
 CASSINI-HUYGENS GAS CHROMATOGRAPH MASS SPECTROMETER SCI-
 ENCE SUPPORT
 10/25/1999 - 10/31/2002 FY02: \$25,000 Total: \$75,000
Prin. Invest.: S K ATREYA
Tech. Officer: GSFC/W T KASPRZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8930 UNIV OF MICHIGAN - ANN ARBOR 6026
 SOLID EARTH AND NATURAL HAZARDS RESEARCH AND APPLICATIONS
 01/13/2000 - 01/14/2003 FY02: \$75,000 Total: \$225,000
Prin. Invest.: K SARABANDI
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8942 UNIV OF MICHIGAN - ANN ARBOR 6027
 THE DISTRIBUTION OF GASES IN THE INNER COMAE OF COMETS
 01/14/2000 - 01/14/2003 FY02: \$100,000 Total: \$320,000
Prin. Invest.: M R COMBI
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8946 UNIV OF MICHIGAN - ANN ARBOR 6028
 STUDIES OF SOLAR WIND INTERACTION AND IONOSPHERIC PROCESSES
 AT VENUS AND MARS
 01/14/2000 - 03/31/2003 FY02: \$85,000 Total: \$264,923
Prin. Invest.: A NAGY
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8993 UNIV OF MICHIGAN - ANN ARBOR 6029
 DYNAMICS IN THE EROS ENVIRONMENT
 01/24/2000 - 12/31/2001 FY02: \$0 Total: \$66,124
Prin. Invest.: D J SCHEERES
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9017 UNIV OF MICHIGAN - ANN ARBOR 6030
 DYNAMICS OF THE ASTEROID ENVIRONMENT
 02/02/2000 - 03/31/2002 FY02: \$0 Total: \$43,000
Prin. Invest.: D J SCHEERES
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 9021 UNIV OF MICHIGAN - ANN ARBOR 6031
 DO ELLIPTICAL GALAXY COOLING FLOWS ACTUALLY COOL? - FUSE
 02/03/2000 - 02/14/2002 FY02: \$0 Total: \$31,000
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9406 **UNIV OF MICHIGAN - ANN ARBOR** **6032**
 HIGH PERFORMANCE PARALLEL METHODS FOR SPACE WEATHER SIMULATION
 04/10/2000 - 04/30/2003 FY02: \$171,300 Total: \$497,000
Prin. Invest.: T GOMBOSI
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9464 **UNIV OF MICHIGAN - ANN ARBOR** **6033**
 A MASSIVELY PARALLEL PARTICLE CODE FOR RARIFIED IONIZED & NEUTRAL GAS FLOWS IN EARTH & PLANETARY
 04/18/2000 - 04/14/2003 FY02: \$120,800 Total: \$354,400
Prin. Invest.: M COMBI
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9762 **UNIV OF MICHIGAN - ANN ARBOR** **6034**
 DESIGN STUDY OF A SYNTHETIC APERTURE PRECIPITATION RADIOMETER
 08/03/2000 - 07/31/2002 FY02: \$41,717 Total: \$290,000
Prin. Invest.: C RUF
Tech. Officer: GSFC/C M PRINCIPE
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9980 **UNIV OF MICHIGAN - ANN ARBOR** **6035**
 METAL ENRICHMENT MECHANISMS IN ABELL 2199 & ABELL 3571
 09/13/2000 - 09/14/2003 FY02: \$0 Total: \$31,700
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9981 **UNIV OF MICHIGAN - ANN ARBOR** **6036**
 THE NATURE OF THE X-RAY EMISSION IN SA BULGES
 09/13/2000 - 09/14/2003 FY02: \$0 Total: \$31,600
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10036 **UNIV OF MICHIGAN - ANN ARBOR** **6037**
 A MODULAR CODE FOR A COMM VERSION OF THE MICHIGAN LSP/R MODEL
 10/31/2000 - 04/30/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: A ENGLAND
Tech. Officer: GSFC/P E O'NEILL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10138 **UNIV OF MICHIGAN - ANN ARBOR** **6038**
 NOZOMI NEUTRAL MASS SPECTROMETER SCIENCE SUPPORT
 12/12/2000 - 12/14/2004 FY02: \$15,000 Total: \$30,000
Prin. Invest.: S K ATREYA
Tech. Officer: GSFC/W T KASPRZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10181 **UNIV OF MICHIGAN - ANN ARBOR** **6039**
 NOZOMI NEUTRAL MASS SPECTROMETER SCIENCE SUPPORT - DEVELOPING UPPER ATMOSPHERIC, EXOSPHERIC MODELS
 01/18/2001 - 01/31/2005 FY02: \$10,000 Total: \$25,000
Prin. Invest.: A F NAGY
Tech. Officer: GSFC/W T KASPRZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10297 **UNIV OF MICHIGAN - ANN ARBOR** **6040**
 PHYSICAL RESPONSE OF THE INNER MAGNETOSPHERE TO GEOMAGNETIC EFFECTIVE SOLAR WIND DRIVERS: ENERGY DISSIPATION
 02/15/2001 - 01/31/2002 FY02: \$0 Total: \$47,000
Prin. Invest.: K KOZYRA
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10336 **UNIV OF MICHIGAN - ANN ARBOR** **6041**
 SELF-RELIANT, HIGH RESOLUTION IMAGING USING FORMATTED ION FLYING SPACECRAFT
 02/07/2001 - 02/14/2004 FY02: \$537,054 Total: \$892,751
Prin. Invest.: D HYLAND
Tech. Officer: GSFC/J A LEITNER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10552 **UNIV OF MICHIGAN - ANN ARBOR** **6042**
 ASU/MICHIGAN COLLABORATION: THE ABUNDANCE & ISOTOPE COMPOSITION OF HG IN EXTRATERRESTRIAL MATERIAL
 03/09/2001 - 03/14/2004 FY02: \$20,000 Total: \$40,000
Prin. Invest.: J BLUM
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10765 **UNIV OF MICHIGAN - ANN ARBOR** **6043**
 X-RAY ABSORPTION STUDIES; COOLING FLOWS (LTS-2000)
 04/23/2001 - 04/30/2006 FY02: \$114,000 Total: \$224,000
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10805 **UNIV OF MICHIGAN - ANN ARBOR** **6044**
 CONCEPT STUDY FOR THE "THE HEAVY NUCLEI EXPLORER" (HNX) MISSION AO-99-OSS-05
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$57,700
Prin. Invest.: D TARLE
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 10806 **UNIV OF MICHIGAN - ANN ARBOR** **6045**
 RXTE OBSERVATIONS OF SELECTED BLAZARS - ADP - 99
 04/23/2001 - 04/30/2004 FY02: \$59,426 Total: \$116,597
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10812 **UNIV OF MICHIGAN - ANN ARBOR** **6046**
 HIGH RESOLUTION DOPPLER IMAGER - OPERATIONS AND ALGORITHM MAINTENANCE.
 05/02/2001 - 11/30/2002 FY02: \$60,000 Total: \$132,500
Prin. Invest.: W R SKINNER
Tech. Officer: GSFC/C H JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10850 **UNIV OF MICHIGAN - ANN ARBOR** **6047**
 SUPERPOSED EPOCH ANALYSIS OF RING CURRENT GEOMAGNETIC EFFECTIVENESS RELATED TO SOLAR WIND & PLASMA SHEET
 05/07/2001 - 05/14/2004 FY02: \$106,244 Total: \$213,520
Prin. Invest.: M W LIEMOHN
Tech. Officer: GSFC/J F SPANN
CASE Category: 31 – ATMOSPHERIC SCIENCE

MICHIGAN

NASA'S UNIVERSITY PROGRAM

NAG 5 10887 **UNIV OF MICHIGAN - ANN ARBOR** **6048**
 POLAR/TIDE
 05/07/2001 - 05/14/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: A NAGY
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10907 **UNIV OF MICHIGAN - ANN ARBOR** **6049**
 2001: A SPACETIME ODYSSEY
 05/22/2001 - 05/31/2002 FY02: \$0 Total: \$12,500
Prin. Invest.: K FREESE
Tech. Officer: GSFC/D GOLOMBEK
CASE Category: 11 – ASTRONOMY

NAG 5 10975 **UNIV OF MICHIGAN - ANN ARBOR** **6050**
 A PREDICTIVE MODEL FOR THE MAGNETIC FIELD IN THE HELIOSPHERE
 05/29/2001 - 05/31/2004 FY02: \$73,828 Total: \$143,193
Prin. Invest.: L A FINK
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11000 **UNIV OF MICHIGAN - ANN ARBOR** **6051**
 SOLAR WIND STRUCTURE IN THE INNER HELIOSPHERE: RATIONALE FOR
 THE LOCATION OF THE SENTINEL MISSION
 06/06/2001 - 05/31/2004 FY02: \$238,996 Total: \$318,599
Prin. Invest.: T H ZURBUCHEN
Tech. Officer: GSFC/W J WAGNER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11004 **UNIV OF MICHIGAN - ANN ARBOR** **6052**
 RESEARCH IN PLANETARY ATMOSPHERES-JUPITER & TITAN
 06/08/2001 - 09/14/2004 FY02: \$0 Total: \$90,000
Prin. Invest.: S K ATREYA
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11031 **UNIV OF MICHIGAN - ANN ARBOR** **6053**
 INTEGRATED MODELING STUDY OF THE EFFECTS OF MAGNETOSPHERIC
 FORCING ON THE JOVIAN IONOSPHERE-THERMOS
 06/11/2001 - 05/30/2002 FY02: \$0 Total: \$90,000
Prin. Invest.: J H WAITE
Tech. Officer: GSFC/D J BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11041 **UNIV OF MICHIGAN - ANN ARBOR** **6054**
 MODELING OF COMETARY ATMOSPHERES
 06/12/2001 - 06/14/2004 FY02: \$0 Total: \$90,000
Prin. Invest.: T I GOMBOSI
Tech. Officer: GSFC/D J BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 11068 **UNIV OF MICHIGAN - ANN ARBOR** **6055**
 DYNAMICAL STUDIES OF THE MIDDLE ATMOSPHERE USING HIGH RESO-
 LUTION DOPPLER IMAGER OBSERVATIONS
 07/09/2001 - 10/14/2002 FY02: \$76,084 Total: \$162,751
Prin. Invest.: W R SKINNER
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11084 **UNIV OF MICHIGAN - ANN ARBOR** **6056**
 MODELING SIBERIAN BOREAL FOREST LAND-COVER CHANGE AND CAR-
 BON UNDER CHANGING ECONOMIC PARADIGMS
 07/20/2001 - 08/14/2004 FY02: \$168,242 Total: \$264,635
Prin. Invest.: K BERGEN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11187 **UNIV OF MICHIGAN - ANN ARBOR** **6057**
 MGS MAG/ER DATA ANALYSIS USING A TIME AND MAGNETIC FIELD
 DEPENDENT ELECTRON TRANSPORT MODEL
 08/08/2001 - 08/31/2004 FY02: \$90,000 Total: \$180,000
Prin. Invest.: M C LIEMOHN
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11271 **UNIV OF MICHIGAN - ANN ARBOR** **6058**
 DEVELOPING LAND COVER SCENARIOS IN METROPOLITAN AND NON-
 METROPOLITAN MICHIGAN
 08/23/2001 - 08/31/2004 FY02: \$39,441 Total: \$158,851
Prin. Invest.: D BROWN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11275 **UNIV OF MICHIGAN - ANN ARBOR** **6059**
 TRACE GAS/AEROSOL INTERACTIONS AND GMI MODELING SUPPORT
 08/22/2001 - 08/31/2004 FY02: \$0 Total: \$100,051
Prin. Invest.: J PENNER
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11406 **UNIV OF MICHIGAN - ANN ARBOR** **6060**
 VEGETATION CORRECTED SRM - DERIVED DIGITAL ELEVATION MODELS.
 12/06/2001 - 12/14/2003 FY02: \$40,000 Total: \$40,000
Prin. Invest.: C DOBSON
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11414 **UNIV OF MICHIGAN - ANN ARBOR** **6061**
 THE PLANET-B NEUTRAL MASS SPECTROMETER: THERMOSPHERE-
 IONOSPHERE STUDIES USING THE MTGM.
 01/03/2002 - 10/14/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: S W BOUGHER
Tech. Officer: GSFC/W T KASPRZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11448 **UNIV OF MICHIGAN - ANN ARBOR** **6062**
 THE SUPERNOVA HEATING RATE IN SPIRAL GALAXIES.
 12/06/2001 - 12/14/2002 FY02: \$96,200 Total: \$96,200
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11483 **UNIV OF MICHIGAN - ANN ARBOR** **6063**
 THE TRUTH ABOUT COOLING FLOWS IN ELLIPTICAL GALAXIES FUSE 2000
 12/14/2001 - 12/14/2002 FY02: \$132,200 Total: \$132,200
Prin. Invest.: J N BREGMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11580 **UNIV OF MICHIGAN - ANN ARBOR** **6064**
 THE SURFACE CLIMATE SIGNAL IN THE CONTEXT OF LSP/R ADIOBRIGHT-
 NESS MODEL- BASED ESTIMATES OF LAND ATM
 01/14/2002 - 01/14/2005 FY02: \$210,000 Total: \$210,000
Prin. Invest.: A W ENGLAND
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11609 **UNIV OF MICHIGAN - ANN ARBOR** **6065**
 NEXT GENERATION LIGHTWEIGHT RAINFALL RADIOMETER SY
 NTHETICALLY-THINNED APERTURE RADIOMETER (NGLRR)
 01/31/2002 - 01/31/2005 FY02: \$487,818 Total: \$487,818
Prin. Invest.: C RUF
Tech. Officer: GSFC/C PRINCIPE
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 11639 **UNIV OF MICHIGAN - ANN ARBOR** **6066**
 DYNAMICS OF THE ASTEROID ENVIRONMENT
 01/22/2002 - 01/31/2005 FY02: \$22,300 Total: \$22,300
Prin. Invest.: D J SCHEERES
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11674 **UNIV OF MICHIGAN - ANN ARBOR** **6067**
 THE STUDY OF BIOMASS EMISSIONS FOR DEFINING RADIAT IVE FORCING
 OF CLIMATE
 01/30/2002 - 01/31/2003 FY02: \$69,300 Total: \$69,300
Prin. Invest.: J PENNER
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11748 **UNIV OF MICHIGAN - ANN ARBOR** **6068**
 WORKSHOP PLANNING PROPOSAL FOR A REGIONAL GOFC WOR KSHOP"
 GOFC SATELLITE INFORMATION PRODUCTS FOR FO
 02/25/2002 - 02/28/2003 FY02: \$34,091 Total: \$34,091
Prin. Invest.: K BERGEN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11831 **UNIV OF MICHIGAN - ANN ARBOR** **6069**
 OBSERVATIONAL AND THEORETICAL ANALYSIS OF THE MAGN ETO-
 SPHERE'S DYNAMIC RESPONSE TO SOLAR WIND DRIV
 03/06/2002 - 02/28/2005 FY02: \$96,732 Total: \$96,732
Prin. Invest.: J U KOZYRA
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11905 **UNIV OF MICHIGAN - ANN ARBOR** **6070**
 PLANETS FORMATION AMONG THE NEAREST YOUNG STARS
 04/04/2002 - 03/31/2005 FY02: \$45,000 Total: \$45,000
Prin. Invest.: R JAYAWARDHANA
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11973 **UNIV OF MICHIGAN - ANN ARBOR** **6071**
 HIGH RESOLUTION X-RAY PROPERTIES OF BL LACS: AN XMM SURVEY
 04/10/2002 - 04/14/2003 FY02: \$4,660 Total: \$4,660
Prin. Invest.: M F ALLER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 12040 **UNIV OF MICHIGAN - ANN ARBOR** **6072**
 INVESTIGATION OF THE STORM-SUB-STORM RELATIONSHIP USING UVI
 IMAGES, GROUND BASE MANAGERMENTS AND
 04/17/2002 - 04/14/2005 FY02: \$89,448 Total: \$89,448
Prin. Invest.: R CLAUER
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12084 **UNIV OF MICHIGAN - ANN ARBOR** **6073**
 ANALYSIS AND ARCHIVAL OF HRDI DATA.
 04/24/2002 - 04/30/2005 FY02: \$134,754 Total: \$134,754
Prin. Invest.: W SKINNER
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12146 **UNIV OF MICHIGAN - ANN ARBOR** **6074**
 STORM-TIME AND SOLAR CYCLE EFFECTS IN THE HIGH- LATITUDE
 MAGNETOSPHERE-IONOSPHERE COUPLING
 05/14/2002 - 05/14/2004 FY02: \$99,238 Total: \$99,238
Prin. Invest.: V O PAPITASHVILI
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12171 **UNIV OF MICHIGAN - ANN ARBOR** **6075**
 COMPLEX ORGANIC AND BIOMARKER ANALYSIS USING TIME OF FLIGHT
 MASS SPECTROMETRY
 05/09/2002 - 05/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: J WAITE
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12176 **UNIV OF MICHIGAN - ANN ARBOR** **6076**
 TEMPORAL AND SPATIAL DEVELOPMENT OF THE RING CURRE NT: MODEL
 IMPROVE- MENTS AND VALIDATION ANALYS
 05/13/2002 - 05/14/2005 FY02: \$114,972 Total: \$114,972
Prin. Invest.: C CLAEUR
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12415 **UNIV OF MICHIGAN - ANN ARBOR** **6077**
 COMETARY HYDROGEN OBSERVATIONS WITH SOHO SWAN
 07/25/2002 - 07/31/2005 FY02: \$71,673 Total: \$71,673
Prin. Invest.: M R COMBI
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12442 **UNIV OF MICHIGAN - ANN ARBOR** **6078**
 MGS RADIO SCIENCE ELECTRON DENSITY PROFILES AND IM Plications
 FOR THE NEUTRAL ATMOSPHERE
 08/07/2002 - 08/14/2003 FY02: \$64,500 Total: \$64,500
Prin. Invest.: S W BOUGHER
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12567 **UNIV OF MICHIGAN - ANN ARBOR** **6079**
 IMPROVED MARS UPPER ATMOSPHERE CLIMATOLOGY
 09/25/2002 - 03/31/2004 FY02: \$80,000 Total: \$80,000
Prin. Invest.: S BOUGHER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

MICHIGAN

NASA'S UNIVERSITY PROGRAM

NAG 8 1725 UNIV OF MICHIGAN - ANN ARBOR 6080
 FIELD-REVERSED END PLUGING FOR THE GASDYNAMIC MIRROR MACHINE
 07/26/2000 - 06/30/2001 FY02: -\$65 Total: \$19,935
Prin. Invest.: T KAMMASH
Tech. Officer: MSFC/W F EMRICH
CASE Category: 46 – MECHANICAL ENGR

NAS 5 99174 UNIV OF MICHIGAN - ANN ARBOR 6088
 PROVIDE SUPPORT, DESIGN, DEVELOPMENT OF THE NGIMS EXPERIMENT FOR THE COMET NUCLEUS TOUR (CONTOUR)
 04/02/1999 - 08/25/2002 FY02: \$86,066 Total: \$1,990,428
Prin. Invest.: G ARIGNAN
Tech. Officer: GSFC/J RICHARDS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 9 1154 UNIV OF MICHIGAN - ANN ARBOR 6081
 IMPACT OF MICROGRAVITY ON DRUG AND NUTRIENT ABSORPTION
 02/03/2000 - 01/31/2003 FY02: \$211,022 Total: \$563,074
Prin. Invest.: G L AMIDON
Tech. Officer: JSC/C LLOYD
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NAS 8 99127 UNIV OF MICHIGAN - ANN ARBOR 6089
 R/S ICARUS SATELLITE FOR PROSEDS
 06/23/1999 - 09/30/2002 FY02: \$336,066 Total: \$736,279
Prin. Invest.: G E GILCHRIST
Tech. Officer: MSFC/K J WELZYN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1167 UNIV OF MICHIGAN - ANN ARBOR 6082
 DEVELOP ADVANCED MILLIMETERWAVE INTERFEROMETER FOR PLASMA DIAGNOSTICS
 09/22/1999 - 06/30/2002 FY02: \$22,000 Total: \$66,000
Prin. Invest.: B E GILCHRIST
Tech. Officer: JSC/F R CHANG-DIAZ
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 8 99128 UNIV OF MICHIGAN - ANN ARBOR 6090
 RESEARCH ENTITLED PROCEEDS UMPS PHASE D & E
 07/30/1999 - 09/30/2002 FY02: \$247,812 Total: \$1,288,505
Prin. Invest.: B GILCHRIST
Tech. Officer: MSFC/J L BALATICE, MSFC/L JOHNSON
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1251 UNIV OF MICHIGAN - ANN ARBOR 6083
 OPTICAL SEARCHES FOR GEOSYNCHRONOUS ORBITAL DEBRIS
 08/01/2000 - 07/31/2002 FY02: \$0 Total: \$106,787
Prin. Invest.: P O SEITZER
Tech. Officer: JSC/E G STANSBERRY
CASE Category: 11 – ASTRONOMY

NCC 1 01050 UNIV OF MICHIGAN - ANN ARBOR 6091
 RESPONSE OF STRONGLY ANISOTROPIC LAMINATED PANELS UNDER COMBINED LOADS
 05/08/2001 - 08/31/2002 FY02: \$0 Total: \$50,148
Prin. Invest.: A P WAAS
Tech. Officer: LARC/M P NEMETH
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1373 UNIV OF MICHIGAN - ANN ARBOR 6084
 AN OPTICAL SURVEY FOR SPACE DEBRIS IN GEOSYNCHRONOUS
 08/15/2001 - 09/30/2002 FY02: \$0 Total: \$229,381
Prin. Invest.: P O SEITZER
Tech. Officer: JSC/E G STANSBERRY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 1 02045 UNIV OF MICHIGAN - ANN ARBOR 6092
 ACTIVE AEROELASTIC INVESTIGATION OF AN ADVANCED ACTIVE TWIST ROTOR SYSTEM
 09/05/2002 - 09/30/2005 FY02: \$111,030 Total: \$111,030
Prin. Invest.: C E CESNIK
Tech. Officer: LARC/M L WILBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG13 99024 UNIV OF MICHIGAN - ANN ARBOR 6085
 FOREST STRUCTURE FROM MULTI-SPECTRAL FUSION SAME
 08/25/1999 - 08/18/2003 FY02: \$150,303 Total: \$580,313
Prin. Invest.: M DOBSON
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 856 UNIV OF MICHIGAN - ANN ARBOR 6093
 EFFECTS OF MICROGRAVITY ON DEVELOPMENT OF THICK MUSCLES
 05/25/1994 - 12/31/2001 FY02: -\$69,694 Total: \$315,304
Prin. Invest.: K I CLARK, K F BARALD
Tech. Officer: ARC/D A REISS-BUBENHEIM, ARC/C M WINGET
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAS 2 02069 UNIV OF MICHIGAN - ANN ARBOR 6086
 BIOSENSORS FOR REAL TIME MONITORING OF RADIATION INDUCED BIOLOGIC
 03/28/2002 - 03/27/2005 FY02: \$652,260 Total: \$652,260
Prin. Invest.: J R BAKER
Tech. Officer: ARC/J W HINES, ARC/P P FUNG
CASE Category: 56 – MEDICL

NCC 2 5442 UNIV OF MICHIGAN - ANN ARBOR 6094
 THE EVOLUTION AND DISPERSAL OF PROTOSTELLAR DISKS
 07/11/2001 - 06/30/2003 FY02: \$13,333 Total: \$28,166
Prin. Invest.: F C ADAMS
Tech. Officer: ARC/D J HOLLENBACH, ARC/K R BELL
CASE Category: 11 – ASTRONOMY

NAS 5 32989 UNIV OF MICHIGAN - ANN ARBOR 6087
 PROVIDE ENGINEERING SUPPORT IN THE DEFINITION DESIGN AND TEST OF THE PLANET-B NMS
 01/25/1996 - 09/30/2000 FY02: -\$13,753 Total: \$1,380,843
Prin. Invest.: G CARIGNAN
Tech. Officer: GSFC/S WAY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 474 UNIV OF MICHIGAN - ANN ARBOR 6095
 INVESTIGATION OF DROOP FORMATION BY VORTEX RING IN MICROGRAVITY
 05/20/1996 - 12/31/2000 FY02: \$0 Total: \$299,337
Prin. Invest.: L P BERNAL
Tech. Officer: GRC/J B MCGUILLEN
CASE Category: 46 – MECHANICAL ENGR

NCC 3 482 **UNIV OF MICHIGAN - ANN ARBOR** **6096**
 RADIANT EXTINCTION OF GASOUS DIFFUSION FLAMES
 06/15/1996 - 12/14/2002 FY02: \$0 Total: \$359,000
Prin. Invest.: A ATREYA
Tech. Officer: GRC/K SACKSTEADER
CASE Category: 13 – PHYSICS

NCC 3 656 **UNIV OF MICHIGAN - ANN ARBOR** **6097**
 FLAME VORTEX INTERACTIONS IN MICROGRAVITY TO ASSES S THE
 THEORY OF FLAME STRETCH
 01/12/1999 - 12/03/2002 FY02: \$90,000 Total: \$440,050
Prin. Invest.: J F DRISCOLL
Tech. Officer: GRC/J E BROOKER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 661 **UNIV OF MICHIGAN - ANN ARBOR** **6098**
 FLOW/SOOT-FORMATION IN NONBOUYANT LAMINAR DIFFUSIO N FLAMES
 01/21/1999 - 12/29/2002 FY02: \$22,497 Total: \$279,862
Prin. Invest.: G M FAETH
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 663 **UNIV OF MICHIGAN - ANN ARBOR** **6099**
 TURBULENT FLAME PROCESSES VIA VORTEX-RING DIFFUSIO N FLAME
 INTERACTION
 01/15/1999 - 12/30/2002 FY02: \$90,000 Total: \$327,819
Prin. Invest.: W DAHM
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 723 **UNIV OF MICHIGAN - ANN ARBOR** **6100**
 GAS SEPARATION & PRESSURIZATION FOR EXTRATERRESTRI AL EXPLO-
 RATION
 07/07/1999 - 12/31/2001 FY02: -\$353 Total: \$39,647
Prin. Invest.: M KAVIANY
Tech. Officer: GRC/E S NELSON
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 790 **UNIV OF MICHIGAN - ANN ARBOR** **6101**
 SYSTEM ON A CHIP: ACTIVE COMPONENTS OF THE RF FRO NT END
 04/04/2000 - 02/28/2003 FY02: \$145,000 Total: \$444,380
Prin. Invest.: L P KATEHI
Tech. Officer: GRC/G E PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 837 **UNIV OF MICHIGAN - ANN ARBOR** **6102**
 LOW COST, LOW POWER COMPONENTS FOR TRANSMIT/RECEIV E PHASE
 ARRAY ANTENNAS
 12/20/2000 - 12/31/2001 FY02: \$0 Total: \$226,564
Prin. Invest.: L P KATEHI
Tech. Officer: GRC/G E PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 296 **UNIV OF MICHIGAN - ANN ARBOR** **6103**
 RADAR REMOTE SENSING OF LAND-COVER AND BIOMASS IN THE AMAZON
 06/16/1998 - 12/31/2002 FY02: \$192,984 Total: \$850,440
Prin. Invest.: M C DOBSON
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 383 **UNIV OF MICHIGAN - ANN ARBOR** **6104**
 COLLABORATIVE EDUCATION AND PUBLIC OUTREACH ACTIVI TIES BY
 WINDOWS TO THEUNIVERSE PROJECT IN SUPPORT
 02/24/1999 - 02/28/2001 FY02: -\$4,715 Total: \$45,285
Prin. Invest.: L FISK
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NCC 5 614 **UNIV OF MICHIGAN - ANN ARBOR** **6105**
 HIGH-PERFORMANCE ADAPTIVE SIMULATION FRAMEWORK FOR SPACE-
 WEATHER MODELING (SWMF)
 03/04/2002 - 03/03/2005 FY02: \$600,000 Total: \$600,000
Prin. Invest.: T GOMBOSI
Tech. Officer: GSFC/J FISCHER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 5 632 **UNIV OF MICHIGAN - ANN ARBOR** **6106**
 A HIGH-PERFORMANCE SOFTWARE FRAMEWORK & INTEROPERA BLE
 APPLICATIONS FOR THE RAPID ADVANCEMENT OF EA
 02/27/2002 - 02/28/2005 FY02: \$62,738 Total: \$62,738
Prin. Invest.: Q F STOUT
Tech. Officer: GSFC/A DA SILVA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 8 181 **UNIV OF MICHIGAN - ANN ARBOR** **6107**
 GLOBAL SIMULATIONS OF CORE PLASMA DENSITIES, COMPOSITION AND
 TEMPERATURE. NASA NRA98-OSS-03.
 06/07/1999 - 06/06/2002 FY02: \$0 Total: \$80,401
Prin. Invest.: M LIEMOHN
Tech. Officer: MSFC/D GALLAGHER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 2 52257 **UNIV OF MICHIGAN - ANN ARBOR** **6108**
 SEARCHING EXTRASOLAR PLANETS USING DIFFERENTIAL PH OTOMETRY
 07/23/1999 - 07/14/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: F C ADAMS
Tech. Officer: ARC/J J LISSAUER
CASE Category: 11 – ASTRONOMY

NGT 2 52269 **UNIV OF MICHIGAN - ANN ARBOR** **6109**
 SIMULTANEOUS VIBRATION & BVI NOISE REDUCTION IN RO TORCRAFT
 USING ACTIIVELY CONTROLLED TRAILING-EDGE
 08/11/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: P P FRIEDMAN
Tech. Officer: ARC/W WARBRODT
CASE Category: 41 – AERONAUTICAL ENGR

NGT 3 52348 **UNIV OF MICHIGAN - ANN ARBOR** **6110**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT
 RESEARCHERS PROGRAM
 06/15/1999 - 08/31/2002 FY02: \$0 Total: \$53,200
Prin. Invest.: A GALLIMORE
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 3 52349 **UNIV OF MICHIGAN - ANN ARBOR** **6111**
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE-
 SEARCH PROGRAM
 06/23/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: A D GALLIMORE
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

MICHIGAN

NASA'S UNIVERSITY PROGRAM

NGT 3 52365 **UNIV OF MICHIGAN - ANN ARBOR** **6112**
 GRADUATE STUDENT PROGRAM GRADUATE STUDENT PROGRAM
 06/14/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: A ATREYA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 43 – CHEMICAL ENGR

NGT 3 52372 **UNIV OF MICHIGAN - ANN ARBOR** **6113**
 GRADUATE STUDENT RESEARCHER'S PROGRAM GRADUATE STUDENT
 RESEARCHER'S PROGRAM
 04/09/2001 - 06/24/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D PAVLIDIS
Tech. Officer: GRC/D MONTEGANI
CASE Category: 45 – ELECTRICAL ENGR

NGT 3 52377 **UNIV OF MICHIGAN - ANN ARBOR** **6114**
 GRADUATE STUDENT RESEARCH
 06/07/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: W J DAHM
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 4 52421 **UNIV OF MICHIGAN - ANN ARBOR** **6115**
 MULTIVARIABLE NONLINEAR IDENTIFICATION MULTIVARIABLE NONLINEAR
 IDENTIFICATION
 05/11/2000 - 06/30/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: D S BERNSTEIN
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52426 **UNIV OF MICHIGAN - ANN ARBOR** **6116**
 GRADUATE RESEARCH - AEROELASTICITY AND AEROELASTIC SCALING OF
 HYPERSONIC VEHICLES
 07/17/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P FRIEDMAN
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 124 **UNIV OF MICHIGAN - ANN ARBOR** **6117**
 DEVELOPMENT AND TESTING OF THE FAST IMAGING PLASMA SPECTROM-
 ETHER (STUDENT: PATRICK KOEHN)
 06/07/2001 - 08/31/2003 FY02: \$0 Total: \$22,000
Prin. Invest.: L A FISK
Tech. Officer: GSFC/M S BURRELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 135 **UNIV OF MICHIGAN - ANN ARBOR** **6118**
 PROMPT OPTICAL OBSERVATIONS OF GAMMA-RAY BURSTS WITH ROTSE-
 III. (STUDENT: ELI RYKOFF)
 06/17/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C W AKERLOF
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 30172 **UNIV OF MICHIGAN - ANN ARBOR** **6119**
 THE USE OF REMOTE SENSING METHODS FOR STUDYING FIRE-INDUCED
 LAND COVER CHANGES IN BOREAL FORESTS OF
 09/04/1998 - 05/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C OLSON, FRENCH
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30359 **UNIV OF MICHIGAN - ANN ARBOR** **6120**
 COMPUTATIONAL METHODS FOR ADVANCED CLIMATE MODEL PREDIC-
 TIONS: A STUDY OF ADOPTIVE GRID TECHNIQUES
 08/23/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J PENNER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30432 **UNIV OF MICHIGAN - ANN ARBOR** **6121**
 QUANTIFICATION OF FOREST STRUCTURE IN SUPPORT OF TERRESTRIAL
 CARBON AND ECOSYSTEM (STUDENT: WAYNE)
 08/15/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C DOBSON
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40062 **UNIV OF MICHIGAN - ANN ARBOR** **6122**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM.
 03/15/1997 - 01/31/2001 FY02: -\$71,365 Total: \$1,733,635
Prin. Invest.: R M JOHNSON
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40118 **UNIV OF MICHIGAN - ANN ARBOR** **6123**
 MICHIGAN SPACE GRANT COLL AND FELLOWSHIP PROGRA M
 03/15/2001 - 01/31/2005 FY02: \$546,365 Total: \$1,021,365
Prin. Invest.: A D GALLIMORE
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50255 **UNIV OF MICHIGAN - ANN ARBOR** **6124**
 A HYBRID KINETIC FLUID MODEL FOR THE ATMOSPHERE OF PLUTO
 STUDENT: AYLSHA REINARD
 06/21/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: L FISK
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50349 **UNIV OF MICHIGAN - ANN ARBOR** **6125**
 DEVELOPMENT OF A NEW SOLID STATE DETECTOR FOR THE STUDY OF
 SOLAR WIND COMPOSITION/STUDENT: SUSAN LEP
 05/08/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: L FISK
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50412 **UNIV OF MICHIGAN - ANN ARBOR** **6126**
 PLUME STUDIES OF FEED THRUSTER SYSTEMS - STUDENT NAME: ANTON
 VANDERWYST
 08/07/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: I D BOYD
Tech. Officer: GSFC/K B LANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52864 **UNIV OF MICHIGAN - ANN ARBOR** **6127**
 IDENTIFICATION OF LONG TERM CHANGE IN SOCIETY AND SETTLEMENT
 OF THE KHABUR DRAINAGE
 07/28/1998 - 12/01/2003 FY02: \$0 Total: \$64,000
Prin. Invest.: H T WRIGHT
Tech. Officer: MSFC/J F DOWDY
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NGT 8 52888 **UNIV OF MICHIGAN - ANN ARBOR** **6128**
 NUCLEAR THERMAL PROPULSION FOR SPACE EXPLORATION
 05/18/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: T KAMMASH
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 49 – ENGINEERING, OTHER

NGT 8 52889 **UNIV OF MICHIGAN - ANN ARBOR** **6129**
 DEVELOPMENT OF FIELD EMITTER ARRAY OF ELECTRODYNAMIC TETHER
 05/04/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: B GILCHRIST
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 45 – ELECTRICAL ENGR

NGT 8 52900 **UNIV OF MICHIGAN - ANN ARBOR** **6130**
 DEV OF COMPUTER MODELS FOR NUCLEAR-BASED MAGNETOHYDRODYNAMIC POWER CYCLES
 05/25/2001 - 06/30/2002 FY02: -\$177 Total: \$21,823
Prin. Invest.: I BOYD
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 41 – AERONAUTICAL ENGR

NGT 8 52917 **UNIV OF MICHIGAN - ANN ARBOR** **6131**
 DEV THE ELECTRODYNAMIC TETHER PROPULSION CONCEPT BEYOND THE PROSEDS MISSION
 04/22/2002 - 07/01/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: B GILCHRIST
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 02105 **WAYNE STATE UNIV** **6132**
 FROM ATOMS TO SPACE - WSU PROPOSAL DATED 6/11/02
 07/16/2002 - 06/30/2003 FY02: \$1,900,000 Total: \$1,900,000
Prin. Invest.: G W AUNER
Tech. Officer: LARC/R R ANTCLIFF, LARC/T R SUTTER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1279 **WAYNE STATE UNIV** **6133**
 DEVELOPMENT OF STRATEGIES & TOOLS FOR ANALYSIS & CONTROL OF LARGE AIR TRAFFIC MANAGEMENT SYSTEMS
 01/05/1999 - 12/31/2001 FY02: \$0 Total: \$90,000
Prin. Invest.: F LIN
Tech. Officer: ARC/G MEYER
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1503 **WAYNE STATE UNIV** **6134**
 EFFECTS OF MICROGRAVITY ON PREIMPLANTATION MOUSE DEVELOPMENT
 07/12/2001 - 07/14/2003 FY02: \$193,700 Total: \$283,300
Prin. Invest.: D A RAPPOLEE
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1532 **WAYNE STATE UNIV** **6135**
 MULTI AGENT HYBRID CONTROL APPROACH TO AIR TRAFFIC CONTROL
 01/31/2002 - 01/31/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: F LIN
Tech. Officer: ARC/G MEYER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2180 **WAYNE STATE UNIV** **6136**
 CHARACTERIZATION OF MULTI-JUNCTION SOLAR CELLS CHARACTERIZATION OF MULTI-JUNCTION SOLAR CELLS
 07/18/1998 - 01/04/2002 FY02: \$0 Total: \$225,000
Prin. Invest.: P WOODYARD
Tech. Officer: GRC/D BRINKER
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2313 **WAYNE STATE UNIV** **6137**
 A DESIGN AND ANALYSIS TOOL FOR PULSE DETONATION ENGINES
 12/29/1999 - 02/04/2003 FY02: \$94,000 Total: \$331,384
Prin. Invest.: S YU
Tech. Officer: GRC/P C JORGENSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2542 **WAYNE STATE UNIV** **6138**
 DIRECT CALCULATIONS OF PLUME DYNAMICS AND ACOUSTICS OF A PULSE DETONATION ENGINE BY THE SPACE-TIME
 02/12/2001 - 02/04/2002 FY02: \$0 Total: \$46,999
Prin. Invest.: S YU
Tech. Officer: GRC/P C JORGENSEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2801 **WAYNE STATE UNIV** **6139**
 CHARACTERIZATION OF MULTI-JUNCTION SOLAR CELLS IN THE STRATOSPHERE
 08/13/2002 - 11/30/2002 FY02: \$26,000 Total: \$26,000
Prin. Invest.: J R WOODYARD
Tech. Officer: GRC/D B SNYDER
CASE Category: 45 – ELECTRICAL ENGR

NAG 9 1183 **WAYNE STATE UNIV** **6140**
 DEVELOPMENT OF HUMAN FACTORS ANALYSIS OF ADVANCED 3D VISUALIZATION FOR TELEPRESENCE
 01/15/2000 - 01/14/2003 FY02: \$127,550 Total: \$376,273
Prin. Invest.: L ZAMORANO
Tech. Officer: JSC/B WOOLFORD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1432 **WAYNE STATE UNIV** **6141**
 ADVANCED DIAGNOSTIC ULTRASOUND IN MICROGRAVITY
 06/20/2002 - 03/31/2003 FY02: \$99,397 Total: \$99,397
Prin. Invest.: S A DULCHAVSKY
Tech. Officer: JSC/C GUIDRY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1189 **WAYNE STATE UNIV** **6142**
 FROM BIOLOGICAL INFORMATION PROCESSING TO ADAPTABLE ROBOTRY: PRINCIPLES, MODELS & BIOMIMETIC DESIGN
 07/14/2000 - 07/14/2003 FY02: \$0 Total: \$150,000
Prin. Invest.: K PETER ZAUNER
Tech. Officer: ARC/S P COLOMBANO, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1318 **WAYNE STATE UNIV** **6143**
 HUMAN FACTORS IN INTER ORGANIZATION PROCESSES
 03/07/2002 - 02/28/2003 FY02: \$66,318 Total: \$66,318
Prin. Invest.: A BATTEAU
Tech. Officer: ARC/B KANKI, ARC/M CONNORS
CASE Category: 69 – PSYCHOLOGY, OTHER

MINNESOTA

NASA'S UNIVERSITY PROGRAM

NCC 3 960 **WAYNE STATE UNIV** **6144**
 SIMULATION OF PLUME DYNAMICS OF A PULSE DETONATION ENGINE BY
 THE SPACE-TIME CE/SE/ METHOD
 05/01/2002 - 04/24/2003 FY02: \$47,000 Total: \$47,000
Prin. Invest.: S YU
Tech. Officer: GRC/P JORGENSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01023 **WESTERN MICHIGAN UNIV** **6145**
 DSMC SIMULATIONS OF LAMINAR FLOW BREAKDOWN ON SPACE TRANS-
 PORT SYSTEMS
 04/02/2001 - 02/28/2004 FY02: \$52,000 Total: \$102,000
Prin. Invest.: W W LIU
Tech. Officer: LARC/J N MOSS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2529 **WESTERN MICHIGAN UNIV** **6146**
 A UNIFIED LES/RANS APPROACH USING THE CE/SE METHOD
 01/22/2001 - 01/17/2002 FY02: \$0 Total: \$61,000
Prin. Invest.: W W LIU
Tech. Officer: GRC/S CHANG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10448 **WESTERN MICHIGAN UNIV** **6147**
 IMPROVED SIMULATIONS OF ASTROPHYSICAL PLASMAS: COMPUTATION
 OF NEW ATOMIC DATA
 02/20/2001 - 02/28/2004 FY02: \$80,000 Total: \$150,000
Prin. Invest.: T GORCZYCA
Tech. Officer: GSFC/P CRANE
CASE Category: 13 – PHYSICS

NCC 2 1246 **WESTERN MICHIGAN UNIV** **6148**
 FRACTAL & GEOSTATISTICAL METADATA FOR MONITORING GLOBAL
 CHANGE USING REMOTE SENSING IMAGERY
 04/17/2001 - 05/31/2003 FY02: \$148,055 Total: \$218,055
Prin. Invest.: C W EMERSON
Tech. Officer: ARC/J L DUNGAN, ARC/J C COUGHLIN
CASE Category: 22 – COMPUTER SCIENCE

MINNESOTA

NAG 1 02012 **BETHEL COLL** **6149**
 ANALYSIS OF THE ADVANTAGES & LIMITATIONS OF A STATIONARY IMAGING
 FOURIER TRANSFORM SPECTROMETER
 12/05/2001 - 10/31/2002 FY02: \$17,656 Total: \$17,656
Prin. Invest.: B P BEECKEN
Tech. Officer: LARC/M G MLYNCZAK
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8626 **CONCORDIA COLL IN MOORHEAD** **6150**
 MARS SOLAR BALLOON GAS CHROMATOGRAPH MASS SPECTROMETER
 06/24/1999 - 06/30/2001 FY02: \$0 Total: \$5,000
Prin. Invest.: H L MANNING
Tech. Officer: GSFC/P R MAHAFFY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7366 **MOORHEAD STATE UNIV** **6151**
 ELECTROCHEMICAL STUDY OF SILICATE MELT STRUCTURE AND COMPO-
 NENT ACTIVITIES
 05/15/1998 - 05/31/2002 FY02: \$0 Total: \$67,800
Prin. Invest.: R O COLSON
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11287 **SAINT CLOUD STATE UNIV** **6152**
 SEARCH FOR CHEMICAL DIVERSITY IN COMETRAY VOLATILE S
 08/20/2001 - 08/31/2004 FY02: \$17,200 Total: \$33,600
Prin. Invest.: M WOMACK
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2242 **UNIV OF MINNESOTA** **6153**
 STRUCTURING FORMAL RQMTS SPECIFICATIONS FOR REUSE AND PROD-
 UCT FAMILIES -- NRA 98-LARC-8
 09/28/1999 - 06/30/2001 FY02: -\$309 Total: \$61,746
Prin. Invest.: M E HEMDAHL
Tech. Officer: LARC/R W BUTLER
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 01090 **UNIV OF MINNESOTA** **6154**
 FURTHER DEVELOPMENT & DEPLOYMENT OF NANOMETER AEROSOL SIZE
 ANALYZER (NASA) TO SUPPORT EXCAVATE
 06/15/2001 - 07/12/2002 FY02: \$1 Total: \$50,001
Prin. Invest.: D Y PUI, D R CHEN
Tech. Officer: LARC/W R COFER, LARC/B E ANDERSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1428 **UNIV OF MINNESOTA** **6155**
 REAL-TIME MOTION PATH PLANNING FOR AUTONOMOUS ROTO RCRAFT
 08/04/2000 - 08/31/2003 FY02: \$60,000 Total: \$205,373
Prin. Invest.: Y J ZHAO
Tech. Officer: ARC/M S WHALLEY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1470 **UNIV OF MINNESOTA** **6156**
 COMPREHENSIVE COMPUTER SIMULATION OF AIR TRAFFIC SYSTEM
 04/09/2001 - 03/31/2003 FY02: \$103,257 Total: \$162,554
Prin. Invest.: Y J ZHAO
Tech. Officer: ARC/J E ROBINSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1474 **UNIV OF MINNESOTA** **6157**
 ATOMIC FORCE MICROSCOPY OF THERMAL INSULATION MATERIALS WITH
 AEROGELS
 04/13/2001 - 06/30/2002 FY02: \$0 Total: \$13,646
Prin. Invest.: J MAPS
Tech. Officer: ARC/L J SALERNO, ARC/S M JOHNSON
CASE Category: 13 – PHYSICS

NAG 3 2435 **UNIV OF MINNESOTA** **6158**
 FEASIBILITY STUDY OF A MICROSCALE PARTICULATE CLASSIFIER (MIPAC)
 05/31/2000 - 09/30/2002 FY02: \$25,000 Total: \$100,000
Prin. Invest.: D H PUI
Tech. Officer: GRC/P S GREENBERG
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2468 **UNIV OF MINNESOTA** **6159**
 DEVELOPMENT OF A LOW-COST, SOFTWARE RECONFIGURABLE LABORA-
 TORY FOR FIRST COURSE ON ELECTRIC DRIVES A
 06/26/2000 - 08/31/2003 FY02: \$10,000 Total: \$20,000
Prin. Invest.: P MOHAN
Tech. Officer: GRC/B H KENNY
CASE Category: 45 – ELECTRICAL ENGR

NASA'S UNIVERSITY PROGRAM

MINNESOTA

NAG 3 2600 UNIV OF MINNESOTA 6160
 NEW POLYMER ELECTROLYTE SYSTEMS
 05/01/2001 - 05/31/2004 FY02: \$89,000 Total: \$214,000
Prin. Invest.: W H SMYRL
Tech. Officer: GRC/N H HAGEDORN
CASE Category: 12 – CHEMISTRY

NAG 5 3735 UNIV OF MINNESOTA 6161
 STUDY FOR AN AURORAL MULTI-PROBE SATELLITE MISSION
 03/03/1997 - 02/28/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: D A CATTELL
Tech. Officer: GSFC/R HOWARD
CASE Category: 13 – PHYSICS

NAG 5 5172 UNIV OF MINNESOTA 6162
 A VERY HIGH TIME RESOLUTION ROCKET INVESTIGATION OF IONOSPHERIC PLASMA PHYSICS ASSOCIATED WITH ATMOSPHERIC PLASMA PHYSICS ASSOCIATED WITH ATMOSPHERE
 03/30/1998 - 03/31/2002 FY02: \$0 Total: \$557,127
Prin. Invest.: J R WYGANT
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5182 UNIV OF MINNESOTA 6163
 TIME DEPENDENT SIMULATION OF NONLINEAR COSMIC-RAY ACCELERATION IN SHOCKS: A POWERFUL NEW APPROACH
 03/26/1998 - 08/31/2001 FY02: \$0 Total: \$132,290
Prin. Invest.: T W JONES
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5214 UNIV OF MINNESOTA 6164
 PHASE A GRANT STUDY FOR IMEX PROJECT P I - PROF J WYGANT
 10/08/1998 - 10/31/2003 FY02: \$0 Total: \$557,085
Prin. Invest.: J WYGANT
Tech. Officer: GSFC/D PIERCE
CASE Category: 13 – PHYSICS

NAG 5 6191 UNIV OF MINNESOTA 6165
 TITLE: MORPHOLOGICAL ANALYSIS OF BRAIDED RIVERS
 08/13/1997 - 05/31/2001 FY02: \$0 Total: \$84,254
Prin. Invest.: E FOUFOULA-GEORGI
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7094 UNIV OF MINNESOTA 6166
 RARE GAS AND NITROGEN STUDIES ON LUNAR, METEORITIC, AND SELECTED TERRESTRIAL MATERIALS
 05/20/1998 - 03/14/2002 FY02: \$0 Total: \$652,000
Prin. Invest.: R O PEPIN
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7462 UNIV OF MINNESOTA 6167
 SOLAR WIND COUPLING TO THE MAGNETOSPHERE: ANALYSIS OF MULTISPACECRAFT OBSERVATIONS IN SOLAR WIND
 11/12/1998 - 12/31/2001 FY02: -\$12 Total: \$260,709
Prin. Invest.: N LIN
Tech. Officer: GSFC/M H ACUNA
CASE Category: 11 – ASTRONOMY

NAG 5 7599 UNIV OF MINNESOTA 6168
 REGIONAL HYDROLOGIC SIMULATION MODEL TO STUDY AQUIFER-ATMOSPHERE INTERACTIONS ON INTERANNUAL-DECADE SCALE
 07/21/1998 - 06/30/2002 FY02: \$0 Total: \$250,000
Prin. Invest.: M PERSON
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7715 UNIV OF MINNESOTA 6169
 SPATIO-TEMPORAL ORGANIZATION AND SPACE-TIME DOWNSCALING OF TROPICAL RAINFALL
 10/27/1998 - 10/31/2002 FY02: \$0 Total: \$227,819
Prin. Invest.: E FOUFOULA-GEORGI
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7906 UNIV OF MINNESOTA 6170
 INFRARED IMAGING PHOTOMETRY AND POLARIMETRY OF COMETS
 12/10/1998 - 09/30/2002 FY02: \$0 Total: \$220,944
Prin. Invest.: D J JONES
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7917 UNIV OF MINNESOTA 6171
 BIG FOOT--CHARACTERIZING LAND COVER, LAI AND NPP AT THE LANDSCAPE SCALE FOR EOS/MODIS VALIDATION
 12/09/1998 - 12/31/2002 FY02: \$0 Total: \$229,481
Prin. Invest.: P B REICH
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8073 UNIV OF MINNESOTA 6172
 GEOTAIL OBSERVATIONS OF EXB FLOWS AND ASSOCIATED LOW FREQUENCY WAVES IN THE MAGNETOTAIL AND THEIR DYNAMICS
 01/21/1999 - 01/31/2001 FY02: -\$8,236 Total: \$75,764
Prin. Invest.: C A CATTELL
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8082 UNIV OF MINNESOTA 6173
 THEORETICAL STUDY OF ULF WAVES IN THE MAGNETOTAIL
 01/22/1999 - 04/30/2002 FY02: \$0 Total: \$285,981
Prin. Invest.: D L LYSAK
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 8205 UNIV OF MINNESOTA 6174
 STUDY OF SUBSTORM ASSOCIATED ULF AND VLF WAVES IN THE MAGNETOTAIL USING SPACECRAFT DATA
 02/08/1999 - 02/14/2003 FY02: \$0 Total: \$167,693
Prin. Invest.: D LIN
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 8869 UNIV OF MINNESOTA 6175
 LABORATORY STUDIES OF THE KINETICS OF ATMOSPHERIC REACTIONS OF HALOGENATED ALKOXY RADICALS
 01/10/2000 - 12/31/2002 FY02: \$119,684 Total: \$344,659
Prin. Invest.: R W CARR
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MINNESOTA

NASA'S UNIVERSITY PROGRAM

NAG 5 9146 **UNIV OF MINNESOTA** **6176**
 PHASE-A AND BRIDGE PHASE STUDY OF STEREO/WAVES ACCOMMODATION
 03/09/2000 - 12/31/2002 FY02: \$620,000 Total: \$1,202,150
Prin. Invest.: K GOETZ
Tech. Officer: GSFC/M KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 9221 **UNIV OF MINNESOTA** **6177**
 QUASARS AS PROBES (LTSA 99)
 03/14/2000 - 05/31/2005 FY02: \$136,969 Total: \$353,530
Prin. Invest.: E SKILLMAN
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9254 **UNIV OF MINNESOTA** **6178**
 THEORETICAL STUDIES OF ALFVEN WAVE INTERACTION WITH THE IONOSPHERE
 03/13/2000 - 04/30/2003 FY02: \$82,460 Total: \$234,592
Prin. Invest.: R LYSAK
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9312 **UNIV OF MINNESOTA** **6179**
 MAPPING & MODELING FOREST CHANGE IN A BOREAL LAND SCAPE
 03/20/2000 - 04/30/2003 FY02: \$113,315 Total: \$313,249
Prin. Invest.: J PASTOR
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9349 **UNIV OF MINNESOTA** **6180**
 BALLOON BORNE OBSERVATIONS OF THE POLARIZATION ANI SOTROPY OF THE COSMIC MICROWAVE BACKGROUND RADIAT
 03/28/2000 - 03/31/2003 FY02: \$147,000 Total: \$431,000
Prin. Invest.: S HANANY
Tech. Officer: GSFC/J FROGEL
CASE Category: 11 – ASTRONOMY

NAG 5 9407 **UNIV OF MINNESOTA** **6181**
 ENHANCING & ARCHIVING THE APS CATALOG OF THE POSS I
 04/10/2000 - 04/30/2003 FY02: \$0 Total: \$233,400
Prin. Invest.: R HUMPHREYS
Tech. Officer: GSFC/P HUNTER
CASE Category: 11 – ASTRONOMY

NAG 5 10178 **UNIV OF MINNESOTA** **6182**
 CONTINUED ANALYSIS OF ISTP WIND/WAVES DATA
 01/18/2001 - 02/29/2004 FY02: \$20,097 Total: \$171,716
Prin. Invest.: K GOETZ
Tech. Officer: GSFC/M L KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 10274 **UNIV OF MINNESOTA** **6183**
 DATA ANALYSIS OF THE UNIV. MINNESOTA PORTION OF THE URAP EXPERIMENT ON THE ULYSSES SPACECRAFT
 01/16/2001 - 12/31/2003 FY02: \$50,000 Total: \$140,024
Prin. Invest.: P J KELLOGG
Tech. Officer: GSFC/R J MACDOWALL
CASE Category: 13 – PHYSICS

NAG 5 10509 **UNIV OF MINNESOTA** **6184**
 RHEOLOGY OF PLANETARY MATERIALS: IMPLICATIONS FOR TECTONICS OF TERRESTRIAL PLANETS
 03/01/2001 - 03/31/2004 FY02: \$86,200 Total: \$171,100
Prin. Invest.: D L KOHLSTEDT
Tech. Officer: GSFC/D SENKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10569 **UNIV OF MINNESOTA** **6185**
 SPATIAL VARIABILITY IN LAND-ATMOSPHERE INTERACTION COUPLING A NEW GENERATION LARGE-EDDY SIMULATION
 03/12/2001 - 03/14/2004 FY02: \$85,293 Total: \$179,678
Prin. Invest.: F PORTE-AGEL
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10774 **UNIV OF MINNESOTA** **6186**
 SELF-CONSISTENT EVOLUTION OF COSMIC-RAY SHOCKS (ATP 2000)
 04/24/2001 - 04/30/2004 FY02: \$88,873 Total: \$150,216
Prin. Invest.: T W JONES
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11124 **UNIV OF MINNESOTA** **6187**
 DETERMINING THE IMPORTANCE OF ENERGY TRANSFER BETWEEN MAGNETOSPHERIC REGIONS VIA MHD WAVES USING
 07/19/2001 - 07/14/2004 FY02: \$181,094 Total: \$366,094
Prin. Invest.: C A CATTELL
Tech. Officer: GSFC/J SPANN
CASE Category: 11 – ASTRONOMY

NAG 5 11130 **UNIV OF MINNESOTA** **6188**
 LAND USE, CARBON AND WATER IN THE UPLANDS OF SOUTH EASTER NORTH AMERICA
 08/02/2001 - 07/14/2004 FY02: \$139,500 Total: \$219,366
Prin. Invest.: P BOLSTAD
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11262 **UNIV OF MINNESOTA** **6189**
 DEVELOPMENT OF ENVIRONMENTAL INDICATORS FOR THE US GREAT LAKES USING REMOTE SENSING TECHNOLOGY
 08/27/2001 - 08/31/2005 FY02: \$75,000 Total: \$150,000
Prin. Invest.: G NIEMI
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11325 **UNIV OF MINNESOTA** **6190**
 STEREO/WAVES PHASE-C INSTRUMENT DESIGN STUDY
 11/28/2001 - 01/01/2002 FY02: \$0 Total: \$0
Prin. Invest.: K GOETZ
Tech. Officer: GSFC/ML KAISER
CASE Category: 11 – ASTRONOMY

NAG 5 11723 **UNIV OF MINNESOTA** **6191**
 EVOLUTIONARY HISTORIES OF NOBLE GASES AND OTHER VOLATILES IN SOLAR-SYSTEM MATERIALS
 02/11/2002 - 03/14/2005 FY02: \$180,000 Total: \$180,000
Prin. Invest.: R O PEPIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NASA'S UNIVERSITY PROGRAM

MINNESOTA

NAG 5 11801 **UNIV OF MINNESOTA** **6192**
 "PARAMETERIZATION OF REGIONAL SCALE FLUXES: INTEGRATING FIELD
 AND LABORATORY MEASUREMENTS WITH LARG
 03/07/2002 - 03/31/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: F FORTE-AGEL
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11856 **UNIV OF MINNESOTA** **6193**
 STUDY OF WAVE MODE CONVERSION AT THE MAGNETOPAUSE USING
 SPACECRAFT AND GROUND DATA
 03/08/2002 - 03/14/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: N LIN
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11868 **UNIV OF MINNESOTA** **6194**
 1HEORETICAL STUDIES OF ULF WAVES IN THE MAGNETOTAI L
 03/18/2002 - 04/30/2005 FY02: \$104,627 Total: \$104,627
Prin. Invest.: R L LYSAK
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11971 **UNIV OF MINNESOTA** **6195**
 A SPECTRUM OF IV&V MODELING TECHNIQUES
 04/05/2002 - 11/14/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: M HEIMDAHL
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAG 8 1258 **UNIV OF MINNESOTA** **6196**
 ATOMISTIC SIMULATIONS OF CADMIUM TELLURIDE
 04/15/1996 - 04/14/2002 FY02: \$0 Total: \$352,000
Prin. Invest.: J DERBY
Tech. Officer: MSFC/P DOTY, MSFC/D NOEVER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1349 **UNIV OF MINNESOTA** **6197**
 SELF-ASSEMBLY OF HEPATOCYTE SPHEROIDS IN MICRO- GRAVITY
 06/19/1997 - 11/30/2001 FY02: -\$1,521 Total: \$496,412
Prin. Invest.: W S HU, L HANSEN, R KEMMEL
Tech. Officer: MSFC/B GUYNES, MSFC/J MAYO
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1474 **UNIV OF MINNESOTA** **6198**
 THEORETICAL ANALYSIS OF 3D TRANSIENT CONVECTION AND SEGREGA-
 TION
 02/06/1998 - 01/31/2003 FY02: \$22,499 Total: \$510,249
Prin. Invest.: J J DERBY, A J YECKEL
Tech. Officer: MSFC/C TALLEY
CASE Category: 13 – PHYSICS

NAG 8 1519 **UNIV OF MINNESOTA** **6199**
 SUBGRID SCALE PRECIPITATION VARIABILITY OVER THE MISSISSIPPI
 RIVER BASIN
 05/01/1998 - 04/30/2002 FY02: \$0 Total: \$317,495
Prin. Invest.: E FOUFOULA-GEORGIU
Tech. Officer: MSFC/J ARNOLD
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 8 1676 **UNIV OF MINNESOTA** **6200**
 FIRST PRINCIPLES CALCULATIONS OF MOLTEN II-IV COMPOUNDS AND
 THEIR SOLIDIFICATION BEHAVIOR
 05/01/2000 - 11/30/2003 FY02: \$120,000 Total: \$269,500
Prin. Invest.: J J DERBY, J R CHELIKOWSKY
Tech. Officer: MSFC/P M DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1007 **UNIV OF MINNESOTA** **6201**
 GENESIS DISCOVERY MISSION
 05/06/1998 - 04/30/2003 FY02: \$268,001 Total: \$577,323
Prin. Invest.: R O PEPIN
Tech. Officer: JSC/E K STANSBERY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1218 **UNIV OF MINNESOTA** **6202**
 LIQUID COOLING GARMENT FOR SPACE SUIT
 03/03/2000 - 01/31/2003 FY02: \$101,618 Total: \$475,404
Prin. Invest.: V KOSCHEYER
Tech. Officer: JSC/R TREVINO
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1222 **UNIV OF MINNESOTA** **6203**
 WORST CASE ANALYSIS OF THE X38 V201 FLIGHT CONTROL SYSTEM
 03/24/2000 - 03/24/2001 FY02: -\$38,165 Total: \$2,753
Prin. Invest.: G J BALAS
Tech. Officer: JSC/S R MUNDY
CASE Category: 41 – AERONAUTICAL ENGR

NAG13 99002 **UNIV OF MINNESOTA** **6204**
 THE UPPER MIDWEST REGIONAL EARTH SCIENCE APPLICATION CENTER
 02/03/1999 - 02/02/2003 FY02: \$0 Total: \$1,500,000
Prin. Invest.: M E BAUER
Tech. Officer: SSC/C HILL
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG13 99022 **UNIV OF MINNESOTA** **6205**
 INTEGRATING SATELLITE REMOTE SENSING INTO FOREST INVENTORY
 AND MANAGEMENT
 08/13/1999 - 10/31/2002 FY02: \$291,083 Total: \$580,000
Prin. Invest.: M BAUER
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 32994 **UNIV OF MINNESOTA** **6206**
 SCIENTIFIC AND TECHNICAL SUPPORT FOR THE UNIFIED RADIO AND
 PLASMA WAVE INVESTIGATION
 02/08/1996 - 12/31/2000 FY02: \$0 Total: \$571,329
Prin. Invest.: K GOETZ, P J KELLOGG
Tech. Officer: GSFC/R J MACDOWELL
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 1 337 **UNIV OF MINNESOTA** **6207**
 APPLICATION OF LINEAR PARAMETER-VARYING TECHNIQUES TO SAFETY-
 CRITICAL AIRCRAFT FLIGHT SYSTEMS
 07/20/1999 - 07/14/2003 FY02: \$202,900 Total: \$705,014
Prin. Invest.: G J BALAS
Tech. Officer: LARC/C M BELCASTRO, LARC/N M BELCASTRO
CASE Category: 41 – AERONAUTICAL ENGR

MINNESOTA

NASA'S UNIVERSITY PROGRAM

NCC 2 1231 **UNIV OF MINNESOTA** **6208**
 DISCOVERY OF CHANGES FROM THE GLOBAL CARBON CYCLE & CLIMATE
 SYSTEM USING DATA MINING
 03/28/2001 - 02/28/2003 FY02: \$173,199 Total: \$267,199
Prin. Invest.: V KUMAR
Tech. Officer: ARC/C S POTTER, ARC/J COUGHLAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1240 **UNIV OF MINNESOTA** **6209**
 INTELLIGENT SPECIFICATION-CENTERED TEST-CASE GENERATION RE-
 VIEW IDENTIFIER
 04/04/2001 - 02/28/2003 FY02: \$88,037 Total: \$196,037
Prin. Invest.: M HEIMDAHL
Tech. Officer: ARC/R MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1335 **UNIV OF MINNESOTA** **6210**
 TEST CASE GENERATION USING AN EXPLICIT STATE MODEL CHECKER
 04/16/2002 - 10/14/2002 FY02: \$38,643 Total: \$38,643
Prin. Invest.: M HEIMDAHL
Tech. Officer: ARC/M LOWRY, ARC/S LAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5393 **UNIV OF MINNESOTA** **6211**
 ADVANCED MODELS FOR HIGH ENTHALPY FLOW SIMULATIONS
 08/14/2000 - 09/14/2002 FY02: \$0 Total: \$113,572
Prin. Invest.: G V CANDLER
Tech. Officer: ARC/J OLEJNICZAK
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 652 **UNIV OF MINNESOTA** **6212**
 MEASUREMENTS IN A TRANSITIONAL BOUNDARY LAYER UNDER LOW-
 PRESSURE TURBINE AIRFOIL CONDITIONS
 11/10/1998 - 12/31/2002 FY02: \$68,936 Total: \$251,242
Prin. Invest.: T W SIMON
Tech. Officer: GRC/D E ASHPIS
CASE Category: 46 – MECHANICAL ENGR

NCC 3 811 **UNIV OF MINNESOTA** **6213**
 ULTRA-COMPACT, SOFT-SWITCHING POWER SUPPLIES WITH HIGH EFFI-
 CIENCY FOR ELECTRIC PROPULSION
 07/13/2000 - 06/14/2003 FY02: \$0 Total: \$128,342
Prin. Invest.: N MOHAN
Tech. Officer: GRC/R M BUTTON
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 857 **UNIV OF MINNESOTA** **6214**
 ULTRA COMPACT SOFT SWITCHING POWER SUPPLIES WITH HIGH
 EFFICIENCY FOR ELECTRIC PROPULSION
 01/26/2001 - 01/14/2003 FY02: \$211,205 Total: \$349,205
Prin. Invest.: N MOHAN
Tech. Officer: GRC/T T PETERSON
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 316 **UNIV OF MINNESOTA** **6215**
 INSTALLING MTPE DATA FOR LAND & ENVIRONMENTAL MANAGEMENT
 04/11/1998 - 02/28/2003 FY02: \$100,000 Total: \$827,000
Prin. Invest.: T BURK
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 102 **UNIV OF MINNESOTA** **6216**
 SPECTROSCOPIC VARIABILITY IN ETA CARINAE (STUDENT: NATHAN SMITH)
 05/25/2000 - 06/30/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: K DAVIDSON
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 11 – ASTRONOMY

NGT 5 30111 **UNIV OF MINNESOTA** **6217**
 THE IMPACTS OF A SALT CEDAR (TAMARIX RAMOSISSIMA) INVASION ON
 COMMUNITIES, ECOSYSTEM PROCESSES
 08/28/1998 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: S HOBBIE
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30115 **UNIV OF MINNESOTA** **6218**
 ECOSYSTEM RESPONSE TO CLIMATIC CHANGE: A COMPARATIVE STUDY
 OF FOREST-LAKE ECOSYSTEMS ON DIFFERENT SITES
 10/01/1997 - 02/28/2001 FY02: -\$3,418 Total: \$62,582
Prin. Invest.: M DAVIS
Tech. Officer: GSFC/G ASRAR
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40086 **UNIV OF MINNESOTA** **6219**
 MINNESOTA SPACE GRANT COLLEGE & FELLOWSHIP PROGRAM
 02/16/2001 - 02/28/2005 FY02: \$475,000 Total: \$1,201,131
Prin. Invest.: W L GARRARD
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50091 **UNIV OF MINNESOTA** **6220**
 STUDY OF LONG RANGE QUANTUM COHERENCE IN THE BOSE- LIQUID
 HELIUM FOUR.
 09/05/1997 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: HALLEY
Tech. Officer: HQ/A NURRIDIN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50250 **UNIV OF MINNESOTA** **6221**
 SOUTHERN GALACTIC PLANE SURVEY AT 21 CM STUDENT: NAOMI M.
 MCCLURE-G
 06/08/1999 - 09/30/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: J DICKEY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50293 **UNIV OF MINNESOTA** **6222**
 A PARTICLE SIMULATION STUDY OF SOLITARY WAVES IN THE
 MAGNETOSPHERE/STUDENT: JAMES CRUMLEY
 06/26/2000 - 06/30/2003 FY02: \$12,000 Total: \$56,000
Prin. Invest.: R LYSAK
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50312 **UNIV OF MINNESOTA** **6223**
 THE ELECTRODYNAMICS OF THE INNER MAGNETOSPHERE DURING
 MAJOR GEOMAGNETIC STORMS/STUDENT: DOUGLAS R
 08/07/2000 - 07/31/2001 FY02: -\$3,733 Total: \$18,267
Prin. Invest.: J WYGANT
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50344 **UNIV OF MINNESOTA** **6224**
 MAXIPOL: MEASURING THE POLARIZATION ANISOTROPY OF THE COSMIC
 MICROWAVE BACKGROUND/STUDENT: BRADLEY
 05/14/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S HANAY
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50346 **UNIV OF MINNESOTA** **6225**
 A MULTIWAVELENGTH STUDY OF THE INTERSTELLAR MEDIUM OF LOW-
 METALLICITY/STUDENT: JOHN CANNON
 05/07/2001 - 08/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: E SKILLMAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01054 **WINONA STATE UNIV** **6226**
 ACCELERATED TESTING OF POLYMERIC COMPOSITES: CORR ELATION OF
 SCALE-UP EFFECTS ON VISOELASTIC
 03/30/2001 - 04/30/2003 FY02: \$62,593 Total: \$123,457
Prin. Invest.: B ABDEL-MAGID
Tech. Officer: LARC/T S GATES
CASE Category: 47 – METAL & MATERIALS ENGR

MISSISSIPPI

NAG13 98005 **ALCORN STATE UNIV** **6227**
 THERMAL-HYDRAULIC MATERIAL PRE-CONSTRUCTION ANALYSIS OF THE
 NEW SSME TEST DIFFUSER
 03/31/1998 - 09/30/2001 FY02: -\$3,619 Total: \$260,773
Prin. Invest.: S ACEIL
Tech. Officer: JSC/B ST. CYR
CASE Category: 49 – ENGINEERING, OTHER

NAG13 98010 **ALCORN STATE UNIV** **6228**
 STRENGTHENING PRE-SERVICE AND IN-SERVICE TEACHER EDUCATION IN
 MATHEMATICS, SCIENCE & TECHNOLOGY
 06/12/1998 - 06/10/2001 FY02: -\$71,246 Total: \$504,034
Prin. Invest.: D ADDIE, J RUSSELL, W HUMPHRY
Tech. Officer: JSC/N SULLIVAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1485 **JACKSON STATE UNIV** **6229**
 NETWORK VISUALIZATION IN THREE-DIMENSIONS (NETVIZ)
 05/22/2001 - 05/14/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: Q MALLUHI
Tech. Officer: ARC/B A BIEGEL
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2277 **JACKSON STATE UNIV** **6230**
 INTELLIGENT INTERFACE TO THE NUMERICAL SIMULATORS (IINS) OF THE
 AEROSPACE TRANSPORTATION ENGINES.
 07/22/1999 - 07/31/2002 FY02: \$0 Total: \$105,847
Prin. Invest.: D MITRA
Tech. Officer: GRC/D F NOGA
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1867 **JACKSON STATE UNIV** **6231**
 NON-CONTRACT PRECISION ACTUATION AND STRUCTURAL CONTROL
 USING OPTO-MECHANICAL ACTUATORS
 06/25/2002 - 06/25/2005 FY02: \$99,674 Total: \$99,674
Prin. Invest.: H R SHIH, F A OKOJIE
Tech. Officer: MSFC/W LOVE, MSFC/E ORDONEZ
CASE Category: 41 – AERONAUTICAL ENGR

NAG13 02056 **JACKSON STATE UNIV** **6232**
 SCIENCE AND TECHNOLOGY ENHANCEMENT PRE-COLL PRO GRAM
 09/19/2002 - 09/18/2005 FY02: \$99,885 Total: \$99,885
Prin. Invest.: A K MOHAMED
Tech. Officer: SSC/R P TRAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 98007 **JACKSON STATE UNIV** **6233**
 PACE/MSET SAME
 06/10/1998 - 08/30/2001 FY02: -\$21,067 Total: \$278,843
Prin. Invest.: A K MOHAMED
Tech. Officer: SSC/A JOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 99004 **JACKSON STATE UNIV** **6234**
 MASTAP PROJECT: A MODEL FOR IMPROVING THE PRE- SERVICE TRAIN-
 ING OF MIDDLE SCHOOL MATH TEACHERS
 02/23/1999 - 02/22/2002 FY02: -\$131,786 Total: \$467,014
Prin. Invest.: H GORE
Tech. Officer: SSC/A JOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 99012 **JACKSON STATE UNIV** **6235**
 STUDIES OF OCEAN-ATMOSPHERIC INTERACTIONS AND ASSOCIATED
 TROPICAL CYCLONES/HURRICANES OF GULF ME
 03/17/1999 - 03/16/2003 FY02: \$0 Total: \$300,000
Prin. Invest.: R REDDY
Tech. Officer: JSC/R MILLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG13 99013 **JACKSON STATE UNIV** **6236**
 SATELLITE ANALYSIS OF GULF COAST ATMOSPHERE MOSITURE AND
 TROPOSHERIC AEROSOLS
 03/24/1999 - 12/31/2002 FY02: \$0 Total: \$299,988
Prin. Invest.: P CROFT
Tech. Officer: JSC/J JENNER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1296 **JACKSON STATE UNIV** **6237**
 NETWORK STORAGE MANAGEMENT IN THE DATA GRID ENVIRO NMENT
 11/20/2001 - 11/14/2002 FY02: \$147,000 Total: \$147,000
Prin. Invest.: Q MALLUHI
Tech. Officer: ARC/B A BIEGEL
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5398 **JACKSON STATE UNIV** **6238**
 COMPUTATIONAL STUDY ON EVOLUTION OF LIFE: INVESTI GATION OF
 NON-CLASICAL BASE 5-AZACYTOSINE & ITS D
 09/21/2000 - 09/30/2002 FY02: \$0 Total: \$14,000
Prin. Invest.: J LESZCZYNSKI
Tech. Officer: ARC/A POHORILLE, ARC/M FONDA
CASE Category: 12 – CHEMISTRY

NCC 5 667 **JACKSON STATE UNIV** **6239**
 SCIENCE AND MATHEMATICS INITIATIVE FOR LEARNING EN HANCEMENT
 08/22/2002 - 08/31/2005 FY02: \$178,969 Total: \$178,969
Prin. Invest.: C CRAIG
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MISSISSIPPI

NASA'S UNIVERSITY PROGRAM

NAG 1 2038 **MISSISSIPPI STATE UNIV** **6240**
 INVESTIGATION OF ROBUST DESIGN CONCEPTS FOR COMPO- SITE
 ROTORCRAFT FUSELAGE STRUCTURES
 03/26/1998 - 05/31/2001 FY02: -\$43 Total: \$135,240
Prin. Invest.: M RAIS-BHANI
Tech. Officer: LARC/D J BAKER, LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02099 **MISSISSIPPI STATE UNIV** **6241**
 INVESTIGATION INTO SENSITIVITY ANALYSIS AND RELIABILITY BASED
 DESIGN OPTIMIZATION OF COMPOSITE CIRCU
 05/23/2002 - 05/22/2003 FY02: \$24,989 Total: \$24,989
Prin. Invest.: M RAIS-ROHANI
Tech. Officer: LARC/D J BAKER, LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1232 **MISSISSIPPI STATE UNIV** **6242**
 PHYSICS-BASED MANEUVERING PREDICTION OF TILT ROTOR AIRCRAFT
 06/24/1998 - 01/31/2002 FY02: \$0 Total: \$870,726
Prin. Invest.: D L WHITFIELD, L K TAYLOR, W R BRILEY
Tech. Officer: ARC/R C STRAWN, ARC/W F FEIREISEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 1699 **MISSISSIPPI STATE UNIV** **6243**
 COMPUTATIONAL FLUID DYNAMICS OF ROTATING MACHINERY USING
 TRUBO
 01/23/1995 - 10/21/2002 FY02: \$49,999 Total: \$679,998
Prin. Invest.: J M JANUS, D WHITFIELD, T M SWAFFORD
Tech. Officer: GRC/D L HUFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2176 **MISSISSIPPI STATE UNIV** **6244**
 DEVELOPMENT OF A PARALLEL TURBOMACHINERY FLOW SOLV ER
 06/22/1998 - 01/31/2002 FY02: \$0 Total: \$225,000
Prin. Invest.: W R BRILEY
Tech. Officer: GRC/E R MCFARLAND
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2235 **MISSISSIPPI STATE UNIV** **6245**
 INTEGRATED GEOMETRY/GRID/SIMULATION SOFTWARE FOR S INGLE AND
 MULTI-ELEENT AIRFOILS WITH ICE ACCRETIO
 02/22/1999 - 06/30/2002 FY02: \$0 Total: \$210,313
Prin. Invest.: B K SONI
Tech. Officer: GRC/Y K CHOO
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2562 **MISSISSIPPI STATE UNIV** **6246**
 ICEWING - A MESH GENERATION SYSTEM FOR COMPLEX THR EE-
 DIMENSIONAL ICED WING CONFIGURATIONS
 03/05/2001 - 04/22/2003 FY02: \$65,000 Total: \$126,087
Prin. Invest.: D THOMPSON
Tech. Officer: GRC/Y K CHOO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11127 **MISSISSIPPI STATE UNIV** **6247**
 DELTA AREA SCIENCE & TECHNOLOGY ACADEMY
 07/26/2001 - 07/14/2004 FY02: \$0 Total: \$70,000
Prin. Invest.: B JOINER
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1566 **MISSISSIPPI STATE UNIV** **6248**
 NOVEL APPROACHES REGARDING PROTEIN SOLUBILITY
 02/23/1999 - 11/30/2003 FY02: \$113,000 Total: \$459,550
Prin. Invest.: W W WILSON, A ASONOV
Tech. Officer: MSFC/B V GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1837 **MISSISSIPPI STATE UNIV** **6249**
 HIGH THROUGHPUT SCREEN OF PROTEIN-PROTEIN INTER- ACTIONS BY
 MICROCHIP SPACE
 08/22/2001 - 11/30/2004 FY02: \$200,000 Total: \$232,000
Prin. Invest.: W W WILSON
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1883 **MISSISSIPPI STATE UNIV** **6250**
 FRACTURE ANALYSIS OF SEMI-ELLIPTICAL SURFACE CRACK S IN DUCTILE
 MATERIALS
 08/23/2002 - 08/23/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S R DANIEWICZ, J C NEWMAN
Tech. Officer: MSFC/W GREGG
CASE Category: 47 – METAL & MATERIALS ENGR

NAG13 99018 **MISSISSIPPI STATE UNIV** **6251**
 LEAF AREA AND VOLUME ESTIMATES IN LOBLOLLY PINE FOREST DERIVED
 FROM AERIAL IMAGING LIDAR
 07/30/1999 - 11/01/2002 FY02: \$31,829 Total: \$278,961
Prin. Invest.: S ROBERTS
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 3 00181 **MISSISSIPPI STATE UNIV** **6252**
 MODIFICATION OF TURBO SOFTWARE
 09/29/2000 - 10/01/2005 FY02: \$303,005 Total: \$628,005
Prin. Invest.: J CHEN, D L WHITEFIELD, R BRILEY
Tech. Officer: GRC/E MCFARLAND, GRC/D VAN ZANTE
CASE Category: 41 – AERONAUTICAL ENGR

NAS13 98033 **MISSISSIPPI STATE UNIV** **6253**
 RESEARCH & DEVELOPMENT NASA AND RESIDENT AGENCIES
 03/23/1998 - 03/22/2003 FY02: \$2,447,459 Total: \$17,169,311
Prin. Invest.: L RITCHIE, BULLINGTON, D WIESENBERG
Tech. Officer: SSC/D POWE
CASE Category: 33 – OCEANOGRAPHY

NCC13 99001 **MISSISSIPPI STATE UNIV** **6254**
 ROLE OF LAND-GRANT UNIV IN APPLICATIONS OF REMOTE SENSING
 02/19/1999 - 03/21/2004 FY02: \$4,000,000 Total: \$16,500,000
Prin. Invest.: D SHAW, N M COX
Tech. Officer: SSC/R MCKELLIP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9197 **MISSISSIPPI VALLEY STATE UNIV.** **6255**
 MISSISSIPPI VALLEY STATE UNIV PACE PROGRAM
 03/09/2000 - 02/28/2003 FY02: \$99,375 Total: \$299,034
Prin. Invest.: C G BLAND
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NASA'S UNIVERSITY PROGRAM

MISSISSIPPI

NAG 5 9535 **MISSISSIPPI VALLEY STATE UNIV.** **6256**
 INTEGRATING REMOTE SENSING/GIS TECHNOLOGY & RSCH INTO MSET
 EDUCATION
 05/01/2000 - 05/14/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: C BLAND
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 98004 **MISSISSIPPI VALLEY STATE UNIV.** **6257**
 RESPONSE OF A LEAF AND CANOPY SPECTRAL REFLECTANCE TO
 DROUGHT STRESS IN SOYBEANS
 03/31/1998 - 09/30/2001 FY02: -\$56,747 Total: \$242,605
Prin. Invest.: R BAHADUR
Tech. Officer: JSC/G CARTER
CASE Category: 55 – AGRICULTURE

NAG13 99003 **MISSISSIPPI VALLEY STATE UNIV.** **6258**
 IMPROVING TEACHERS AND STUDENTS ACHIEVEMENT IN MATHEMATICS
 AND SCIENCE
 02/17/1999 - 08/17/2002 FY02: \$0 Total: \$591,503
Prin. Invest.: S J WHITE
Tech. Officer: SSC/N S SULLIVAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 99026 **MISSISSIPPI VALLEY STATE UNIV.** **6259**
 RESPONSE OF SOYBEAN LEAF & CANOPY SPECTRAL REFLECT ANCE TO
 CHELATE ASSISTED LEAD JUPEXTRACTOPM
 09/01/1999 - 09/27/2002 FY02: \$0 Total: \$199,920
Prin. Invest.: R BAHADUR
Tech. Officer: JSC/R TRAVIS
CASE Category: 55 – AGRICULTURE

NCC 5 665 **MISSISSIPPI VALLEY STATE UNIV.** **6260**
 DEVELOPING AND IMPROVING TEACHER EDUCATION IN MATH EMATICS,
 SCIENCE, AND TECHNOLOGY
 08/22/2002 - 08/31/2005 FY02: \$199,884 Total: \$199,884
Prin. Invest.: O CATHEY
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7671 **UNIV OF MISSISSIPPI - MEDICAL CENTER** **6261**
 FUNDING FOR 'THE UTILITY OF LOW COST THERMAL SENSORS IN
 ARCHAEOLOGICALRESEARCH' (SENH98-0125)
 09/01/1998 - 02/28/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: J K JOHNSON
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICALSCIENCE

NAG13 00036 **UNIV OF MISSISSIPPI - UNIV** **6262**
 THE UNIV OF MS REMOTE SENSING AND SPACE LAW CENTER OF
 EXCELLENCE
 04/06/2000 - 04/05/2003 FY02: \$999,986 Total: \$1,499,986
Prin. Invest.: J GABRYNOWICZ, R MCLAUGHLIN, R RYCHLAK
Tech. Officer: SSC/M MICK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 00037 **UNIV OF MISSISSIPPI - UNIV** **6263**
 THE UNIV OF MISSISSIPPI GEOINFORMATICS CENTER
 05/08/2000 - 09/30/2002 FY02: \$0 Total: \$1,826,459
Prin. Invest.: G EASSON
Tech. Officer: SSC/N SOVIK
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG13 01004 **UNIV OF MISSISSIPPI - UNIV** **6264**
 NEW GRANT AWARD GEOSPATIAL INFORMATION TECHNOLOGY EDUCA-
 TION:
 07/12/2001 - 07/02/2006 FY02: \$2,000,000 Total: \$3,000,000
Prin. Invest.: J JOHNSON, P LAWHEAD
Tech. Officer: SSC/D P POWE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG13 02052 **UNIV OF MISSISSIPPI - UNIV** **6265**
 UNIV OF MISSISSIPPI GEOINFORMATICS CENTER (UMGS)
 08/23/2002 - 09/30/2005 FY02: \$2,000,000 Total: \$2,000,000
Prin. Invest.: G EASSON
Tech. Officer: SSC/T VANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 405 **UNIV OF MISSISSIPPI - UNIV** **6266**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/17/1999 - 12/31/2001 FY02: \$0 Total: \$450,000
Prin. Invest.: P SUKANEK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 574 **UNIV OF MISSISSIPPI - UNIV** **6267**
 MISSISSIPPI NASA EPSCOR PROGRAM
 09/26/2001 - 07/31/2004 FY02: \$0 Total: \$258,000
Prin. Invest.: P SUKANEK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40098 **UNIV OF MISSISSIPPI - UNIV** **6268**
 MISSISSIPPI SPACE GRANT COLL AND FELLOWSHIP PRO GRAM
 02/28/2001 - 02/28/2005 FY02: \$406,250 Total: \$870,794
Prin. Invest.: P SUKANEK
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9770 **UNIV OF SOUTHERN MISSISSIPPI** **6269**
 OPTICAL ASSESSMENT OF BIOGEOCHEMICAL PROPERTIES IN COASTAL
 WATERS WITH APPLICATION TO MULTI-SPECTRAL
 07/12/2000 - 01/31/2002 FY02: \$0 Total: \$58,216
Prin. Invest.: S E LOHRENZ
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10668 **UNIV OF SOUTHERN MISSISSIPPI** **6270**
 EXPLORING THE RELATIONSHIP BETWEEN SIZE AND CATALYTIC CAPAC-
 ITY OF RNA CATALYSTS
 03/21/2001 - 03/31/2004 FY02: \$168,400 Total: \$335,600
Prin. Invest.: F HUANG
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 8 1466 **UNIV OF SOUTHERN MISSISSIPPI** **6271**
 FRONTAL POLYMERIZATION IN MICROGRAVITY
 02/10/1998 - 12/31/2002 FY02: \$0 Total: \$735,520
Prin. Invest.: J A POJMAN
Tech. Officer: MSFC/W S SPEARMAN
CASE Category: 13 – PHYSICS

MISSOURI

NASA'S UNIVERSITY PROGRAM

NAG 8 1684 **UNIV OF SOUTHERN MISSISSIPPI** **6272**
 "PHASE SEPARATION AND SELF-ASSEMBLY OF LIQUID CRYSTALS AND
 POLYMER DISPERSIONS"
 06/05/2000 - 11/30/2003 FY02: \$90,000 Total: \$215,500
Prin. Invest.: J WHITEHEAD
Tech. Officer: MSFC/P DOTY
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1858 **UNIV OF SOUTHERN MISSISSIPPI** **6273**
 FRONTAL POLYMERIZATION IN MICROGRAVITY RESEARCH
 02/22/2002 - 09/30/2004 FY02: \$258,000 Total: \$258,000
Prin. Invest.: J A POJMAN
Tech. Officer: MSFC/M BODIFORD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG13 01005 **UNIV OF SOUTHERN MISSISSIPPI** **6274**
 A PROPOSAL TO DEVELOP AND OPERATE A COASTAL ZONE APPLICATIONS
 CENTER/ADVANCED GIS/REMOTE SENSING
 07/30/2001 - 06/30/2003 FY02: \$0 Total: \$2,993,400
Prin. Invest.: W HAWKINS
Tech. Officer: SSC/M THOMAS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

MISSOURI

NAG 1 02027 **SAINT LOUIS UNIV** **6275**
 TRANSITION-SENSITIZED TURBULENCE MODELS FOR COMPRESSIBLE
 AND INCOMPRESSIBLE FLOW
 12/18/2001 - 12/31/2002 FY02: \$45,001 Total: \$45,001
Prin. Invest.: W D THACKER
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2469 **SAINT LOUIS UNIV** **6276**
 INVESTIGATION OF THERMAL PROCESSING ON THE PROPERTIES OF
 PS304, A SOLID LUBRICANT COATING
 06/27/2000 - 06/14/2001 FY02: -\$3,431 Total: \$28,770
Prin. Invest.: P A BENOY
Tech. Officer: GRC/C DELLACORTE
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2642 **SAINT LOUIS UNIV** **6277**
 INVESTIGATION OF THERMAL PROCESSING ON THE PROPERTIES OF
 PS305, A SOLID LUBRICANT COATING
 08/02/2001 - 06/16/2002 FY02: \$0 Total: \$31,007
Prin. Invest.: P A BENOY
Tech. Officer: GRC/C DELLACORTE
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1852 **SAINT LOUIS UNIV** **6278**
 INVESTIGATION OF AIRPORT TO SPACEPORT TRANSITION
 10/30/2001 - 01/30/2002 FY02: \$19,417 Total: \$19,417
Prin. Invest.: C RAHAIM
Tech. Officer: MSFC/E SHAW
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 01003 **SAINT LOUIS UNIV** **6279**
 FORMULATION OF A TRANSITION-SENSITIZED TURBULENCE MODEL
 12/19/2000 - 12/31/2001 FY02: \$0 Total: \$35,000
Prin. Invest.: W D THACKER
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01037 **UNIV OF MISSOURI - COLUMBIA** **6280**
 DESIGN & EXPERIMENTAL VERIFICATION OF DEPLOYABLE/ INFLATABLE
 ULTRA-LIGHTWEIGHT STRUCTURES
 06/08/2001 - 05/31/2004 FY02: \$81,067 Total: \$160,121
Prin. Invest.: P PAI
Tech. Officer: LARC/W K BELVIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 02085 **UNIV OF MISSOURI - COLUMBIA** **6281**
 AIRFRAME-NOISE MODELING AND CONTROL
 04/22/2002 - 09/10/2002 FY02: \$0 Total: \$0
Prin. Invest.: O V VASILYEV, V CHELLABOINA
Tech. Officer: LARC/M R KHORRAMI
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1372 **UNIV OF MISSOURI - COLUMBIA** **6282**
 SIGNALING OF MUSCLE ATROPHY WITH UNLOADING
 08/17/1999 - 08/31/2003 FY02: \$107,627 Total: \$472,833
Prin. Invest.: F W BOOTH
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2670 **UNIV OF MISSOURI - COLUMBIA** **6283**
 INTERPLANETARY TRAJECTOR OPTIMIZATION PROGRAM FOR ELECTRIC
 PROPULSION SPACECRAFT
 12/03/2001 - 11/01/2002 FY02: \$33,273 Total: \$33,273
Prin. Invest.: C KLUEVER
Tech. Officer: GRC/S OLESON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 4607 **UNIV OF MISSOURI - COLUMBIA** **6284**
 VESTIBULAR ONTOGENY, ADAPTATION, AND THE EFFECTS OF LOADING IN
 THE RAT
 05/19/1997 - 11/14/2001 FY02: \$0 Total: \$296,020
Prin. Invest.: T A JONES
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 8344 **UNIV OF MISSOURI - COLUMBIA** **6285**
 BAYESIAN HIERARCHICAL AIR-SEA INTERACTION MODELING : DEVELOP-
 MENT AND APPLICATION IN THE LABR
 04/13/1999 - 05/31/2002 FY02: \$0 Total: \$51,413
Prin. Invest.: C K WIKLE
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 9145 **UNIV OF MISSOURI - COLUMBIA** **6286**
 ANDEAN MOUNTAIN BUILDING: AN INTEGRATED TOPOGRAPHY GPS, SEIS-
 MOLOGICAL AND NUMERICAL STUDY
 03/07/2000 - 03/14/2003 FY02: \$50,000 Total: \$150,000
Prin. Invest.: M LIU
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9555 **UNIV OF MISSOURI - COLUMBIA** **6287**
 EVOLUTION OF THE RIBOZYME RNASE P RNA BY TRANSCRIPTION
 05/04/2000 - 04/30/2003 FY02: \$120,000 Total: \$353,040
Prin. Invest.: F SCHMIDT
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NASA'S UNIVERSITY PROGRAM

MISSOURI

NAG 5 10720 **UNIV OF MISSOURI - COLUMBIA** **6288**
MOBILE WIRELESS ACCESS TO LOW RESOLUTION PICTURE TAKING (LRPT)
NOAA WEATHER IMAGES
05/03/2001 - 05/14/2004 FY02: \$10,000 Total: \$60,000
Prin. Invest.: C CHEN
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11081 **UNIV OF MISSOURI - COLUMBIA** **6289**
20-YEAR ELEVATION CHANGE OF THE SOUTHERN GREENLAND ICE SHEET
FROM SATELLITE RADAR ALTIMETRY
07/10/2001 - 06/30/2003 FY02: \$40,000 Total: \$88,977
Prin. Invest.: C DAVIS
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12284 **UNIV OF MISSOURI - COLUMBIA** **6290**
AWARD OF FUNDS FOR MULTI-USE SCIENTIFIC EQUIPMENT
06/12/2002 - 05/31/2003 FY02: \$2,000,000 Total: \$2,000,000
Prin. Invest.: G CHIPENDALE
Tech. Officer: GSFC/L CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12300 **UNIV OF MISSOURI - COLUMBIA** **6291**
HUMAN HEALTH FROM EARTH TO SPACE: A NASA-MU PARTNERSHIP FOR
UNDERSTANDING SEX DIFFERENCES
06/20/2002 - 06/30/2003 FY02: \$3,300,000 Total: \$3,300,000
Prin. Invest.: M HAY
Tech. Officer: GSFC/L CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12482 **UNIV OF MISSOURI - COLUMBIA** **6292**
TECHNOLOGY ASSESSMENT AND READINESS CRITIQUES FOR THE APPLI-
CATIONS PROGRAM INVESTMENT PORTFOLIO
08/26/2002 - 08/31/2005 FY02: \$149,995 Total: \$149,995
Prin. Invest.: V KAUP
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1741 **UNIV OF MISSOURI - COLUMBIA** **6293**
TRAJECTORY OPTIMIZATION PROGRAM FOR NEAR-EARTH LOW-THRUST
SPACECRAFT
11/01/2000 - 08/31/2002 FY02: \$0 Total: \$55,933
Prin. Invest.: C A KLUEVER
Tech. Officer: MSFC/J M HANSON, MSFC/G A DUKEMAN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1210 **UNIV OF MISSOURI - COLUMBIA** **6294**
DESIGN & THERMAL CONTROL OF ADVANCED SPACE SUITS
03/24/2000 - 03/31/2003 FY02: \$10,000 Total: \$99,999
Prin. Invest.: S NAIR, J B MILES
Tech. Officer: JSC/C H LIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1230 **UNIV OF MISSOURI - COLUMBIA** **6295**
CONSTRUCT THE LIFE SCIENCES CENTER
09/29/2000 - 08/31/2005 FY02: \$0 Total: \$27,767,000
Prin. Invest.: G M CHIPPENDALE
Tech. Officer: JSC/R P KEHOE, JSC/P CAMPBELL
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG13 00006 **UNIV OF MISSOURI - COLUMBIA** **6296**
CENTER FOR LOCAL AND REGIONAL GOVERNMENT APPLICATIONS
(CLARA)
03/13/2000 - 11/30/2002 FY02: \$0 Total: \$324,999
Prin. Invest.: D D HIPPLE
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99014 **UNIV OF MISSOURI - COLUMBIA** **6297**
INST FOR THE COMMERCIAL DEVELOPMENT OF REMOTE SENSING TECH-
NOLOGY (ICREST)
04/19/1999 - 12/31/2001 FY02: -\$1,651 Total: \$3,588,349
Prin. Invest.: D BLANCHARD
Tech. Officer: JSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 01017 **UNIV OF MISSOURI - COLUMBIA** **6298**
GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) (PREVIOUS
GRANT NO. NGT-1-52239)
05/25/2001 - 06/30/2002 FY02: \$10,000 Total: \$22,000
Prin. Invest.: O VASILYEV
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52239 **UNIV OF MISSOURI - COLUMBIA** **6299**
GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
05/26/2000 - 06/30/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: O VASILYEV
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 8 52914 **UNIV OF MISSOURI - COLUMBIA** **6300**
ROBUST GUIDANCE SCHEMES FOR THE LANDING PHASE OF A REYSABKE
KAYBCG VEHICLE
05/30/2002 - 07/01/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C KLUEVER
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NGT13 52747 **UNIV OF MISSOURI - COLUMBIA** **6301**
REMOTE SENSING INFO. PRODUCTS FROM HIGH RESOLUTION SATELLITE
IMAGERY FOR LOCAL GOV. APP.'S
06/08/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A K SHACKLEFORD
Tech. Officer: SSC/B DAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01050 **UNIV OF MISSOURI - ROLLA** **6302**
MODELING OF INTERACTION BETWEEN PERMEABILITY & DAMAGE IN PMC
LAMINATES FOR THE NASA RLV
04/05/2001 - 04/04/2004 FY02: \$0 Total: \$81,286
Prin. Invest.: S ROY
Tech. Officer: LARC/T S GATES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01122 **UNIV OF MISSOURI - ROLLA** **6303**
HIGH-SPEED PROPULSION SYSTEM MODELING AND ANALYSIS
08/29/2001 - 08/28/2004 FY02: \$0 Total: \$60,001
Prin. Invest.: D W RIGGINS
Tech. Officer: LARC/C R MCCLINTON, LARC/S H STACK
CASE Category: 41 – AERONAUTICAL ENGR

MISSOURI

NASA'S UNIVERSITY PROGRAM

NAG 1 02094 **UNIV OF MISSOURI - ROLLA** **6304**
 DEPOSITION OF PIEZOELECTRIC FILMS ON THIN POLYMERIC SUBSTRATES
 05/02/2002 - 12/31/2002 FY02: \$29,480 Total: \$29,480
Prin. Invest.: R W SCHWARTZ
Tech. Officer: LARC/Q A SHAMS
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2185 **UNIV OF MISSOURI - ROLLA** **6305**
 ADVANCED EXTRACTIVE AEROSOL SAMPLING
 07/27/1998 - 09/30/2000 FY02: \$0 Total: \$303,149
Prin. Invest.: P D WHITEFIELD, D E HAGEN
Tech. Officer: GRC/C C WEY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2340 **UNIV OF MISSOURI - ROLLA** **6306**
 STUDIES IN ACOUSTIC PROPAGATION AND RADIATION STUDIES IN ACOUSTIC PROPAGATION AND RADIATION
 02/25/2000 - 01/31/2002 FY02: \$0 Total: \$75,381
Prin. Invest.: W EVERSMA
Tech. Officer: GRC/E ENVIA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2357 **UNIV OF MISSOURI - ROLLA** **6307**
 CHARACTERIZATION OF ENVIRONMENTAL DURABILITY OF A POLYMER MATRIX COMPOSITE
 03/15/2000 - 04/01/2002 FY02: -\$31,731 Total: \$33,913
Prin. Invest.: D ROY
Tech. Officer: GRC/M A MEADER
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2608 **UNIV OF MISSOURI - ROLLA** **6308**
 SECOND-LAW BASED PERFORMED OF AEROSPACE TURBOSHAFT ENGINES & ENGINE COMPONENTS
 05/11/2001 - 06/30/2002 FY02: \$0 Total: \$59,999
Prin. Invest.: D W RIGGINS
Tech. Officer: GRC/D THURMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2718 **UNIV OF MISSOURI - ROLLA** **6309**
 TURBOFAN NOISE PROPAGATION AND RADIATION AT HIGH FREQUENCIES
 02/22/2002 - 09/30/2003 FY02: \$66,951 Total: \$66,951
Prin. Invest.: W EVERSMA
Tech. Officer: GRC/D KOCH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12244 **UNIV OF MISSOURI - ROLLA** **6310**
 SEX, SPACE AND ENVIRONMENTAL ADAPTATION: A NATIONAL WORKSHOP TO DEFINE RESEARCH PRIORITIES REGARDING
 05/30/2002 - 05/31/2003 FY02: \$99,486 Total: \$99,486
Prin. Invest.: M HAY
Tech. Officer: GSFC/L CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12589 **UNIV OF MISSOURI - ROLLA** **6311**
 DESIGN AND TEST OF A TETHERED PAIR OF SATELLITES: EQUIPMENT REQUIREMENTS
 09/19/2002 - 11/14/2002 FY02: \$19,580 Total: \$19,580
Prin. Invest.: H J PERNICKA
Tech. Officer: GSFC/J A LEITNER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 8 1465 **UNIV OF MISSOURI - ROLLA** **6312**
 KINETICS OF NUCLEATION AND CRYSTAL GROWTH IN GLASS FORMING METALS IN MICROGRAVITY
 02/10/1998 - 02/14/2004 FY02: \$169,000 Total: \$786,880
Prin. Invest.: D E DAY, C S RAY
Tech. Officer: MSFC/M PURVEY
CASE Category: 13 – PHYSICS

NAG 8 1805 **UNIV OF MISSOURI - ROLLA** **6313**
 ROBUST ADAPTIVE CRITIC BASED NEUROCONTROLLERS FOR REUSABLE LAUNCH VEHICLES
 07/25/2001 - 07/31/2002 FY02: \$0 Total: \$34,999
Prin. Invest.: S N BALAKRISHNAN
Tech. Officer: MSFC/D KRUPP, MSFC/C HALL
CASE Category: 46 – MECHANICAL ENGR

NCC 2 5419 **UNIV OF MISSOURI - ROLLA** **6314**
 ADAPTIVE CRITIC BASED RECONFIGURABLE CONTROLLER
 02/14/2001 - 01/31/2003 FY02: \$60,000 Total: \$120,000
Prin. Invest.: S N BALAKRISHNAN
Tech. Officer: GSFC/J J TOTAH
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5423 **UNIV OF MISSOURI - ROLLA** **6315**
 AN ANALYTICAL METHOD FOR DESIGN & MANUFACTURING TO CAPTURE POTENTIAL FAILURE MODES IN HIGH RISK AE
 02/26/2001 - 02/28/2003 FY02: \$51,748 Total: \$102,388
Prin. Invest.: R B STONE
Tech. Officer: ARC/I Y TUMER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5490 **UNIV OF MISSOURI - ROLLA** **6316**
 PREDICTING AND SIMULATING MONITORED FAILURE SIGNALS: COMPUTATION AND EXPERIMENTATION
 05/21/2002 - 05/31/2003 FY02: \$26,500 Total: \$26,500
Prin. Invest.: D A MCADAMS
Tech. Officer: ARC/I Y TUMER, ARC/S LAU
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 40060 **UNIV OF MISSOURI - ROLLA** **6317**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATIONAL AND FELLOWSHIP PROGRAM.
 03/04/1997 - 02/28/2001 FY02: -\$59,870 Total: \$747,630
Prin. Invest.: F FINIASH
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40112 **UNIV OF MISSOURI - ROLLA** **6318**
 MISSOURI SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$272,370 Total: \$484,870
Prin. Invest.: F FINIASH
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52916 **UNIV OF MISSOURI - ROLLA** **6319**
 ROBUST NONLINEAR GUIDANCE/CONTROL FOR REUSABLE LAUNCH VEHICLES
 05/30/2002 - 07/01/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S N BALAKRISHNAN
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2592	UNIV OF MISSOURI - SAINT LOUIS	6320	NAG 5 4098	WASHINGTON UNIV - ST. LOUIS	6329
THE THERMO-CHEMISTRY OF HIGH ENERGY DENSITY MISSILE FUELS			ISOTOPIC STRUCTURES AND FINE-SCALE CHRONOLOGY IN P		
04/23/2001 - 02/28/2002	FY02: \$0	Total: \$30,000	06/23/1997 - 03/31/2002	FY02: \$0	Total: \$427,000
<i>Prin. Invest.:</i> J CHICKOS			<i>Prin. Invest.:</i> D A PODOSEK		
<i>Tech. Officer:</i> GRC/M J ZEHE			<i>Tech. Officer:</i> HQ/J BOYCE		
<i>CASE Category:</i> 12 – CHEMISTRY			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 3 2797	UNIV OF MISSOURI - SAINT LOUIS	6321	NAG 5 4173	WASHINGTON UNIV - ST. LOUIS	6330
THE THERMOCHEMISTRY OF HIGH ENERGY DENSITY MISSILE FUELS			LUNAR AND PLANETARY SURFACE DYNAMICS AND EARLY HIS		
07/26/2002 - 09/30/2002	FY02: \$9,946	Total: \$9,946	06/02/1997 - 12/14/2000	FY02: -\$187	Total: \$644,813
<i>Prin. Invest.:</i> J S CHICKOS			<i>Prin. Invest.:</i> D HOHENBERG		
<i>Tech. Officer:</i> GRC/M ZEHE			<i>Tech. Officer:</i> GSFC/J BOYCE		
<i>CASE Category:</i> 12 – CHEMISTRY			<i>CASE Category:</i> 12 – CHEMISTRY		
NAG 5 12013	UNIV OF MISSOURI - SAINT LOUIS	6322	NAG 5 4435	WASHINGTON UNIV - ST. LOUIS	6331
METHANE AND AMMONIA OVERTONE ABSORPTION SPECTRA			PARTICIPATION IN THE DATA ANALYSIS AND SCIENCE ACT ORBITING		
04/22/2002 - 04/30/2005	FY02: \$82,324	Total: \$82,324	LASER ALTIMETER (MOLA) & THE MARS GLOBAL		
<i>Prin. Invest.:</i> J J O'BRIEN			04/28/1997 - 12/31/2002	FY02: \$0	Total: \$560,000
<i>Tech. Officer:</i> GSFC/J HILLMAN			<i>Prin. Invest.:</i> R J PHILLIPS		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>Tech. Officer:</i> GSFC/D E SMITH		
			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 2 1457	WASHINGTON UNIV - ST. LOUIS	6323	NAG 5 4448	WASHINGTON UNIV - ST. LOUIS	6332
DEFORMABLE WAKE DYNAMICS FOR IMPROVED MANEUVERING FLIGHT SIMULATION			PLANETARY INTERIOR MODELLING AND TECTONIC IMPLICAT		
03/07/2001 - 07/31/2003	FY02: \$43,750	Total: \$87,571	05/08/1997 - 12/31/2002	FY02: \$118,800	Total: \$672,950
<i>Prin. Invest.:</i> D A PETERS			<i>Prin. Invest.:</i> D J PHILLIPS		
<i>Tech. Officer:</i> ARC/C TUNG, ARC/T MAIER			<i>Tech. Officer:</i> GSFC/P ROGERS		
<i>CASE Category:</i> 46 – MECHANICAL ENGR			<i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE		
NAG 2 1493	WASHINGTON UNIV - ST. LOUIS	6324	NAG 5 4564	WASHINGTON UNIV - ST. LOUIS	6333
MULTISENSORY INTERACTIONS TO DISCRIMINATE GRAVITY FROM TRANS-LATIONAL ACCELERATIONS			KINETICS OF THERMOCHEMICAL REACTIONS IMPORTANT IN SULFUR CYCLE		
07/31/2001 - 06/30/2003	FY02: \$349,535	Total: \$538,366	05/29/1997 - 12/31/2002	FY02: \$0	Total: \$343,206
<i>Prin. Invest.:</i> D E ANGELAKI			<i>Prin. Invest.:</i> D FEGLEY		
<i>Tech. Officer:</i> ARC/M M AVERNER, ARC/R D MACELROY			<i>Tech. Officer:</i> GSFC/D BOGAN		
<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)			<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE		
NAG 2 1500	WASHINGTON UNIV - ST. LOUIS	6325	NAG 5 4565	WASHINGTON UNIV - ST. LOUIS	6334
EVOLUTION OF ANTHROPOD NEURAL PATTERN			CHEMICAL WEATHERING KINETICS OF BASALT ON VENUS		
07/06/2001 - 06/30/2003	FY02: \$154,731	Total: \$230,954	05/30/1997 - 02/14/2002	FY02: \$0	Total: \$227,838
<i>Prin. Invest.:</i> J B SKEATH			<i>Prin. Invest.:</i> D FEGLEY		
<i>Tech. Officer:</i> ARC/M M AVERNER			<i>Tech. Officer:</i> GSFC/D BOGAN		
<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)			<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE		
NAG 3 1910	WASHINGTON UNIV - ST. LOUIS	6326	NAG 5 5078	WASHINGTON UNIV - ST. LOUIS	6335
GAS - PHASE COMBUSTION SYNTHESIS OF METAL AND ERAM IC NANO-PARTICLES			BASIC RESEARCH ON THE COMPOSITION OF HEAVY COSMIC RAYS: TIGER		
06/24/1996 - 06/22/2001	FY02: \$0	Total: \$288,238	05/03/1996 - 05/31/2002	FY02: \$0	Total: \$1,812,700
<i>Prin. Invest.:</i> R L AXELBAUM, B H CHAO			<i>Prin. Invest.:</i> R W BINNS		
<i>Tech. Officer:</i> GRC/S A GOKOGLE			<i>Tech. Officer:</i> GSFC/H C NEDDLEMAN, GSFC/B A MERRITT		
<i>CASE Category:</i> 49 – ENGINEERING, OTHER			<i>CASE Category:</i> 13 – PHYSICS		
NAG 3 2625	WASHINGTON UNIV - ST. LOUIS	6327	NAG 5 5110	WASHINGTON UNIV - ST. LOUIS	6336
DEVELOPMENT OF A MICROSCALE PARTICULATE CLASSIFIER (MIPAC)			DEVELOPMENT OF SIFTER WITH SIMULTANEOUS TRACKING AND CALORIMETRY		
06/01/2001 - 12/31/2002	FY02: \$45,000	Total: \$70,000	02/12/1997 - 05/31/2001	FY02: \$0	Total: \$410,000
<i>Prin. Invest.:</i> D CHEN			<i>Prin. Invest.:</i> R BINNS		
<i>Tech. Officer:</i> GRC/P S GREENBERG			<i>Tech. Officer:</i> GSFC/H NEEDLEMAN		
<i>CASE Category:</i> 49 – ENGINEERING, OTHER			<i>CASE Category:</i> 13 – PHYSICS		
NAG 5 3657	WASHINGTON UNIV - ST. LOUIS	6328	NAG 5 5154	WASHINGTON UNIV - ST. LOUIS	6337
STRUCTURE AND EVOLUTION OF OUTER PLANET SATELLITES			ULTRA HEAVY AND HEAVY COSMIC-RAY MEASUREMENTS ON ACCESS		
03/19/1997 - 10/31/2002	FY02: \$0	Total: \$151,632	03/26/1998 - 06/30/2001	FY02: \$0	Total: \$112,160
<i>Prin. Invest.:</i> W B MCKINNON			<i>Prin. Invest.:</i> W R BINNS		
<i>Tech. Officer:</i> GSFC/P G ROGERS			<i>Tech. Officer:</i> GSFC/H NEEDLEMAN		
<i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE			<i>CASE Category:</i> 13 – PHYSICS		

MISSOURI

NASA'S UNIVERSITY PROGRAM

NAG 5 5215 **WASHINGTON UNIV - ST. LOUIS** **6338**
 A PROPOSAL FOR CONVERSION OF THE TRANS-IRON GALACTIC ELEMENT
 RECORDER (TIGER) PIHINK
 12/01/1998 - 11/30/2002 FY02: \$0 Total: \$529,732
Prin. Invest.: P HINK
Tech. Officer: GSFC/B MERRITT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 5296 **WASHINGTON UNIV - ST. LOUIS** **6339**
 SIFTER SCINTILLATING FIBER TELESCOPE FOR ENERGETIC
 06/12/2000 - 06/30/2002 FY02: \$0 Total: \$64,000
Prin. Invest.: W R BINNS
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5343 **WASHINGTON UNIV - ST. LOUIS** **6340**
 BASIC RESEARCH ON THE COMPOSITION OF HEAVY COSMIC RAYS - THE
 TRANS-IRON GALACTICELEMENT RECORDER EX
 01/17/2002 - 11/30/2004 FY02: \$472,000 Total: \$472,000
Prin. Invest.: R BINNS
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5357 **WASHINGTON UNIV - ST. LOUIS** **6341**
 CONTINUED DEVELOPMENT OF SCINTILLATING FIBER DETEC TORS FOR
 GAMMA-RAY ASTRONOMY.
 08/05/2002 - 04/30/2003 FY02: \$61,000 Total: \$61,000
Prin. Invest.: R BINNS
Tech. Officer: WFF/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 6125 **WASHINGTON UNIV - ST. LOUIS** **6342**
 ACOUSTIC COMPOSITION EXPERIMENT FOR DETERMINING H2 RATIO IN
 THE ATMOSPHERES OF THE JOVIAN PLANETS
 08/04/1997 - 07/14/2003 FY02: \$0 Total: \$467,327
Prin. Invest.: D FEGLEY
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6366 **WASHINGTON UNIV - ST. LOUIS** **6343**
 CHEMICAL MODELS OF THE PRESENT AND PRIMORDIAL ATMO GIANT
 PLANETS JUPITER, SATURN, URANUS AND NEPTUNE
 09/22/1997 - 12/31/2002 FY02: \$0 Total: \$283,926
Prin. Invest.: D FEGLEY
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7140 **WASHINGTON UNIV - ST. LOUIS** **6344**
 OPTICAL DESIGN AND BREADBOARD OF A RAMAN SPECTROME TER
 03/13/1998 - 03/31/2001 FY02: \$0 Total: \$267,726
Prin. Invest.: L HASKIN
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 11 – ASTRONOMY

NAG 5 7613 **WASHINGTON UNIV - ST. LOUIS** **6345**
 DYNAMICS OF WETLANDS AMONG ENGINEERED PORTIONS OF MISSOURI
 RIVER SYSTEM
 07/22/1998 - 01/31/2002 FY02: \$0 Total: \$360,000
Prin. Invest.: R E ARVIDSON
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7696 **WASHINGTON UNIV - ST. LOUIS** **6346**
 HYDROTHERMAL ECOSYSTEMS IN A PLANETARY CONTEXT
 09/17/1998 - 01/31/2002 FY02: \$0 Total: \$425,728
Prin. Invest.: E L SHOCK
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8056 **WASHINGTON UNIV - ST. LOUIS** **6347**
 DEFORMATION OF THE EUROPEAN ICE SHELL BY TIDAL AND CONVECTION
 STRESSES
 01/15/1999 - 01/31/2003 FY02: \$0 Total: \$103,000
Prin. Invest.: W B MCKINNON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8336 **WASHINGTON UNIV - ST. LOUIS** **6348**
 SOLID STATE AND MASS SPECTROMETRIC MEASUREMENT OF EXTRATER-
 RESTRIAL MATERIALS
 02/24/1999 - 02/28/2003 FY02: \$0 Total: \$1,981,000
Prin. Invest.: T J BERNATOWICZ
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8536 **WASHINGTON UNIV - ST. LOUIS** **6349**
 DEVELOPMENT OF HIGH QUANTUM EFFICIENCY UV/BLUE PHO TOCATH-
 ODE EPITAXIAL SEMICONDUCTOR HETEROSTRUCTURE
 07/08/1999 - 07/14/2002 FY02: \$0 Total: \$576,028
Prin. Invest.: D LEOPOLD
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 12 – CHEMISTRY

NAG 5 8568 **WASHINGTON UNIV - ST. LOUIS** **6350**
 THE HIGH ENERGY X-RAY IMAGING SURVEY (HEXIS)
 05/24/1999 - 05/31/2001 FY02: \$0 Total: \$45,000
Prin. Invest.: P L HINK
Tech. Officer: GSFC/L KALUZIENSKI
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8609 **WASHINGTON UNIV - ST. LOUIS** **6351**
 SYNTHESIZING LUNAR PROSPECTOR, CLEMENTINE, AND APO LLO
 GEOCHEMICAL DATA TO UNDERSTAND THE GEOLOGY O
 06/10/1999 - 06/30/2003 FY02: \$0 Total: \$176,000
Prin. Invest.: R L KOROTEV
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8717 **WASHINGTON UNIV - ST. LOUIS** **6352**
 GLOBAL CHEMICAL REACTOR OF PROTOPLANETARY DISK
 08/10/1999 - 07/31/2002 FY02: \$0 Total: \$68,000
Prin. Invest.: J T GLEAVES
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8729 **WASHINGTON UNIV - ST. LOUIS** **6353**
 PURCHASE AND INSTALLATION OF NANOSIMS 50
 08/10/1999 - 07/31/2002 FY02: \$0 Total: \$1,083,000
Prin. Invest.: R M WALKER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8899 **WASHINGTON UNIV - ST. LOUIS** **6354**
 DEFORMATION OF THE EUROPEAN ICE SHELL BY TIDAL AND CONVECTIVE
 STRESSES: CONSTRAINTS FROM GEM DATA
 01/13/2000 - 01/31/2003 FY02: \$0 Total: \$69,000
Prin. Invest.: W MCKINNON
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8905 **WASHINGTON UNIV - ST. LOUIS** **6355**
 COMPOSITION, LITHOLOGY, AND HETEROGENEITY OF THE LUNAR CRUST
 USING REMOTE-SENSING OF IMPACT-BASIN
 01/21/2000 - 01/31/2003 FY02: \$38,600 Total: \$112,700
Prin. Invest.: B L JOLLIFF
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9442 **WASHINGTON UNIV - ST. LOUIS** **6356**
 LUNAR & PLANETARY SURFACE DYNAMICS & EARLY HISTORY
 04/14/2000 - 12/14/2002 FY02: \$220,000 Total: \$661,000
Prin. Invest.: C M HOHENBERG
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9449 **WASHINGTON UNIV - ST. LOUIS** **6357**
 STUDIES OF PRESOLAR MATERIALS AND SOLAR NEBULA STRUCTURE AND
 EVOLUTION
 04/12/2000 - 04/30/2003 FY02: \$82,000 Total: \$238,000
Prin. Invest.: F PODOSEK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9801 **WASHINGTON UNIV - ST. LOUIS** **6358**
 ORIGIN & EVOLUTION OF THE SOLAR SYSTEM: MICROANALYTICAL
 STUDIES OF METEORITES & INTERPLANETARY DUST
 07/14/2000 - 02/28/2003 FY02: \$195,000 Total: \$582,000
Prin. Invest.: R M WALKER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10158 **WASHINGTON UNIV - ST. LOUIS** **6359**
 WASHINGTON UNIV-REGIONAL PLANETARY IMAGE FACILITY
 12/18/2000 - 12/31/2003 FY02: \$21,300 Total: \$45,773
Prin. Invest.: R ARVIDSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10186 **WASHINGTON UNIV - ST. LOUIS** **6360**
 SPACE-BASED GRAVITATIONAL-WAVE OBSERVATIONS AS TOOLS FOR
 TESTING GENERAL RELATIVITY
 12/20/2000 - 12/31/2003 FY02: \$67,000 Total: \$132,000
Prin. Invest.: C M WILL
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10190 **WASHINGTON UNIV - ST. LOUIS** **6361**
 HYDROGEOLOGY OF BASINS ON MARS
 01/03/2001 - 01/14/2002 FY02: \$0 Total: \$138,000
Prin. Invest.: R E ARVIDSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10227 **WASHINGTON UNIV - ST. LOUIS** **6362**
 INTEGRATED STUDY OF THE GEOLOGY, COMPOSITION, & ORIGIN OF
 LUNAR MARE BASALTS
 01/04/2001 - 01/14/2004 FY02: \$35,500 Total: \$70,500
Prin. Invest.: B JOLLIFF
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10426 **WASHINGTON UNIV - ST. LOUIS** **6363**
 THE HISTORY OF PRESOLAR GRAINS
 02/16/2001 - 02/28/2004 FY02: \$390,000 Total: \$776,000
Prin. Invest.: T BERNATOWICZ
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10485 **WASHINGTON UNIV - ST. LOUIS** **6364**
 GEOCHEMICAL & PETROLOGIC ANALYSIS & MODELING OF LUNAR ROCKS
 & REGOLITHS
 03/06/2001 - 03/14/2004 FY02: \$255,000 Total: \$505,000
Prin. Invest.: L HASKIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10513 **WASHINGTON UNIV - ST. LOUIS** **6365**
 ISOTOPIC STRUCTURES & FINE-SCALE CHRONOLOGY IN PLANETARY
 MATERIALS
 03/05/2001 - 03/31/2004 FY02: \$114,000 Total: \$228,000
Prin. Invest.: F PODOSEK
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10533 **WASHINGTON UNIV - ST. LOUIS** **6366**
 MAJOR EQUIPMENT: GAMMA-RAY DETECTORS FOR NEUTRON ACTIVATION
 ANALYSIS ASSOCIATED WITH PROPOSAL "GE
 04/06/2001 - 08/31/2002 FY02: \$0 Total: \$44,200
Prin. Invest.: L HASKIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10553 **WASHINGTON UNIV - ST. LOUIS** **6367**
 KINETICS OF THERMOCHEMICAL GAS-SOLID REACTIONS IMPORTANT FOR
 VOLATILE RETENTION IN THE SOLAR NE
 03/09/2001 - 03/14/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: B FEGLEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10703 **WASHINGTON UNIV - ST. LOUIS** **6368**
 ENHANCED LASER RAMAN SPECTROSCOPY FOR PLANETARY ON
 -SURFACE MINERALOGY, PETROLOGY, AND DETECTION OF
 04/09/2001 - 03/31/2004 FY02: \$189,414 Total: \$376,088
Prin. Invest.: L HASKIN
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 10802 **WASHINGTON UNIV - ST. LOUIS** **6369**
 CONCEPT STUDY FOR THE "THE HEAVY NUCLEI EXPLORER" (HNX)
 MISSION AO-99-OSS-05
 04/30/2001 - 04/30/2002 FY02: \$0 Total: \$127,300
Prin. Invest.: W BINNS
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

MISSOURI

NASA'S UNIVERSITY PROGRAM

NAG 5 11037 **WASHINGTON UNIV - ST. LOUIS** **6370**
 KINETICS OF THE THERMOCHEMICAL REACTIONS IMPORTANT IN THE
 VENUS ATMOSPHERIC SULFUR CYCLE
 06/12/2001 - 06/14/2002 FY02: \$0 Total: \$93,000
Prin. Invest.: B FEGLEY
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11050 **WASHINGTON UNIV - ST. LOUIS** **6371**
 CHEMICAL WEATHERING REACTIONS ON VENUS
 06/18/2001 - 05/31/2004 FY02: \$63,000 Total: \$123,000
Prin. Invest.: B FEGLEY, JR
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11202 **WASHINGTON UNIV - ST. LOUIS** **6372**
 INTEGRATED GEODYNAMICAL AND HYDROGEOLOGICAL HISTORY OF
 MARS
 08/14/2001 - 08/14/2004 FY02: \$65,000 Total: \$130,000
Prin. Invest.: R J PHILLIPS
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11517 **WASHINGTON UNIV - ST. LOUIS** **6373**
 STRUCTURE AND EVOLUTION OF OUTER PLANET SATELLITES
 12/31/2001 - 12/31/2004 FY02: \$51,400 Total: \$51,400
Prin. Invest.: W B MCKINNON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11545 **WASHINGTON UNIV - ST. LOUIS** **6374**
 ISOTOPIC STUDIES OF STARDUST
 01/04/2002 - 02/28/2005 FY02: \$415,000 Total: \$415,000
Prin. Invest.: E ZINNER
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11574 **WASHINGTON UNIV - ST. LOUIS** **6375**
 PARTICIPATION IN THE DATA ANALYSIS AND SCIENCE ACTIVITIES OF THE
 MARS ORBITING LASER ALTIMETER (MGS)
 01/07/2002 - 12/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: R PHILLIPS
Tech. Officer: GSFC/D E SMITH
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11620 **WASHINGTON UNIV - ST. LOUIS** **6376**
 DYNAMICS OF DURICRUST ON MARS
 01/22/2002 - 01/31/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: R E ARVIDSON
Tech. Officer: GSFC/D S SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11865 **WASHINGTON UNIV - ST. LOUIS** **6377**
 DEVELOPMENT OF NEW ANALYTICAL TECHNIQUES FOR THE MICROANALYSIS
 OF EXTRATERRESTRIAL MATERIALS
 03/20/2002 - 03/31/2005 FY02: \$314,000 Total: \$314,000
Prin. Invest.: F S STADERMANN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11958 **WASHINGTON UNIV - ST. LOUIS** **6378**
 CHEMICAL MODELS OF THE GAS GIANT PLANETS
 04/02/2002 - 03/31/2005 FY02: \$66,651 Total: \$66,651
Prin. Invest.: B FEGLEY
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12114 **WASHINGTON UNIV - ST. LOUIS** **6379**
 REDUCED CARBON AND WATER SEEKER: A SURVEY INSTRUMENT
 04/26/2002 - 04/30/2004 FY02: \$168,998 Total: \$168,998
Prin. Invest.: A WANG
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1682 **WASHINGTON UNIV - ST. LOUIS** **6380**
 "STUDIES OF NUCLEATION AND GROWTH, SPECIFIC HEAT AND VISCOSITY
 OF UNDER COOLED MELTS OF ALLOYS"
 05/01/2000 - 11/30/2003 FY02: \$189,000 Total: \$428,579
Prin. Invest.: K F KELTON
Tech. Officer: MSFC/P DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1006 **WASHINGTON UNIV - ST. LOUIS** **6381**
 GENESIS: NOBLE GAS MEASUREMENTS PHASE B
 04/29/1998 - 07/31/2003 FY02: \$271,500 Total: \$516,400
Prin. Invest.: C M HOHENBERG
Tech. Officer: JSC/K E CYR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1010 **WASHINGTON UNIV - ST. LOUIS** **6382**
 GENESIS DISCOVERY MISSION
 05/05/1998 - 11/08/2002 FY02: \$0 Total: \$56,600
Prin. Invest.: F A PODOSEK
Tech. Officer: JSC/E K STANSBERY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 3 00094 **WASHINGTON UNIV - ST. LOUIS** **6383**
 NRA CONTRACT FOR "SEARCH FOR EFFECTS OF ELECTROSTATIC
 POTENTIAL ON CLOCKS IN THE FRAME OF REFERENCE"
 12/27/1999 - 12/26/2000 FY02: \$0 Total: \$99,985
Prin. Invest.: M S CONRAD, H I RINGERMACHER
Tech. Officer: GRC/M MILLIS
CASE Category: 13 – PHYSICS

NCC 3 697 **WASHINGTON UNIV - ST. LOUIS** **6384**
 FLAME DESIGN - A NOVEL APPROACH TO CLEAN, EFFICIENT DIFFUSION
 FLAMES
 03/26/1999 - 01/13/2003 FY02: \$66,150 Total: \$252,182
Prin. Invest.: R L AXELBAUM
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 777 **WASHINGTON UNIV - ST. LOUIS** **6385**
 OPTIMIZING THE CORBA COMPONENT MODEL FOR HIGH-PERFORMANCE
 AND REAL-TIME APPLICATIONS
 02/24/2000 - 01/20/2003 FY02: \$0 Total: \$100,842
Prin. Invest.: D L LEVINE
Tech. Officer: GRC/R W CLAUS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 8 85 **WASHINGTON UNIV - ST. LOUIS** **6386**
 COMPOSITION EFFECTS ON PHASE FORMATION & STABILITY
 04/22/1996 - 04/21/2001 FY02: -\$11 Total: \$467,389
Prin. Invest.: K F KELTON
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 8 154 **WASHINGTON UNIV - ST. LOUIS** **6387**
 COOPERATIVE AGREEMENT ENTITLED "IMAGING CALORIMETER FOR ACCESS (ICA)"
 07/10/1998 - 07/09/2001 FY02: \$0 Total: \$119,600
Prin. Invest.: P L HINK, M H ISRAEL, R W BINNS
Tech. Officer: MSFC/M CHRISTI, MSFC/M J CHRISTL
CASE Category: 11 – ASTRONOMY

NGT 5 50170 **WASHINGTON UNIV - ST. LOUIS** **6388**
 GRADUATE STUDENT RESEARCH IN X-RAY ASTRONOMY
 05/22/1998 - 06/30/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: P L HINK
Tech. Officer: GSFC/K E BLANDING
CASE Category: 13 – PHYSICS

NGT 5 50240 **WASHINGTON UNIV - ST. LOUIS** **6389**
 GRADUATE STUDENT RSCH IN COSMIC RAY ASTROPHYSICS
 06/03/1999 - 06/30/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: M ISRAEL
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50348 **WASHINGTON UNIV - ST. LOUIS** **6390**
 HYDROTHERMAL ECOSYSTEMS AS ANALOGS IN THE STUDY OF ASTROBIOLOGY & EARLY LIFE ON EARTH/STUDENT: D. ME
 05/07/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J AMEND
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50386 **WASHINGTON UNIV - ST. LOUIS** **6391**
 STUDIES OF THE COMPOSITION OF HEAVY COSMIC RAYS (STUDENT: LAUREN SCOTT)
 06/03/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M ISRAEL
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50402 **WASHINGTON UNIV - ST. LOUIS** **6392**
 DYNAMICS OF A GTO-ESCAPE SOLAR SAIL
 06/12/2002 - 06/30/2005 FY02: \$23,895 Total: \$23,895
Prin. Invest.: M SWARTOUT
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1851 **WILLIAM JEWELL COLL** **6393**
 MOLECULAR PROBE FLUORESCENCE MONITORING OF POLYMER ZATION
 09/27/2001 - 08/31/2002 FY02: \$0 Total: \$27,957
Prin. Invest.: P BUNTON
Tech. Officer: MSFC/M P BODIFORD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MONTANA

NAG 2 1323 **MONTANA STATE UNIV** **6394**
 SPATIO-SPECTRAL HOLOGRAPHY FOR HIGH BANDWIDTH CORR ELATORS
 04/29/1999 - 04/30/2003 FY02: \$2,000,000 Total: \$7,096,000
Prin. Invest.: L H SPANGLER
Tech. Officer: ARC/V C VANDERBILT, ARC/D KOGA
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 4576 **MONTANA STATE UNIV** **6395**
 CENTER FOR EDUCATIONAL RESOURCES
 05/13/1997 - 05/31/2001 FY02: \$0 Total: \$999,975
Prin. Invest.: G TUTHILL
Tech. Officer: GSFC/M V PHELPS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 6110 **MONTANA STATE UNIV** **6396**
 MAGNETIC HELICITY AND THE SOLAR DYNAMO
 07/28/1997 - 07/31/2003 FY02: \$0 Total: \$975,776
Prin. Invest.: D CANFIELD
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 8807 **MONTANA STATE UNIV** **6397**
 CENTER FOR STUDYING LIFE IN EXTREME ENVIRONMENTS
 09/03/1999 - 08/31/2004 FY02: \$0 Total: \$7,002,000
Prin. Invest.: T R MCDERMOTT
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8824 **MONTANA STATE UNIV** **6398**
 MOLECULAR AND GEOCHEMICAL ANALYSIS OF HOT SPRING CYANOBACTERIAL & CHLOROFLEXUS MATS AS STROMATOLITE
 09/22/1999 - 10/31/2002 FY02: \$100,000 Total: \$294,200
Prin. Invest.: D M WARD
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9300 **MONTANA STATE UNIV** **6399**
 MONITORING FOREST RESPONSE TO PAST & FUTURE GLOBAL CHANGE IN GREATER YELLOWSTONE
 04/07/2000 - 04/30/2003 FY02: \$108,178 Total: \$315,346
Prin. Invest.: A HANSEN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9806 **MONTANA STATE UNIV** **6400**
 CHANGING LANDSCAPED IN RURAL AMERICA
 07/13/2000 - 08/31/2001 FY02: \$0 Total: \$15,000
Prin. Invest.: A HANSEN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10489 **MONTANA STATE UNIV** **6401**
 THE X-RAY BRIGHT POINT: A CASE STUDY IN RECONNECTI ON
 03/07/2001 - 02/28/2006 FY02: \$88,097 Total: \$179,126
Prin. Invest.: D LONGCOPE
Tech. Officer: GSFC/W WALTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

MONTANA

NASA'S UNIVERSITY PROGRAM

NAG 5 10997 **MONTANA STATE UNIV** **6402**
 MOSES: A SLITLESS MULTI-ORDER SOLAR EXTREME ULTRA VIOLET
 SPECTROGRAPH FOR FAST IMAGING SPECTROSCOPY
 06/08/2001 - 05/31/2004 FY02: \$298,179 Total: \$546,301
Prin. Invest.: C C KANKELBORG
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11158 **MONTANA STATE UNIV** **6403**
 LAND USE LAND CHANGE AROUND PROTECTED AREAS IN LCLUC SITES:
 SYNTHESIS OF RATES, CONSEQUENCES FOR
 08/01/2001 - 08/14/2004 FY02: \$103,011 Total: \$164,436
Prin. Invest.: A HANSEN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11467 **MONTANA STATE UNIV** **6404**
 EXPERIMENTAL TESTS OF RELATIVITY
 12/13/2001 - 12/14/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: R HELLINGS
Tech. Officer: GSFC/M SALAMON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11469 **MONTANA STATE UNIV** **6405**
 SPECTRUM OF CONTINUOUS GRAVIATATIONAL WAVE BACKGRO UND
 12/13/2001 - 12/14/2002 FY02: \$95,000 Total: \$95,000
Prin. Invest.: R HELLINGS
Tech. Officer: GSFC/M SALAMON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11873 **MONTANA STATE UNIV** **6406**
 MAGNETIC HELICITY AND THE SOLAR DYNAMO
 03/15/2002 - 07/31/2005 FY02: \$140,000 Total: \$140,000
Prin. Invest.: R C CANFIELD
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 12079 **MONTANA STATE UNIV** **6407**
 THERMAL EVOLUTION AND RELATED PROBLEMS OF NEUTRON STARS
 05/07/2002 - 04/30/2005 FY02: \$50,208 Total: \$50,208
Prin. Invest.: S TSURUTA
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12081 **MONTANA STATE UNIV** **6408**
 DESIGNS FOR A VIRTUAL SOLAR OBSERVATORY
 04/23/2002 - 10/31/2002 FY02: \$41,919 Total: \$41,919
Prin. Invest.: P MARTENS
Tech. Officer: GSFC/J GURMAN
CASE Category: 11 – ASTRONOMY

NAG 8 1399 **MONTANA STATE UNIV** **6409**
 LARGE SCALE ORGANIZATION OF ACTIVE REGION MAGNETIC FIELDS
 08/11/1997 - 08/10/2002 FY02: \$0 Total: \$184,330
Prin. Invest.: R C CANFIELD
Tech. Officer: MSFC/M J HAGYARD, MSFC/G A GARY
CASE Category: 11 – ASTRONOMY

NAG 9 1082 **MONTANA STATE UNIV** **6410**
 RAPID BACTERIAL TESTING FOR SPACECRAFT WATER
 03/03/1999 - 03/31/2003 FY02: \$128,145 Total: \$414,423
Prin. Invest.: B H PYLE
Tech. Officer: JPL/D JAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1073 **MONTANA STATE UNIV** **6411**
 COMPARATIVE STUDIES OF MICROBIAL MATS: COMM COMPOSITION,
 PHYSIOLOGICAL & ORGANIC GEOCHEMICAL P
 12/08/1998 - 12/31/2003 FY02: \$61,492 Total: \$216,946
Prin. Invest.: D M WARD
Tech. Officer: ARC/D J DES MARAIS, ARC/B BEBOUT
CASE Category: 54 – ENVIRONMENTALBIOLOGY

NCC 2 1143 **MONTANA STATE UNIV** **6412**
 BACTERIAL PHYSIOLOGY & VIRULENCE ON EARTH & IN MIC ROGRAVITY
 09/19/1999 - 08/31/2003 FY02: \$69,778 Total: \$395,399
Prin. Invest.: B H PYLE
Tech. Officer: ARC/M F VASQUES, ARC/P D SAVAGE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1181 **MONTANA STATE UNIV** **6413**
 STUDENT-MENTOR PROJECTS IN SUPPORT OF NASA SHARP PROGRAM
 EXPERIMENTS
 05/23/2000 - 12/31/2001 FY02: \$0 Total: \$91,357
Prin. Invest.: D CAIRNS
Tech. Officer: ARC/P KOLODZIEJ, ARC/D J RASKY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5437 **MONTANA STATE UNIV** **6414**
 A MINIATURE RAMAN SPECTROMETER FOR FIELD EVALUATIO N IN
 ANTARCTICA AS AN ANALOGUE OF PUTATIVE MARTIA
 06/25/2001 - 05/31/2002 FY02: \$0 Total: \$72,607
Prin. Invest.: D L DICKENSHEETS
Tech. Officer: ARC/R A GRAYMES, ARC/W W DOLCI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 5445 **MONTANA STATE UNIV** **6415**
 EFFECTS OF STAND-REPLACING FIRE ON MYCORRHIZAL COM MUNITIES
 07/16/2001 - 06/30/2003 FY02: \$90,000 Total: \$184,660
Prin. Invest.: J HENSON
Tech. Officer: ARC/K CULLINGS, ARC/M H NEW
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NCC 5 240 **MONTANA STATE UNIV** **6416**
 MONTANA EPSCOR PROGRAM
 09/12/1997 - 02/28/2002 FY02: \$0 Total: \$1,800,000
Prin. Invest.: W HISCOCK
Tech. Officer: GSFC/D DETROYE
CASE Category: 11 – ASTRONOMY

NCC 5 410 **MONTANA STATE UNIV** **6417**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/18/1999 - 05/31/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: W HISCOCK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 579 **MONTANA STATE UNIV** **6418**
 MONTANA NASA EPSCOR PROGRAM
 08/17/2001 - 07/31/2004 FY02: \$0 Total: \$463,300
Prin. Invest.: W HISCOCK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NASA'S UNIVERSITY PROGRAM

MONTANA

NCC 9 44 **MONTANA STATE UNIV** **6419**
 TECHNOLOGY TRANSFER & COMMERCIALIZATION CTR FOR THE ROCKY
 MOUNTAINS & UPPER PLAINS
 06/01/1996 - 02/28/2003 FY02: \$400,000 Total: \$5,847,000
Prin. Invest.: W SWEARINGEN
Tech. Officer: JSC/K LASSMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 01012 **MONTANA STATE UNIV** **6420**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/15/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: V H SCHMIDT
Tech. Officer: LARC/J HARRISON
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 40092 **MONTANA STATE UNIV** **6421**
 MONTANA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/28/2001 - 02/28/2005 FY02: \$481,000 Total: \$1,036,617
Prin. Invest.: W HISCOCK
Tech. Officer: GSFC/D D DEROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50297 **MONTANA STATE UNIV** **6422**
 ECOLOGY & NITROGEN BIOGEOCHEMISTRY OF ANATARCTIC LAKE
 ICE/STUDENT: AARON D. HALL
 06/27/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: J C PRISCU
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9139 **MONTANA TECH OF THE UNIV OF MONTANA** **6423**
 STEP CAREERS IN RESEARCH EXPLORATION PROGRAM
 02/29/2000 - 02/28/2003 FY02: \$15,730 Total: \$47,460
Prin. Invest.: T MOON
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1890 **ROCKY MOUNTAIN COLL** **6424**
 FEEDBACK MECHANISMS AFFECTING INTERANNUAL VARI- ABILITY OF
 THE TROPICAL HYDROLOGIC CYCLE & ENERGY
 09/23/2002 - 09/30/2003 FY02: \$31,595 Total: \$31,595
Prin. Invest.: S MCDANIEL
Tech. Officer: MSFC/F ROBINSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9102 **SALISH KOOTENAI COLL** **6425**
 EARTH SYSTEM SCIENCE STUDENT RESEARCH EXPERIENCES AT SALISH
 KOOTENAI COLL
 03/02/2000 - 01/31/2003 FY02: \$92,757 Total: \$305,860
Prin. Invest.: T S OLSON
Tech. Officer: GSFC/N K HAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9147 **SALISH KOOTENAI COLL** **6426**
 NORTHERN ROCKY MOUNTAIN TRIBAL PATHWAY TO ACADEMIC EXCEL-
 LENCE PROGRAM
 03/03/2000 - 03/14/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: J M GOBERT
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9368 **SALISH KOOTENAI COLL** **6427**
 NASA NATIVE EARTH SYSTEMS SCIENCE CURRICULUM PROJECT (NESCP)
 04/03/2000 - 03/31/2003 FY02: \$155,813 Total: \$464,660
Prin. Invest.: J M GOBERT
Tech. Officer: GSFC/B MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9541 **SALISH KOOTENAI COLL** **6428**
 RELATIVISTIC DISSIPATIVE FLUID THEORIES OF NEUTRON STARS
 06/08/2000 - 06/14/2003 FY02: \$100,305 Total: \$148,356
Prin. Invest.: T OLSON
Tech. Officer: GSFC/D MENCHAN
CASE Category: 21 – MATHEMATICS

NAG 5 10144 **SALISH KOOTENAI COLL** **6429**
 ASTRONOMY & ASTROPHYSICS COURSE DEVELOPMENT AT SAL ISH
 KOOTENAI COLL
 12/11/2000 - 12/31/2002 FY02: \$12,852 Total: \$25,704
Prin. Invest.: T S OLSON
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 44 – CIVIL ENGR

NAG 5 12205 **SALISH KOOTENAI COLL** **6430**
 CENTER FOR REMOTE SENSING OF TRIBAL LANDS: NASA GO DDARD
 RESEARCH EXPERIENCE FOR SKU STUDENTS
 05/29/2002 - 05/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: T S OLSON
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1531 **UNIV OF MONTANA** **6431**
 UNDERSTANDING THE EFFECT OF LAND COVER CLASSIFICAT ION ON
 MODEL ESTIMATES OF REGIONAL CARBONCYCLING
 01/03/2002 - 12/14/2002 FY02: \$45,000 Total: \$45,000
Prin. Invest.: J S KIMBALL
Tech. Officer: ARC/C S POTTER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8599 **UNIV OF MONTANA** **6432**
 THE IMPACT OF VEGETATION CHANGES IN THE SAHEL ON REGIONAL
 SCALE HYDROLOGY
 06/21/1999 - 06/30/2002 FY02: \$0 Total: \$140,734
Prin. Invest.: S W RUNNING
Tech. Officer: GSFC/E G ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9062 **UNIV OF MONTANA** **6433**
 EARTH SCIENCE ENTERPRISE RESEARCH PROGRAM
 02/15/2000 - 02/14/2003 FY02: \$100,572 Total: \$300,247
Prin. Invest.: W R SNYDER
Tech. Officer: GSFC/B MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9332 **UNIV OF MONTANA** **6434**
 DEVELOPMENT SPRAWL IMPACTS ON THE TERRESTRIAL CARBON DYNAM-
 ICS OF THE UNITED STATES
 03/23/2000 - 04/30/2003 FY02: \$51,159 Total: \$129,032
Prin. Invest.: R NEMANI
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NEBRASKA

NASA'S UNIVERSITY PROGRAM

NAG 5 9333 **UNIV OF MONTANA** **6435**
 MONITORING BOREAL LANDCOVER AND ECOSYSTEM DYNAMICS AT REGIONAL SCALES USING INTEGRATED SPACEBORNE
 03/23/2000 - 04/30/2003 FY02: \$68,000 Total: \$102,000
Prin. Invest.: J KIMBALL
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11256 **UNIV OF MONTANA** **6436**
 A SATELLITE MICROWAVE REMOTE SENSING MEASURE OF HIGH LATITUDE GROWING SEASONS FOR IMPROVED ASSESS
 08/16/2001 - 08/31/2004 FY02: \$54,710 Total: \$220,062
Prin. Invest.: S RUNNING
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11255 **UNIV OF MONTANA** **6437**
 AUTOMATED TESTING AND QUANTITATIVE TESTING EVALUATION OF REAL-TIME SYSTEMS USING SIMULATION
 01/08/2002 - 01/14/2004 FY02: \$127,000 Total: \$127,000
Prin. Invest.: D HENRY
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12540 **UNIV OF MONTANA** **6438**
 EOS NATURAL RESOURCE/EDUCATION TRAINING CENTER
 09/04/2002 - 08/31/2005 FY02: \$1,750,000 Total: \$1,750,000
Prin. Invest.: S W RUNNING
Tech. Officer: GSFC/W TURNER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12624 **UNIV OF MONTANA** **6439**
 EOS EDUCATION PROJECT/CONGRESSIONAL EARMARK
 09/30/2002 - 09/30/2005 FY02: \$1,750,000 Total: \$1,750,000
Prin. Invest.: R VAN DEN POL
Tech. Officer: GSFC/W TURNER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1112 **UNIV OF MONTANA** **6440**
 INST FOR THE STUDY OF BIOMAKERS IN ASTROMATERIALS
 05/11/1999 - 05/13/2003 FY02: \$10,000 Total: \$48,353
Prin. Invest.: N C HINMAN
Tech. Officer: JSC/E K GIBSON
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG13 02002 **UNIV OF MONTANA** **6441**
 DEVELOPING A BIOSPHERIC NOWCAST AND FORECAST CAPABILITY FOR THE CONTERMINIOUS U.S.
 11/30/2001 - 09/28/2004 FY02: \$419,770 Total: \$419,770
Prin. Invest.: R NEMANI
Tech. Officer: SSC/C HALL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 31368 **UNIV OF MONTANA** **6442**
 EOS MODIS INVESTIGATION FROM DR. STEVE RUNNING
 01/07/1992 - 06/14/2003 FY02: \$432,000 Total: \$4,801,500
Prin. Invest.: S W RUNNING
Tech. Officer: GSFC/H OSEROFF
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1263 **UNIV OF MONTANA** **6443**
 INTELLIGENT PARAMETERIZATION & REAL-TIME EXECUTION OF ECOSYSTEM MODELS
 05/07/2001 - 11/30/2002 FY02: \$150,100 Total: \$250,949
Prin. Invest.: R NEMANI
Tech. Officer: ARC/K P GOODEN, ARC/M A SCHWABACHER
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5397 **UNIV OF MONTANA** **6444**
 AUTOMATED TESTING OF MATRIX MODELS
 09/07/2000 - 02/28/2001 FY02: \$0 Total: \$12,162
Prin. Invest.: J HENRY
Tech. Officer: ARC/A PATTERSON-HINE, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 382 **UNIV OF MONTANA** **6445**
 INTERNATIONAL EOS NATURAL RESOURCE TRAINING CENTER
 02/19/1999 - 08/31/2002 FY02: \$0 Total: \$8,174,400
Prin. Invest.: S W RUNNING
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30395 **UNIV OF MONTANA** **6446**
 FORECASTING THE EFFECTS OF CLIMATE CHANGE ON EMERGING INFECTIOUS DISEASE: A HANTAVIRUS MODEL
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S RUNNING
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50225 **UNIV OF MONTANA** **6447**
 MODELING NOVEL FT-IR SPECTROSCOPIC MEASUREMENTS OF OXYGENATED HYDROCARBON LEVELS FROM BIO
 09/29/1998 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R J FIELD
Tech. Officer: GSFC/M Y WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50329 **UNIV OF MONTANA** **6448**
 BIOGEOCHEMISTRY OF RECREATIONAL GRASSLANDS STUDENT: CRISTINA MILESI
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S RUNNING
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NEBRASKA

NAG 2 1353 **CREIGHTON UNIV** **6449**
 EFFECTS OF GRAVITY ON VESTIBULAR DEVELOPMENT IN MICE
 07/22/1999 - 07/31/2003 FY02: \$122,444 Total: \$607,318
Prin. Invest.: B FRITSZCH
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 1 01087 **UNIV OF NEBRASKA - LINCOLN** **6450**
 OPTIMAL EXPERIMENTAL DESIGN FOR THERMAL CHARACTERIZATION OF FUNCTIONALLY GRADED MATERIALS
 05/30/2001 - 09/30/2002 FY02: \$17,745 Total: \$47,182
Prin. Invest.: K D COLE
Tech. Officer: LARC/M L BLOXXER
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2219 **UNIV OF NEBRASKA - LINCOLN** **6451**
 ATOMIC OXYGEN ULTRAVIOLET, AND THERMAL CYCLING EFFECTS ON
 SPACE MATERIALS
 12/28/1998 - 10/31/2002 FY02: \$45,000 Total: \$190,001
Prin. Invest.: J A WOOLLAM
Tech. Officer: GRC/D A JAWORSKE
CASE Category: 13 – PHYSICS

NAG 5 6506 **UNIV OF NEBRASKA - LINCOLN** **6452**
 MRK 42 AND MRK 957: TWO EXTREME NARROW-LINE STRONG FE II
 EMITTING QUASARS - ASCA PROPOSAL A05
 11/17/1997 - 10/31/2002 FY02: \$0 Total: \$17,800
Prin. Invest.: M GASKELL
Tech. Officer: GSFC/N WHITE
CASE Category: 11 – ASTRONOMY

NAG 5 6990 **UNIV OF NEBRASKA - LINCOLN** **6453**
 CHARACTERIZATION AND IMPROVEMENT OF EOS LAND PRODU CTS
 USING MEASUREMENTSAT AMERIFLUX GRASSLAND AND
 02/25/1998 - 02/28/2003 FY02: \$0 Total: \$505,000
Prin. Invest.: E WALTER-SHEA
Tech. Officer: GSFC/D C WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8677 **UNIV OF NEBRASKA - LINCOLN** **6454**
 "COMPRESSION FOR LAND USE DATA". GSFC CONTROL NO. 5-3491.
 FUNDS FOR UNSOLICITED PROPOSAL W/UNIV NE
 07/09/1999 - 09/30/2001 FY02: \$0 Total: \$50,131
Prin. Invest.: K SAYOOD
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9834 **UNIV OF NEBRASKA - LINCOLN** **6455**
 ROBUST COMPRESSION FOR LAND USE DATA
 07/28/2000 - 09/30/2002 FY02: \$0 Total: \$60,546
Prin. Invest.: K SAYOOD
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10408 **UNIV OF NEBRASKA - LINCOLN** **6456**
 "CONTEXT BASED COMPRESSION SCHEME"
 04/05/2001 - 07/14/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: K SAYOOD
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11147 **UNIV OF NEBRASKA - LINCOLN** **6457**
 CONSEQUENCES OF INSTAL CHANGE: LAND-COVER DYNAMICS IN KAZA-
 KHSTAN 1960-2000
 07/31/2001 - 08/14/2004 FY02: \$157,264 Total: \$247,213
Prin. Invest.: A GITELSON
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12277 **UNIV OF NEBRASKA - LINCOLN** **6458**
 MULTISTAGE COMPRESSION
 07/11/2002 - 08/14/2003 FY02: \$51,223 Total: \$51,223
Prin. Invest.: K SAYOOD
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1310 **UNIV OF NEBRASKA - LINCOLN** **6459**
 USE OF FEMTOSECOND LASERS IN THE CURATION & ALLOCATION OD
 SAMPLES COLLECTED BY UPCOMING PLANET
 06/06/2001 - 06/08/2004 FY02: \$34,995 Total: \$69,990
Prin. Invest.: D R ALEXANDER
Tech. Officer: JSC/F HORZZ, JSC/J JONES
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 2 5304 **UNIV OF NEBRASKA - LINCOLN** **6460**
 TRANSPORT IN QUANTUM STRUCUTRES: QUASI TWO DIMENS IONAL
 DEVICES
 01/11/1999 - 12/31/2001 FY02: -\$5,279 Total: \$121,694
Prin. Invest.: S BANDYOPADHYAY
Tech. Officer: ARC/M MEYYAPPAN
CASE Category: 13 – PHYSICS

NCC 5 169 **UNIV OF NEBRASKA - LINCOLN** **6461**
 THE NEBRASKA INITIATIVE FOR AEROSPACE RESEARCH AND DEVELOP-
 MENT
 12/05/1996 - 05/14/2002 FY02: -\$19,032 Total: \$2,480,968
Prin. Invest.: B D BOWEN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 430 **UNIV OF NEBRASKA - LINCOLN** **6462**
 "AMERICA'S FARM" A PROTOTYPE FOR OTHER NATIONAL CY BER-
 EDUCATIONAL SITES IN RESPONSE TO NASA COOPERA
 09/20/1999 - 09/30/2002 FY02: \$170,525 Total: \$688,753
Prin. Invest.: D C RUNDQUIST
Tech. Officer: GSFC/R E GABRYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC13 98003 **UNIV OF NEBRASKA - LINCOLN** **6463**
 AN INITIATIVE TO CREATE AN AFFILIATED RESEARCH CENTER PROGRAM
 08/17/1998 - 03/31/2002 FY02: \$0 Total: \$622,399
Prin. Invest.: RUNDQUIST
Tech. Officer: SSC/A PEEK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30358 **UNIV OF NEBRASKA - LINCOLN** **6464**
 LANDFORM EVOLUTION OF THE LOWER MISSISSIPPI RIVER VALLEY IN
 RESPONSE TO DEGLACIATION/STUDENT: TAMMY
 08/23/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: M BLUM
Tech. Officer: GSFC/M Y WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 401 **UNIV OF NEBRASKA-OMAHA** **6465**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/13/1999 - 09/30/2001 FY02: \$0 Total: \$450,000
Prin. Invest.: B BROWN
Tech. Officer: HQ/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 572 **UNIV OF NEBRASKA-OMAHA** **6466**
 NEBRASKA NASA EPSCOR PROGRAM
 07/20/2001 - 07/31/2004 FY02: \$700,000 Total: \$1,400,000
Prin. Invest.: B D BOWEN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NEVADA

NASA'S UNIVERSITY PROGRAM

NGT 5 40037 UNIV OF NEBRASKA-OMAHA 6467
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND FELLOWSHIP PROGRAM.
 02/13/1997 - 02/28/2001 FY02: \$0 Total: \$1,040,150
Prin. Invest.: B D BOWEN
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40104 UNIV OF NEBRASKA-OMAHA 6468
 NEBRASKA SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/01/2001 - 02/28/2005 FY02: \$271,250 Total: \$548,900
Prin. Invest.: B D BOWEN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NEVADA

NAG 1 2046 UNIV. OF NEVADA - DESERT RES. INST, RENO 6469
 MICROPHYSICS AND RADIATIVE PROPERTIES OF CIRRU: INSTRUMENTATION AND ANALYSIS/PREVIOUS # NAG-1-1707
 04/01/1998 - 08/03/2002 FY02: \$0 Total: \$212,000
Prin. Invest.: J HALLETT
Tech. Officer: LARC/D S MCDUGAL, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2183 UNIV. OF NEVADA - DESERT RES. INST, RENO 6470
 CLOUD CONDENSATION NUCLEI FIRE III MY 1/2
 04/19/1999 - 06/03/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: J G HUDSON
Tech. Officer: LARC/V E DELNORE, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7870 UNIV. OF NEVADA - DESERT RES. INST, RENO 6471
 INTEGRATING MODELING AND REMOTE SENSING FOR MONITORING POTENTIAL RESPONSES TO CLIMATE CHANGE
 01/20/1999 - 12/31/2002 FY02: \$0 Total: \$158,378
Prin. Invest.: G L DANA
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7973 UNIV. OF NEVADA - DESERT RES. INST, RENO 6472
 IN SITU MICROPHYSICAL OBSERVATIONS IN SUPPORT OF THE TRMM/KWAJEX FIELD CAMPAIGN
 01/03/1999 - 09/30/2002 FY02: \$0 Total: \$349,841
Prin. Invest.: J HALALETT
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9716 UNIV. OF NEVADA - DESERT RES. INST, RENO 6473
 ANALYSIS AND INTEGRATION OF IN SITU MICROPHYSICAL OBSERVATIONS FROM THE TRMM/KWAJEX FIELD CAMPAIGN
 06/22/2000 - 06/14/2003 FY02: \$112,000 Total: \$417,764
Prin. Invest.: D KINGSMILL
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10445 UNIV. OF NEVADA - DESERT RES. INST, RENO 6474
 AN AQUEOUS GEOCHEMICAL MODEL FOR COLD PLANETS
 02/20/2001 - 02/28/2004 FY02: \$66,000 Total: \$131,000
Prin. Invest.: G M MARION
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 8 1718 UNIV. OF NEVADA - DESERT RES. INST, RENO 6475
 RESEARCH ENTITLED, "SHEAR FLOW STABILIZED LASER-IGNITED Z-PINCH"
 04/27/2000 - 04/26/2003 FY02: \$0 Total: \$67,000
Prin. Invest.: F WINTERBERG
Tech. Officer: MSFC/F THIO
CASE Category: 13 – PHYSICS

NAG13 02017 UNIV. OF NEVADA - DESERT RES. INST, RENO 6476
 DEVELOPMENT AND TRANSFER OF INSAR AND GPS APPLICATIONS TO LOCAL GOVERNMENT IN NEVADA
 03/05/2002 - 09/30/2004 FY02: \$245,064 Total: \$245,064
Prin. Invest.: J W BELL
Tech. Officer: SSC/W GRAHAM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 486 UNIV. OF NEVADA - DESERT RES. INST, RENO 6477
 HYPERSPECTRAL MONITORING OF INVASIVE NON-NATIVE PLANT SPECIES
 04/06/2000 - 09/30/2002 FY02: \$37,038 Total: \$148,004
Prin. Invest.: K C MCGWIRE
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40038 UNIV. OF NEVADA - DESERT RES. INST, RENO 6478
 NATIONAL SPACE GRANT COLL & FELLOWSHIP PROGRAM
 01/24/1997 - 02/28/2001 FY02: -\$7,595 Total: \$793,530
Prin. Invest.: J V TARANIK
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 6727 UNIV OF NEVADA - LAS VEGAS 6479
 LABORATORY STUDIES OF THERMAL ENERGY CHARGE TRANSFER OF CARBON, IRON, SULPHUR, AND NITROGEN IONS IN
 12/11/1997 - 12/31/2001 FY02: \$0 Total: \$310,200
Prin. Invest.: V H KWONG
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 9489 UNIV OF NEVADA - LAS VEGAS 6480
 DEVELOPMENT OF THE CONTENT-BASED IMAGE QUERYING TOOLS: TOWARD ADVANCED DATABASES FOR ASTRONOMICAL
 04/17/2000 - 04/14/2003 FY02: \$0 Total: \$80,000
Prin. Invest.: S LATIFI
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11990 UNIV OF NEVADA - LAS VEGAS 6481
 LABORATORY STUDIES OF THERMAL ENERGY CHARGE TRANSFER OF MULTIPLY CHARGED IONS IN ASTROPHYSICAL
 04/10/2002 - 03/31/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: V KWONG, V KWONG
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 31231 UNIV OF NEVADA - LAS VEGAS 6482
 STIS CO-INVESTIGATOR SUPPORT
 08/30/1991 - 12/31/2002 FY02: \$62,000 Total: \$1,085,301
Prin. Invest.: D WEISTROP
Tech. Officer: GSFC/D VITAGLIANO
CASE Category: 11 – ASTRONOMY

NAG 5 6881 **UNIV OF NEVADA - RENO** **6483**
 NUMERICAL GEOMECHANICS STUDIES OF PLANETARY FAULTING
 02/27/1998 - 12/31/2000 FY02: -\$11,515 Total: \$152,787
Prin. Invest.: R SCHULTZ
Tech. Officer: GSFC/P ROGERS
CASE Category: 11 – ASTRONOMY

NAG 5 8267 **UNIV OF NEVADA - RENO** **6484**
 GEOMETRY AND MECHANICS OF FAULTING ON MARS
 02/24/1999 - 06/30/2002 FY02: \$0 Total: \$279,000
Prin. Invest.: R SCHULTZ
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9001 **UNIV OF NEVADA - RENO** **6485**
 COMPREHENSIVE STRUCTURAL MODEL FOR PLANETARY WRINKLE RIDGES
 02/03/2000 - 06/30/2003 FY02: \$42,300 Total: \$122,400
Prin. Invest.: R A SCHULTZ
Tech. Officer: GSFC/D SENSKE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9127 **UNIV OF NEVADA - RENO** **6486**
 CONCURRENT ANALYSIS OF MULTI- & HYPERSPECTRAL DATA SETS OF ANTARCTICA
 02/25/2000 - 12/31/2001 FY02: \$0 Total: \$31,900
Prin. Invest.: W M CALVIN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9298 **UNIV OF NEVADA - RENO** **6487**
 ALTERATION MINERALOGY OF MARS: SPECTROSCOPIC ANALYSIS AND INTERPRETATION
 04/27/2000 - 04/30/2001 FY02: -\$468 Total: \$54,632
Prin. Invest.: W CALVIN
Tech. Officer: GSFC/J A GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9467 **UNIV OF NEVADA - RENO** **6488**
 AN AQUEOUS GEOCHEMICAL MODEL FOR COLD PLANETS
 04/18/2000 - 04/14/2001 FY02: -\$11 Total: \$33,239
Prin. Invest.: G M MARION
Tech. Officer: GSFC/J A GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9498 **UNIV OF NEVADA - RENO** **6489**
 GLOBAL ASSESSMENT OF VOLCANIC DEBRIS FLOW HAZARDS FROM SPACE: EVALUATION OF NEW MULTISPECTRAL AND HYPERSPECTRAL DATA SETS
 04/27/2000 - 03/31/2003 FY02: \$33,029 Total: \$114,850
Prin. Invest.: R J WATTERS
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10290 **UNIV OF NEVADA - RENO** **6490**
 ICES & ALTERATION MINERALS IN THE SOLAR SYSTEM: SPECTROSCOPIC ANALYSIS & INTERPRETATION
 01/29/2001 - 01/31/2002 FY02: \$0 Total: \$43,000
Prin. Invest.: W CALVIN
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10926 **UNIV OF NEVADA - RENO** **6491**
 GEOMECHANICS STUDIES OF PLANETARY FAULTING: MECHANISMS OF DEFORMATION ON MARS AND EUROPA
 05/14/2001 - 06/30/2002 FY02: \$0 Total: \$36,000
Prin. Invest.: R A SCHULTZ
Tech. Officer: GSFC/D A SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11447 **UNIV OF NEVADA - RENO** **6492**
 GEOMECHANICS OF SOFT ROCK FAULTING ON MARS
 12/21/2001 - 06/30/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: R A SCHULTZ
Tech. Officer: GSFC/D A SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11491 **UNIV OF NEVADA - RENO** **6493**
 MARS ALTERATION ANALOGS: ACID WEATHERING OF BASALTIC ANDESITES AND IRON FORMATION
 12/27/2001 - 12/31/2004 FY02: \$58,000 Total: \$58,000
Prin. Invest.: W CALVIN
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12222 **UNIV OF NEVADA - RENO** **6494**
 FUTURE MECHANICAL MODELING OF MARTIAN STRUCTURES & THE 4-D TECTONICS THARSIS
 05/20/2002 - 06/30/2005 FY02: \$86,000 Total: \$86,000
Prin. Invest.: R A SCHULTZ
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12223 **UNIV OF NEVADA - RENO** **6495**
 SPECTRAL PROPERTIES OF THE NORTH POLAR REGION OF MARS
 05/20/2002 - 05/14/2005 FY02: \$45,000 Total: \$45,000
Prin. Invest.: W M CALVIN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 9 1340 **UNIV OF NEVADA - RENO** **6496**
 STEM CELL PLASTICITY UNDER SIMULATED MICROGRAVITY
 08/01/2001 - 09/30/2004 FY02: \$166,000 Total: \$217,000
Prin. Invest.: G ALMEIDA-PORADA
Tech. Officer: JSC/D RISIN
CASE Category: 43 – CHEMICAL ENGR

NCC 2 5408 **UNIV OF NEVADA - RENO** **6497**
 MEASURING CHANGES IN LOCAL VOLUMETRIC BONE DENSITY
 11/24/2000 - 11/14/2002 FY02: \$20,600 Total: \$44,350
Prin. Invest.: E WANG
Tech. Officer: ARC/R T WHALEN, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5443 **UNIV OF NEVADA - RENO** **6498**
 TESTING/DIRECT OSMOTIC CONCENTRATION
 07/16/2001 - 01/31/2003 FY02: \$19,000 Total: \$39,684
Prin. Invest.: V D ADAMS, J G CURTIS, A E CHILDRESS
Tech. Officer: ARC/M T FLYNN, ARC/J W FISHER
CASE Category: 59 – LIFE SCIENCE, OTHER

NEW HAMPSHIRE

NASA'S UNIVERSITY PROGRAM

NCC 2 5503 **UNIV OF NEVADA - RENO** **6499**
 ALLOCATION OF ATTENTIONAL RESOURCES IN THE COCKPIT ENVIRONMENT
 07/19/2002 - 07/14/2003 FY02: \$21,075 Total: \$21,075
Prin. Invest.: M A CROGNALE
Tech. Officer: ARC/J B MULLIGAN, ARC/L STONE
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 3 750 **UNIV OF NEVADA - RENO** **6500**
 ACOUSTIC TOMOGRAPHY FOR JET ENGINES/TURBINES: PRO OF OF CONCEPT
 12/15/1999 - 09/30/2002 FY02: \$64,330 Total: \$183,894
Prin. Invest.: J A KLEPPE
Tech. Officer: GRC/G FRALICK
CASE Category: 46 – MECHANICAL ENGR

NGT 5 30385 **UNIV OF NEVADA - RENO** **6501**
 EVAPORATION AND CARBON DIOXIDE FLUX MEASUREMENTS AT THE SALAR DE ATACAMA, NORTHERN CHILE/STE
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S TYLER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40113 **UNIV OF NEVADA - RENO** **6502**
 NEVADA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/12/2001 - 02/28/2005 FY02: \$320,095 Total: \$526,220
Prin. Invest.: J V TARANIK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50362 **UNIV OF NEVADA - RENO** **6503**
 SYNTHESIS OF HYPERSPECTRAL AND MULTISPECTRAL IMAGE DATA FOR THE IDENTIFICATION OF FOSSIL AND ACTIVE
 05/31/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: W CALVIN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 397 **UNIV OF NEVADA SYSTEM** **6504**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/24/1999 - 06/30/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: J TARANIK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 583 **UNIV OF NEVADA SYSTEM** **6505**
 NEVADA NASA EPSCOR PROGRAM
 08/27/2001 - 08/31/2004 FY02: \$191,400 Total: \$700,000
Prin. Invest.: J V TARANIK
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NEW HAMPSHIRE

NAG 2 1420 **DARTMOUTH COLL** **6506**
 TRANSCRIPTIONAL REGULATIONS & EVOLUTION OF BILATERAL BODY PLANS
 07/13/2000 - 12/31/2002 FY02: \$0 Total: \$134,855
Prin. Invest.: K PETERSON, E H DAVIDSON
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 4529 **DARTMOUTH COLL** **6507**
 DISPERSIVE ALFVEN DYNAMICS OF THE MAGNETOSPHERE-IO
 05/09/1997 - 08/31/2001 FY02: \$0 Total: \$251,535
Prin. Invest.: D LOTKO
Tech. Officer: GSFC/M M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 5238 **DARTMOUTH COLL** **6508**
 SOUNDING OF THE ION ENERGIZATION REGION: RESOLVING AMBIGUITIES (SIERRA)
 05/11/1999 - 05/10/2003 FY02: \$0 Total: \$166,055
Prin. Invest.: J W LABELLE
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5239 **DARTMOUTH COLL** **6509**
 FIRST YEAR FUNDING FOR "ROCKET AURORAL CORRELATOR EXPERIMENT (RACE) PI DR. JAMES LABELLE
 05/19/1999 - 05/18/2003 FY02: \$0 Total: \$263,637
Prin. Invest.: J W LABELLE
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5318 **DARTMOUTH COLL** **6510**
 HIGH BANDWIDTH AURORAL ROCKET (HI-BAR) HIGH BANDWIDTH AURORAL ROCKET (HI-BAR)
 02/14/2001 - 02/12/2004 FY02: \$138,839 Total: \$207,937
Prin. Invest.: J W LABELLE
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5367 **DARTMOUTH COLL** **6511**
 SVALBARD EISCAT ROCKET STUDY OF ION OUTFLOWS (SERS IO)
 07/29/2002 - 07/21/2005 FY02: \$24,702 Total: \$24,702
Prin. Invest.: M LESSARD
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5382 **DARTMOUTH COLL** **6512**
 SVALBARD EISCAT ROCKET STUDY OF ION OUTFLOWS: SER SIO
 07/29/2002 - 07/21/2005 FY02: \$51,043 Total: \$51,043
Prin. Invest.: K LYNCH
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 7185 **DARTMOUTH COLL** **6513**
 APPROXIMATELY TWO-DIMENSIONAL, COHERENT STRUCTURES IN SPACE PLASMAS: THE INVERSE PROBLEM
 03/25/1998 - 03/31/2002 FY02: \$0 Total: \$213,222
Prin. Invest.: B U SONNERUP
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7442 **DARTMOUTH COLL** **6514**
 A THEORETICAL STUDY OF THE GLOBAL GEOSPACE SYSTEM
 06/02/1998 - 09/30/2001 FY02: \$0 Total: \$585,630
Prin. Invest.: M HUDSON
Tech. Officer: GSFC/S CURTIS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7689 **DARTMOUTH COLL** **6515**
 NONADIABATIC CHANGES IN RADIATION BELT POPULATIONS
 09/14/1998 - 09/30/2001 FY02: \$0 Total: \$215,592
Prin. Invest.: M K HUDSON
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7803 **DARTMOUTH COLL** **6516**
 MULTIPOINT, MULTI-INSTRUMENT STUDY OF AURORAL ALFVENIC PROCESSES (SEC GI PROGRAM) NRA-98-03-S
 11/09/1998 - 03/31/2002 FY02: \$0 Total: \$284,369
Prin. Invest.: W LOTKO
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8441 **DARTMOUTH COLL** **6517**
 RESEARCH: "ULTRA LOW FREQUENCY MAGNETOSPHERIC PHYSICS...". FIRST YEAR OF THREE YEAR FUNDING CYCLE. P
 04/08/1999 - 04/14/2003 FY02: \$0 Total: \$980,048
Prin. Invest.: W LOTKO
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 9225 **DARTMOUTH COLL** **6518**
 THE FORMATION OF THE MILKY WAY AND ITS SATELLITE GALAXIES (LTSA 99)
 03/15/2000 - 03/14/2005 FY02: \$60,668 Total: \$182,317
Prin. Invest.: B CHABOYER
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9470 **DARTMOUTH COLL** **6519**
 RIVER FLOODING AND GLOBAL ENVIRONMENTAL CHANGE: A MULTI-SENSOR APPROACH
 04/14/2000 - 04/30/2003 FY02: \$266,757 Total: \$596,194
Prin. Invest.: R BRAKENRIDGE
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10216 **DARTMOUTH COLL** **6520**
 IMPACTS OF IONOSPHERIC ACTIVITY ON ULTRA-LOW-FREQUENCY AURORAL ELECTRODYNAMICS
 01/05/2001 - 01/14/2004 FY02: \$82,352 Total: \$160,865
Prin. Invest.: A V STRELTSOV
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10219 **DARTMOUTH COLL** **6521**
 A LOW-COST ROCKET-BORNE IMAGER FOR STUDIES OF AURORAL FINE STRUCTURES
 01/05/2001 - 01/14/2003 FY02: \$0 Total: \$69,891
Prin. Invest.: M R LESSARD
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10953 **DARTMOUTH COLL** **6522**
 EARLY FLOOD DETECTION USING QUICKSCAT AND THE DARTMOUTH FLOOD OBSERVATORY
 05/18/2001 - 05/31/2003 FY02: \$62,073 Total: \$121,759
Prin. Invest.: G BRAKENRIDGE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11712 **DARTMOUTH COLL** **6523**
 A THEORETICAL STUDY OF THE GLOBAL GEOSPACE SYSTEM
 02/21/2002 - 01/31/2003 FY02: \$84,000 Total: \$84,000
Prin. Invest.: M K HUDSON
Tech. Officer: GSFC/S A CURTIS
CASE Category: 13 – PHYSICS

NAG 5 11735 **DARTMOUTH COLL** **6524**
 ULTRA-LOW-FREQUENCY MAGNETOSPHERIC PHYSICS.
 02/28/2002 - 03/31/2005 FY02: \$349,093 Total: \$349,093
Prin. Invest.: W LOTKO
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 11825 **DARTMOUTH COLL** **6525**
 MASS DENSITY ALONG FIELD LINES
 03/07/2002 - 03/14/2005 FY02: \$73,815 Total: \$73,815
Prin. Invest.: R E DENTON
Tech. Officer: GSFC/J SHARBER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12005 **DARTMOUTH COLL** **6526**
 RECONSTRUCTION OF COHERENT TWO-DIMENSIONAL SPACE PLASMA STRUCTURES
 04/11/2002 - 04/14/2005 FY02: \$101,262 Total: \$101,262
Prin. Invest.: B O SONNERUP
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12202 **DARTMOUTH COLL** **6527**
 A STUDY OF GEOMAGNETIC STORMS USING GLOBAL MHD AND KENTIC RADIATION BELT SIMULATIONS
 05/15/2002 - 05/14/2005 FY02: \$107,750 Total: \$107,750
Prin. Invest.: M K HUDSON
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12325 **DARTMOUTH COLL** **6528**
 ONE YEAR FUNDING FOR UNSOLICITED PROPOSAL "MODIS RAPID RESPONSE CAPABILITIES: APPLICATION TO FLOOD
 08/12/2002 - 08/14/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: G BRAKENRIDGE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 8 1590 **DARTMOUTH COLL** **6529**
 R/S IN SITU OPTICAL WAVEGUIDES FOR MONITORING AND MODIFYING PROTEIN CRYSTAL GROWTH
 01/28/1999 - 09/30/2002 FY02: \$109,000 Total: \$414,299
Prin. Invest.: U J GIBSON
Tech. Officer: MSFC/H K HIGGINBOTTAM, MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1088 **DARTMOUTH COLL** **6530**
 LIFE SCIENCES DATA ARCHIVE SCIENTIFIC SUPPORT
 03/15/1999 - 09/30/2002 FY02: \$129,480 Total: \$390,571
Prin. Invest.: J BUCKEY
Tech. Officer: JSC/D BELL
CASE Category: 56 – MEDICAL

NEW HAMPSHIRE

NASA'S UNIVERSITY PROGRAM

NAG 9 1387 **DARTMOUTH COLL** **6531**
 OTOACOUSTIC HEARING OF SPACE STATION CREWS
 09/24/2001 - 08/31/2004 FY02: \$152,127 Total: \$237,131
Prin. Invest.: J BUCKLEY
Tech. Officer: JSC/C LLYOD
CASE Category: 56 – MEDICL

NAG13 00041 **DARTMOUTH COLL** **6532**
 LIMITED AREA OPERATIONAL COASTAL OCEAN MODELS SAME
 09/06/2000 - 09/05/2002 FY02: \$580,721 Total: \$815,445
Prin. Invest.: D R LYNCH
Tech. Officer: SSC/C DEL CASTILLO
CASE Category: 33 – OCEANOGRAPHY

NCC 1 01045 **DARTMOUTH COLL** **6533**
 DATA-BASED OPTIMAL CONTROL & FAULT DETECTION TECHNIQUES FOR
 AEROSPACE SYSTEMS
 06/12/2001 - 02/14/2004 FY02: \$72,000 Total: \$128,000
Prin. Invest.: M Q PHAN
Tech. Officer: LARC/D D MOERDER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 50403 **DARTMOUTH COLL** **6534**
 SIMULATING THREE DIMENSIONAL RADIATION BELT DYNAMICS/STUDENT:
 KARA PERRY
 07/15/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M HUDSON
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 384 **SAINT ANSELM COLL** **6535**
 GROUND-BASED TESTING OF A PROTOTYPE HOLOGRAPHIC AT MO-
 SPHERIC SCANNER FOR ENVIRONMENTAL REMOTESENSIN
 03/05/1999 - 08/31/2002 FY02: \$16,500 Total: \$51,200
Prin. Invest.: D GUERRA
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4785 **UNIV OF NEW HAMPSHIRE - DURHAM** **6536**
 AN INTEGRATED SYSTEM FOR WATER BUDGET CLOSURE OVER MASS: A
 TRMM VALIDATION EFFORT
 07/03/1997 - 12/31/2001 FY02: \$0 Total: \$234,500
Prin. Invest.: C VOROSMARTY
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 5117 **UNIV OF NEW HAMPSHIRE - DURHAM** **6537**
 THE TIGRE INSTRUMENT FOR INTERMEDIATE-ENERGY GAMMA-RAY AS-
 TRONOMY FOR 0.3 TO 100MEV
 04/18/1997 - 11/30/2002 FY02: \$0 Total: \$175,972
Prin. Invest.: J RYAN
Tech. Officer: GSFC/H NEEDLEMAN, GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5147 **UNIV OF NEW HAMPSHIRE - DURHAM** **6538**
 MINUTE OF ARC RESOLUTION GAMMA-RAY IMAGING EXPERIMENT (MAR-
 GLE)
 07/02/1997 - 06/30/2001 FY02: -\$3,010 Total: \$146,990
Prin. Invest.: J RYAN
Tech. Officer: GSFC/H NEEDLEMAN
CASE Category: 13 – PHYSICS

NAG 5 5212 **UNIV OF NEW HAMPSHIRE - DURHAM** **6539**
 ULDB COMPTON TELESCOPE MISSION
 09/22/1998 - 06/30/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: J M RYAN
Tech. Officer: WFF/B A MERRITT
CASE Category: 11 – ASTRONOMY

NAG 5 5234 **UNIV OF NEW HAMPSHIRE - DURHAM** **6540**
 DUST DARTS PI DR. KRISTINA LYNCH
 02/12/1999 - 12/31/2002 FY02: \$49,955 Total: \$403,550
Prin. Invest.: K LYNCH
Tech. Officer: GSFC/W JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5237 **UNIV OF NEW HAMPSHIRE - DURHAM** **6541**
 SOUNDING OF THE ION ENERGIZATION REGION: RESOLVING AMBIGUITIES
 (SIERRA)
 05/11/1999 - 11/10/2003 FY02: \$3,500 Total: \$428,215
Prin. Invest.: R L ARNOLDY
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5324 **UNIV OF NEW HAMPSHIRE - DURHAM** **6542**
 A WIDE FIELD-OF-VIEW HARD X-RAY POLARIMETER FOR STUDYING
 GAMMA-RAY BURSTS
 03/21/2001 - 12/31/2003 FY02: \$75,000 Total: \$150,000
Prin. Invest.: M L MCCONNELL
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5326 **UNIV OF NEW HAMPSHIRE - DURHAM** **6543**
 DEVELOPMENT OF CZT STRIP DETECTORS FOR HARD X-RAY IMAGING
 WITH MARGIE
 03/21/2001 - 12/31/2004 FY02: \$0 Total: \$130,000
Prin. Invest.: J M RYAN
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5327 **UNIV OF NEW HAMPSHIRE - DURHAM** **6544**
 DEVELOPMENT OF CZT STRIP DETECTORS FOR HARD X-RAY AND GAMMA-
 RAY IMAGING SPECTROSCOPY PI PRO
 08/09/2001 - 12/31/2003 FY02: \$365,000 Total: \$615,000
Prin. Invest.: J RYAN
Tech. Officer: WFF/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5358 **UNIV OF NEW HAMPSHIRE - DURHAM** **6545**
 CONTINUED DEVELOPMENT OF SCINTILLATING FIBER DETECTORS FOR
 GAMMA-RAY ASTRONOMY.
 07/15/2002 - 04/30/2003 FY02: \$6,000 Total: \$6,000
Prin. Invest.: J RYAN
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5381 **UNIV OF NEW HAMPSHIRE - DURHAM** **6546**
 SVALBARD EISCAT ROCKET STUDY OF ION OUTFLOWS: SER SIO
 07/29/2002 - 07/21/2005 FY02: \$15,222 Total: \$15,222
Prin. Invest.: K LYNCH
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6137 UNIV OF NEW HAMPSHIRE - DURHAM 6547
 TRANSFER FUNDS TO UNIV OF NEW HAMPSHIRE IN S ENTITLED:
 CHANGES IN BIOGEOCHEMICAL CYCLES
 08/11/1997 - 05/31/2002 FY02: \$0 Total: \$6,253,073
Prin. Invest.: B MOORE, III
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6289 UNIV OF NEW HAMPSHIRE - DURHAM 6548
 DEVELOPMENT OF A PARTICLE BACKSCATTERING ALGORITHM CONCUR-
 RENT SHIP MEASUREMENTS, AND GLOBAL BIOGEOCH
 09/10/1997 - 08/31/2002 FY02: \$0 Total: \$425,983
Prin. Invest.: W S BROWN
Tech. Officer: GSFC/E A LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6452 UNIV OF NEW HAMPSHIRE - DURHAM 6549
 SATELLITE-BASED SYSTEMS FOR MONITORING BIOGEOCHEMI CAL
 FLUXES BETWEEN THECONTINENTAL LAND MASS AND C
 11/04/1997 - 12/31/2000 FY02: -\$2,310 Total: \$550,672
Prin. Invest.: C VOROSMARTY
Tech. Officer: GSFC/J A YODER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6453 UNIV OF NEW HAMPSHIRE - DURHAM 6550
 ATMOSPHERIC IMPACTS OF AGRICULTURE: INTEGRATION OF REMOTE
 SENSING AND BIOGEOCHEMICAL MODELS FOR T
 11/18/1997 - 12/31/2001 FY02: -\$17 Total: \$336,459
Prin. Invest.: C LI
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 6623 UNIV OF NEW HAMPSHIRE - DURHAM 6551
 RADAR-BASED MEASURE OF INTERANNUAL VEGETATION PHEN OLOGY
 FOR MONITORING GLOBAL CHANGES RESPONSES OF
 11/19/1997 - 11/30/2000 FY02: -\$1,045 Total: \$82,182
Prin. Invest.: S FROLKING
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6860 UNIV OF NEW HAMPSHIRE - DURHAM 6552
 WIND/SWE CONTINUED INVESTIGATIONS
 02/17/1998 - 01/14/2001 FY02: -\$33 Total: \$459,122
Prin. Invest.: R TORBERT
Tech. Officer: GSFC/K OGILVIE
CASE Category: 13 – PHYSICS

NAG 5 6935 UNIV OF NEW HAMPSHIRE - DURHAM 6553
 GRANT
 02/04/1998 - 07/31/2001 FY02: \$0 Total: \$379,492
Prin. Invest.: R B TORBERT
Tech. Officer: GSFC/M HESSE
CASE Category: 13 – PHYSICS

NAG 5 7095 UNIV OF NEW HAMPSHIRE - DURHAM 6554
 SCALING PEATLAND C02 AND CH4 FLUXES FROM CHAMBERS TO THE
 BOREAS NORTH- ERN AND SOUTHERN STUDY AREAS
 05/21/1998 - 04/30/2001 FY02: -\$585 Total: \$217,777
Prin. Invest.: S FROLKING
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7097 UNIV OF NEW HAMPSHIRE - DURHAM 6555
 STUDIES OF INTERSTELLAR PICKUP IONS IN THE SOLAR W IND
 06/05/1998 - 04/30/2001 FY02: \$0 Total: \$220,600
Prin. Invest.: P A ISENBERG
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7631 UNIV OF NEW HAMPSHIRE - DURHAM 6556
 QUANTIFYING THE ATMOSPHERIC IMPACTS OF PADDY RICE AGRICULTURE
 IN CHINA
 08/10/1998 - 09/30/2002 FY02: \$0 Total: \$1,350,000
Prin. Invest.: C LI
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7792 UNIV OF NEW HAMPSHIRE - DURHAM 6557
 ION ACCELERATION AND TRANSPORT IN IMPULSIVE AND GR ADUAL SOLAR
 FLARES
 12/14/1998 - 03/31/2002 FY02: \$0 Total: \$166,844
Prin. Invest.: D A LEE
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NAG 5 7798 UNIV OF NEW HAMPSHIRE - DURHAM 6558
 SMALL SCALE STRUCTURE OF AURORAL ELECTRIC CURRENTS -- A GUEST
 INVESTI- GATOR PROPOSAL TO THE FAST
 12/15/1998 - 12/31/2001 FY02: \$0 Total: \$168,425
Prin. Invest.: D A LYNCH
Tech. Officer: GSFC/L ZANETTI
CASE Category: 11 – ASTRONOMY

NAG 5 7804 UNIV OF NEW HAMPSHIRE - DURHAM 6559
 ELECTRIC FIELDS AND RING CURRENT ENERGIZATION (SEC GI PROGRAM)
 11/06/1998 - 12/31/2001 FY02: \$0 Total: \$224,131
Prin. Invest.: V K JORDANOVA
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8041 UNIV OF NEW HAMPSHIRE - DURHAM 6560
 INVESTIGATION OF POLAR CAP AND RING CURRENT PRECIP ITATION
 01/07/1999 - 01/14/2001 FY02: -\$870 Total: \$59,825
Prin. Invest.: R B TORBERT
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 8228 UNIV OF NEW HAMPSHIRE - DURHAM 6561
 "THEORETICAL STUDIES OF THE SOLAR ATMOSPHERE AND S OLAR
 WIND".
 02/24/1999 - 03/14/2003 FY02: \$0 Total: \$1,139,914
Prin. Invest.: J V HOLLWEG
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 8443 UNIV OF NEW HAMPSHIRE - DURHAM 6562
 A WATER BUDGET CLOSURE SYSTEM TO SUPPORT LBA HYDRO METEO-
 ROLOGY AND ECOLOGY STUDIES
 04/08/1999 - 04/14/2003 FY02: \$120,148 Total: \$448,293
Prin. Invest.: C J VOROSMARTY
Tech. Officer: GSFC/P T HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NEW HAMPSHIRE

NASA'S UNIVERSITY PROGRAM

NAG 5 8641 UNIV OF NEW HAMPSHIRE - DURHAM 6563
 AN APD READOUT SCHEME FOR A SOLAR NEUTRON TRACKING DEVICE.
 07/08/1999 - 06/30/2002 FY02: \$0 Total: \$368,600
Prin. Invest.: M L MCCONNELL
Tech. Officer: GSFC/F HERRERO
CASE Category: 13 – PHYSICS

NAG 5 8683 UNIV OF NEW HAMPSHIRE - DURHAM 6564
 THE CONTRIBUTION OF SATELLITE RADAR ALTIMETRY TO THE DETERMI-
 NATION OF RIVER DISCHARGE & LAKE/RESSER
 07/23/1999 - 07/14/2003 FY02: \$119,028 Total: \$251,227
Prin. Invest.: C J VOROSMARTY
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8733 UNIV OF NEW HAMPSHIRE - DURHAM 6565
 CONVERSION SURFACE TECHNOLOGY FOR LOW ENERGY NEUTRAL ATOM
 IMAGING.
 09/14/1999 - 06/30/2002 FY02: \$0 Total: \$352,372
Prin. Invest.: J QUINN
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8828 UNIV OF NEW HAMPSHIRE - DURHAM 6566
 "COOPERATION BETWEEN IGBP AND LAB: MEETING THE INTERNATIONAL
 CHALLENGE"
 09/08/1999 - 03/14/2003 FY02: \$0 Total: \$214,950
Prin. Invest.: B MOORE III
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9614 UNIV OF NEW HAMPSHIRE - DURHAM 6567
 MAGNETIC RECONNECTION IN SOLAR FLARES
 05/16/2000 - 11/14/2001 FY02: -\$178 Total: \$29,662
Prin. Invest.: T G FORBES
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9617 UNIV OF NEW HAMPSHIRE - DURHAM 6568
 A REGIONAL INTEGRATED MONITORING SYSTEM FOR THE HYDROLOGY
 OF THE PAN-ARCTIC MASS
 05/23/2000 - 04/30/2002 FY02: \$46,031 Total: \$260,432
Prin. Invest.: C VOROSMARTY
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9685 UNIV OF NEW HAMPSHIRE - DURHAM 6569
 CONSOLIDATING THE VELA-REGION 1.809 MEV RESULTS
 06/05/2000 - 08/14/2002 FY02: \$0 Total: \$3,500
Prin. Invest.: J RYAN
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 9689 UNIV OF NEW HAMPSHIRE - DURHAM 6570
 LONG DURATION SOLAR OBSERVATIONS WITH COMPTEL
 06/15/2000 - 06/14/2001 FY02: -\$3 Total: \$4,997
Prin. Invest.: M L MCCONNELL
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 9960 UNIV OF NEW HAMPSHIRE - DURHAM 6571
 CLUSTER ELECTRON DRIFT INSTRUMENT (EDI).
 09/20/2000 - 10/31/2003 FY02: \$999,672 Total: \$1,866,987
Prin. Invest.: J M QUINN
Tech. Officer: GSFC/M GOLDSTEIN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10135 UNIV OF NEW HAMPSHIRE - DURHAM 6572
 PREDICTING CHANGES IN REGIONAL & GLOBAL BIOGEO- CHEMICAL
 CYCLES
 02/14/2001 - 12/31/2003 FY02: \$850,000 Total: \$1,650,000
Prin. Invest.: B MOORE
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10203 UNIV OF NEW HAMPSHIRE - DURHAM 6573
 HARD X-RAY POLARIMETRY OF SOLAR FLARES WITH HESSI
 12/28/2000 - 12/31/2003 FY02: \$70,735 Total: \$138,850
Prin. Invest.: M L MCCONNELL
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10260 UNIV OF NEW HAMPSHIRE - DURHAM 6574
 A SATELLITE-BASED SYSTEM FOR MONITORING FLUXES BETWEEN THE
 CONTINENTAL LAND MASS & COASTAL OCEANS
 02/05/2001 - 12/31/2001 FY02: \$0 Total: \$212,404
Prin. Invest.: C VOROSMARTY
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10360 UNIV OF NEW HAMPSHIRE - DURHAM 6575
 GGS/WIND MISSION MISSIONS OPERATIONS AND DATA ANALYSIS PHASE.
 02/05/2001 - 02/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: R TORBERT
Tech. Officer: GSFC/K OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10420 UNIV OF NEW HAMPSHIRE - DURHAM 6576
 CONSTELLATION PATHFINDER TECHNOLOGY DEVELOPMENT: SYSTEMS
 INTEGRATION AND MANUFACTURABILITY.
 03/12/2001 - 03/14/2003 FY02: \$0 Total: \$49,645
Prin. Invest.: D LYNCH
Tech. Officer: GSFC/P BUCHANAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10472 UNIV OF NEW HAMPSHIRE - DURHAM 6577
 PARTICLE ENERGIZATION IN REVERSE AURORA
 02/27/2001 - 02/28/2004 FY02: \$74,035 Total: \$153,070
Prin. Invest.: K LYNCH
Tech. Officer: GSFC/J SPANN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10835 UNIV OF NEW HAMPSHIRE - DURHAM 6578
 A NEW KINETIC MODEL FOR CORONAL HEATING AND GENERATION OF
 THE FAST SOLAR WIND BY ION-CYCLOTRON
 04/27/2001 - 04/30/2004 FY02: \$97,488 Total: \$191,509
Prin. Invest.: P A ISENBERG
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10883 UNIV OF NEW HAMPSHIRE - DURHAM 6579
 AN ASSESSMENT OF THE FEASIBILITY OF PREDICTING MAJOR GEOMAGNETIC DISTURBANCES FROM MONITORS IN
 05/03/2001 - 04/30/2004 FY02: \$95,649 Total: \$194,534
Prin. Invest.: C FARRUGIA
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10890 UNIV OF NEW HAMPSHIRE - DURHAM 6580
 LOCAL INTERSTELLAR MEDIUM PARAMETERS
 05/10/2001 - 05/31/2004 FY02: \$74,207 Total: \$149,534
Prin. Invest.: E MOEBIUS
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10977 UNIV OF NEW HAMPSHIRE - DURHAM 6581
 NUMERICAL TESTS OF ERUPTIVE CME MODELS
 05/29/2001 - 05/31/2004 FY02: \$54,614 Total: \$107,681
Prin. Invest.: T G FORBES
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10988 UNIV OF NEW HAMPSHIRE - DURHAM 6582
 THE ROLE OF KINETICS IN NEARLY PERPENDICULAR CASCADES
 06/05/2001 - 05/31/2004 FY02: \$89,829 Total: \$176,141
Prin. Invest.: B J VASQUEZ
Tech. Officer: GSFC/W J WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11160 UNIV OF NEW HAMPSHIRE - DURHAM 6583
 LAND-USE CHANGE IN TEMPERATE EAST ASIA: LAND COVER CHANGE IMPACTS ON CARBON FLUXES AND LAND PRODUCTI
 08/03/2001 - 07/31/2004 FY02: \$115,767 Total: \$152,598
Prin. Invest.: X XIAO
Tech. Officer: GSFC/G Q GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11258 UNIV OF NEW HAMPSHIRE - DURHAM 6584
 AIR-SEA FLUX OF CO2: EFFECTS OF SMALL-SCALE VARIABILITY ON LARGE-SCALE ESTIMATES
 08/17/2001 - 08/31/2004 FY02: \$0 Total: \$133,369
Prin. Invest.: J W CAMPBELL
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11310 UNIV OF NEW HAMPSHIRE - DURHAM 6585
 SCALING FOREST CARBON FLUX MEASUREMENTS FROM SITES TO LANDSCAPES: A HYPERSPECTRAL ANALYSIS OF F
 08/31/2001 - 08/31/2004 FY02: \$91,047 Total: \$359,122
Prin. Invest.: S OLLINGER
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11750 UNIV OF NEW HAMPSHIRE - DURHAM 6586
 A GLOBAL RAPID INTEGRATED MONITORING SYSTEM FOR WATER CYCLE AND WATER RESOURCE ASSESSMENT (GLOBAL
 02/13/2002 - 02/14/2005 FY02: \$92,300 Total: \$92,300
Prin. Invest.: C VOROSMARTY
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11797 UNIV OF NEW HAMPSHIRE - DURHAM 6587
 RESEARCH: "THEORETICAL STUDIES ON THE SOLAR ATMOSPHERE AND SOLAR WIND", A PART OF NASA'S SEC THEORY
 04/29/2002 - 02/28/2005 FY02: \$388,317 Total: \$388,317
Prin. Invest.: J V HOLLWEG
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 11803 UNIV OF NEW HAMPSHIRE - DURHAM 6588
 "GGS WIND"
 03/07/2002 - 03/31/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: R TORBERT
Tech. Officer: GSFC/K OGILVIE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11820 UNIV OF NEW HAMPSHIRE - DURHAM 6589
 SUPERPOSED EPOCH ANALYSIS OF THE PLASMA SHEET
 03/01/2002 - 06/30/2005 FY02: \$79,744 Total: \$79,744
Prin. Invest.: R L KAUFMANN
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12189 UNIV OF NEW HAMPSHIRE - DURHAM 6590
 SOLAR WIND-MAGNETOSPHERE-IONOSPHERE COUPLING: OBSERVATIONS DURING MAGNETIC CONJUNCTIONS OF
 05/14/2002 - 06/30/2005 FY02: \$82,721 Total: \$82,721
Prin. Invest.: C FARRUGIA
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12252 UNIV OF NEW HAMPSHIRE - DURHAM 6591
 JOINT CENTER FOR EARTH SCIENCES EDUCATIONAL INITIATIVE
 06/05/2002 - 05/31/2005 FY02: \$23,254 Total: \$23,254
Prin. Invest.: B MOORE
Tech. Officer: GSFC/V V SALOMONSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12365 UNIV OF NEW HAMPSHIRE - DURHAM 6592
 MULTISENSOR MEASUREMENTS OF THE TEMPORAL AND SPATIAL PATTERN OF ICE SHEET ACCUMULATION
 07/22/2002 - 07/31/2005 FY02: \$31,515 Total: \$31,515
Prin. Invest.: M FAHNESTOCK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12369 UNIV OF NEW HAMPSHIRE - DURHAM 6593
 WORKFORCE DEVELOPMENT IN REMOTE SENSING
 07/10/2002 - 06/30/2003 FY02: \$85,403 Total: \$85,403
Prin. Invest.: D BARTLETT
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12402 UNIV OF NEW HAMPSHIRE - DURHAM 6594
 QUANTIFYING THE ROLE OF OCEANIC ECOLOGICAL PROVINCES IN ASSESSING SEASONAL AND INTERANNUAL VARIATION
 07/23/2002 - 07/31/2005 FY02: \$135,038 Total: \$135,038
Prin. Invest.: M DOWELL
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NEW HAMPSHIRE

NASA'S UNIVERSITY PROGRAM

NAG 5 12408 UNIV OF NEW HAMPSHIRE - DURHAM 6595
 MELT CONTRIBUTIONS TO MASS CHANGE FOR THE GREENLAND ICE SHEET
 08/01/2002 - 07/31/2005 FY02: \$67,464 Total: \$67,464
Prin. Invest.: M FAHNESTOCK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 12451 UNIV OF NEW HAMPSHIRE - DURHAM 6596
 SATELLITE-BASED SYSTEM FOR MONITORING BIOGEOCHEMICAL FLUXES BETWEEN THE CONTINENTAL LAND MASS AND THE OCEAN
 08/15/2002 - 08/14/2003 FY02: \$170,349 Total: \$170,349
Prin. Invest.: C VOROSMARTY
Tech. Officer: GSFC/C TREES
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 12493 UNIV OF NEW HAMPSHIRE - DURHAM 6597
 DEVELOPMENT AND TESTING OF A NEW ANGLE DETECTING INCLINED SENSOR (ADIS) SYSTEM
 08/27/2002 - 08/31/2005 FY02: \$134,592 Total: \$134,592
Prin. Invest.: J J CONNELL
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAS 5 00132 UNIV OF NEW HAMPSHIRE - DURHAM 6598
 STEREO PHASE A CONCEPT STUDY FOR INSTANT MEASUREMENTS OF PARTICLES & CME TRANSIENT (IMPACT)
 02/22/2000 - 10/31/2004 FY02: \$1,802,942 Total: \$3,126,551
Prin. Invest.: A GALVIN
Tech. Officer: GSFC/A HARPER
CASE Category: 13 - PHYSICS

NAS 5 26645 UNIV OF NEW HAMPSHIRE - DURHAM 6599
 DEFINITION PHASE OF THE DETECTOR SUBSYSTEM FOR THE COMPTEL
 08/19/1981 - 09/30/2002 FY02: \$90,000 Total: \$30,631,653
Prin. Invest.: J RYAN
Tech. Officer: GSFC/J NORRIS
CASE Category: 11 - ASTRONOMY

NAS 5 96063 UNIV OF NEW HAMPSHIRE - DURHAM 6600
 MODIS-EOS DEVELOPMENT OF ALGORITHMS
 07/16/1996 - 06/14/2003 FY02: \$277,000 Total: \$1,433,000
Prin. Invest.: J CAMPBELL
Tech. Officer: GSFC/D TOLL, GSFC/B CONBOY
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 1 298 UNIV OF NEW HAMPSHIRE - DURHAM 6601
 PEM-TROPICS B MY 1/2
 04/30/1998 - 07/31/2001 FY02: -\$42 Total: \$817,958
Prin. Invest.: R W TALBOT, J E DIBB
Tech. Officer: LARC/J M HOELL, JR., LARC/R J BENDURA
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 1 410 UNIV OF NEW HAMPSHIRE - DURHAM 6602
 TRACE-P DC-8 AND P3-B AIRCRAFT MY 1/3
 09/13/2000 - 06/30/2003 FY02: \$297,119 Total: \$677,026
Prin. Invest.: R W TALBOT
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 1 02023 UNIV OF NEW HAMPSHIRE - DURHAM 6603
 TROPOSPHERIC METHANE OVER THE PACIFIC BASIC DURING TRACE-P
 04/04/2002 - 01/04/2003 FY02: \$32,527 Total: \$32,527
Prin. Invest.: K B BARTLETT
Tech. Officer: LARC/G W SACHSE, LARC/G S DISKIN
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 5 226 UNIV OF NEW HAMPSHIRE - DURHAM 6604
 TROPICAL BIOCHEMISTRY & NASA LBA ECOLOGY SCIENCE S
 09/10/1997 - 12/31/2001 FY02: \$0 Total: \$656,894
Prin. Invest.: D BARTLETT
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCC 5 304 UNIV OF NEW HAMPSHIRE - DURHAM 6605
 WEB BASED SYSTEM FOR TERRESTRIAL ENVIRONMENTAL RESEARCH
 04/22/1998 - 12/31/2002 FY02: \$175,000 Total: \$3,560,000
Prin. Invest.: B MOORE
Tech. Officer: GSFC/M MAIDEN
CASE Category: 29 - MATH/COMPUTER SCI, OTHER

NCC 5 338 UNIV OF NEW HAMPSHIRE - DURHAM 6606
 MODELING THE BIOGEOCHEMICAL SYSTEM OF THE TERRESTRIAL AMAZON: ISSUES FOR SUSTAINABILITY
 06/23/1998 - 12/31/2002 FY02: \$269,385 Total: \$1,292,661
Prin. Invest.: B MOORE, 111
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCC 5 357 UNIV OF NEW HAMPSHIRE - DURHAM 6607
 SOIL BIOGEOCHEMISTRY OF CARBON, NUTRIENTS AND TRACE GAS IN THE AMAZON REGION OF BRAZIL: FIELD AND LABORATORY STUDIES
 08/03/1998 - 12/31/2002 FY02: \$0 Total: \$1,034,065
Prin. Invest.: P CRILL
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCC 5 477 UNIV OF NEW HAMPSHIRE - DURHAM 6608
 EVALUATION OF HYPERSPECTRAL REQUIREMENTS FOR REMOTE ESTIMATION OF FOREST ECOSYSTEM COMPOSITION
 03/22/2000 - 03/31/2003 FY02: \$52,422 Total: \$173,782
Prin. Invest.: M E MARTIN
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCC 5 499 UNIV OF NEW HAMPSHIRE - DURHAM 6609
 "LENA/IMAGE" MO&DA - ON-ORBIT EVALUATION & VALIDATION OF THE LENA INSTRUMENT OPERATION & DATA
 05/03/2000 - 01/31/2001 FY02: -\$178 Total: \$27,887
Prin. Invest.: J M QUINN
Tech. Officer: GSFC/T E MOORE
CASE Category: 11 - ASTRONOMY

NCC 5 587 UNIV OF NEW HAMPSHIRE - DURHAM 6610
 VALIDATING, SCALING AND PARAMETERIZING A FOREST RE GROWTH MODEL FOR THE AMAZON REGION USING AIRCRAFT
 08/30/2001 - 08/31/2004 FY02: \$90,667 Total: \$372,064
Prin. Invest.: M DUCKEY
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NCC 5 608 UNIV OF NEW HAMPSHIRE - DURHAM 6611
 ECOSYSTEM RESPIRATION AND TRACE GAS EXCHANGE IN UN DISTURBED
 AND SELECTIVELY LOGGED FORESTS
 12/10/2001 - 12/31/2005 FY02: \$605,691 Total: \$605,691
Prin. Invest.: P CRILL
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30349 UNIV OF NEW HAMPSHIRE - DURHAM 6612
 SOURCE APPORTIONMENT OF ANTHROPOGENIC AEROSOLS CONTRIBUTING
 TO DIRECT RADIATIVE FORCING IN SOUTHERN
 08/24/2000 - 02/28/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: J E DIBB
Tech. Officer: GSFC/M WEITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40088 UNIV OF NEW HAMPSHIRE - DURHAM 6613
 NEW HAMPSHIRE SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/21/2001 - 02/28/2005 FY02: \$431,250 Total: \$1,116,796
Prin. Invest.: D BARTLETT
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50379 UNIV OF NEW HAMPSHIRE - DURHAM 6614
 SOUNDING ROCKET STUDY OF RETURN CURRENT REGION AURORA
 (STUDENT: ELIZABETH MACDONALD)
 05/13/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: K A LYNCH
Tech. Officer: GSFC/M MELLOTT
CASE Category: 11 – ASTRONOMY

NGT 5 50381 UNIV OF NEW HAMPSHIRE - DURHAM 6615
 INTERSTELLAR HE+ PICKUP ION VELOCITY DISTRIBUTION MODELING AND
 ANALYSIS (STUDENT: LUKAS SAUL)
 05/21/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: E MOBIUS
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NEW JERSEY

NAG 1 01110 NEW JERSEY INST OF TECHNOLOGY 6616
 NANOCOMPOSITES BASED ON LIQUID CRYSTALLINE POLYMERS
 08/30/2001 - 09/30/2004 FY02: \$0 Total: \$131,933
Prin. Invest.: M JAFFE
Tech. Officer: LARC/E S WEISER, LARC/B J JENSEN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2367 NEW JERSEY INST OF TECHNOLOGY 6617
 GRAVITY AND GRANULAR MATERIALS GRAVITY AND GRANULAR MATERIALS
 03/24/2000 - 11/30/2003 FY02: \$52,180 Total: \$72,513
Prin. Invest.: L KONDIC
Tech. Officer: GRC/A WILKENSEN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2459 NEW JERSEY INST OF TECHNOLOGY 6618
 DATA ANALYSIS FOR REAL-TIME/POST FLIGHT HEALTH MONITORING OF
 PROPULSION SYSTEMS
 06/07/2000 - 08/31/2002 FY02: \$0 Total: \$104,419
Prin. Invest.: D P DHAWAN
Tech. Officer: GRC/E WONG
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2475 NEW JERSEY INST OF TECHNOLOGY 6619
 DATA MINING AND OPTIMIZATION TOOLS FOR ENGINE CONDITION MONITORING
 07/19/2000 - 03/31/2002 FY02: \$0 Total: \$94,022
Prin. Invest.: D P DHAWAN
Tech. Officer: GRC/J LITT
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 5 7085 NEW JERSEY INST OF TECHNOLOGY 6620
 STATISTICAL STUDIES OF FILAMENT DIAPPEARANCES BY ANALYZING
 FULL-DISK YOHKOH SXT AND BBSO HX DATA
 03/13/1998 - 10/14/2001 FY02: \$0 Total: \$105,906
Prin. Invest.: H WANG
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7454 NEW JERSEY INST OF TECHNOLOGY 6621
 EARTHSHINE MEASUREMENTS OF GLOBAL ATMOSPHERIC PROPERTIES
 07/23/1998 - 07/31/2001 FY02: \$0 Total: \$325,721
Prin. Invest.: P R GOODE
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 7837 NEW JERSEY INST OF TECHNOLOGY 6622
 SOHO/BBSO COORDINATED STUDY ON MAGNETIC RECONNECTION IN
 THE QUIET SUN
 12/22/1998 - 08/31/2002 FY02: \$0 Total: \$232,363
Prin. Invest.: H WANG
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8485 NEW JERSEY INST OF TECHNOLOGY 6623
 INTERACTION OF WAVES AND CONVECTION IN THE SUN
 05/04/1999 - 10/31/2002 FY02: \$0 Total: \$131,417
Prin. Invest.: M F WOODARD
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 9501 NEW JERSEY INST OF TECHNOLOGY 6624
 STUDIES OF SMALL-SCALE DYNAMICS BY JOINT TRACE AND BBSO
 OBSERVATIONS
 04/20/2000 - 12/31/2002 FY02: \$31,630 Total: \$148,113
Prin. Invest.: H WANG
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9519 NEW JERSEY INST OF TECHNOLOGY 6625
 SOURCES OF SOLAR IRRADIANCE VARIATION
 05/02/2000 - 10/30/2001 FY02: -\$1,516 Total: \$45,584
Prin. Invest.: M F WOODARD
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9682 NEW JERSEY INST OF TECHNOLOGY 6626
 STUDIES OF SOLAR MAGNETIC FIELDS & SOLAR ACTIVITY
 06/26/2000 - 05/31/2003 FY02: \$481,008 Total: \$1,006,163
Prin. Invest.: P R GOODE
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NEW JERSEY

NASA'S UNIVERSITY PROGRAM

NAG 5 9730 NEW JERSEY INST OF TECHNOLOGY 6627
 NEW GRANT GLOBAL ASYMMETRIES IN SOLAR INTERIOR FROM SOHO
 06/22/2000 - 06/30/2001 FY02: \$0 Total: \$73,307
Prin. Invest.: P GOODE
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9738 NEW JERSEY INST OF TECHNOLOGY 6628
 NEW GRANT STUDY OF FILAMENT ERUPTIONS AND CORONAL MASS
 EJECTIONS BY SOHO
 07/18/2000 - 07/31/2001 FY02: \$0 Total: \$100,440
Prin. Invest.: H WANG
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10212 NEW JERSEY INST OF TECHNOLOGY 6629
 MICROWAVE IMAGING SPECTROSCOPY OF SOLAR FLARES IN SUPPORT
 OF HESSI
 01/03/2001 - 12/31/2003 FY02: \$86,226 Total: \$165,171
Prin. Invest.: D E GARY
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10891 NEW JERSEY INST OF TECHNOLOGY 6630
 STUDY OF OVSA MICROWAVES AND HESSI HARD X-RAYS
 05/10/2001 - 05/31/2004 FY02: \$48,574 Total: \$95,782
Prin. Invest.: J LEE
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10894 NEW JERSEY INST OF TECHNOLOGY 6631
 EPHEMERAL REGIONS AND CANCELLING MAGNETIC FEATURES
 05/14/2001 - 05/31/2004 FY02: \$47,503 Total: \$93,748
Prin. Invest.: J CHAE
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10910 NEW JERSEY INST OF TECHNOLOGY 6632
 HESSI-BBSO JOINT STUDIES OF SOLAR FLARES
 05/24/2001 - 05/31/2004 FY02: \$77,533 Total: \$152,504
Prin. Invest.: H WANG
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11007 NEW JERSEY INST OF TECHNOLOGY 6633
 EARTHSHINE MEASUREMENTS OF THE EARTH'S ALBEDO
 06/29/2001 - 06/30/2004 FY02: \$244,735 Total: \$318,240
Prin. Invest.: P R GOODE
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 11875 NEW JERSEY INST OF TECHNOLOGY 6634
 MICROWAVE IMAGING OF SOLAR FLARES AND ACTIVE REGIONS WITH
 THE OWENS VALLEYSOLAR ARRAY
 03/15/2002 - 03/14/2005 FY02: \$84,743 Total: \$84,743
Prin. Invest.: D E GARY
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 8 1714 NEW JERSEY INST OF TECHNOLOGY 6635
 HIGH TEMPERATURE PHASES AND PHASE EQUILIBRIA IN REACTIVE
 MOLTEN METAL-BASED SYSTEMS
 05/04/2000 - 11/30/2003 FY02: \$105,000 Total: \$254,750
Prin. Invest.: E DREIZIN
Tech. Officer: MSFC/P DOTY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 746 NEW JERSEY INST OF TECHNOLOGY 6636
 DETAILED REACTION MECHANISMS AND PARTICLE INTERACT ION IN
 BURNING TWO-PHASE SYSTEMS
 12/07/1999 - 06/30/2001 FY02: \$0 Total: \$53,363
Prin. Invest.: E L DREIZEN
Tech. Officer: GRC/R F FRIEDMAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9103 PASSAIC COUNTY COMM COLL 6637
 PANTHER PROJECT (PATERSON & NASA TOGETHER FOR HIGH EXPECTA-
 TIONS & RESULTS)
 03/10/2000 - 02/28/2003 FY02: \$99,853 Total: \$299,853
Prin. Invest.: R EPSTEIN
Tech. Officer: HQ/STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2291 PRINCETON UNIV 6638
 ADAPTIVE AND OPTIMAL CONTROLLER DESIGNS FOR UNCER- TAIN AERO-
 SPACE STRUCTURES
 04/13/2000 - 12/01/2000 FY02: \$0 Total: \$45,000
Prin. Invest.: M Q PHAN
Tech. Officer: LARC/P G MAGHAMI
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 1 01010 PRINCETON UNIV 6639
 SELF-HEALING ORGANIC/INORGANIC NANOCOMPOSITES
 01/10/2001 - 12/31/2003 FY02: \$125,000 Total: \$250,000
Prin. Invest.: A AKSAY
Tech. Officer: WFF/T L STCLAIR
CASE Category: 12 – CHEMISTRY

NAG 2 1327 PRINCETON UNIV 6640
 DEVELOPMENT OF UNSTRUCTURED METHODS FOR EFFICIENT AERODY-
 NAMIC SIMULATION & DESIGN
 05/21/1999 - 03/14/2003 FY02: \$108,731 Total: \$314,066
Prin. Invest.: T J BAKER, A J SMITS
Tech. Officer: ARC/S E CLIFF
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 2 1400 PRINCETON UNIV 6641
 STUDIES IN ROTORCRAFT SYSTEM IDENTIFICATION
 03/28/2000 - 09/30/2001 FY02: \$0 Total: \$22,500
Prin. Invest.: H C CURTIS
Tech. Officer: ARC/M B TISCHLER
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 2 1475 PRINCETON UNIV 6642
 PIERZOELECTRIC MICROCANTILEVERS WITH NANOSCOPIC CO ATINGS A
 BREAKTHROUGH SENSING TECHNOLOGY
 04/20/2001 - 04/14/2003 FY02: \$200,000 Total: \$798,740
Prin. Invest.: I AKSAY
Tech. Officer: ARC/M MEYYAPPAN, ARC/H PATRIDGE
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1579 **PRINCETON UNIV** **6643**
 RESEARCH ON ROTORCRAFT MODELING
 09/06/2002 - 08/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: H C CURTISS
Tech. Officer: ARC/M TISCHLER, ARC/B LAKINSMITH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2248 **PRINCETON UNIV** **6644**
 THE CONTROL AND DYNAMICS OF HARD SPHERE COLLOIDAL DISPERSIONS
 03/30/1999 - 02/23/2004 FY02: \$405,180 Total: \$1,437,680
Prin. Invest.: P M CHALKIN
Tech. Officer: GRC/B S SINGH
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2380 **PRINCETON UNIV** **6645**
 ELECTROHYDRODYNAMIC FLOWS IN ELECTROCHEMICAL SYSTEMS
 04/06/2000 - 11/30/2003 FY02: \$95,000 Total: \$245,250
Prin. Invest.: D A SAVILLE
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2473 **PRINCETON UNIV** **6646**
 FUEL SULFUR ISSUES AND SOX/NOX/COX HOT SECTION INTERACTIONS
 07/12/2000 - 09/30/2001 FY02: \$0 Total: \$100,087
Prin. Invest.: D L DRYER
Tech. Officer: GRC/M RABINOWITZ
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2665 **PRINCETON UNIV** **6647**
 COMPUTATIONAL TOOLS FOR THE DESIGN OF ADVANCED COATING SYSTEMS FOR 3000F
 11/08/2001 - 09/30/2005 FY02: \$150,000 Total: \$150,000
Prin. Invest.: D J SROLOVITZ
Tech. Officer: GRC/B GOOD
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 616 **PRINCETON UNIV** **6648**
 INTERSTELLAR MEDIUM ABSORPTION PROFILE SPECTROGRAPH (IMAPS)
 01/01/1983 - 10/31/2002 FY02: \$0 Total: \$10,722,665
Prin. Invest.: E B JENKINS
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 3364 **PRINCETON UNIV** **6649**
 ORIGIN AND EVOLUTION OF DUST IN ELLIPTICAL GALAXIES
 08/28/1996 - 08/31/2001 FY02: \$0 Total: \$151,000
Prin. Invest.: G R KNAPP
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6591 **PRINCETON UNIV** **6650**
 EVALUATION AND INTERCOMPARISON OF THREE-DIMENSIONAL GLOBAL MARINE CARBON CYCLE MODELS
 11/07/1997 - 12/31/2000 FY02: \$0 Total: \$172,804
Prin. Invest.: J L SARMIENTO
Tech. Officer: GSFC/G ASRAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6734 **PRINCETON UNIV** **6651**
 IMAGING THE CELESTIAL EQUATOR AT 12 MICRONS AND 2.5 MICRONS AND COMPARISON ON WITH FIVE COLOR
 12/16/1997 - 12/31/2001 FY02: \$0 Total: \$45,000
Prin. Invest.: G KNAPP
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7030 **PRINCETON UNIV** **6652**
 INTERSTELLAR STUDIES - ATP
 02/17/1998 - 02/14/2002 FY02: \$0 Total: \$297,933
Prin. Invest.: B T DRAINE
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7066 **PRINCETON UNIV** **6653**
 DYNAMICS OF THE GALAXY, GLOBULAR CLUSTERS, AND THE LOCAL GROUP - ATP
 02/26/1998 - 02/28/2002 FY02: \$0 Total: \$229,480
Prin. Invest.: S D TREMAINE
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7154 **PRINCETON UNIV** **6654**
 FORMATION AND EVOLUTION OF GROUPS AND FILAMENTS - ATP
 03/16/1998 - 03/14/2003 FY02: \$0 Total: \$348,752
Prin. Invest.: D N SPERGEL
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7297 **PRINCETON UNIV** **6655**
 A TERRESTRIAL WATER AND ENERGY BUDGET FOR THE BOREAL STUDY REGION SCALE USING FIELD MEASUREMENTS, R
 04/21/1998 - 04/30/2002 FY02: \$0 Total: \$103,503
Prin. Invest.: E F WOOD
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7310 **PRINCETON UNIV** **6656**
 LONG-TERM ORBITAL EVOLUTION IN PLANETARY SYSTEMS AND PROTOPLANETARY DISKS
 04/22/1998 - 04/30/2001 FY02: \$0 Total: \$217,000
Prin. Invest.: S D TREMAINE
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7544 **PRINCETON UNIV** **6657**
 HYDROLOGY OF EXTREME FLOODS FOR THE UNITED STATES EAST OF THE ROCKY MOUNTAINS
 06/23/1998 - 09/30/2001 FY02: \$0 Total: \$246,097
Prin. Invest.: J A SMITH
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7744 **PRINCETON UNIV** **6658**
 DEVELOPMENT AND EVALUATION OF RADAR DATA QUALITY CONTROL ALGORITHMS
 10/28/1998 - 10/31/2001 FY02: \$0 Total: \$254,471
Prin. Invest.: J A SMITH
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NEW JERSEY

NASA'S UNIVERSITY PROGRAM

NAG 5 8084 **PRINCETON UNIV** **6659**
 PRIMARY AND SECONDARY ANISOTROPIES OF COSMIC MICRO WAVE
 BACKGROUND
 01/19/1999 - 02/28/2002 FY02: \$0 Total: \$270,664
Prin. Invest.: U SELJAK
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8365 **PRINCETON UNIV** **6660**
 STUDYING THE EVOLUTION OF X-RAY CLUSTERS OF GALAXIES USING
 LARGE-SCALE HIGH RESOLUTION COSMOLOGIC
 03/15/1999 - 03/14/2003 FY02: \$0 Total: \$363,066
Prin. Invest.: R CEN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8385 **PRINCETON UNIV** **6661**
 EVOLUTION AND DYNAMICS OF PROTOSTELLAR DISKS
 03/03/1999 - 02/28/2003 FY02: \$0 Total: \$125,000
Prin. Invest.: J GOODMAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8676 **PRINCETON UNIV** **6662**
 ATMOSPHERIC AEROSOL EVOLUTION AND EXCHANGE
 07/08/1999 - 07/14/2003 FY02: \$0 Total: \$322,129
Prin. Invest.: L RUSSELL
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9274 **PRINCETON UNIV** **6663**
 EARLY IDENTIFICATION & INTERPRETATION OF QUASAR/ AGN MICROLENS-
 ING EVENT: PROBES OF ACCRETIONDISK
 03/15/2000 - 03/14/2003 FY02: \$94,818 Total: \$268,058
Prin. Invest.: E TURNER
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9284 **PRINCETON UNIV** **6664**
 FINDING THE BARYONS: MATCHING COSMOLOGICAL PREDICTIONS WITH
 THE X-RAY SKY
 04/17/2000 - 04/30/2003 FY02: \$127,676 Total: \$338,020
Prin. Invest.: J P OSTRIKER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9414 **PRINCETON UNIV** **6665**
 UNDERSTANDING WATER, CLIMATE AND GLOBAL CHANGE: A GEWEX
 GLOBAL WATER AND ENERGY PATHFINDER DATA SET
 04/11/2000 - 04/14/2003 FY02: \$85,509 Total: \$180,957
Prin. Invest.: E WOOD
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9486 **PRINCETON UNIV** **6666**
 TERRESTRIAL HYDROLOGY & CLIMATE STUDIES USING EOS- ERA DATA
 04/17/2000 - 03/31/2003 FY02: \$124,060 Total: \$278,018
Prin. Invest.: E WOOD
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9635 **PRINCETON UNIV** **6667**
 TMI SOIL MOISTURE PATHFINDER DATA STUDY
 06/05/2000 - 05/31/2003 FY02: \$85,001 Total: \$175,003
Prin. Invest.: E WOOD
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9748 **PRINCETON UNIV** **6668**
 "SATELLITE ATTITUDE ESTIMATION WITH THE TWO STEP OPTIMAL ESTI-
 MATOR"
 07/14/2000 - 02/28/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: N KASDIN
Tech. Officer: GSFC/R HARMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9810 **PRINCETON UNIV** **6669**
 REGIONAL CONTRIBUTION TO THE GLOBAL TROPOSPHERIC OZONE
 BUDGET-GLOBAL MODELING AND DATA ANALYSIS
 07/18/2000 - 07/14/2003 FY02: \$62,359 Total: \$124,203
Prin. Invest.: D L MAUZERALL
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9891 **PRINCETON UNIV** **6670**
 USE OF TRMM DATA TO EVALUATE BENEFITS OF POST-2002 GLOBAL
 PRECIPITATION MISSION FOR LAND SURFACE HYD
 08/23/2000 - 08/31/2003 FY02: \$113,000 Total: \$239,000
Prin. Invest.: E F WOOD
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10456 **PRINCETON UNIV** **6671**
 RESONANT & SECULAR ORBITAL DYNAMICS OF PLANETS, PLANETESI-
 MALS & SATELLITES
 02/21/2001 - 02/28/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: S TREMAINE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10481 **PRINCETON UNIV** **6672**
 MICROWAVE ANISOTROPY PROBE (MAP) INVESTIGATION PHASE III
 COMPLETION & PHASE IV DATA ANALYSIS
 03/01/2001 - 07/31/2004 FY02: \$1,932,373 Total: \$2,313,913
Prin. Invest.: L PAGE
Tech. Officer: GSFC/C BENNET
CASE Category: 11 – ASTRONOMY

NAG 5 10811 **PRINCETON UNIV** **6673**
 INTERSTELLAR STUDIES OF DUST AND GAS (ATP 2000)
 04/30/2001 - 04/30/2004 FY02: \$65,400 Total: \$125,400
Prin. Invest.: B T DRAINE
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10933 **PRINCETON UNIV** **6674**
 MODELING AND SIMULATION OF THE MAXIM PATHFINDER MISSION: PRE-
 CISION SPACECRAFT FORMATION CONTROL
 06/04/2001 - 10/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: J KASDIN
Tech. Officer: GSFC/F L MARKLEY
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11094	PRINCETON UNIV	6675	NAG 5 11983	PRINCETON UNIV	6684
PARALLAXES OF RED GIANT STARS (ADP 2000)			SMALL SCALE ANISOTROPIES IN COSMIC MICROWAVE BACK GROUND		
07/10/2001 - 07/14/2003	FY02: \$39,935	Total: \$78,326	04/12/2002 - 04/14/2005	FY02: \$86,869	Total: \$86,869
<i>Prin. Invest.:</i> G R KNAPP			<i>Prin. Invest.:</i> U SELJAK		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/M SALAMON		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11111	PRINCETON UNIV	6676	NAG 5 12015	PRINCETON UNIV	6685
LAND SURFACE MODELING STUDIES IN SUPPORT OF AQUA AMSR-E			MGCM SIMULATIONS OF MARTIAN CLIMATE		
VALIDATION AQUA-0088-0029			04/22/2002 - 09/19/2002	FY02: \$0	Total: \$0
07/12/2001 - 08/31/2004	FY02: \$92,326	Total: \$138,917	<i>Prin. Invest.:</i> R Q WILSON		
<i>Prin. Invest.:</i> E F WOOD			<i>Tech. Officer:</i> GSFC/J HILLMAN		
<i>Tech. Officer:</i> GSFC/D STARR			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER					
NAG 5 11136	PRINCETON UNIV	6677	NAG 5 12212	PRINCETON UNIV	6686
TESTING COSMOLOGICAL MODELS WITH QSO ABSORBERS (L TSA 2000)			SEARCH FOR PLANETS WITH GRAVITATIONAL MICROLENSING & PLANETARY TRANSITS		
07/20/2001 - 09/30/2006	FY02: \$0	Total: \$88,745	05/15/2002 - 05/14/2005	FY02: \$80,000	Total: \$80,000
<i>Prin. Invest.:</i> T M TRIPP			<i>Prin. Invest.:</i> B PACZYNSKI		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/J BOYCE		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11301	PRINCETON UNIV	6678	NAG 5 12387	PRINCETON UNIV	6687
USING REMOTE SENSING AND OCEAN MEASUREMENTS TO CONstrain CARBON FLUXES IN THE SOUTHERN OCEAN			CLIMATE VARIABILITY ON DECADEAL & LONGER TIMESCALES		
08/31/2001 - 08/31/2003	FY02: \$50,556	Total: \$205,809	07/17/2002 - 07/14/2005	FY02: \$76,478	Total: \$76,478
<i>Prin. Invest.:</i> M BENDER			<i>Prin. Invest.:</i> G PHILANDER		
<i>Tech. Officer:</i> GSFC/J MARRA			<i>Tech. Officer:</i> GSFC/S HAKKINEN		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 33 – OCEANOGRAPHY		
NAG 5 11489	PRINCETON UNIV	6679	NAG 5 12398	PRINCETON UNIV	6688
ANALYSIS OF COSMIC MICROWAVE BACKGROUND DATA (L TSA 2001)			AN INTEGRATED FORWARD AND INVERSE MODELING APPROACH TO THE PREDICTION OF PHYTOPLANKTON BLOOMS		
12/27/2001 - 12/31/2006	FY02: \$204,001	Total: \$204,001	07/23/2002 - 07/31/2005	FY02: \$71,220	Total: \$71,220
<i>Prin. Invest.:</i> U SELJAK			<i>Prin. Invest.:</i> J SARMIENTO		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/C TREES		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NAG 5 11610	PRINCETON UNIV	6680	NAG 5 12519	PRINCETON UNIV	6689
"EVALUATION OF HYDROLOGIC REMOTE SENSING OBSERVATIONS FOR IMPROVED WEATHER PREDICTION"			USING FUSE TO MEASURE THE GALACTIC HALO'S OPTIC DENSITY		
01/31/2002 - 01/31/2005	FY02: \$53,138	Total: \$53,138	08/21/2002 - 08/31/2003	FY02: \$18,600	Total: \$18,600
<i>Prin. Invest.:</i> E F WOOD			<i>Prin. Invest.:</i> E L JENKINS		
<i>Tech. Officer:</i> GSFC/P R HOUSER			<i>Tech. Officer:</i> GSFC/G SONNEBORN		
<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11664	PRINCETON UNIV	6681	NAG 5 12542	PRINCETON UNIV	6690
EVOLUTION AND DYNAMICS OF PROTOSTELLAR DISKS			INTERANNUAL VARIABILITY IN TRANS-PACIFIC TRANSPORT OF POLLUTION		
02/11/2002 - 02/28/2005	FY02: \$70,000	Total: \$70,000	08/29/2002 - 08/31/2005	FY02: \$95,475	Total: \$95,475
<i>Prin. Invest.:</i> J GOODMAN			<i>Prin. Invest.:</i> D MAUZERALL		
<i>Tech. Officer:</i> GSFC/J BOYCE			<i>Tech. Officer:</i> GSFC/M WEI		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NAG 5 11884	PRINCETON UNIV	6682	NAG 5 12544	PRINCETON UNIV	6691
LAND INFORMATION SYSTEM			CONSTRAINING OCEANIC SOURCES AND SINKS OF CO2 BY INVERSE MODELING: A FIRST STEP TOWARD ASSIMILATION		
03/27/2002 - 07/31/2005	FY02: \$19,505	Total: \$19,505	08/30/2002 - 08/31/2005	FY02: \$3,666	Total: \$3,666
<i>Prin. Invest.:</i> E WOOD			<i>Prin. Invest.:</i> J SARMIENTO		
<i>Tech. Officer:</i> GSFC/C D PETERS-LIDARD			<i>Tech. Officer:</i> GSFC/C TREES		
<i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE			<i>CASE Category:</i> 33 – OCEANOGRAPHY		
NAG 5 11947	PRINCETON UNIV	6683	NAG 8 1368	PRINCETON UNIV	6692
OVI IN THE LMC HALO - FUSE 2001			ELECTROHYDRODYNAMICS OF SUSPENSIONS		
04/01/2002 - 03/31/2003	FY02: \$59,400	Total: \$59,400	05/30/1997 - 11/30/2000	FY02: \$0	Total: \$389,000
<i>Prin. Invest.:</i> D V BOWEN			<i>Prin. Invest.:</i> D SAVILLE		
<i>Tech. Officer:</i> GSFC/G SONNEBORN			<i>Tech. Officer:</i> MSFC/D NOENER		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 12 – CHEMISTRY		

NEW JERSEY

NASA'S UNIVERSITY PROGRAM

NAG 8 1517 **PRINCETON UNIV** **6693**
 TERRESTRIAL HYDROLOGY AND CLIMATE STUDIES USING EOS-ERA DATA
 (CATEGORY 2)
 05/07/1998 - 04/30/2002 FY02: \$0 Total: \$715,753
Prin. Invest.: E F WOOD
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 30110 **PRINCETON UNIV** **6694**
 SPACE TELESCOPE IMAGING SPECTROGRAPH PROGRAM SUPPORT
 06/17/1987 - 12/31/2004 FY02: \$232,000 Total: \$1,346,245
Prin. Invest.: E JENKINS
Tech. Officer: GSFC/D VITAGLINO
CASE Category: 11 – ASTRONOMY

NAS 5 96021 **PRINCETON UNIV** **6695**
 MICROWAVE ANISOTROPY PROBE INVESTIGATION (PHASE I DEFINITION
 STUDY)
 06/28/1996 - 05/30/2001 FY02: \$0 Total: \$9,368,566
Prin. Invest.: D WILKINSON
Tech. Officer: GSFC/R CUDDAPAH
CASE Category: 11 – ASTRONOMY

NCC 1 01010 **PRINCETON UNIV** **6696**
 DEV OF A DESIGN METHODOLOGY FOR RECONFIGURABLE FLIGHT CON-
 TROL SYSTEMS
 02/27/2001 - 02/28/2002 FY02: \$0 Total: \$50,992
Prin. Invest.: I A AKSAY
Tech. Officer: LARC/E J SIOCHI, LARC/T L ST. CLAIR
CASE Category: 12 – CHEMISTRY

NCC 1 02037 **PRINCETON UNIV** **6697**
 UNIV RESEARCH ENGINEERING AND TECHNOLOGY INST (URETI) BIOIN-
 SPIRED MULTIFUNCTIONAL NANOCOMPOSITE
 08/19/2002 - 08/18/2007 FY02: \$1,500,000 Total: \$1,500,000
Prin. Invest.: I A AKSAY
Tech. Officer: LARC/T R SUTTER
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 670 **PRINCETON UNIV** **6698**
 STRUCTURE AND RESPONSE OF SPHERICAL DIFFUSION FLAM ES
 02/08/1999 - 12/29/2002 FY02: \$120,000 Total: \$553,750
Prin. Invest.: C K LAW
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 687 **PRINCETON UNIV** **6699**
 AERODYNAMICS AND CHEMICAL KINETICS OF PREMIXED FLAMES AT HIGH
 PRESSURE
 03/12/1999 - 01/03/2003 FY02: \$112,500 Total: \$451,500
Prin. Invest.: C K LAW
Tech. Officer: GRC/D SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 735 **PRINCETON UNIV** **6700**
 SCIENTIFIC SUPPORT FOR A SPACE SHUTTLE DROPLET BURNING EXPERI-
 MENT
 09/30/1999 - 11/30/2002 FY02: \$161,497 Total: \$663,745
Prin. Invest.: F L DRYER
Tech. Officer: GRC/D L URBAN
CASE Category: 46 – MECHANICAL ENGR

NGT 5 30113 **PRINCETON UNIV** **6701**
 CHANGE IN FOREST COVER OF NANG RONG, THAILAND: AN INTEGRATED
 PRGM OF LANDSCAPE ANALYSIS, EMPIRICAL S
 10/01/1997 - 08/31/2001 FY02: -\$586 Total: \$65,414
Prin. Invest.: S HUBBELL
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30134 **PRINCETON UNIV** **6702**
 RESPONSE OF ENSO TO MODULATIONS IN TROPICAL CLIMATE
 E/STUDENT:WITTENBERG
 09/04/1998 - 08/31/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: G PHILANDER
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30137 **PRINCETON UNIV** **6703**
 TRANSBOUNDARY AIR POLLUTION IN ASIA/STUDENT:HOLLOWAY
 09/04/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: H LEVY, 11
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30333 **PRINCETON UNIV** **6704**
 THE INTERACTION BETWEEN THE ABYSSAL CIRCULATION & THE WIND
 DRIVEN OCEAN DYNAMICS & EFFECTS ON THE CL
 08/16/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: G PHILANDER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30341 **PRINCETON UNIV** **6705**
 ELEPHANTS, FIRE & VEGETATION CHANGE IN SOUTHERN AFRICAN
 WOODLANDS/STUDENT: RICARDO HOLDO
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: A DOBSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30356 **PRINCETON UNIV** **6706**
 MODELING MARINE DENITRIFICATION & N2 FIXATION STUDENT: CURTIS
 DEUTSCH
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J SARMIENTO
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50333 **PRINCETON UNIV** **6707**
 ROLE OF GLOBAL SNOW COVER EXTENT ON CLIMATE VARIABILITY &
 PREDICTABILITY STUDENT: RADHIKA WIJETUNG
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: E F WOOD
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50356 **PRINCETON UNIV** **6708**
 LITHIUM LORENTZ FORCE ACCELERATOR RESEARCH FOR HIGH POWER
 STEADY-STATE SPACE PROPULSION (STUDENT:
 05/23/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: E CHOUERI
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50370 **PRINCETON UNIV** **6709**
OPTICALLY-TUNABLE COLLOIDAL CRYSTALLIZATION (STUDENT: W. RISTEN-
PART)
06/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D SAVILLE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50383 **PRINCETON UNIV** **6710**
GRAVITATIONAL LENSING OF COSMIC MICROWAVE BACK- GROUND (STU-
DENT: CHRISTOPHER HIRATA)
05/20/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: U SELJAK
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50407 **PRINCETON UNIV** **6711**
KINETICS OF COLLOIDAL CRYSTALLIZATION
07/31/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W RUSSEL
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2521 **ROWAN UNIV** **6712**
GRAVITATIONAL INFLUENCES ON FLAME PROPAGATION THROUGH NON
UNIFORM PREMIXED GAS SYSTEMS
01/10/2001 - 11/30/2004 FY02: \$17,452 Total: \$28,197
Prin. Invest.: D MARCHESE
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 6776 **ROWAN UNIV** **6713**
RESEARCH IN PLANETARY ASTRONOMY
01/09/1998 - 06/30/2002 FY02: \$0 Total: \$246,728
Prin. Invest.: D KLASSEN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9593 **ROWAN UNIV** **6714**
FUNDING FOR PROFESSOR KAREN MAGEE-SAUER, DEPT OF CHEMISTRY
& PHYSICS; PRODUCTION DATA PROCESSING
06/07/2000 - 05/31/2003 FY02: \$8,900 Total: \$17,800
Prin. Invest.: K MAGEE-SAUER
Tech. Officer: GSFC/M J MUMMA
CASE Category: 13 – PHYSICS

NAG 5 11076 **ROWAN UNIV** **6715**
CLOUDS OF MARS-AN IRFT/MGS COMPARIION
08/06/2001 - 08/14/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: D R KLASSEN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 1 2154 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6716**
SAGE II VALIDATION WITH A GLOBAL LIDAR NETWORK MY 1/3
03/10/1999 - 12/31/2002 FY02: \$0 Total: \$253,933
Prin. Invest.: A ROBOCK
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2182 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6717**
NANOCOMPOSITES BASED ON LIQUID CRYSTALLINE POLYMERS
04/13/1999 - 10/31/2001 FY02: -\$1 Total: \$115,000
Prin. Invest.: M JAFFE
Tech. Officer: LARC/N J JOHNSON, LARC/J W CONNELLE
CASE Category: 12 – CHEMISTRY

NAG 1 2311 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6718**
NIGHTTIME POLAR CLOUD PARAMETERS RETRIEVED FROM SATELLITE
SOUNDER AND IMAGE DATA
06/15/2000 - 06/30/2002 FY02: \$0 Total: \$68,099
Prin. Invest.: J A FRANCIS
Tech. Officer: LARC/P MINNIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1234 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6719**
SELF ADAPTIVE SOFTWARE FOR AUTOMATED DESIGN OF COM PLEX
ENGINEERING SYSTEMS
07/24/1998 - 06/30/2002 FY02: \$0 Total: \$788,238
Prin. Invest.: S AMAREL, T ELLMAN
Tech. Officer: ARC/M R LOWRY
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2350 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6720**
THE EFFECT OF GRAVITY ON THE MECHANICS OF FLUIDIZED BEDS
03/16/2000 - 11/30/2003 FY02: \$76,000 Total: \$202,000
Prin. Invest.: D J GLASSER
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2589 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6721**
IN-SITU ULTRA-HIGH VACUUM SCANNING PROBE MICROSCOPY STUDIES
OF THE POLYMER ANODE/LIPON INTERFACE
04/17/2001 - 05/31/2003 FY02: \$97,304 Total: \$147,304
Prin. Invest.: D H GAROFALINI
Tech. Officer: GRC/N HAGEDORN
CASE Category: 13 – PHYSICS

NAG 5 3432 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6722**
DETERMINING THE HUBBLE CONSTANT USING X-RAY, OPTIC IONS OF
CLUSTER
10/30/1996 - 09/30/2003 FY02: \$0 Total: \$638,401
Prin. Invest.: J P HUGHES
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 4327 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6723**
ISOTOPIC INVESTIGATIONS OF EXTRATERRESTRIAL MATERI
04/11/1997 - 02/28/2002 FY02: \$0 Total: \$339,000
Prin. Invest.: D F HERZOG
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 4597 **RUTGERS ST UNIV N.J.-INCLUDES PSCTWY** **6724**
TRANSIENT HEATING IN THE SOLAR ACCRETION DISK
05/15/1997 - 02/28/2001 FY02: \$0 Total: \$190,000
Prin. Invest.: R H HEWINS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NEW JERSEY

NASA'S UNIVERSITY PROGRAM

NAG 5 6011 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6725
 "NJ-NSCORT FOR BIOGENERATIVE LIFE SUPPORT SYSTEM
 07/23/1997 - 04/30/2001 FY02: \$0 Total: \$5,084,998
Prin. Invest.: H JANES
Tech. Officer: GSFC/G FOGLEMAN
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 6037 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6726
 BLACK HOLES AND GALAXY DYNAMICS
 10/08/1997 - 10/14/2002 FY02: \$123,000 Total: \$577,000
Prin. Invest.: D MERRITT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7015 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6727
 THEORETICAL ISSUES FOR INTERPRETING COSMIC MICROWAVE BACKGROUND MAPS_ATP
 02/17/1998 - 04/30/2001 FY02: \$0 Total: \$100,333
Prin. Invest.: A B KOSOWSKY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7148 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6728
 UV SOLID STATE DETECTORS
 05/04/1998 - 04/14/2002 FY02: \$0 Total: \$301,004
Prin. Invest.: C L JOSEPH
Tech. Officer: GSFC/W WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 7564 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6729
 EVALUATION OF SNOW WATER EQUIVALENT ACROSS GRASSLAND REGIONS
 06/30/1998 - 06/30/2001 FY02: \$0 Total: \$115,143
Prin. Invest.: D ROBINSON
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8213 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6730
 THE IMPACTS OF LAND-USE/LAND-COVER CHANGE IN AMAZONIA ON HYDROMETEOROLOGICAL PROCESS
 03/01/1999 - 06/30/2001 FY02: -\$104,697 Total: \$195,303
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9046 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6731
 ORIGIN AND EVOLUTION OF MASSIVE BLACK HOLES IN GALAXIES - (ATP 99)
 03/06/2000 - 05/31/2002 FY02: \$0 Total: \$196,783
Prin. Invest.: D MERRITT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9340 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6732
 ATMOSPHERIC IRON FLUXES TO THE OCEAN: SEASONAL PATTERNS AND LINKAGE TO PHYTOPLANKTON BLOOMS
 04/11/2000 - 04/30/2003 FY02: \$126,118 Total: \$283,484
Prin. Invest.: Y GAO
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9528 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6733
 IN SITU SYNCHROTRON MICROXANES MEASUREMENTS OF OXIDATION STATES OF SOLAR SYSTEM MATERIALS
 04/28/2000 - 04/30/2003 FY02: \$0 Total: \$109,000
Prin. Invest.: J S DELANEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9746 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6734
 SUPPORT FOR THE NASA-HYDROMETEOROLOGY SCIENCE TEAM OFFICE
 07/11/2000 - 07/14/2001 FY02: -\$10,594 Total: \$38,881
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9787 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6735
 ESTABLISHING AND IMPROVING A TRACEABLE, TIME-DEPENDENT PRIMARY PRODUCTION ALGORITHM FOR GENERATING
 07/14/2000 - 07/14/2001 FY02: \$0 Total: \$74,000
Prin. Invest.: M J BEHRENFELD
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9792 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6736
 VOLCANIC ERUPTIONS AND CLIMATE
 07/18/2000 - 07/31/2003 FY02: \$60,000 Total: \$180,000
Prin. Invest.: A ROBECK
Tech. Officer: GSFC/K BERGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9847 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6737
 OCEAN CARBON FLUX: TRANSPORT & BURIAL WITHIN THE WESTERN & EASTERN U.S. COASTAL ZONES
 07/31/2000 - 07/31/2003 FY02: \$101,250 Total: \$292,500
Prin. Invest.: D HAIDVOGEL
Tech. Officer: GSFC/E LINSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9927 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6738
 XMM SPECTRO-IMAGERY OF TWO YOUNG EJECTA-DOMINATED SNRS: KEPLER & W49B
 09/07/2000 - 09/14/2003 FY02: \$0 Total: \$6,240
Prin. Invest.: J P HUGHES
Tech. Officer: GSFC/D F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9979 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6739
 CONFRONTING THE COMPLEXITY OF GALAXY CLUSTERS WITH LENSING, SZ, & XMM DATA
 09/12/2000 - 09/14/2003 FY02: \$0 Total: \$44,800
Prin. Invest.: J P HUGHES
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9990 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6740
 XMM STUDIES OF A NEW SAMPLE OF YOUNG EJECTA-DOMINATED GALACTIC SNRS
 09/14/2000 - 08/31/2003 FY02: \$0 Total: \$45,061
Prin. Invest.: J P HUGHES
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10003 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6741
 BLACK HOLES IN EARLY TYPE GALAXIES: INCIDENCE, FOR MATION AND
 EVOLUTION
 09/25/2000 - 08/31/2004 FY02: \$0 Total: \$216,501
Prin. Invest.: L FERRARESE
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10110 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6742
 SPACE ASTROPHYSICS RESEARCH & ANALYSIS PROGRAM
 01/02/2001 - 12/31/2004 FY02: \$100,000 Total: \$200,000
Prin. Invest.: J SELLWOOD
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10357 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6743
 HOT-ELECTRON DETECTORS: RECORD SENSITIVITY DUE TO CONTROL-
 LABLE ELECTRON-PHONON COUPLING IN SUPERCOND
 02/01/2001 - 01/14/2004 FY02: \$165,223 Total: \$347,817
Prin. Invest.: M GERSHENSON
Tech. Officer: GSFC/C STAHL
CASE Category: 13 – PHYSICS

NAG 5 10494 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6744
 SIMULATION & ANALYSIS OF METEORITIC MATERIAL
 02/28/2001 - 02/28/2004 FY02: \$120,000 Total: \$240,000
Prin. Invest.: R HEWINS
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10495 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6745
 TRANSIENT HEATING IN THE SOLAR ACCRETION DISK
 02/28/2001 - 02/28/2004 FY02: \$35,000 Total: \$65,000
Prin. Invest.: R HEWINS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10809 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6746
 REDUCTION OF BACKGROUND SIGNALS IN AIGAN OR GAN SOLID STATE
 DETECTORS
 04/26/2001 - 04/30/2002 FY02: \$0 Total: \$32,000
Prin. Invest.: C L JOSEPH
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11045 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6747
 EFFECTS OF RADIATION ON DESORPTION OF ALKALIS FROM MINERAL &
 ICE SURFACES: RELATION TO ORIGINS OF AL
 06/13/2001 - 06/14/2004 FY02: \$80,000 Total: \$160,000
Prin. Invest.: T MADEY
Tech. Officer: GSFC/D J BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11345 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6748
 USING REMOTE SENSING AND OCEAN OXYGEN MEASUREMENTS TO
 CONSTRAIN CARBONFLUXES IN THE SOUTHERN OCEA
 09/10/2001 - 09/14/2004 FY02: \$82,510 Total: \$161,091
Prin. Invest.: P G FALKONSKI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11403 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6749
 A HYBRID APPROACH FOR EVALUATING AND PREDICTING I TERATIONS
 BETWEEN THE SEASONAL SNOW PACK AND THE
 11/28/2001 - 11/30/2004 FY02: \$77,471 Total: \$77,471
Prin. Invest.: D A ROBINSON
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11437 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6750
 TOWARDS A BILLION COUNTS/SECOND PHOTON COUNTER WIT H HIGH
 QUANTUM EFFICIENCY
 12/03/2001 - 12/31/2005 FY02: \$190,000 Total: \$190,000
Prin. Invest.: C L JOSEPH
Tech. Officer: GSFC/P CRANE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11719 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6751
 ISOTOPIC INVESTIGATIONS OF EXTRATERRESTRIAL MATERIALS
 02/06/2002 - 01/31/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: G F HERZOG
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11720 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6752
 AN IMPROVED GCM SIMULATION OF THE ARCTIC HYDRO- LOGIC CYCLE
 USING SATELLITE-DERIVED PRODUCTS
 02/08/2002 - 02/14/2005 FY02: \$90,000 Total: \$90,000
Prin. Invest.: J R MILLER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1513 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6753
 SPATIAL & TEMPORAL VAIABILITY OF SOIL MOISTURE & ITS RELATION TO
 WATER & ENERGY BALANCES IN A MONSN
 06/01/1998 - 05/31/2002 FY02: \$0 Total: \$339,524
Prin. Invest.: Y LIU, R AVISSAR
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1769 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6754
 RESEARCH ON STRESS-DRIVEN INSTABILITY ON HELIUM- 4 CRYSTALS.
 04/27/2001 - 03/31/2005 FY02: \$106,468 Total: \$206,912
Prin. Invest.: H KOJIMA
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 3 967 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6755
 STRUCTURE AND RESPONSE OF SPHERICAL DIFFUSION FLAM ES
 05/22/2002 - 05/19/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: D D TSE
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 476 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6756
 COOPERATIVE RESEARCH IN REGIONAL & GLOBAL CLIMATE VARIABILITY.
 03/17/2000 - 03/31/2001 FY02: \$0 Total: \$657,181
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/R STOTHERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NEW JERSEY

NASA'S UNIVERSITY PROGRAM

NCC 5 553 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6757
 RESEARCH IN REGIONAL & GLOBAL CLIMATE VARIABILITY
 04/24/2001 - 03/31/2006 FY02: \$404,089 Total: \$1,104,089
Prin. Invest.: A ROBOCK
Tech. Officer: GSFC/R B STOTHERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 50229 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6758
 CROP MODELING FOR MULTIPLE CROP PRODUCTION AND CONTROL FOR
 ADVANCED LIFE SUPPORT SYSTEMS
 11/04/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: K C TING, FLEISHER
Tech. Officer: HQ/A NURRIDIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 50364 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6759
 DEVELOPMENT OF A HAPTIC INTERFACE FOR REMOTE OPERATIONS IN
 SPACE, MEDICINE AND VIRTUAL REALITY, USI
 06/12/2001 - 08/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C MAVROIDIS
Tech. Officer: GSFC/K BLADING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50376 RUTGERS ST UNIV N.J.-INCLUDES PSCTWY 6760
 SPATIALLY RESOLVED X-RAY SPECTROSCOPY OF YOUNG SUPERNOVA
 REMNANTS/STUDENT: CARA RAKOWSKI
 07/05/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J P HUGHES
Tech. Officer: GSFC/L KALUZIENSKI
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 9359 RUTGERS STATE UNIV OF NJ COOK CAMPUS 6761
 A STUDY OF TELECONNECTIONS USING A NESTED GCM-RCM & SATELLITE
 OBSERVATIONS
 04/06/2000 - 06/30/2001 FY02: -\$77,776 Total: \$22,224
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/K BERGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5344 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6762
 VERY-LARGE-FOCAL-PLANE PHOTOCATHODE-BASED IMAGE SENSORS
 FOR OWL
 01/16/2002 - 01/07/2005 FY02: \$144,000 Total: \$144,000
Prin. Invest.: C JOSEPH
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 9833 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6763
 ULTRAVIOLET TESTING OF GAN ARRAYS AS DESCRIBED IN THE PROPOSAL
 "GAN ULTRAVIOLET ARRAYS"
 07/26/2000 - 10/31/2003 FY02: \$24,504 Total: \$73,512
Prin. Invest.: D JOSEPH
Tech. Officer: GSFC/B MOTT
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11244 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6764
 GLOBAL MODELING AND ANALYSIS OF NONMETHANE HYDROCARBONS,
 OXYGENATED HYDROCARBONS, AND ANTHROPOG
 08/16/2001 - 08/31/2002 FY02: \$0 Total: \$81,221
Prin. Invest.: Y WANG
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11356 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6765
 REPRESENTING KEY PHYTOPLANKTON GROUPS IN OCEAN CARBON
 CYCLE MODELS
 09/25/2001 - 09/30/2004 FY02: \$32,767 Total: \$157,593
Prin. Invest.: P G FALKOWSKI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11585 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6766
 A POLAR-SPECIFIC 20-YEAR DATA SET OF CLOUD FRACTION AND HEIGHT
 DERIVED FROM SATELLITE RADIANCES
 01/25/2002 - 01/31/2004 FY02: \$78,000 Total: \$78,000
Prin. Invest.: J A FRANCIS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11714 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6767
 A DYNAMICAL STUDY OF THE VIRGO AND FORNAX CLUSTERS (LTSA 2001)
 02/27/2002 - 05/31/2007 FY02: \$110,000 Total: \$110,000
Prin. Invest.: P J COTE
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 12148 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6768
 IN SITU SYNCHROTRON MICROXANES MEASUREMENTS OF OXIDATION
 STATES OF SOLARSYSTEM MATERIALS
 05/23/2002 - 05/31/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: J S DELANEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12435 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6769
 NEW JERSEY ECOCOMPLEX LIFE SUPPORT CENTER PROJECT
 08/08/2002 - 07/31/2003 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: H JANES
Tech. Officer: GSFC/L P CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1283 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6770
 MOLECULAR CHARACTERIZATION OF EUBACTERIA IN THE BIOLOGICAL
 WATER PROCESSOR
 02/22/2001 - 02/21/2004 FY02: \$97,758 Total: \$241,986
Prin. Invest.: L KERKHOF
Tech. Officer: JSC/K DAUES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1318 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6771
 CHARACTERIZATION OF HYDROPONICALLY GROWN APOGEE WHEAT
 FLOUR
 06/18/2001 - 10/31/2001 FY02: \$0 Total: \$16,100
Prin. Invest.: J L KOKINI
Tech. Officer: JSC/V KLOERIS
CASE Category: 43 – CHEMICAL ENGR

NAS 5 99138 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6772
 AIRBORNE (LIFT) METHOD FOR MEASURING PHOTOSYNTHETIC PERFOR-
 MANCE & PRIMARY PRODUCTIVITY.
 04/15/1999 - 04/15/2002 FY02: \$0 Total: \$984,393
Prin. Invest.: Z KOLBER
Tech. Officer: GSFC/J B HARTLEY
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NCC 2 1259 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6773
 INTEGRATING MULTIPLE SOURCES OF INFORMATION IN TEX T MINING
 04/20/2001 - 05/31/2003 FY02: \$55,000 Total: \$135,000
Prin. Invest.: H HIRSCH
Tech. Officer: ARC/M SCHWABACHER, ARC/J COUGHLAN
CASE Category: 22 – COMPUTER SCIENCE

NGT13 52758 RUTGERS STATE UNIV OF NJ NEW BRUNSWICK 6774
 GRADUATE STUDENT RESEARCHERS PROGRAM - DYNAMIC INT ERAC-
 TIONS OF HOLOCENE SUBSISTENCE STRATEGIES AND
 06/27/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D HARRIS
Tech. Officer: SSC/R TRAVIS
CASE Category: 71 – ANTHROPOLOGY

NAG 5 8971 STEVENS INST OF TECHNOLOGY 6775
 ELECTRON-IMPACT DISSOCIATION AND EXCITATION OF MOLECULES AND
 MOLECULAR IONS
 01/28/2000 - 12/31/2002 FY02: \$60,100 Total: \$176,814
Prin. Invest.: K BECKER
Tech. Officer: GSFC/J HILLMAN
CASE Category: 11 – ASTRONOMY

NAG 9 1063 STEVENS INST OF TECHNOLOGY 6776
 INVESTIGATION OF AMBIENT PRESSURE
 01/05/1999 - 07/05/2002 FY02: \$0 Total: \$428,983
Prin. Invest.: G P KORFIATIS
Tech. Officer: JSC/J GRAF
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NGT 5 40096 STEVENS INST OF TECHNOLOGY 6777
 NEW JERSEY SPACE GRANT COLL AND FELLOWSHIP PROG RAM
 02/28/2001 - 02/28/2005 FY02: \$212,500 Total: \$418,625
Prin. Invest.: S THANGAM
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1367 UNIV OF MEDICINE AND DENTISTRY 6778
 MURINE DEVELOPMENT: CELLULAR & MOLECULAR ANALYSIS
 08/02/1999 - 07/14/2003 FY02: \$182,636 Total: \$887,952
Prin. Invest.: R S NOWAKOWSKI
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1162 UNIV OF MEDICINE AND DENTISTRY 6779
 GLUKOSE KINETICS AND MUSCLE ATROPHY
 09/21/1999 - 09/22/2003 FY02: \$200,782 Total: \$348,809
Prin. Invest.: T P STEIN
Tech. Officer: JSC/C W LLOYD
CASE Category: 56 – MEDICL

NCC 2 1354 UNIV OF MEDICINE AND DENTISTRY 6780
 GLUCOSE KINETICS AND MUSCLE ATROPHY
 07/23/2002 - 07/31/2003 FY02: \$44,999 Total: \$44,999
Prin. Invest.: T P STEIN
Tech. Officer: ARC/C E WADE, ARC/A ROMA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 50335 UNIV OF MEDICINE AND DENTISTRY 6781
 TRANSCRIPTIONAL REGULATION OF DIFFERENTIATING OSTE
 OBLASTS/STUDENT: RICHARD D'ALONZO
 10/16/2000 - 10/01/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: N C PARTRIDGE
Tech. Officer: HQ/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1556 UNIV. OF MEDICINE & DENTISTRY-NJ. 6782
 EFFECTS OF MICROGRAVITY ON ZEBRAFISH VESTIBULAR DE VELOPMENT
 04/30/2002 - 04/14/2003 FY02: \$57,300 Total: \$57,300
Prin. Invest.: S J MOORMAN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NEW MEXICO

NAG 9 1066 COLL OF SANTA FE 6783
 MOBILE SCIENCE PROJECT PACE/ MSET
 01/07/1999 - 12/31/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: B COLEMAN
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10150 EASTERN NEW MEXICO UNIV - MAIN CAMPUS 6784
 NEW MEXICO CONNECTIONS: CONNECTING PEOPLE, PLACES AND RE-
 SEARCH
 12/08/2000 - 08/13/2001 FY02: -\$5,302 Total: \$59,654
Prin. Invest.: S NUTTER
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 9 1255 EASTERN NEW MEXICO UNIV - MAIN CAMPUS 6785
 SMET CAMP
 08/12/2000 - 09/30/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: J MILLER
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1730 INST AMER INDIAN & AK NATIVE CULTURE & DEV 6786
 ESTABLISH A COMM BASED NATIVE AMERICAN AGHRIC ULTURE RE-
 SEARCH AND DEVELOPMENT CENTER
 06/22/2000 - 01/15/2002 FY02: \$0 Total: \$98,854
Prin. Invest.: S SULNA
Tech. Officer: MSFC/W LOVE
CASE Category: 55 – AGRICULTURE

NAG 8 1860 INST AMER INDIAN & AK NATIVE CULTURE & DEV 6787
 SANTA FE INDIAN SCHOOL COMM BASED NATIVE AMERICAN AGRICULTURE
 RESEARCH AND DEV CENTER
 06/28/2002 - 06/28/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: W COFFEY
Tech. Officer: MSFC/W LOVE
CASE Category: 55 – AGRICULTURE

NAG 5 8734 NEW MEXICO HIGHLANDS UNIV 6788
 CCD PHOTOMETRY OF THE VESTA FAMILY OF ASTEROIDS & AN ANALYSIS
 OF THEIRIMPACT ORIGIN
 08/26/1999 - 07/31/2003 FY02: \$0 Total: \$217,699
Prin. Invest.: D V RYAN
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 8 1639 NEW MEXICO HIGHLANDS UNIV 6789
 DEVELOPMENT OF NOVEL THERMOSTABLE PHOTOREFRACTIVE POLY-
 MERS AND SOL-GEL MATERIALS
 12/21/1999 - 12/20/2002 FY02: \$0 Total: \$290,006
Prin. Invest.: R D CLARK, M SANGHADASA
Tech. Officer: MSFC/B G PENN
CASE Category: 13 – PHYSICS

NEW MEXICO

NASA'S UNIVERSITY PROGRAM

NAG 8 1708 **NEW MEXICO HIGHLANDS UNIV** **6790**
 ALLIANCE FOR NONLINEAR OPTICS
 03/01/2000 - 02/28/2003 FY02: \$500,000 Total: \$1,500,000
Prin. Invest.: R CLARK
Tech. Officer: MSFC/W LOVE
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1139 **NEW MEXICO HIGHLANDS UNIV** **6791**
 AMERICAN INDIAN SCIENCE & TECH EDUCATION CONSORTIUM
 08/31/1999 - 08/30/2001 FY02: \$0 Total: \$278,000
Prin. Invest.: J C'DE BACA
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1168 **NEW MEXICO HIGHLANDS UNIV** **6792**
 JSC ASTROBIOLOGY INST
 09/28/1999 - 09/29/2002 FY02: \$0 Total: \$292,100
Prin. Invest.: J C DEBACA, J R JUAREZ
Tech. Officer: JSC/D S MCKAY, JSC/L ARMENDARIZ
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1260 **NEW MEXICO HIGHLANDS UNIV** **6793**
 STUDIES ON THE IMPACT OF CERRO GRANDE & VIVEASH FOREST FIRES
 09/07/2000 - 09/30/2004 FY02: \$0 Total: \$151,095
Prin. Invest.: J R JUAREZ
Tech. Officer: JSC/G HENDERSEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1330 **NEW MEXICO HIGHLANDS UNIV** **6794**
 REACHING OUT FOR SCIENCE, MATHEMATICS & TECHNOLOGY STUDENTS
 06/26/2001 - 06/26/2004 FY02: \$0 Total: \$19,528
Prin. Invest.: J R JUAREZ
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1369 **NEW MEXICO HIGHLANDS UNIV** **6795**
 EDUCATIONAL OUTREACH
 07/30/2001 - 07/31/2004 FY02: \$15,000 Total: \$34,000
Prin. Invest.: J JUAREZ
Tech. Officer: WFF/PBAKER, JSC/L M ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1374 **NEW MEXICO HIGHLANDS UNIV** **6796**
 AISTEC PROJECT
 08/09/2001 - 08/12/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: J CAIBACA
Tech. Officer: JSC/K KRISHEN, JSC/L ARMENDARIZ
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1375 **NEW MEXICO HIGHLANDS UNIV** **6797**
 HYDROCODE SIMULATIGRS OF POROUS ASTEROID IMPACTS
 08/09/2001 - 08/12/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: J R JUAREZ
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 9 1393 **NEW MEXICO HIGHLANDS UNIV** **6798**
 HYDRAZINE AIR FILTRATION SYSTEM
 01/04/2002 - 01/03/2005 FY02: \$174,932 Total: \$174,932
Prin. Invest.: J C DE BACA
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1394 **NEW MEXICO HIGHLANDS UNIV** **6799**
 JSC ASTROBIOLOGY INST
 08/09/2002 - 08/11/2005 FY02: \$456,822 Total: \$456,822
Prin. Invest.: J R JUAREZ
Tech. Officer: JSC/D S MCKAY, JSC/L M ARMENDARIZ
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1409 **NEW MEXICO HIGHLANDS UNIV** **6800**
 NMHU STUDENT RESEARCHERS-DEVELOP SKILLS&MOTIVATION TO EN-
 ABLE STDNTS TO GRAD & EMPHASIZE ON SMET
 08/01/2002 - 07/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: E RYAN, J C'DEBACA
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1921 **NEW MEXICO HIGHLANDS UNIV** **6801**
 EDUCATIONAL OUTREACH
 05/23/2000 - 05/31/2001 FY02: \$0 Total: \$18,803
Prin. Invest.: J R JUAREZ
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1922 **NEW MEXICO HIGHLANDS UNIV** **6802**
 HYDROCODE SIMULATIONS OF PAROUS ASTEROID IMPACTS
 05/23/2000 - 08/30/2002 FY02: \$0 Total: \$24,997
Prin. Invest.: J R JUAREZ
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2688 **NEW MEXICO INST OF MINING & TECH** **6803**
 ANALYSIS OF THE EFFECT OF SURFACE MODIFICATION ON POLYIMIDE
 COMPOSITES COATED WITH EROSION RESISTANT
 01/10/2002 - 08/31/2004 FY02: \$98,835 Total: \$98,835
Prin. Invest.: D A HIRSCHFELD
Tech. Officer: GRC/J K SUTTER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 4139 **NEW MEXICO INST OF MINING & TECH** **6804**
 OBSERVATIONS & ANALYSIS OF ATMOSPHERIC HYDROXYL
 03/17/1997 - 03/14/2001 FY02: -\$2,359 Total: \$174,523
Prin. Invest.: K MINSCHWANNER
Tech. Officer: GSFC/M J KURYLO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7109 **NEW MEXICO INST OF MINING & TECH** **6805**
 GROUND BASED MEASUREMENTS OF TOTAL OZONE, CLOUD PR OPER-
 TIES, AND UV DOSES
 03/25/1998 - 03/31/2002 FY02: \$0 Total: \$107,153
Prin. Invest.: D R MINSCHWANER
Tech. Officer: GSFC/J HERMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9328 **NEW MEXICO INST OF MINING & TECH** **6806**
 INFLUENCE OF LAND-ATMOSPHERE INTERACTIONS ON VARIA BILITY OF
 THE NORTH AMERICAN MONSOON
 04/03/2000 - 04/30/2003 FY02: \$104,565 Total: \$245,319
Prin. Invest.: E E SMALL
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1106 NEW MEXICO INST OF MINING & TECH 6807
 THE SEARCH FOR MICROBIAL BIOMARKERS IN TERRESTRIAL DEPOSITS
 05/10/1999 - 05/09/2004 FY02: \$12,000 Total: \$78,000
Prin. Invest.: T L KIEFT
Tech. Officer: JSC/F K GIBSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30169 NEW MEXICO INST OF MINING & TECH 6808
 COMBINED SIMULATION OF ALPINE GLACIERS AND CLOSED- BASIN LAKES:
 THE KEY TO DETERMINING THE LONG-TERM
 09/01/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: F M PHILLIPS, PLUMMER
Tech. Officer: GSFC/M Y WEI
CASE Category: 11 – ASTRONOMY

NAG 2 1334 NEW MEXICO STATE UNIV - LAS CRUCES 6809
 XENOPUS INNER EAR ORGAN INFORMATION IN AN ALTERED GRAVITY
 ENVIRONMENT
 07/08/1999 - 06/30/2003 FY02: \$0 Total: \$299,141
Prin. Invest.: E E SERRANO
Tech. Officer: ARC/C E WADE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 2 1562 NEW MEXICO STATE UNIV - LAS CRUCES 6810
 TOWARD A MODEL OF ORGANIZATIONAL RISK: CRITICAL FACTORS AT THE
 TEAM LEVEL
 05/28/2002 - 11/30/2002 FY02: \$39,709 Total: \$39,709
Prin. Invest.: N J COOKE
Tech. Officer: ARC/J ORASANU, ARC/M CONNORS
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 6007 NEW MEXICO STATE UNIV - LAS CRUCES 6811
 THEORETICAL & OBSERVATIONAL STUDIES OF SOLAR & EXT RA SOLAR
 PLANETARY ATMOSPHERES
 10/16/1996 - 06/30/2001 FY02: -\$80 Total: \$288,299
Prin. Invest.: M MARLEY
Tech. Officer: ARC/C P MCKAY, ARC/A J HATCH
CASE Category: 11 – ASTRONOMY

NAG 2 6030 NEW MEXICO STATE UNIV - LAS CRUCES 6812
 CAREER OPPORTUNITIES IN MATHEMATICS, ENGINEERING, TECHNOLOGY,
 & SCIENCE (COMETS) PROGRAMS
 03/09/1999 - 03/31/2002 FY02: \$0 Total: \$299,001
Prin. Invest.: G V GARCIA
Tech. Officer: ARC/A CARDENAS, ARC/G S LEE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 6053 NEW MEXICO STATE UNIV - LAS CRUCES 6813
 RIOSOFT CONSORTIUM - INFRASTRUCTURE FOR SOFTWARE COMPUTING
 NMSU
 10/31/2001 - 09/30/2002 FY02: \$75,000 Total: \$75,000
Prin. Invest.: N R PRASAD
Tech. Officer: ARC/B J COLLINS, ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2793 NEW MEXICO STATE UNIV - LAS CRUCES 6814
 IP-COMPLIANT SATELLITE ARCHITECTURE STUDY IP-COMPLIANT SATELLITE
 ARCHITECTURE STUDY
 07/03/2002 - 06/04/2004 FY02: \$67,703 Total: \$67,703
Prin. Invest.: D HORAN
Tech. Officer: GRC/R SLYWCZAK
CASE Category: 22 – COMPUTER SCIENCE

NAG 4 231 NEW MEXICO STATE UNIV - LAS CRUCES 6815
 POWER BEAMING DEMONSTRATOR POWER BEAMING DEMONSTRATOR
 08/20/2002 - 07/09/2003 FY02: \$49,589 Total: \$49,589
Prin. Invest.: S B HOTTMAN
Tech. Officer: DFRC/D BUSHMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 3842 NEW MEXICO STATE UNIV - LAS CRUCES 6816
 MODELLING X-RAY CLUSTERS: EVOLUTION AND REALISTIC
 02/25/1997 - 02/28/2001 FY02: -\$11,258 Total: \$288,282
Prin. Invest.: A KLYPIN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4987 NEW MEXICO STATE UNIV - LAS CRUCES 6817
 MODEL ATMOSPHERES AND SPECTRA FOR EXTRASOLAR GIANT
 06/26/1997 - 06/14/2001 FY02: \$0 Total: \$127,500
Prin. Invest.: D MARLEY
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 5159 NEW MEXICO STATE UNIV - LAS CRUCES 6818
 AN IMAGING SILICON CALORIMETER FOR USE ON ACCESS INCREMENTAL
 FUNDING FOR FIRST YEAR OF GRANT
 03/26/1998 - 12/31/2002 FY02: \$0 Total: \$209,000
Prin. Invest.: S J STOCHAJ
Tech. Officer: GSFC/B A MERRITT
CASE Category: 11 – ASTRONOMY

NAG 5 5226 NEW MEXICO STATE UNIV - LAS CRUCES 6819
 FIRST YEAR FUNDING FOR NAG5-5226
 07/06/1999 - 12/31/2002 FY02: \$0 Total: \$428,000
Prin. Invest.: S J STOCHAJ
Tech. Officer: WSTF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5351 NEW MEXICO STATE UNIV - LAS CRUCES 6820
 ESTABLISHMENT AND OPERATION OF THE SUBORBITAL CENTER OF
 EXCELLENCE.
 01/18/2002 - 11/30/2004 FY02: \$200,000 Total: \$200,000
Prin. Invest.: S HOTTMAN
Tech. Officer: GSFC/B MERRITT
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 7524 NEW MEXICO STATE UNIV - LAS CRUCES 6821
 TRANSPORTATION OF ENERGETIC PARTICLES IN THE GALAXY - APPROVED
 UNDER NRA 97-OSS-12
 06/09/1998 - 06/14/2002 FY02: \$0 Total: \$34,173
Prin. Invest.: W R WEBBER
Tech. Officer: GSFC/F C JONES
CASE Category: 11 – ASTRONOMY

NAG 5 7795 NEW MEXICO STATE UNIV - LAS CRUCES 6822
 A PROPOSAL TO ASSIST IN THE INTERPRETATION OF DATA FROM THE
 COSMIC RAY ISOTOPE SPECTROMETER EXPERIMENT
 12/10/1998 - 12/31/2002 FY02: \$0 Total: \$117,422
Prin. Invest.: D R WEBBER
Tech. Officer: GSFC/D C LING
CASE Category: 11 – ASTRONOMY

NEW MEXICO

NASA'S UNIVERSITY PROGRAM

NAG 5 7904 NEW MEXICO STATE UNIV - LAS CRUCES 6823
 ADVANCED IR IMAGING OF SATURN
 12/03/1998 - 11/30/2002 FY02: \$0 Total: \$160,726
Prin. Invest.: D J CHANOVER
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8242 NEW MEXICO STATE UNIV - LAS CRUCES 6824
 TESTING INFLATION AND DARK MATTER WITH NEW DATA, M ODELS, AND
 METHODS (ATP98)
 02/19/1999 - 02/28/2003 FY02: \$0 Total: \$67,392
Prin. Invest.: A KLYPIN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8803 NEW MEXICO STATE UNIV - LAS CRUCES 6825
 EFFECTS OF RHEOLOGY ON THE DYNAMICS AND THERMAL EVOLUTION
 OF MARS AND VENUS
 01/06/2000 - 01/14/2003 FY02: \$48,700 Total: \$142,300
Prin. Invest.: V SOLOMATOV
Tech. Officer: GSFC/J GRANT
CASE Category: 13 – PHYSICS

NAG 5 8919 NEW MEXICO STATE UNIV - LAS CRUCES 6826
 MODEL ATMOSPHERES AND SPECTRA FOR EXTRASOLAR GIANT PLANETS
 AND BROWN DWARFS
 01/21/2000 - 06/14/2003 FY02: \$0 Total: \$148,515
Prin. Invest.: M MARLEY
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9273 NEW MEXICO STATE UNIV - LAS CRUCES 6827
 MODEL ATMOSPHERES AND SPECTRA OF THE L-DWARFS (ATP 99)
 03/15/2000 - 03/14/2003 FY02: \$8,227 Total: \$94,354
Prin. Invest.: M S MARLEY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9323 NEW MEXICO STATE UNIV - LAS CRUCES 6828
 "THE CENTER FOR SPACE TELEMETERING AND TELECOMMUNICATIONS
 SYSTEMS", AT THE NEW MEXICO STATE UNIVER
 03/31/2000 - 04/30/2003 FY02: \$500,000 Total: \$1,560,000
Prin. Invest.: S HORAN
Tech. Officer: GSFC/W H MILLER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10578 NEW MEXICO STATE UNIV - LAS CRUCES 6829
 IMPACTS AND THE THERMAL EVOLUTION OF MARS
 03/19/2001 - 02/28/2004 FY02: \$30,000 Total: \$60,000
Prin. Invest.: V SOLOMATOV
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11164 NEW MEXICO STATE UNIV - LAS CRUCES 6830
 DETERMINATION OF MARTIAN POLAR DUST FLUX FROM TES OPACITY
 OBSERVATIONS
 08/06/2001 - 08/14/2003 FY02: \$23,000 Total: \$45,000
Prin. Invest.: J R MURPHY
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11311 NEW MEXICO STATE UNIV - LAS CRUCES 6831
 NMSU PARTICIPATORY PROJECT IN MESSENGER EXPLORATION AND NSIP
 DEVELOPMENT OF STUDENT SCIENCE
 09/07/2001 - 09/14/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: H BAPTISTE
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 11 – ASTRONOMY

NAG 5 12068 NEW MEXICO STATE UNIV - LAS CRUCES 6832
 BIOSOFT - TECHNOLOGY FOR INTEGRATED BIOLOGICAL PEST MANAGE-
 MENT IN AGRICULTURE
 05/22/2002 - 05/31/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: N R PRASAD
Tech. Officer: GSFC/M CAULFIELD
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12123 NEW MEXICO STATE UNIV - LAS CRUCES 6833
 INVESTIGATION OF PHYSICAL PROCESSES INVOLVED IN THE INTERAN-
 NUAL VARIABILITY OF MARTIAN DUST
 04/30/2002 - 04/30/2005 FY02: \$49,000 Total: \$49,000
Prin. Invest.: J R MURPHY
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1710 NEW MEXICO STATE UNIV - LAS CRUCES 6834
 NANOMETER LASER SPECTROSCOPY USING FRACTAL MEDIA
 03/08/2000 - 03/07/2003 FY02: \$99,997 Total: \$299,992
Prin. Invest.: C YING
Tech. Officer: MSFC/W LOVE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1291 NEW MEXICO STATE UNIV - LAS CRUCES 6835
 STUDY TOWARD A HAND HELD VOLATILE ORGANIC ANALYZER FOR MARS
 MISSION
 04/19/2001 - 12/31/2002 FY02: \$215,493 Total: \$417,673
Prin. Invest.: G A EICEMAN
Tech. Officer: JSC/D M RUSSO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 02046 NEW MEXICO STATE UNIV - LAS CRUCES 6836
 PYROTECHNICALLY OPERATED VALVES FOR TESTING AND FLIGHT
 08/09/2002 - 06/30/2005 FY02: \$99,998 Total: \$99,998
Prin. Invest.: E G CONLEY
Tech. Officer: SSC/W ST. CYR
CASE Category: 45 – ELECTRICAL ENGR

NAS 5 02083 NEW MEXICO STATE UNIV - LAS CRUCES 6837
 RESEARCH INTO THE EARTH'S ULTRAVIOLET NIGHTGLOW FOR DETECT-
 ING ULTRA-HIGH ENERGY COSMIC RAY PARTICLES
 06/19/2002 - 06/18/2003 FY02: \$74,984 Total: \$74,984
Prin. Invest.: S J STOCHAJ, R HULL
Tech. Officer: GSFC/L M BARBER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 5 02087 NEW MEXICO STATE UNIV - LAS CRUCES 6838
 DESIGN, MANUFACTURE TEST, & DELIVERY OF 1 PROTOFLIGHT MODEL
 ANTENNA ASSEMBLY & 4 FLIGHT ANTENNA
 06/04/2002 - 02/28/2003 FY02: \$124,480 Total: \$124,480
Prin. Invest.: B BLEVINS
Tech. Officer: GSFC/A RODRIGUEZ
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 98009 NEW MEXICO STATE UNIV - LAS CRUCES 6839
 BALLOON SERVICES
 02/17/1998 - 02/28/2003 FY02: \$16,005,756 Total: \$71,693,415
Prin. Invest.: N APPLICABLE
Tech. Officer: WFF/R S NOCK, WFF/B A MERRITT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 422 NEW MEXICO STATE UNIV - LAS CRUCES 6840
 SIMULATIONS OF EXTENSIVE AIRWHOWERS USING BEOWULF- CLASS SYSTEMS
 09/30/1999 - 08/31/2002 FY02: \$0 Total: \$138,230
Prin. Invest.: S STOCHAJ
Tech. Officer: GSFC/R E STREITMATTER
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 466 NEW MEXICO STATE UNIV - LAS CRUCES 6841
 MATHEMATICS AND SCIENCE EDUCATORS FOR THE FUTURE
 03/02/2000 - 02/28/2003 FY02: \$199,607 Total: \$539,751
Prin. Invest.: H BAPTISTE
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40061 NEW MEXICO STATE UNIV - LAS CRUCES 6842
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND FELLOWSHIPPROGRAM.
 03/04/1997 - 04/30/2002 FY02: \$0 Total: \$1,968,000
Prin. Invest.: P HYNES
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40087 NEW MEXICO STATE UNIV - LAS CRUCES 6843
 NEW MEXICO SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/16/2001 - 02/14/2005 FY02: \$475,000 Total: \$950,000
Prin. Invest.: P HYNES
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT13 52752 NEW MEXICO STATE UNIV - LAS CRUCES 6844
 CHARACTERIZATION OF DEFORMED PYROVALVE HOUSING CHARACTERIZATION OF DEFORMED PYROVALVE HOUSING
 06/20/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: E G CONLEY
Tech. Officer: SSC/R P TRAVIS
CASE Category: 46 – MECHANICAL ENGR

NAG 5 10143 SOUTHWESTERN INDIAN POLYTECHNIC INST 6845
 STARS ON EARTH, PROVIDING UNDERREPRESENTED NEW MEXICO HIGH SCHOOL STUDENTS WITH RESEARCH EXPER
 01/18/2001 - 12/31/2003 FY02: \$161,000 Total: \$321,000
Prin. Invest.: K GCHACHU
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 9 1407 SOUTHWESTERN INDIAN POLYTECHNIC INST 6846
 SIPI PACE/MSET PROGRAM
 06/27/2002 - 06/30/2004 FY02: \$20,000 Total: \$20,000
Prin. Invest.: C L ABEITA
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1312 UNIV OF ALBUQUERQUE 6847
 NASA TRAINING PROJECT
 09/24/2001 - 09/30/2004 FY02: \$451,000 Total: \$901,200
Prin. Invest.: R A LAFARGE
Tech. Officer: JSC/LM ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1439 UNIV OF ALBUQUERQUE 6848
 EXPERIMENTAL STUDIES OF PLANETARY MAGMAS AT HIGH P RESSURE
 07/26/2002 - 06/30/2003 FY02: \$79,950 Total: \$79,950
Prin. Invest.: C B AGEE
Tech. Officer: JSC/E K STANSBERY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 9 1449 UNIV OF ALBUQUERQUE 6849
 EXPERIMENTAL STUDIES-HIGH PRESSURE LABORATOARY RES EARCY
 08/02/2002 - 06/30/2003 FY02: \$231,450 Total: \$231,450
Prin. Invest.: C B AGEE
Tech. Officer: JSC/E K STANSBERY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 1 2018 UNIV OF NEW MEXICO-ALBUQUERQUE 6850
 SIMULATION OF FLOW CONTROL USING DEFORMABLE SURFACES
 03/17/1998 - 03/16/2001 FY02: \$1 Total: \$299,944
Prin. Invest.: C R TRUMAN
Tech. Officer: LARC/R D JOSLIN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1196 UNIV OF NEW MEXICO-ALBUQUERQUE 6851
 NASA CENTER FOR AUTONOMOUS CONTROL ENGINEERING (AC) AT THE U/NM
 03/26/1998 - 12/14/2000 FY02: \$0 Total: \$3,434,241
Prin. Invest.: M JAMSHIDI, R LUMIA
Tech. Officer: ARC/G S LEE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1437 UNIV OF NEW MEXICO-ALBUQUERQUE 6852
 CHARACTERIZATION & ANALYSIS OF ADVANCED THERMAL PROTECTION MATERIALS
 09/13/2000 - 08/14/2003 FY02: \$0 Total: \$59,996
Prin. Invest.: R E LOEHMAN
Tech. Officer: ARC/D T ELLERBY, ARC/S M JOHNSON
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 1480 UNIV OF NEW MEXICO-ALBUQUERQUE 6853
 NASA GROUP UNIV RESEARCH CENTER SECOND FIVE YEARS
 05/01/2001 - 08/14/2002 FY02: \$440,000 Total: \$1,200,000
Prin. Invest.: P DORATO
Tech. Officer: ARC/A CARDENAS, ARC/A R GROSS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1516 UNIV OF NEW MEXICO-ALBUQUERQUE 6854
 CHARACTERIZATION AND ANALYSIS OF ULTRAHIGH TEMPERATURE CERAMICS
 08/15/2001 - 07/31/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: R E LOEHMAN
Tech. Officer: ARC/D ELLERBY, ARC/S JOHNSON
CASE Category: 47 – METAL & MATERIALS ENGR

NEW MEXICO

NASA'S UNIVERSITY PROGRAM

NAG 2 1547 UNIV OF NEW MEXICO-ALBUQUERQUE 6855
 INTEGRATING THE STOCHASTIC LEARNING AUTOMATA PARADIGM AND
 DISTRIBUTED NEURO FUZZY TECHNIQUES INTO A
 04/05/2002 - 05/14/2003 FY02: \$290,822 Total: \$290,822
Prin. Invest.: M JAMSHIDI
Tech. Officer: ARC/R MORRIS, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1553 UNIV OF NEW MEXICO-ALBUQUERQUE 6856
 ADVANCED THERMAL PROTECTION MATERIALS BASED ON ULTRA-HIGH
 TEMPERATURE CERAMICS
 04/16/2002 - 04/14/2003 FY02: \$34,988 Total: \$34,988
Prin. Invest.: R LOEHMAN
Tech. Officer: ARC/D T ELLERBY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 1976 UNIV OF NEW MEXICO-ALBUQUERQUE 6857
 NEW PHENOMENA IN STRONGLY COUNTERFLOWING HE-II
 10/22/1996 - 09/30/2003 FY02: \$0 Total: \$354,000
Prin. Invest.: S T BOYD, R V DUNCAN, M J ADVIAANS
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2543 UNIV OF NEW MEXICO-ALBUQUERQUE 6858
 HIGH EFFICIENCY THERMOELECTRIC RADIOISOTOPE POWER SYSTEMS
 02/15/2001 - 12/31/2003 FY02: \$142,509 Total: \$244,509
Prin. Invest.: M EL-GENK
Tech. Officer: GRC/R L CATALDO
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2626 UNIV OF NEW MEXICO-ALBUQUERQUE 6859
 EXPERIMENTS WITH BOUNDARY CONDITIONS FOR JET FLOW SIMULA-
 TIONS
 06/01/2001 - 04/30/2002 FY02: \$0 Total: \$6,943
Prin. Invest.: T HAGSTROM
Tech. Officer: GRC/J GOODRICH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2692 UNIV OF NEW MEXICO-ALBUQUERQUE 6860
 COMPUTATIONAL METHODS FOR JET NOISE SIMULATION COMPUTATIONAL
 METHODS FOR JET NOISE SIMULATION
 01/11/2002 - 09/30/2004 FY02: \$67,569 Total: \$67,569
Prin. Invest.: D HAGSTROM
Tech. Officer: GRC/J W GOODRICH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 4441 UNIV OF NEW MEXICO-ALBUQUERQUE 6861
 PETROLOGY OF PRESOLAR DUST AND ALTERATION IN CHONDRITE
 04/28/1997 - 03/31/2002 FY02: \$0 Total: \$559,000
Prin. Invest.: D J RIETMEIJER
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 6999 UNIV OF NEW MEXICO-ALBUQUERQUE 6862
 RIPARIAN ECOSYSTEM RESTORATION: EFFECTS OF FLOODING AND
 VEGETATION TYPE ON ANNUAL EVAPOTRANSPIRATION
 02/17/1998 - 02/14/2002 FY02: \$0 Total: \$700,000
Prin. Invest.: C N DAHM
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8454 UNIV OF NEW MEXICO-ALBUQUERQUE 6863
 HIGH PERFORMANCE DATA COMPRESSION VLSI ARCHITECTURE; GSFC
 CONTROL NO. 3474
 04/20/1999 - 04/30/2002 FY02: \$0 Total: \$460,000
Prin. Invest.: G MAKI
Tech. Officer: GSFC/W H MILLER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8804 UNIV OF NEW MEXICO-ALBUQUERQUE 6864
 MARTIN IMPACT CRATER HYDROTHERMAL SYSTEMS, CLUES FROM THE
 LONAR CRATER, INDIA.
 01/06/2000 - 01/14/2003 FY02: \$0 Total: \$48,945
Prin. Invest.: H NEWSOM
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8821 UNIV OF NEW MEXICO-ALBUQUERQUE 6865
 BIOMIMETIC SELF-ASSEMBLY OF HARDENED (NACRE-LIKE) COMPOSITE
 COATINGS FOR TRANSHAB
 09/21/1999 - 08/31/2002 FY02: \$0 Total: \$492,748
Prin. Invest.: J BRINKER
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9402 UNIV OF NEW MEXICO-ALBUQUERQUE 6866
 "BIT PLANE ENCODER/DECODER FOR HPDC", FOR THE UNIVERSITY OF
 NEW MEXICO, CONTROL #5-3524.
 04/25/2000 - 06/30/2002 FY02: -\$162,799 Total: \$557,201
Prin. Invest.: G MAKI
Tech. Officer: GSFC/W H MILLER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9463 UNIV OF NEW MEXICO-ALBUQUERQUE 6867
 MICROBEAM STUDIES OF PLANETARY MATERIALS
 04/18/2000 - 02/14/2003 FY02: \$245,000 Total: \$761,800
Prin. Invest.: J J PAPIKE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9469 UNIV OF NEW MEXICO-ALBUQUERQUE 6868
 RECONFIGURABLE DATA PATH PROCESSOR
 04/17/2000 - 06/30/2002 FY02: -\$123,483 Total: \$386,517
Prin. Invest.: G DONOHOE
Tech. Officer: GSFC/P YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9704 UNIV OF NEW MEXICO-ALBUQUERQUE 6869
 SOFTWARE DEVELOPMENT ENVIRONMENT FOR A RECONFIGURABLE
 PROCESSOR
 06/22/2000 - 07/31/2002 FY02: \$0 Total: \$483,010
Prin. Invest.: G W DONOHOE
Tech. Officer: GSFC/W H MILLER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9798 UNIV OF NEW MEXICO-ALBUQUERQUE 6870
 FORMATION AND ALTERATION HISTORIES OF CHONDRITIC MATERIAL
 07/13/2000 - 06/30/2003 FY02: \$65,000 Total: \$190,000
Prin. Invest.: A BREARLEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10337 UNIV OF NEW MEXICO-ALBUQUERQUE 6871
 "ULTRA-LOW POWER RADIATION TOLERANT CMOS VLSI", RENEWAL OF
 GRANT NAG5-9152, PROPOSAL CONTROL #5-35
 02/07/2001 - 03/14/2002 FY02: \$0 Total: \$995,760
Prin. Invest.: G K MAKI
Tech. Officer: GSFC/W H MILLER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10359 UNIV OF NEW MEXICO-ALBUQUERQUE 6872
 NEUTRON AND HIGH ENERGY PARTICLE DETECTION WITH CRYOGENIC
 CALORIMETERS
 02/01/2001 - 01/14/2004 FY02: \$123,485 Total: \$256,482
Prin. Invest.: S BOYD
Tech. Officer: GSFC/M LI
CASE Category: 13 – PHYSICS

NAG 5 10372 UNIV OF NEW MEXICO-ALBUQUERQUE 6873
 SEMICONDUCTOR- RING -LASER-BASED ROTATION SENSORS PROPOSAL
 #293.
 02/15/2001 - 02/14/2004 FY02: \$332,645 Total: \$659,527
Prin. Invest.: M OSINSKI
Tech. Officer: GSFC/J GAMBINO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10373 UNIV OF NEW MEXICO-ALBUQUERQUE 6874
 SOLID STATE OPTICAL REFRIGERATORS FOR SPACE MISSIONS, PRO-
 POSAL #214
 03/27/2001 - 03/14/2004 FY02: \$300,000 Total: \$600,000
Prin. Invest.: R I EPSTEIN
Tech. Officer: GSFC/E R CANAVAN
CASE Category: 13 – PHYSICS

NAG 5 10918 UNIV OF NEW MEXICO-ALBUQUERQUE 6875
 HELIOSEISMIC METROLOGY
 05/14/2001 - 05/31/2004 FY02: \$118,680 Total: \$233,347
Prin. Invest.: S JEFFERIES
Tech. Officer: GSFC/J GURMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10960 UNIV OF NEW MEXICO-ALBUQUERQUE 6876
 HIGH PERFORMANCE ULTRA-LOW POWER RADIATION TOLERANT CMOS
 VLSI
 06/11/2001 - 06/14/2002 FY02: \$4,440 Total: \$402,598
Prin. Invest.: G K MAKI
Tech. Officer: GSFC/P YEP
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11496 UNIV OF NEW MEXICO-ALBUQUERQUE 6877
 MARTIAN IMPACT CRATER HYDROTHERMAL SYSTEMS, CLUES FROM THE
 LONAR CRATER, INDIA, AND OTHER TERRESTRIAL
 12/27/2001 - 12/31/2004 FY02: \$25,500 Total: \$25,500
Prin. Invest.: H E NEWSOM
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11555 UNIV OF NEW MEXICO-ALBUQUERQUE 6878
 GEOCHRONOLOGY OF PLANETARY MATERIALS: A PETROLOGIC AP-
 PROACH
 01/09/2002 - 01/14/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: L BORG
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11561 UNIV OF NEW MEXICO-ALBUQUERQUE 6879
 THE VIRTUAL COLLABORATIVE CLINIC: AN EARTH-BASED MODEL FOR
 SPACE MEDICINE APPLICATIONS FOR INTERN
 01/17/2002 - 01/31/2003 FY02: \$60,000 Total: \$60,000
Prin. Invest.: P J BOYCE
Tech. Officer: GSFC/L P CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11762 UNIV OF NEW MEXICO-ALBUQUERQUE 6880
 PETROLOGY OF HIERARCHICAL DUST ACCRETION IN AGGREGATE IDPS
 02/19/2002 - 03/31/2005 FY02: \$128,000 Total: \$128,000
Prin. Invest.: F J RIETMEIJER
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11764 UNIV OF NEW MEXICO-ALBUQUERQUE 6881
 EXTRATERRESTRIAL STUDIES USING NUCLEAR INTERACTIONS
 02/19/2002 - 03/31/2003 FY02: \$63,000 Total: \$63,000
Prin. Invest.: R C REEDY
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11862 UNIV OF NEW MEXICO-ALBUQUERQUE 6882
 MECHANISMS AND KINETICS OF AQUEOUS ALTERATION REACTIONS IN
 CHONDRITIC METEORITES
 03/11/2002 - 03/14/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: A BREARLY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11976 UNIV OF NEW MEXICO-ALBUQUERQUE 6883
 ACQUISITION OF AN ELECTRON MICROPROBE
 04/08/2002 - 04/14/2003 FY02: \$280,000 Total: \$280,000
Prin. Invest.: J J PIPIKE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12364 UNIV OF NEW MEXICO-ALBUQUERQUE 6884
 THE STRUCTURAL CHANGES OF TROPICAL CYCLONES UPON INTERAC-
 TION WITH VERTICAL WIND SHEAR
 07/22/2002 - 07/31/2003 FY02: \$43,674 Total: \$43,674
Prin. Invest.: E A RITCHIE-TYO
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1664 UNIV OF NEW MEXICO-ALBUQUERQUE 6885
 RESEARCH
 06/01/2000 - 05/31/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: M OSINSKI
Tech. Officer: MSFC/M D WATSON
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1758 UNIV OF NEW MEXICO-ALBUQUERQUE 6886
 BASIC AWARD FOR RESEARCH STUDY ENTITLED, "SURFACE PHYSICS
 WITH HELIUM CRYSTALS IN MICROGRAVITY"
 04/24/2001 - 04/29/2003 FY02: \$90,000 Total: \$170,000
Prin. Invest.: A V BABKIN
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 9 995 UNIV OF NEW MEXICO-ALBUQUERQUE 6887
 DESIGN & DEVELOP INTELLIGENT BIOMIMETIC ROBOTS
 03/12/1998 - 07/30/2001 FY02: -\$814 Total: \$299,186
Prin. Invest.: M SHAHINPOOR
Tech. Officer: JSC/K KRISHEN
CASE Category: 45 – ELECTRICAL ENGR

NAG 9 1017 UNIV OF NEW MEXICO-ALBUQUERQUE 6888
 STIMULUS FOR STUDENTS TO STUDY PRE COLL MATH
 05/28/1998 - 07/31/2002 FY02: \$0 Total: \$297,351
Prin. Invest.: H E NEWSOM
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1111 UNIV OF NEW MEXICO-ALBUQUERQUE 6889
 INST FOR THE STUDY OF BIOMARKERS IN ASTROMATERIALS
 05/14/1999 - 05/13/2003 FY02: \$25,000 Total: \$175,000
Prin. Invest.: J J PAPIKE
Tech. Officer: JSC/E K GIBSON
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 9 1303 UNIV OF NEW MEXICO-ALBUQUERQUE 6890
 PHOTOVOLTAIC DIRECT DRIVE ICE STORAGE REFRIGERATION CONCEPT
 06/06/2001 - 06/06/2002 FY02: \$26,085 Total: \$26,085
Prin. Invest.: R FOSTER
Tech. Officer: JSC/M K EWERT
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1324 UNIV OF NEW MEXICO-ALBUQUERQUE 6891
 ADVANCED CO2 REMOVAL SYSTEM USING AMINE FUNCTIONALIZED
 MEMBRANES
 07/20/2001 - 07/19/2003 FY02: \$240,000 Total: \$335,000
Prin. Invest.: J BRINKER
Tech. Officer: JSC/G THOMAS
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 3 00103 UNIV OF NEW MEXICO-ALBUQUERQUE 6892
 MULTIPLE PR'S FOR THIS ACTION: 132514,132514F BREAKTHROUGH PRO-
 PULSION PHYSICS
 01/19/2000 - 04/09/2002 FY02: \$0 Total: \$170,353
Prin. Invest.: K J MALLOY
Tech. Officer: GRC/M G MILLIS
CASE Category: 13 – PHYSICS

NCC 1 02008 UNIV OF NEW MEXICO-ALBUQUERQUE 6893
 ADVANCED PARTICLE RADIATION TRANSPORT METHODS
 02/04/2002 - 02/03/2003 FY02: \$69,948 Total: \$69,948
Prin. Invest.: A PRINJA
Tech. Officer: LARC/R C SINGLETERRY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 309 UNIV OF NEW MEXICO-ALBUQUERQUE 6894
 PERFORMING A REGIONAL ASSESSMENT & PROTOTYPING INTERNET
 ACCESSIBLE MTPPE PRODUCTS TO THE UPPER RIO
 04/09/1998 - 02/28/2003 FY02: \$314,000 Total: \$2,392,687
Prin. Invest.: S MORAIN
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 350 UNIV OF NEW MEXICO-ALBUQUERQUE 6895
 PREPARATION FOR UNIVERSITY OF STUDENTS IN UNDEGRADUATE
 EDUCATION
 07/01/1998 - 07/31/2003 FY02: \$498,619 Total: \$2,495,206
Prin. Invest.: L CROSSEY
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC13 98002 UNIV OF NEW MEXICO-ALBUQUERQUE 6896
 AFFILIATED RESEARCH CENTER PROGRAM-COMMERCIAL RE- MOTE SENS-
 ING PARTNERSHIPS WITH INDUSTRY
 08/11/1998 - 08/10/2002 FY02: \$0 Total: \$574,681
Prin. Invest.: S A MORAIN, S A MORAIN
Tech. Officer: SSC/A PEEK
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 02017 UNIV OF NEW MEXICO-ALBUQUERQUE 6897
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/18/2002 - 06/30/2003 FY02: \$14,000 Total: \$14,000
Prin. Invest.: R LAFARGE
Tech. Officer: LARC/M V RUIZ
CASE Category: 46 – MECHANICAL ENGR

NGT 5 30227 UNIV OF NEW MEXICO-ALBUQUERQUE 6898
 CLIMATIC WATER BALANCE AND THE DYNAMICS OF PINYON- JUNIPER
 09/19/2000 - 08/31/2001 FY02: \$0 Total: \$14,000
Prin. Invest.: B MILNE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52915 UNIV OF NEW MEXICO-ALBUQUERQUE 6899
 A STUDY OF ROCKING RIDID BLOCKS
 05/24/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: T ROSS
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 44 – CIVIL ENGR

NGT 9 31 UNIV OF NEW MEXICO-ALBUQUERQUE 6900
 TRAINING GRANT
 06/03/1998 - 08/01/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: C D HERD
Tech. Officer: JSC/J H JONES, JSC/D SICKORREZ
CASE Category: 32 – GEOLOGICAL SCIENCE

NEW YORK

NAG 5 11863 BARNARD COLL 6901
 78TH MEETING OF THE SOCIETY FOR RESEARCH ON BIOLOGICAL
 RHYTHMS
 03/12/2002 - 03/31/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: R SILVER
Tech. Officer: GSFC/L P CHAMBERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7473 CAYUGA COUNTY COMM COLL 6902
 DEFINING EARTH SYSTEM ENTERPRISE INFO NEEDS & PILOT PROGRAMS
 FOR UTILIZATION BY LOCAL GOVERNMENT
 06/15/1998 - 06/14/2003 FY02: \$0 Total: \$3,450,000
Prin. Invest.: R BROWN
Tech. Officer: GSFC/W CAMPBELL
CASE Category: 22 – COMPUTER SCIENCE

NAG13 00043 **CAYUGA COUNTY COMM COLL** **6903**
 SPATIAL INFORMATION TECHNOLOGY CENTER AT FULTON MONTGOMERY
 COMM COLL
 09/27/2000 - 09/26/2003 FY02: \$0 Total: \$1,491,400
Prin. Invest.: R FRESTOPKIK
Tech. Officer: SSC/D POWE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 00044 **CAYUGA COUNTY COMM COLL** **6904**
 PHASE III:DEPLOYING ESE PILOT INFORMATION PROGRAMS FOR STATE &
 LOCAL GOVERNMENT IN THE NORTHEAST
 09/27/2000 - 09/26/2003 FY02: \$3,989,000 Total: \$14,099,000
Prin. Invest.: R BROWER
Tech. Officer: SSC/M MICK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 02053 **CAYUGA COUNTY COMM COLL** **6905**
 SPATIAL INFORMATION TECHNOLOGY CENTER AT FULTON MONTGOMERY
 COMM COLL THIRDYEAR OPERATION
 08/23/2002 - 09/30/2003 FY02: \$812,000 Total: \$812,000
Prin. Invest.: M FLINTON
Tech. Officer: SSC/W DAMAGGIO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11546 **CITY UNIV NY KINGSBOROUGH COMM COLL** **6906**
 PETROLOGIC-GEOCHEMICAL STUDIES OF PRIMITIVE SOLAR SYSTEM MA-
 TERIALS
 01/08/2002 - 01/14/2005 FY02: \$44,000 Total: \$44,000
Prin. Invest.: M WEISBERG
Tech. Officer: HQ/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 3 2268 **CITY UNIV OF NY HERBERT H. LEHMAN COLL** **6907**
 MATHEMATICS, SCIENCE AND TECHNOLOGY WITH EXCELLENCE IN
 RESEARCH: A SCIENCE AND TECHNOLOGY ENTRY PR
 05/17/1999 - 08/31/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: A L ROTHSETIN
Tech. Officer: GRC/R F LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7532 **CITY UNIV COLL OF NEW YORK YORK COLL** **6908**
 LET'S DO SCIENCE
 06/11/1998 - 05/31/2001 FY02: \$0 Total: \$583,704
Prin. Invest.: J SCHLEIN
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10152 **CITY UNIV COLL OF NEW YORK YORK COLL** **6909**
 YORK COLL OBSERVATORY EDUCATIONAL OUTREACH SVC. TO THE COLL &
 THE PUBLIC SCHOOL COMM
 12/08/2000 - 12/31/2003 FY02: \$233,000 Total: \$387,000
Prin. Invest.: M SPERGEL
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 1 2028 **CITY UNIV OF NEW YORK CITY COLL** **6910**
 EIGENSTRUCTURE ASSIGNMENT FOR FAULT TOLERANT FLIGHT CONTROL
 DESIGN
 03/09/1998 - 01/31/2002 FY02: \$0 Total: \$298,796
Prin. Invest.: K SOBEL
Tech. Officer: LARC/S M JOSHI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2259 **CITY UNIV OF NEW YORK CITY COLL** **6911**
 IRA (INSTAL RESEARCH AWARD) PROGRAM TRANSFER NAGW5-6952
 01/19/2000 - 11/30/2002 FY02: \$500,000 Total: \$1,500,000
Prin. Invest.: R A ALFANO
Tech. Officer: LARC/N P BARNES, LARC/J C BARNES
CASE Category: 13 – PHYSICS

NAG 3 2074 **CITY UNIV OF NEW YORK CITY COLL** **6912**
 PICOSECOND GATED OPTICAL IMAGING OF DENSE FUEL SPRAYS
 09/17/1997 - 07/15/2001 FY02: -\$49,532 Total: \$249,790
Prin. Invest.: P P HO
Tech. Officer: GRC/K J BREISACHER, GRC/L LIU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2163 **CITY UNIV OF NEW YORK CITY COLL** **6913**
 HIGH RESOLUTION EXPERIMENTS OF COMPRESSIBLE TURBULENCE
 INTERACTING WITH EXPANSION OR SHOCK WAVES
 08/24/1998 - 04/05/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: Y ANDREPOULOS
Tech. Officer: GRC/D O DAVIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2167 **CITY UNIV OF NEW YORK CITY COLL** **6914**
 USING SURFACTANTS TO ENHANCE THERMOCAPILLARY MIGRATION OF
 BUBBLES & DROPS & FACILITATE DROP SPREADING
 05/26/1998 - 09/30/2001 FY02: \$0 Total: \$299,820
Prin. Invest.: C MALDARELLI, R BALASUBRAMANIAN
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2258 **CITY UNIV OF NEW YORK CITY COLL** **6915**
 SCIENCE AND TECHNOLOGY TEACHERS FOR THE NEXT MILLENNIUM
 PHASE II (MASTAP)
 05/03/1999 - 03/22/2002 FY02: \$0 Total: \$600,000
Prin. Invest.: L P JOHNSON
Tech. Officer: GRC/R F LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2259 **CITY UNIV OF NEW YORK CITY COLL** **6916**
 ULTRASONIC ASSESSMENT OF IMPACT-INDUCED DAMAGE AND MICRO-
 CRACKING IN POLYMER MATRIX COMPOSITES
 05/05/1999 - 01/31/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: B LIAW
Tech. Officer: GRC/K J BOWLES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2335 **CITY UNIV OF NEW YORK CITY COLL** **6917**
 MOLECULAR DYNAMICS OF FLUID-SOLID SYSTEMS MOLECULAR DYNAM-
 ICS OF FLUID-SOLID SYSTEMS
 02/17/2000 - 11/30/2003 FY02: \$45,000 Total: \$120,085
Prin. Invest.: D KOPLIK
Tech. Officer: GRC/F P CHIARMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2698 **CITY UNIV OF NEW YORK CITY COLL** **6918**
 PARTICLE SEGREGATION IN A FLOWING CONCENTRATED SUSPENSION
 SUBJECT TO HIGH-GRADIENT STRONG ELECTRIC
 01/29/2002 - 10/31/2005 FY02: \$81,600 Total: \$81,600
Prin. Invest.: D ACHRIVOS
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 3 2720 **CITY UNIV OF NEW YORK CITY COLL** **6919**
 USING REMOBILIZING SURFICANTS TO ENHANCE THE THERM OCAPIL-
 LARY MIGRATION OF BUBBLES RETARDED BY THE A
 02/27/2002 - 09/30/2005 FY02: \$72,931 Total: \$72,931
Prin. Invest.: D MALDARELLI
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4911 **CITY UNIV OF NEW YORK CITY COLL** **6920**
 ADVANCING MINORITIES IN SCIENCE AND ENGINEERING ED
 07/16/1997 - 08/31/2001 FY02: \$0 Total: \$633,325
Prin. Invest.: J BARBA
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7129 **CITY UNIV OF NEW YORK CITY COLL** **6921**
 ROBUST ALGORITHMS FOR IMAGE REGISTRATION
 03/11/1998 - 09/30/2001 FY02: -\$5,027 Total: \$294,973
Prin. Invest.: G WOLBERG
Tech. Officer: GSFC/J TILTON
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 7160 **CITY UNIV OF NEW YORK CITY COLL** **6922**
 HIGH DENSITY SOLID STATE MEMORIES
 03/11/1998 - 03/14/2002 FY02: \$0 Total: \$294,347
Prin. Invest.: N SCHEINBERG
Tech. Officer: GSFC/H SHAW
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 7827 **CITY UNIV OF NEW YORK CITY COLL** **6923**
 WINDS, WATER BUDGETS, AND STABLE ISOTOPES IN TROPICAL CY-
 CLONES USING TRMM AND QUICKSCAT
 12/14/1998 - 12/14/2002 FY02: \$25,000 Total: \$229,552
Prin. Invest.: S GEDZELMAN
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERICSCIENCE

NAG 5 9732 **CITY UNIV OF NEW YORK CITY COLL** **6924**
 THE STUDENT POLARIMETER AEROSOL & CLOUD EXPERIMENT (SPACE)
 06/20/2000 - 12/31/2001 FY02: -\$180 Total: \$99,820
Prin. Invest.: F MOSHARY
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10845 **CITY UNIV OF NEW YORK CITY COLL** **6925**
 ADVANCING MINORITIES IN SCIENCE AND ENGINEERING EDUCATION
 05/01/2001 - 05/14/2002 FY02: \$0 Total: \$157,608
Prin. Invest.: J BARBA
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11690 **CITY UNIV OF NEW YORK CITY COLL** **6926**
 CIO MEASUREMENTS & ANALYSIS IN THE NETWORK FOR THE DETECTION
 OF STRATOSPHERIC CHANGE
 01/31/2002 - 01/31/2005 FY02: \$399,147 Total: \$399,147
Prin. Invest.: P M SOLOMON
Tech. Officer: GSFC/M KURYLO
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11813 **CITY UNIV OF NEW YORK CITY COLL** **6927**
 COMBINING ACTIVE & PASSIVE OPTICAL REMOTE SENSING TECHNIQUES
 TO MEASURE TROPOSPHERIC AEROSOL PROFILE
 03/05/2002 - 03/14/2005 FY02: \$98,059 Total: \$98,059
Prin. Invest.: B GROSS
Tech. Officer: GSFC/B CARLSON
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 607 **CITY UNIV OF NEW YORK CITY COLL** **6928**
 THE SYNERGISM OF ELECTORRHEOLOGICAL RESPONSE, DIEL ETRO-
 PHORESIS AND SHEAR-INDUCED DIFFUSION IN FLOWI
 04/07/1998 - 07/31/2002 FY02: \$0 Total: \$296,250
Prin. Invest.: A ACRIVOS
Tech. Officer: GRC/F D CHIARAMONTE
CASE Category: 46 – MECHANICAL ENGR

NCC 5 98 **CITY UNIV OF NEW YORK CITY COLL** **6929**
 AN URBAN COLLABORATION FOR NETWORK CONNECTIVITY AND INTER-
 NET ACCESS
 09/13/1995 - 11/14/2000 FY02: \$0 Total: \$2,423,500
Prin. Invest.: S AUSTIN
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 343 **CITY UNIV OF NEW YORK CITY COLL** **6930**
 COOPERATIVE RESEARCH & EDUCATION PROGRAM: INST ON CLIMATE
 AND PLANETS
 06/23/1998 - 12/31/2000 FY02: \$0 Total: \$782,194
Prin. Invest.: N A PARKER
Tech. Officer: GSFC/L TRAVIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 344 **CITY UNIV OF NEW YORK CITY COLL** **6931**
 INTEGRATION OF RESEARCH AND EDUCATION IN REMOTE SENSING AND
 ENVIRONMENTAL CLIMATE RESEA
 07/15/1998 - 06/30/2003 FY02: \$500,000 Total: \$2,500,000
Prin. Invest.: R KHANBILVARDI
Tech. Officer: HQ/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 425 **CITY UNIV OF NEW YORK CITY COLL** **6932**
 ATMOSPHERIC/OCEAN & ENVIRONMENTAL SCIENCE RESEARCH PRO-
 GRAM PHASE II. RESEARCH FOUNDATION OF CUNY
 08/27/1999 - 08/31/2001 FY02: -\$1,202 Total: \$198,798
Prin. Invest.: L P JOHNSON
Tech. Officer: GSFC/J HANSEN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 5 427 **CITY UNIV OF NEW YORK CITY COLL** **6933**
 AN INTEGRATED ATMOSPHERIC, WATER & LAND-COVER/LAND -USE RE-
 SEARCH & TRAINING PROGRAM COMBINING ON-SIT
 09/03/1999 - 08/31/2001 FY02: -\$8,824 Total: \$191,176
Prin. Invest.: F MOSHAIR
Tech. Officer: GSFC/A LACIS
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 520 **CITY UNIV OF NEW YORK CITY COLL** **6934**
 COOPERATIVE RESEARCH & EDUCATION PROGRAM: INST. ON CLIMATE &
 PLANETS.
 11/02/2000 - 12/31/2002 FY02: \$0 Total: \$349,123
Prin. Invest.: N A PARKER
Tech. Officer: GSFC/L TRAVIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 530 **CITY UNIV OF NEW YORK CITY COLL** **6935**
 AN URBAN COLLABORATION FOR NETWORKS CONNECTIVITY & INTERNET
 ACCESS/MUSPINNRTS PROGRAM.
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$749,765
Prin. Invest.: S AUSTIN
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10645 **CITY UNIV OF NEW YORK SYSTEM** **6936**
 EVALUATION OF SNOW WATER EQUIVALENT ACROSS GRASS LAND RE-
 GIONS - HUNTER COLL
 03/20/2001 - 06/30/2001 FY02: \$0 Total: \$48,187
Prin. Invest.: A FREI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 11 – ASTRONOMY

NAG 5 12280 **CITY UNIV OF NEW YORK SYSTEM** **6937**
 ADVANCING MINORITIES IN SCIENCE AND ENGINEERING EDUCATION
 06/11/2002 - 05/31/2003 FY02: \$157,608 Total: \$157,608
Prin. Invest.: J BARBA
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 654 **CITY UNIV OF NEW YORK SYSTEM** **6938**
 TECHNOLOGY INTEGRATED PROGRAM FOR PREPARATION OF T OMOR-
 ROW'S MSET TEACHERS
 08/19/2002 - 08/30/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: M WEINER
Tech. Officer: GSFC/M MATEU
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2393 **CLARKSON UNIV** **6939**
 QUANTIFICATION OF ENERGY RELEASE IN COMPOSITE STRU CTURES
 04/18/2000 - 09/30/2002 FY02: \$20,000 Total: \$69,529
Prin. Invest.: D MINNETYAN
Tech. Officer: GRC/C C CHAMIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2394 **CLARKSON UNIV** **6940**
 TEST-FREE FRACTURE TOUGHNESS, REF. #00169 TEST-FREE FRACTURE
 TOUGHNESS, REF. #00169
 04/18/2000 - 09/30/2002 FY02: \$20,000 Total: \$70,554
Prin. Invest.: D MINNETYAN
Tech. Officer: GRC/C C CHAMIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2609 **CLARKSON UNIV** **6941**
 COMPUTATIONAL SIMULATION OF COMPOSITE STRUCTURAL FA TIGUE
 05/16/2001 - 05/31/2004 FY02: \$0 Total: \$25,118
Prin. Invest.: D MINNETYAN
Tech. Officer: GRC/C C CHAMIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2703 **CLARKSON UNIV** **6942**
 MOTIN OF DROPS ON SURFACES WITH WETTABILITY GRADIENTS
 02/07/2002 - 11/30/2005 FY02: \$86,700 Total: \$86,700
Prin. Invest.: R SUBRAMAIA
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2717 **CLARKSON UNIV** **6943**
 CONSTITUTIVE RELATION IN TRANSITIONAL GRANULAR FLO WS, REF
 #01233
 02/27/2002 - 12/31/2005 FY02: \$94,775 Total: \$94,775
Prin. Invest.: D H SHEN
Tech. Officer: GRC/R D GREEN
CASE Category: 49 – ENGINEERING, OTHER

NAG 8 1482 **CLARKSON UNIV** **6944**
 R/S IMPROVED CRYSTAL QUALITY BY DETACHED SOLIDIFICATION IN
 MICROGRAVITY
 02/12/1998 - 01/31/2003 FY02: \$15,833 Total: \$356,250
Prin. Invest.: L L REGEL
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1703 **CLARKSON UNIV** **6945**
 RESIDUAL GAS EFFECTS ON DETACHED SOLIDIFICATION IN MICROGRAV-
 ITY
 06/22/2000 - 11/28/2003 FY02: \$100,000 Total: \$235,000
Prin. Invest.: W R WILCOX
Tech. Officer: MSFC/P DOTY
CASE Category: 12 – CHEMISTRY

NGT 1 52214 **CLARKSON UNIV** **6946**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) YEAR 1
 06/10/1999 - 06/30/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: M N GLAUSER
Tech. Officer: LARC/C S YAO
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52222 **CLARKSON UNIV** **6947**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/29/1999 - 06/30/2002 FY02: \$10,000 Total: \$66,001
Prin. Invest.: R F SCHMIT, M GLAUSER
Tech. Officer: LARC/J JUANG, LARC/L HORTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1345 **COLUMBIA UNIV** **6948**
 DEVELOPMENT & FUNCTION OF THE MOUSE VESTIBULAR SYS TEM IN THE
 ABSENCE OF GRAVITY PERCEPTION
 07/16/1999 - 07/14/2003 FY02: \$91,802 Total: \$520,863
Prin. Invest.: D J WOLGEMUTH
Tech. Officer: ARC/M M AVRENER, ARC/G C JAHN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 618 **COLUMBIA UNIV** **6949**
 X-RAY ASTRONOMY
 07/23/1990 - 06/30/2001 FY02: \$0 Total: \$8,461,663
Prin. Invest.: R NOVICK, W H-M KU, M VARTANIAN
Tech. Officer: GSFC/L J EARLY, GSFC/R H PLESS
CASE Category: 13 – PHYSICS

NAG 5 3502 **COLUMBIA UNIV** **6950**
 SN 1987A: FORMATION OF A SUPERNOVA REMNANT
 12/11/1996 - 12/14/2001 FY02: \$0 Total: \$583,500
Prin. Invest.: A P CROTTS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 5 4649 **COLUMBIA UNIV** **6951**
 EARLY DIFFERENTIATION OF THE MOON: EXPERIMENTAL AND
 06/11/1997 - 11/30/2002 FY02: \$0 Total: \$710,000
Prin. Invest.: D LONGHI
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 5123 **COLUMBIA UNIV** **6952**
 X-RAY SPECTROSCOPIC LABORATORY EXPERIMENTS IN SUPPORT OF THE
 NASA X-RAY ASTRONOMY PROGRAM
 02/20/1997 - 05/31/2003 FY02: \$52,861 Total: \$761,261
Prin. Invest.: S M KAHN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5254 **COLUMBIA UNIV** **6953**
 HIGH-PERFORMANCE MULTILAYER COATINGS FOR THE NEXT GENERATION
 OF HIGH-RESOLUTION X-RAY OPTICS
 02/22/2000 - 02/03/2003 FY02: \$200,000 Total: \$580,000
Prin. Invest.: D L WINDT
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5260 **COLUMBIA UNIV** **6954**
 THERMALLY-FORMED GALASS OPTICS FOR X-RAY AND GAMMA-RAY MIS-
 SIONS
 02/18/2000 - 02/10/2003 FY02: \$195,000 Total: \$569,000
Prin. Invest.: C J HAILEY
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 5261 **COLUMBIA UNIV** **6955**
 MEASUREMENTS, CALCULATIONS, AND ASTROPHYSICAL IMPLICATIONS
 OF NEW LOW TEMPERATURE DIELECTRONIC
 02/11/2000 - 02/10/2003 FY02: \$120,000 Total: \$353,040
Prin. Invest.: D W SAVIN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5275 **COLUMBIA UNIV** **6956**
 FUNDING FOR PHASE 1 OF SPACE PROJECT FUNDING FOR PHASE 1 OF
 SPACE PROJECT
 04/17/2000 - 04/13/2006 FY02: \$0 Total: \$299,510
Prin. Invest.: B CAIRNS
Tech. Officer: GSFC/D L PIERCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5280 **COLUMBIA UNIV** **6957**
 DEVELOPMENT OF XENON TIME PROJECTION CHAMBERS FOR PRECISDE
 COMPTON IMAGING OF ASTROPHYSICAL LINES
 05/31/2000 - 12/31/2002 FY02: \$415,000 Total: \$1,172,500
Prin. Invest.: E APRILE
Tech. Officer: GSFC/B A MERRITT
CASE Category: 11 – ASTRONOMY

NAG 5 6035 **COLUMBIA UNIV** **6958**
 SURFING THE HIGH DENSITY UNIVERSE
 10/03/1997 - 09/30/2002 FY02: \$105,000 Total: \$591,800
Prin. Invest.: D HELFAND
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6450 **COLUMBIA UNIV** **6959**
 PRODUCTION AND ANALYSIS OF GLOBAL WAVE AND PHOTOSY NTHETI-
 CALLY ACTIVE SURFACE IRRADIANCE FIELDS U
 10/31/1997 - 06/30/2002 FY02: \$0 Total: \$485,933
Prin. Invest.: J A BISHOP
Tech. Officer: GSFC/J A MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6876 **COLUMBIA UNIV** **6960**
 INFLUENCE OF ARCTIC SEA ICE ON NATURAL AND ANTHROP OGENICALLY-
 INDUCED CLIMATE VARIABILITY
 01/30/1998 - 03/31/2003 FY02: \$0 Total: \$235,200
Prin. Invest.: D G MARTINSON
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6877 **COLUMBIA UNIV** **6961**
 MONSOONS, TIDAL MIXING AND PRODUCTIVITY IN THE BAN DA SEA,
 INDONESIA
 02/10/1998 - 12/31/2001 FY02: \$0 Total: \$554,232
Prin. Invest.: T TAKAHASHI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7044 **COLUMBIA UNIV** **6962**
 ASSESSING CURRENT AND POTENTIAL USE OF CLIMATE FOR ECASTS FOR
 COMMUNAL FARM MANAGEMENT IN ZIMBABWE
 03/05/1998 - 08/31/2001 FY02: \$0 Total: \$102,621
Prin. Invest.: M A CANE
Tech. Officer: GSFC/D RIND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7461 **COLUMBIA UNIV** **6963**
 POLYNYAS, PREDATORS AND PACK ICE VARIABILITY IN TH E SOUTHERN
 OCEAN
 10/26/1998 - 12/31/2002 FY02: \$0 Total: \$249,868
Prin. Invest.: S S JACOBS
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7687 **COLUMBIA UNIV** **6964**
 SURFACE SOLAR RADIATION SOLAR BASE
 09/17/1998 - 08/31/2001 FY02: \$0 Total: \$300,429
Prin. Invest.: G KUKLA
Tech. Officer: GSFC/M IMISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7737 **COLUMBIA UNIV** **6965**
 SCIENCE AND CALIBRATION SUPPORT FOR THE REFLECTING GRATING
 SPECTROMETER ON THE X-RAY MULTI-MIRROR M
 10/01/1998 - 03/31/2004 FY02: \$936,000 Total: \$2,969,750
Prin. Invest.: S M KAHN
Tech. Officer: GSFC/N E WHITE
CASE Category: 11 – ASTRONOMY

NAG 5 7814 **COLUMBIA UNIV** **6966**
 NEW ASCA AND ROSAT OBSERVATIONS OF ROTATION-POWERED
 PULSARS - ADP 98
 12/03/1998 - 12/14/2001 FY02: -\$16 Total: \$72,712
Prin. Invest.: J P HALPERN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7922 **COLUMBIA UNIV** **6967**
EFFECT OF HISTORICAL AND PROJECTED CLIMATE CHANGE ON SOUTH-
ERN OCEAN SEA ICE AND ANTARCTIC MASSBALAN
12/21/1998 - 12/31/2002 FY02: \$61,000 Total: \$154,000
Prin. Invest.: D MARTINSON
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7935 **COLUMBIA UNIV** **6968**
THE NATURE OF RADIO-QUIET X-RAY PULSARS IN SUPERNOVA REM-
NANTS __ (L TSA-98)
12/14/1998 - 12/31/2003 FY02: \$118,506 Total: \$457,702
Prin. Invest.: E V GOTTHELF
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7977 **COLUMBIA UNIV** **6969**
ACCRETION RATES IN CATAclySMIC VARIABLES (ADP98)
12/23/1998 - 12/31/2001 FY02: -\$11 Total: \$106,799
Prin. Invest.: J O PATTERSON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8675 **COLUMBIA UNIV** **6970**
HYDRODYNAMIC INSTABILITIES AND EDDY-MEAN FLOW INTERACTION IN
THE SOUTHERN OCEAN
07/08/1999 - 07/14/2001 FY02: \$0 Total: \$131,482
Prin. Invest.: D L WITTER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8725 **COLUMBIA UNIV** **6971**
SEASONAL AND INTERANNUAL VARIABILITY OF AIR-SEA-ICE COUPLING
PROCESSES IN THE SUBPOLAR SOUTHERN OCEAN
08/04/1999 - 08/31/2002 FY02: \$0 Total: \$184,254
Prin. Invest.: X YUAN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8848 **COLUMBIA UNIV** **6972**
FIRST YEAR FUNDING FOR SENH99-0121, LANDSLIDE MECHANISMS &
HAZARD ASSESSMENT IN MOUNTAIN REGIONS
12/16/1999 - 12/31/2002 FY02: \$144,438 Total: \$460,199
Prin. Invest.: J K WEISSEL
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9056 **COLUMBIA UNIV** **6973**
CONTINENT-WIDE ESTIMATION AND CALIBRATION OF CATCHMENT HY-
DROLOGIC PARAMETERS USING SRM AND LASER
02/15/2000 - 02/28/2003 FY02: \$49,403 Total: \$121,096
Prin. Invest.: C P STARK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9060 **COLUMBIA UNIV** **6974**
IMPROVED ESTIMATES OF ANTARCTIC ICE SHEET VOLUME BASED ON
INVERSION OF GRAVITY DATA & OTHER POTENTIALS
02/10/2000 - 02/14/2002 FY02: \$0 Total: \$139,000
Prin. Invest.: R E BELL
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9094 **COLUMBIA UNIV** **6975**
TESTING FOR X-RAY PERIODICITIES IN SEYFERT GALAXIES - ADP 99
02/18/2000 - 02/28/2002 FY02: \$0 Total: \$22,152
Prin. Invest.: J P HALPERN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9095 **COLUMBIA UNIV** **6976**
ASCA OBSERVATIONS OF HIGH-ENERGY GAMMA-RAY SOURCES - ADP 99
02/18/2000 - 02/28/2002 FY02: \$0 Total: \$49,911
Prin. Invest.: J P HALPERN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9136 **COLUMBIA UNIV** **6977**
ON THE EVOLUTION OF YOUNG NEUTRON STARS: ANOMALOUS COMPACT
OBJECTS WITHIN SUPERNOVA REMNANTS
03/01/2000 - 02/28/2003 FY02: \$54,491 Total: \$157,353
Prin. Invest.: E V GOTTHELF
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9581 **COLUMBIA UNIV** **6978**
UNRAVELING THE PHYSICAL CONDITIONS IN THE SOLAR ATMOSPHERE:
EXPERIMENTAL AND THEORETICAL RATES FOR
05/09/2000 - 04/30/2003 FY02: \$115,909 Total: \$321,961
Prin. Invest.: D W SAVIN
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9615 **COLUMBIA UNIV** **6979**
HIGH-PERFORMANCE MULTILAYER X-RAY OPTICS FOR SOLAR PHYSICS
05/23/2000 - 04/30/2003 FY02: \$140,561 Total: \$284,630
Prin. Invest.: D WINDT
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 9653 **COLUMBIA UNIV** **6980**
CONSOLIDATING THE VELA-REGION 1.809 MEV RESULTS
05/30/2000 - 08/31/2001 FY02: \$0 Total: \$6,500
Prin. Invest.: U OBERLACK
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 9759 **COLUMBIA UNIV** **6981**
ASSIMILATION OF REMOTELY SENSED SNOW OBSERVATIONS INTO THE
NSIPP LAND SURFACE MODEL
06/26/2000 - 06/30/2003 FY02: \$0 Total: \$103,447
Prin. Invest.: M STIEGLITZ
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9870 **COLUMBIA UNIV** **6982**
SURVEYING THE GALACTIC PLANE WITH XMM
09/29/2000 - 09/30/2002 FY02: \$0 Total: \$61,000
Prin. Invest.: D HELFAND
Tech. Officer: GSFC/P ATKINS
CASE Category: 11 – ASTRONOMY

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 5 9898 **COLUMBIA UNIV** **6983**
 THE NATURE OF ISOLATED NEUTRON STARS AND THE EQUATION OF STATE AT SUPRA-NUCLEAR DENSITY
 09/06/2000 - 09/14/2002 FY02: \$0 Total: \$8,500
Prin. Invest.: F B PAERELS
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9911 **COLUMBIA UNIV** **6984**
 AN ULTRA-MAGNETIZED X-RAY PULSAR IN THE SUPERNOVA REMNANT KES 73
 09/05/2000 - 09/30/2002 FY02: \$0 Total: \$27,365
Prin. Invest.: E V GOTTHELF
Tech. Officer: GSFC/R M MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9928 **COLUMBIA UNIV** **6985**
 COMPOSITE SUPERNOVA REMNANTS: HOME TO THE YOUNGEST NEUTRON STARS
 09/07/2000 - 09/14/2002 FY02: \$0 Total: \$23,459
Prin. Invest.: D J HELFAND
Tech. Officer: GSFC/D F MUTSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9929 **COLUMBIA UNIV** **6986**
 AN X-RAY SPECTROSCOPIC DETERMINATION OF THE HUBBLE CONSTANT
 09/07/2000 - 09/14/2002 FY02: \$0 Total: \$24,619
Prin. Invest.: F B PAERLES
Tech. Officer: GSFC/D F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9946 **COLUMBIA UNIV** **6987**
 TAKING THE PULSE OF OUR YOUNGEST NEIGHBORHOOD NEUTRON STAR
 09/06/2000 - 09/14/2002 FY02: \$0 Total: \$32,900
Prin. Invest.: D J HELFAND
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9950 **COLUMBIA UNIV** **6988**
 A POSSIBLE IDENTIFICATION OF THE EGRET SOURCE 2EG J2227+6122
 09/07/2000 - 08/31/2002 FY02: \$0 Total: \$30,662
Prin. Invest.: J P HALPERN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10082 **COLUMBIA UNIV** **6989**
 THE X-RAY TEMPERATURE FUNCTION AND STRUCTURE OF CLUSTERS AT $Z=0.6-1$
 11/06/2000 - 11/14/2002 FY02: \$0 Total: \$5,625
Prin. Invest.: C A SCHARF
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10607 **COLUMBIA UNIV** **6990**
 USING A CLOUD-RESOLVING MODEL TO UNDERSTAND LARGE-SCALE VARIATIONS IN TROPICAL RAINFALL: A NO
 03/15/2001 - 03/14/2004 FY02: \$98,495 Total: \$194,071
Prin. Invest.: A SOBEL
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11049 **COLUMBIA UNIV** **6991**
 RECOMBINATION RATES OF METHYL RADICALS AT LOW TEMPERATURES IN HYDROGEN. (LOW TEMPERATURE PHOTOCHEMISTRY)
 06/18/2001 - 05/31/2004 FY02: \$65,000 Total: \$130,000
Prin. Invest.: R BERSOHN
Tech. Officer: GSFC/D J BOGAN
CASE Category: 12 – CHEMISTRY

NAG 5 11215 **COLUMBIA UNIV** **6992**
 MESOSCALE CIRCULATION AND ECOSYSTEM PROCESSES OFF WESTERN AUSTRALIA: A SYNERGISTIC APPROACH OF REMO
 08/13/2001 - 09/30/2003 FY02: \$0 Total: \$243,481
Prin. Invest.: O ANDERSON
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11357 **COLUMBIA UNIV** **6993**
 TIME VARIATIONS OF THE NET AIR-SEA CO₂ FLUX
 09/25/2001 - 09/30/2004 FY02: \$0 Total: \$87,100
Prin. Invest.: T TAKAHASHI
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11530 **COLUMBIA UNIV** **6994**
 INTEGRATED CIRRUS REMOTE SENSING USING MULTIANGLE, MULTISPECTRAL POLARIMETRIC MEASUREMENTS
 01/09/2002 - 11/30/2003 FY02: \$321,968 Total: \$321,968
Prin. Invest.: B CAIRNS
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11697 **COLUMBIA UNIV** **6995**
 MODELING STUDY OF THE EFFECT OF CARBONACEOUS INCLUSIONS AND SULFATE AEROSOLS ON THE CLOUD RADIATIVE
 02/07/2002 - 02/14/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S MENON
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11799 **COLUMBIA UNIV** **6996**
 SCALING ANALYSIS & CATCHMENT PROCESSING OF TOPOGRAPHIC DATA FOR A GCM LAND SURFACE MODEL
 03/01/2002 - 02/28/2003 FY02: \$67,539 Total: \$67,539
Prin. Invest.: C P STARK
Tech. Officer: GSFC/R KOSTER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12074 **COLUMBIA UNIV** **6997**
 EARLY DIFFERENTIATION OF THE MOON: EXPERIMENTAL & MODELLING STUDIES
 04/23/2002 - 05/31/2005 FY02: \$167,000 Total: \$167,000
Prin. Invest.: J LONGHI
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12586 **COLUMBIA UNIV** **6998**
 THE ANTARCTIC DIPOLE: INTERACTION WITH POLAR/EXTRA POLAR CLIMATE VARIATIONS AND ITS PREDICTION
 09/18/2002 - 09/14/2005 FY02: \$81,740 Total: \$81,740
Prin. Invest.: X YUAN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NASA'S UNIVERSITY PROGRAM

NEW YORK

NAG 9 1148 **COLUMBIA UNIV** **6999**
 INDIVIDUAL SUSCEPTIBILITY TO RADIATION EFFECTS
 09/14/1999 - 09/30/2003 FY02: \$280,812 Total: \$1,015,030
Prin. Invest.: E J HALL
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 59 – LIFE SCIENCE, OTHER

NAS 2 02039 **COLUMBIA UNIV** **7000**
 TRANSLATION OF DISEASE MARKERS INTO BULLUMINESCENT SIGNALS-
 BASIC RESEARCH
 12/20/2001 - 11/30/2004 FY02: \$505,998 Total: \$505,998
Prin. Invest.: D W LANDY
Tech. Officer: ARC/P P FUNG
CASE Category: 56 – MEDICAL

NAS 5 97164 **COLUMBIA UNIV** **7001**
 ACRIM SCIENCE TEAM
 04/21/1997 - 04/20/2003 FY02: \$512,000 Total: \$2,561,807
Prin. Invest.: R C WILSON
Tech. Officer: GSFC/V GRIFFIN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 5 98162 **COLUMBIA UNIV** **7002**
 EOSDIS SEDAC
 07/01/1998 - 06/30/2003 FY02: \$3,817,000 Total: \$14,887,114
Prin. Invest.: R S CHEN
Tech. Officer: GSFC/Q BARKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 218 **COLUMBIA UNIV** **7003**
 SEASONAL-TO-INTERANNUAL PREDICTION PROJECT
 07/21/1997 - 06/30/2001 FY02: -\$4,603 Total: \$216,289
Prin. Invest.: M STIEGLITZ
Tech. Officer: GSFC/R KOSTER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 485 **COLUMBIA UNIV** **7004**
 MODELING OF OCEAN CIRCULATION AND ATMOSPHERIC CHEMICAL SYS-
 TEMS.
 03/30/2000 - 06/30/2001 FY02: -\$16 Total: \$1,596,232
Prin. Invest.: C K CHU
Tech. Officer: GSFC/R B STOTHERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 505 **COLUMBIA UNIV** **7005**
 INTERDISCIPLINARY RESEARCH ON CLIMATE VARIABILITY AND CLIMATE
 CHANGE
 07/21/2000 - 07/31/2003 FY02: \$742,973 Total: \$2,045,516
Prin. Invest.: M CHANDLER
Tech. Officer: GSFC/D RIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 510 **COLUMBIA UNIV** **7006**
 LAND SURFACE MODEL DEVELOPMENT FOR THE NASA SEASONAL TO
 INTERANNUAL PREDICTION PROJECT
 08/21/2000 - 08/14/2003 FY02: \$127,714 Total: \$305,012
Prin. Invest.: M STIEGLITZ
Tech. Officer: GSFC/R KOSTER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 546 **COLUMBIA UNIV** **7007**
 INTERDISCIPLINARY GLOBAL CHANGE RESEARCH
 04/04/2001 - 03/31/2004 FY02: \$992,216 Total: \$1,854,926
Prin. Invest.: L M DRUYAN
Tech. Officer: GSFC/A LACIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 547 **COLUMBIA UNIV** **7008**
 MODELING OF OCEAN CIRCULATION AND ATMOSPHERIC CHEMICAL
 SYSTEMS
 04/06/2001 - 03/31/2004 FY02: \$1,010,007 Total: \$1,937,422
Prin. Invest.: C K CHU
Tech. Officer: GSFC/R B STOTHERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 549 **COLUMBIA UNIV** **7009**
 "ICP: RESEARCH EDUCATION PROGRAM"
 04/09/2001 - 05/31/2002 FY02: \$191,000 Total: \$360,981
Prin. Invest.: C HARRIS
Tech. Officer: GSFC/B CARLSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 558 **COLUMBIA UNIV** **7010**
 MODELING OF ATMOSPHERIC CIRCULATION AND CHEMISTRY.
 06/06/2001 - 02/28/2004 FY02: \$235,317 Total: \$564,520
Prin. Invest.: L M POLVANI
Tech. Officer: GSFC/R STOTHERS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 30167 **COLUMBIA UNIV** **7011**
 VARIABILITY OF BIOGEOCHEMICAL REGIMES IN THE ROSS SEA: AN
 ANALYSIS USING HIGH RESOLUTION SEA SURFACE
 09/02/1998 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: T TAKAHASHI
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30226 **COLUMBIA UNIV** **7012**
 HIGH RESOLUTION MILLENNIAL SCALE HISTORY OF HUDSON VALLEY, NY
 FORESTS: CLIMATE & ENVIRONMENTAL INFL
 09/19/2000 - 08/31/2002 FY02: -\$22,000 Total: \$22,000
Prin. Invest.: D PETEET
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30374 **COLUMBIA UNIV** **7013**
 INCREASING HAZARD IN GREATER CARACAS, VENEZUELA: INTERAC-
 TIONS OF NEOTECTONICS, LANDSLIDES AND
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: W MENKE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30391 **COLUMBIA UNIV** **7014**
 SENSITIVITY AND RESPONSE OF ICE-OCEAN-ATMOSPHERE INTERAC-
 TIONS IN THE SOUTH PACIFIC SECTOR OF THE
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D MARTINSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NEW YORK

NASA'S UNIVERSITY PROGRAM

NGT 5 30442 **COLUMBIA UNIV** **7015**
 IMPACTS OF THE NORTH ATLANTIC OSCILLATION ON PLANK TONIC
 ECOSYSTEMS AND THE CARBON CYCLE:
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M VISBECK
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30465 **COLUMBIA UNIV** **7016**
 AN IMPROVED SCHEME FOR INITIALIZATION OF AN ENSO F ORECASTING
 MODEL:USINGSINGULAR VECTOR ANALYSIS TO
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M A CANE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50323 **COLUMBIA UNIV** **7017**
 PREDICTION OF MOSQUITO ABUNDANCE WITH A LAND SURFA CE HYDROL-
 OGY MODEL & LANDSAT THERMATIC MAPPER IMA
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: M CANE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50353 **COLUMBIA UNIV** **7018**
 X-RAY SPECTROSCOPIC INVESTIGATIONS OF OUTFLOWS IN ACTIVE GA-
 LACTIC NUCLEI
 05/11/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S KAHN
Tech. Officer: GSFC/K E BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50392 **COLUMBIA UNIV** **7019**
 HARD X-RAY OBSERVATION OF YOUNG SUPERNOVA REMNANTS STUDENT:
 JAMES CHONKO
 05/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C HAILEY
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01034 **CORNELL UNIV** **7020**
 NANOTUBE SENSORS
 02/28/2001 - 04/30/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: P L MCEUEN
Tech. Officer: LARC/S K KAHNG
CASE Category: 13 – PHYSICS

NAG 1 02001 **CORNELL UNIV** **7021**
 DEVELOPMENT OF TECHNOLOGIES FOR MODELING DAMAGE IN STIFF-
 ENED THIN SHELL STRUCTURES
 10/18/2001 - 10/31/2004 FY02: \$50,606 Total: \$50,606
Prin. Invest.: A R INGRAFFEA
Tech. Officer: LARC/D YOUNG
CASE Category: 46 – MECHANICAL ENGR

NAG 1 02051 **CORNELL UNIV** **7022**
 COMPUTATIONAL MICRO-MECHANICAL INVESTIGATIONS OF CRACK INITIA-
 TION IN METALLIC POLYCRYSTALS
 02/04/2002 - 03/31/2005 FY02: \$72,245 Total: \$72,245
Prin. Invest.: A R INGRAFFEA
Tech. Officer: LARC/E H GLAESSGEN, LARC/I S RAJU
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 1993 **CORNELL UNIV** **7023**
 SIMULATION OF CRACK GROWTH IN SPRIAL-BEVEL GEARS
 12/11/1996 - 01/01/2002 FY02: \$0 Total: \$289,961
Prin. Invest.: A R INGRAFFEA
Tech. Officer: GRC/D G LOWICKI
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2112 **CORNELL UNIV** **7024**
 STUDIES OF GAS-PARTICLE INTERATIONS IN A MICROGRAV ITY FLOW
 CELL
 01/15/1998 - 12/31/2001 FY02: \$0 Total: \$686,517
Prin. Invest.: M LOUGE
Tech. Officer: GRC/R HAKIMAZADEH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2224 **CORNELL UNIV** **7025**
 HIGH PRESSURE COMBUSTION OF AN UNSUPPORTED SOOTING FUEL
 DROPLET IN MICROGRAVITY
 01/12/1999 - 11/11/2002 FY02: \$68,668 Total: \$280,640
Prin. Invest.: T AVEDISIAN
Tech. Officer: GRC/D L DIETRICH
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2349 **CORNELL UNIV** **7026**
 TURBULENCE-INDUCED COALESCENCE OF AEROSOL PARTICLES
 03/23/2000 - 11/30/2003 FY02: \$95,000 Total: \$240,000
Prin. Invest.: D L KOCH
Tech. Officer: GRC/H K NAHRA
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2353 **CORNELL UNIV** **7027**
 SHEET FLOWS, AVALANCHES, AND DUNE EVOLUTION ON EAR TH AND
 MARS
 03/14/2000 - 11/30/2003 FY02: \$65,875 Total: \$169,015
Prin. Invest.: D T JENKINS
Tech. Officer: GRC/F P CHIARMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2440 **CORNELL UNIV** **7028**
 RAPIDLY SHEARED BUBBLY SUSPENSION RAPIDLY SHEARED BUBBLY
 SUSPENSION
 05/31/2000 - 04/30/2005 FY02: \$140,000 Total: \$413,000
Prin. Invest.: D L KOCH
Tech. Officer: GRC/H K NAHRA
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2705 **CORNELL UNIV** **7029**
 GAS-PARTICLE INTERACTIONS IN A MICROGRAVITY FLOW CELL #OSP
 41286
 02/27/2002 - 12/31/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: D LOUGE
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2713 **CORNELL UNIV** **7030**
 DYNAMICS AND STABILITY OF CAPILLARY SYSTEMS: MOVIN G LIQUIDS BY
 DESIGN
 02/25/2002 - 11/30/2005 FY02: \$76,500 Total: \$76,500
Prin. Invest.: D STEEN
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NASA'S UNIVERSITY PROGRAM

NEW YORK

NAG 5 3427 **CORNELL UNIV** **7031**
 DEVELOPMENT AND APPLICATION OF NEW TOOLS FOR STATI DISCRETE
 ASTROPHYSICAL DATA
 09/26/1996 - 09/30/2001 FY02: \$0 Total: \$522,253
Prin. Invest.: T J LOREDO
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3626 **CORNELL UNIV** **7032**
 PHYSICAL STUDIES OF PLANETARY AND SATELLITE SURFACE
 02/12/1997 - 10/31/2001 FY02: \$0 Total: \$511,150
Prin. Invest.: J VEVERKA
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3639 **CORNELL UNIV** **7033**
 STUDY OF THE EFFECTS OF PHOTOMETRIC GEOMETRY ON SP MEASURE-
 MENTS
 02/12/1997 - 12/31/2001 FY02: \$0 Total: \$247,500
Prin. Invest.: P HELFENSTEIN
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3862 **CORNELL UNIV** **7034**
 STUDIES OF THERMAL STRUCTURES AND MOTIONS OF PLANE
 01/24/1997 - 11/30/2001 FY02: \$0 Total: \$547,161
Prin. Invest.: D J GIERABCH
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 3910 **CORNELL UNIV** **7035**
 PHYSICAL PROCESSES IN PLANETARY RINGS
 03/07/1997 - 12/31/2001 FY02: \$0 Total: \$683,100
Prin. Invest.: D A BURNS
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4205 **CORNELL UNIV** **7036**
 STUDIES IN PLANETARY GEOSCIENCES
 03/19/1997 - 03/31/2002 FY02: \$0 Total: \$459,323
Prin. Invest.: S W SQUYRES
Tech. Officer: GSFC/J G GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4333 **CORNELL UNIV** **7037**
 MARS SURFACE MINERALOGY FROM HST AND MARINER 6.7 I
 04/25/1997 - 04/30/2001 FY02: \$0 Total: \$133,200
Prin. Invest.: D F BELL
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 5233 **CORNELL UNIV** **7038**
 SIERRA PI DR. PAUL KINTNER
 02/10/1999 - 03/31/2002 FY02: \$11,021 Total: \$524,168
Prin. Invest.: P M KINTNER
Tech. Officer: MSFC/W BJOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5244 **CORNELL UNIV** **7039**
 FIRST YEAR OF A THREE GRANT NAG5-5244 PI DR. MICHAEL C. KELLEY
 03/29/1999 - 03/31/2003 FY02: \$0 Total: \$189,538
Prin. Invest.: M C KELLEY
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5366 **CORNELL UNIV** **7040**
 SVALBARD EISCAT RADAR SOUNDING OF ION OUTFLOWS: SE RSIO
 06/19/2002 - 06/12/2005 FY02: \$202,347 Total: \$202,347
Prin. Invest.: P KINTNER
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5370 **CORNELL UNIV** **7041**
 ELECTRODYNAMICS OF THE NIGHTTIME EQUATORIAL ELECTR OJECT: THE
 EFFECTS OF WINDS AND WAVES
 06/19/2002 - 06/12/2005 FY02: \$205,000 Total: \$205,000
Prin. Invest.: L GELINAS
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5380 **CORNELL UNIV** **7042**
 ROCKET INVESTIGATION OF ELECTRODYNAMICS AND SCATTE RING LAY-
 ERS IN THE BOTTOMSIDE EQUATORIAL REGIO
 06/25/2002 - 06/19/2005 FY02: \$42,002 Total: \$42,002
Prin. Invest.: D HYSELL
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6273 **CORNELL UNIV** **7043**
 BIOLOGICAL AND PHYSICAL CONTROLS OF PRIMARY PRODUC SUBSE-
 QUENT FATE IN THE GEORGES BANK REGION: AN IN
 08/29/1997 - 04/30/2001 FY02: \$0 Total: \$218,223
Prin. Invest.: G CHARLES
Tech. Officer: GSFC/J JODER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6495 **CORNELL UNIV** **7044**
 DEVELOPMENT OF 256X256 SI:SB AND SI:AS BIBIB DETEC TORS FOR SOFIA
 10/31/1997 - 12/31/2002 FY02: \$0 Total: \$840,000
Prin. Invest.: D L HERTER
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 7497 **CORNELL UNIV** **7045**
 UNDERSTANDING METEOROLOGICAL CONTROLS OF GLACIER M ASS
 BALANCE
 06/29/1998 - 06/30/2002 FY02: \$0 Total: \$270,000
Prin. Invest.: K H COOK
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7864 **CORNELL UNIV** **7046**
 JUPITER CLOUD STRUCTURE AND DYNAMICS STUDIES
 01/12/1999 - 12/31/2001 FY02: \$0 Total: \$182,000
Prin. Invest.: D J GIERASCH
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 8010 **CORNELL UNIV** **7047**
 DIGITAL MAPPING OF JOVAIN CLOUD MOTIONS
 01/13/1999 - 01/14/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: P HELFENSTEIN
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 5 8070 **CORNELL UNIV** **7048**
 WATER DETECTION ON ASTEROIDS: ARE THE VISIBLE REBANDS REALLY A
 GOOD PROXY?
 01/29/1999 - 02/28/2002 FY02: \$0 Total: \$89,364
Prin. Invest.: D S HOWELL
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 8188 **CORNELL UNIV** **7049**
 UNDERGRADUATE COURSE ON SATELLITE REMOTE SENSING I N BIOLOGI-
 CAL OCEANOGRAPHY
 03/04/1999 - 09/30/2001 FY02: \$0 Total: \$151,501
Prin. Invest.: B MONGER
Tech. Officer: GSFC/J CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8282 **CORNELL UNIV** **7050**
 SEPARATION & ANALYSIS OF TES ATMOSPHERIC TEMPERATU RES AS
 COMPONENT FIELDS: ZONAL MEANS, THERMA
 02/19/1999 - 02/28/2002 FY02: \$0 Total: \$200,800
Prin. Invest.: D J BANDFIELD
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8356 **CORNELL UNIV** **7051**
 ASTROPHYSICS OF FAST MOVING NEUTRON STARS (ATP98)
 03/11/1999 - 03/14/2003 FY02: \$0 Total: \$329,504
Prin. Invest.: D F CHERNOFF
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8484 **CORNELL UNIV** **7052**
 MATTER IN STRONG MAGNETIC FIELDS AND THERMAL RADIA TION FROM
 ISOLATED NEUTRON STARS (ATP - 98)
 05/11/1999 - 05/14/2002 FY02: \$0 Total: \$197,114
Prin. Invest.: D LAI
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8673 **CORNELL UNIV** **7053**
 A SCANNING DOUBLE HALF-WAVE INTERFEROMETER FOR SOFIA
 07/09/1999 - 07/14/2002 FY02: \$0 Total: \$315,665
Prin. Invest.: G J STACEY
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8775 **CORNELL UNIV** **7054**
 ENGINEERING CONTROL OF BIOMOLECULAR MOTOR POWERED
 NANO-CHEMICAL DEVICE
 09/01/1999 - 08/31/2002 FY02: \$107,304 Total: \$434,076
Prin. Invest.: C MONTEEMAGNO
Tech. Officer: GSFC/S DAVISON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9034 **CORNELL UNIV** **7055**
 RADAR SYNTHESIS IMAGING OF SMALL BODIES
 02/07/2000 - 02/14/2003 FY02: \$63,900 Total: \$186,750
Prin. Invest.: B CAMPBELL
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9047 **CORNELL UNIV** **7056**
 ACCRETION TO MAGNETIZED ROTATING NEUTRON STARS (ATP 99)
 03/09/2000 - 03/14/2003 FY02: \$66,542 Total: \$183,294
Prin. Invest.: R LOVELACE
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9067 **CORNELL UNIV** **7057**
 SCALING & CROSS CORRELATION STUDIES OF LAND SLIDES
 02/17/2000 - 02/28/2003 FY02: \$60,000 Total: \$180,000
Prin. Invest.: D L TURCOTTE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9140 **CORNELL UNIV** **7058**
 INVESTIGATION OF CELESTIAL SOLID ANALOGS
 02/29/2000 - 02/28/2003 FY02: \$0 Total: \$116,520
Prin. Invest.: A SIEVERS
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9199 **CORNELL UNIV** **7059**
 ELECTRON AND ION ACCELERATION ASSOCIATED WITH ALFVENIC STRUC-
 TURES
 03/09/2000 - 03/14/2003 FY02: \$82,000 Total: \$235,500
Prin. Invest.: C E SEYLER
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9492 **CORNELL UNIV** **7060**
 STUDIES OF VOLCANISM AND TECTONISM ON MARS AND THE MOON
 04/17/2000 - 04/14/2003 FY02: \$35,500 Total: \$103,750
Prin. Invest.: D L TURCOTTE
Tech. Officer: GSFC/J A GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9594 **CORNELL UNIV** **7061**
 PARTICIPATION IN SHOEMAKER-LEVY 9 IMPACT MODELING INVESTIGATION
 06/08/2000 - 06/14/2003 FY02: \$104,329 Total: \$211,476
Prin. Invest.: J HARRINGTON
Tech. Officer: GSFC/L D DEMING
CASE Category: 11 – ASTRONOMY

NAG 5 9612 **CORNELL UNIV** **7062**
 NEW ALGORITHMS FOR MAGNETOMETER ORBIT AND ATTITUDE ESTIMA-
 TION
 05/26/2000 - 05/31/2002 FY02: \$0 Total: \$60,008
Prin. Invest.: D PSIAKI
Tech. Officer: GSFC/R HARMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9735 **CORNELL UNIV** **7063**
 MAGNETO-HYDRODYNAMICS AND PLASMA PHENOMENA IN PROTE STEL-
 LAR SYSTEMS
 06/21/2000 - 06/30/2003 FY02: \$23,200 Total: \$68,400
Prin. Invest.: R LOVELACE
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9774 **CORNELL UNIV** **7064**
 SUB-PIXEL DETECTABILITY OF MATERIALS AT THE PATH FINDER LANDING
 SITE: IMPLICATIONS FOR MARTIAN SURF
 06/30/2000 - 06/30/2003 FY02: \$70,000 Total: \$210,000
Prin. Invest.: J F BELL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9794 **CORNELL UNIV** **7065**
 DETERMINATION OF AERODYNAMIC ROUGHNESS FROM SUR- FACE-
 BASES STEREO IMAGING
 07/11/2000 - 07/14/2003 FY02: \$0 Total: \$85,100
Prin. Invest.: R J SULLIVAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10168 **CORNELL UNIV** **7066**
 SURFACES OF PLANETS, SATELLITES, AND ASTEROIDS
 01/04/2001 - 11/30/2002 FY02: \$39,600 Total: \$78,600
Prin. Invest.: P THOMAS
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10289 **CORNELL UNIV** **7067**
 THERMAL EMISSION SPECTRAL MODELING WITH APPLICA- TIONS TO
 ASTEROIDS AND METEORITES
 01/29/2001 - 01/31/2002 FY02: \$0 Total: \$16,000
Prin. Invest.: B E CLARK
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10356 **CORNELL UNIV** **7068**
 QUANTUM WELL ELECTRON GAIN STRUCTURES FOR IMPROVED INFRA-
 RED DETECTOR READ NOISE
 02/07/2001 - 01/31/2003 FY02: \$250,000 Total: \$543,057
Prin. Invest.: S EIKENBERRY
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10434 **CORNELL UNIV** **7069**
 OPERATE THE SPACECRAFT PLANETARY IMAGING FACILITY AT CORNELL
 02/16/2001 - 02/28/2006 FY02: \$37,600 Total: \$74,600
Prin. Invest.: J VEVERKA
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10438 **CORNELL UNIV** **7070**
 THE IRREGULAR SATELLITE SYSTEMS OF THE GIANT PLANETS
 02/20/2001 - 02/28/2004 FY02: \$55,800 Total: \$109,800
Prin. Invest.: P NICHOLSON
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10574 **CORNELL UNIV** **7071**
 EVALUATION OF DUST AVALANCHES AND HIGH-ALTITUDE AEOLIAN FEAT-
 URES
 03/13/2001 - 03/14/2004 FY02: \$45,000 Total: \$90,000
Prin. Invest.: R SULLIVAN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10579 **CORNELL UNIV** **7072**
 DUST LIFTING & TRANSPORT ON MARS: ANALYSIS OF MGS DATA WITH A
 MESOSCALE MODEL
 03/19/2001 - 02/28/2004 FY02: \$71,000 Total: \$142,000
Prin. Invest.: P GIERASCH
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10580 **CORNELL UNIV** **7073**
 OBSERVATIONAL STUDY OF THE MARS POLAR VORTEX
 03/19/2001 - 02/28/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: B CONRATH
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10584 **CORNELL UNIV** **7074**
 ELASTIC PROPERTIES OF FILMS OF WATER & NOBLE GASES CONDENSED
 AT LOW TEMPERATURES
 03/13/2001 - 05/31/2003 FY02: \$0 Total: \$45,000
Prin. Invest.: R O POHL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10636 **CORNELL UNIV** **7075**
 MINERALOGY AND WEATHERING HISTORY OF THE MARTIAN SURFACE
 03/17/2001 - 03/14/2004 FY02: \$96,200 Total: \$176,200
Prin. Invest.: J F BELL, III
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10848 **CORNELL UNIV** **7076**
 UNDERGRADUATE COURSE ON SATELLITE REMOTE SENSING IN BIOLOGI-
 CAL OCEANOGRAPHY
 05/03/2001 - 04/14/2002 FY02: \$0 Total: \$89,482
Prin. Invest.: B MONGER
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11424 **CORNELL UNIV** **7077**
 TOPOGRAPHIC SIGNALS OF CENTRAL ANDEAD TECTONIC
 11/28/2001 - 11/30/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: B L ISACKS
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11480 **CORNELL UNIV** **7078**
 DYNAMICS OF SMALL SOLAR SYSTEM BODIES: PLANETARY RINGS, DUST,
 ASTEROIDS, AND SATELLITES
 12/19/2001 - 12/31/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: J A BURNS
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11492 **CORNELL UNIV** **7079**
 STUDY OF THE EFFECTS OF PHOTOMETRIC GEOMETRY ON SP ECTRAL
 REFLECTANCE MEASUREMENTS
 12/27/2001 - 12/31/2004 FY02: \$52,000 Total: \$52,000
Prin. Invest.: P HELFENSTEIN
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 5 11514 **CORNELL UNIV** **7080**
 PHYSICAL STUDIES OF PLANETARY RINGS AND SATELLITE SURFAC ES
 12/31/2001 - 12/31/2004 FY02: \$85,100 Total: \$85,100
Prin. Invest.: J VERERKA
Tech. Officer: GSFC/D SENKSE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11515 **CORNELL UNIV** **7081**
 DYNAMICAL STUDIES OF PLANETARY RINGS AND SATELLITE S
 12/31/2001 - 12/31/2004 FY02: \$61,900 Total: \$61,900
Prin. Invest.: P D NICHOLSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11819 **CORNELL UNIV** **7082**
 THIS PROPOSED HIGH ALTITUDE WORK WILL EXPLORE THE USE OF
 TECHNIQUES DEVELOPED FOR LOW EARTH ORBITING
 03/01/2002 - 02/28/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: M L PSIAKI
Tech. Officer: GSFC/S KANT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11919 **CORNELL UNIV** **7083**
 EULER DYNAMICS-BASED ESTIMATION ALGORITHMS FOR SPA CECRAFT
 ATTITUDE AND RATE DETERMINATION
 03/28/2002 - 03/31/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D PSIAKI
Tech. Officer: GSFC/R R HARMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12034 **CORNELL UNIV** **7084**
 THERMAL RADIATION FROM STRONGLY MAGNETIZED NEUTRON STARS
 04/12/2002 - 04/14/2005 FY02: \$77,280 Total: \$77,280
Prin. Invest.: D LAI
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12082 **CORNELL UNIV** **7085**
 ASTROSTATISTICAL TOOLS IN PYTHON
 04/23/2002 - 04/30/2005 FY02: \$122,493 Total: \$122,493
Prin. Invest.: T LOREDO
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12089 **CORNELL UNIV** **7086**
 DEVELOPMENT OF GPS TRANSLATOR INSTRUMENTATION
 04/30/2002 - 04/30/2004 FY02: \$90,489 Total: \$90,489
Prin. Invest.: P M KINTNER
Tech. Officer: GSFC/J SPANN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12164 **CORNELL UNIV** **7087**
 INVESTIGATION OF PLASMA TURBULENCE IN THE EQUATORIAL IONO-
 SPHERE
 06/13/2002 - 02/29/2004 FY02: \$46,321 Total: \$46,321
Prin. Invest.: D L HYSELL
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12187 **CORNELL UNIV** **7088**
 TRANSIENT AND FORCED WAVES IN MARS' ATMOSPHERE
 05/14/2002 - 05/14/2005 FY02: \$65,000 Total: \$65,000
Prin. Invest.: D BANFIELD
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12211 **CORNELL UNIV** **7089**
 DUAL FREQUENCY GPS SOFTWARE RECEIVER DEVELOPMENT
 05/20/2002 - 05/31/2005 FY02: \$88,430 Total: \$88,430
Prin. Invest.: M PSIAKI
Tech. Officer: GSFC/J Q SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12231 **CORNELL UNIV** **7090**
 VALIDATION OF THE ION-F FORMATION FLIGHT HARDWARE AND SOFT-
 WARE
 06/04/2002 - 11/14/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: M CAMPBELL
Tech. Officer: GSFC/L COX
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 12332 **CORNELL UNIV** **7091**
 OLIGONUCLEOTIDE TEMPLATES AND PEPTIDE BOND FORMATI ON: A NEW
 APPROACH
 07/08/2002 - 06/30/2005 FY02: \$88,509 Total: \$88,509
Prin. Invest.: D A USHER
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12470 **CORNELL UNIV** **7092**
 LATITUDE-RESOLVED AO SPECTRA OF NEPTUNE & URANUS: CIRCULATION
 MONITORING
 08/14/2002 - 08/14/2005 FY02: \$65,953 Total: \$65,953
Prin. Invest.: D J BANFIELD
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1445 **CORNELL UNIV** **7093**
 STUDIES OF FREE RADICALS
 02/16/1998 - 01/31/2003 FY02: \$150,000 Total: \$733,500
Prin. Invest.: D M LEE
Tech. Officer: MSFC/J W POE
CASE Category: 13 – PHYSICS

NAG 8 1518 **CORNELL UNIV** **7094**
 MESOSCALE LANDSURFACE HEAT FLUX VARIABILITY OVER THE SOUTH-
 ERN GCIP AREA FROM ATMOSPHERIC SOUNDINGS
 06/01/1998 - 05/31/2002 FY02: -\$28 Total: \$342,972
Prin. Invest.: W BRUTSAERT
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1574 **CORNELL UNIV** **7095**
 IMPURITY EFFECTS IN MACROMOLECULAR CRYSTAL GROWTH
 01/05/1999 - 11/30/2002 FY02: \$18,000 Total: \$210,150
Prin. Invest.: R THORNE
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1666 **CORNELL UNIV** **7096**
 INFLUENCE OF HOMOGENEITY AND FRAGILITY ON THE DYNAMICAL
 PROPERTIES OF GLASSY NETWORKS.
 05/12/2000 - 09/30/2003 FY02: \$110,000 Total: \$269,500
Prin. Invest.: A J SIEVERS
Tech. Officer: MSFC/P DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1671 **CORNELL UNIV** **7097**
 ON THE CONTROL OF THE EFFECTS OF GRAVITY ON THE SOLIDIFICATION
 MICROSTRUCTURES USING OPTIMALLY DESIGNED
 06/16/2000 - 12/31/2003 FY02: \$95,000 Total: \$230,250
Prin. Invest.: N ZABARAS
Tech. Officer: MSFC/P DOTY
CASE Category: 43 – CHEMICAL ENGR

NAG 8 1759 **CORNELL UNIV** **7098**
 BIODEGRADABLE POLYMERS
 05/02/2001 - 03/31/2005 FY02: \$77,553 Total: \$151,637
Prin. Invest.: C A BATT, E P GIANNELIS
Tech. Officer: MSFC/D S HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1778 **CORNELL UNIV** **7099**
 MICROSCALE MIXER FOR PROTEIN FOLDING
 05/02/2001 - 12/31/2005 FY02: \$65,000 Total: \$145,000
Prin. Invest.: L POLLACK
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1831 **CORNELL UNIV** **7100**
 R/S "MACROMOLECULAR CRYSTAL GROWTH: TECHNIQUES, DEVELOP-
 MENT, FUNDAMENTAL STUDIES, AND APPS.
 08/30/2001 - 11/30/2004 FY02: \$439,000 Total: \$570,000
Prin. Invest.: R E THORNE
Tech. Officer: MSFC/G GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NASW 00005 **CORNELL UNIV** **7101**
 PRINCIPAL INVESTIGATOR & CO'S NASA'S CONTOUR DISCOVERY MISSION
 07/03/2000 - 12/31/2002 FY02: \$952,951 Total: \$1,858,448
Prin. Invest.: J F VEVERKA
Tech. Officer: JPL/D B JARRETT
CASE Category: 11 – ASTRONOMY

NCC 2 1201 **CORNELL UNIV** **7102**
 DO INTEGRINS MEDIATE THE SKELETAL RESPONSES TO ALTERED
 LOADING IN VIVO (SUB-PROJECT B)
 09/12/2000 - 09/30/2003 FY02: \$37,906 Total: \$101,966
Prin. Invest.: M C VAN DER MEULEN
Tech. Officer: ARC/R K GLOBUS, ARC/E M HOLTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5459 **CORNELL UNIV** **7103**
 SYNTHETIC & MICROBIAL FOOD INGREDIENTS FOR LONG DURATION
 SPACE MISSIONS
 08/27/2001 - 07/31/2003 FY02: \$0 Total: \$18,293
Prin. Invest.: J B HUNTER
Tech. Officer: ARC/H W JONES, ARC/M H KLISS
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 3 797 **CORNELL UNIV** **7104**
 PARTICLE SEGREGATION IN COLLISIONAL SHEARING FLOWS PARTICLE
 SEGREGATION IN COLLISIONAL SHEARING FLOW
 05/18/2000 - 04/30/2005 FY02: \$119,871 Total: \$429,867
Prin. Invest.: J JENKINS
Tech. Officer: GRC/F P CHARIAMONTE 111
CASE Category: 46 – MECHANICAL ENGR

NCC 3 832 **CORNELL UNIV** **7105**
 HIGH TEMPERATURE POLYIMIDE NANOCOMPOSITES HIGH TEMPERATURE
 POLYIMIDE NANOCOMPOSITES
 01/04/2001 - 12/31/2002 FY02: \$60,000 Total: \$127,850
Prin. Invest.: D P GIANNELIS
Tech. Officer: GRC/M MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 5 298 **CORNELL UNIV** **7106**
 CARBON AND NUTRIENT STOCKS, SOIL WATER DYNAMICS, AND TRACE
 GAS FLUXES IN ABANDONED PASTURES AND AGRICULTURE
 06/16/1998 - 12/31/2002 FY02: \$276,709 Total: \$1,271,886
Prin. Invest.: E FERNANDES
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 375 **CORNELL UNIV** **7107**
 RADIATIVE STUDIES OF PLANETARY ATMOSPHERES
 01/19/1999 - 02/14/2002 FY02: \$0 Total: \$273,854
Prin. Invest.: B J CONRATH
Tech. Officer: GSFC/F M FLASAR
CASE Category: 11 – ASTRONOMY

NCC 5 539 **CORNELL UNIV** **7108**
 OUTER PLANETS, ATMOSPHERIC STRUCTURE AND PARTICIPATION IN
 CIRCULAR POLARIZATION
 02/12/2001 - 02/14/2004 FY02: \$150,100 Total: \$320,100
Prin. Invest.: P J GIERASCH
Tech. Officer: GSFC/F M FLASAR
CASE Category: 11 – ASTRONOMY

NCC 5 563 **CORNELL UNIV** **7109**
 DEVELOPMENT OF GPS SOFTWARE RECEIVER ALGORITHMS FOR USE IN
 HIGH-ALTITUDE SPACECRAFT NAVIGATION
 06/12/2001 - 06/30/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: M L PSIAKI
Tech. Officer: GSFC/B L EDWARDS
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 5 622 **CORNELL UNIV** **7110**
 RADIATIVE STUDIES OF PLANETARY ATMOSPHERES
 01/16/2002 - 02/14/2005 FY02: \$120,608 Total: \$120,608
Prin. Invest.: B J CONRATH
Tech. Officer: GSFC/F M FLASAR
CASE Category: 11 – ASTRONOMY

NCC 9 89 **CORNELL UNIV** **7111**
 COORDINATE ANALYSIS AND CALIBRATION STUDIES
 07/20/1999 - 07/19/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: R V MORRIS, J F BELL
Tech. Officer: JSC/R V MORRIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 02011 **CORNELL UNIV** **7112**
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/12/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S B POPE, M A SINGER
Tech. Officer: LARC/P J DRUMMOND
CASE Category: 21 – MATHEMATICS

NEW YORK

NASA'S UNIVERSITY PROGRAM

NGT 3 52362 **CORNELL UNIV** **7113**
 NASA GRADUATE STUDENT RESEARCHERS PROGRAM NASA GRADUATE
 STUDENT RESEARCHERS PROGRAM
 06/07/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D KOCH
Tech. Officer: GRC/H K NAHRA
CASE Category: 43 - CHEMICAL ENGR

NGT 5 30126 **CORNELL UNIV** **7114**
 INTERFEROMETRIC SAR MEASUREMENTS OF SEISMIC & INTE R-SEISMIC
 STRAIN NEAR A MAJOR SEISMIC GAP INPERU
 10/10/1997 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: B ISACKS
Tech. Officer: GSFC/G ASRAR
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 30210 **CORNELL UNIV** **7115**
 HAVE WE GROSSLY UNDERESTIMATED METHANE PRODUCTION & CON-
 SUMPTION? APPLICATION OF A NEW STABLE ISOTOPE
 08/20/1999 - 08/31/2002 FY02: \$0 Total: \$46,200
Prin. Invest.: L O HEDIN
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 30461 **CORNELL UNIV** **7116**
 LANDSCAPE EVOLUTION GRADIENTS IN THE CENTRAL ANDEAN FOREARC
 BETWEEN 12 SAND 32 S. SOUTHERN PERU AND
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: T JORDAN
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 40078 **CORNELL UNIV** **7117**
 NEW YORK SPACE GRANT COLL & FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$475,000 Total: \$965,696
Prin. Invest.: Y TERZIAN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50375 **CORNELL UNIV** **7118**
 BONE ADAPTATION TO PRECISELY CONTROLLED CYCLIC LOADING (STU-
 DENT: JAMES FRITTON)
 06/29/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M H VAN DER MUELEN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50390 **CORNELL UNIV** **7119**
 INFRARED TRANSMISSION SPECTROSCOPY AND TIME-SERIES PHOTOM-
 ETRY OF EXTRA-SOLAR PLANET ATMOSPHERES/MICHA
 05/23/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J HOUCK
Tech. Officer: HQ/K BLANDING
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 8 52897 **CORNELL UNIV** **7120**
 UNDERSTANDING THE COVARIABILITY OF AFRICAN AND INDIAN SUMMER
 RAINFALL
 05/25/2001 - 06/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: K H COOK
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 31 - ATMOSPHERIC SCIENCE

NGT10 52623 **CORNELL UNIV** **7121**
 GRADUATE STUDENT RESEARCHER'S PROGRAM
 08/23/1999 - 06/30/2003 FY02: \$24,000 Total: \$90,000
Prin. Invest.: L ALBRIGHT
Tech. Officer: KSC/R WHEELER
CASE Category: 55 - AGRICULTURE

NAG 5 11780 **HOFSTRA UNIV** **7122**
 STUDIES OF THE EFFECT OF RAINFALL OVER THE OCEAN ON THE
 SEAWINDS SCATTEROMETER & RAINRATE ESTIMATES
 02/28/2002 - 02/28/2003 FY02: \$120,341 Total: \$120,341
Prin. Invest.: D WEISSMAN
Tech. Officer: GSFC/E LINDTSROM
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG13 02015 **HOFSTRA UNIV** **7123**
 SCATTEROMETER DERIVED OPERATIONAL WINDS, SURFACE PRESSURES
 AND RAIN
 12/18/2001 - 09/18/2004 FY02: \$65,000 Total: \$65,000
Prin. Invest.: D E WEISSMAN
Tech. Officer: SSC/R MILLER
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 9311 **INTER AMERICAN UNIV OF PR AGUADILLA CAMPUS** **7124**
 PRECOLL AWARENESS IN MATHY AND SCIENCE PROGRAM
 03/22/2000 - 02/28/2003 FY02: \$91,205 Total: \$263,366
Prin. Invest.: R GONZALEZ
Tech. Officer: HQ/M STOUTSENBERGER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 11398 **IONA COLL** **7125**
 "HDO ON MARS."
 11/28/2001 - 11/30/2004 FY02: \$10,000 Total: \$10,000
Prin. Invest.: R NOVAK
Tech. Officer: GSFC/M J MUMMA
CASE Category: 13 - PHYSICS

NAG 5 9889 **MARIST COLL** **7126**
 PERSISTENCE & INFECTIVITY OF CYANOPHAGE FROM POLAR ENVIRON-
 MENTS: IMPLICATIONS FOR PLANETARY PROTECTI
 08/30/2000 - 06/30/2003 FY02: \$75,000 Total: \$145,650
Prin. Invest.: R KEPNER
Tech. Officer: GSFC/M MEYER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 9256 **MEDGAR EVERS COLL** **7127**
 MEDGAR EVERS COLL AERONAUTICS AND EARTH SCIENCE ACADEMY
 03/15/2000 - 02/28/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: L JOHNSON
Tech. Officer: HQ/M STOUTSENBERGER
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 10142 **MEDGAR EVERS COLL** **7128**
 THE NEW YORK CITY SPACE SCIENCE RESEARCH ALLIANCE
 12/19/2000 - 12/31/2003 FY02: \$245,000 Total: \$490,000
Prin. Invest.: L P JOHNSON
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 - ASTRONOMY

NAG 2 946 **MT SINAI SCH OF MED OF THE CUNY** **7129**
 ANATOMICAL STUDIES OF CENTRAL VESTIBULAR ADAPTATIO N
 01/10/1995 - 03/31/2002 FY02: \$0 Total: \$694,832
Prin. Invest.: G R HOLSTEIN, G R HOLSTEIN
Tech. Officer: ARC/W E HINDS, ARC/C M WINGET
CASE Category: 51 - BIOLOGY (EXCLUDING ENVIR)

NAG 2 1191 **MT SINAI SCH OF MED OF THE CUNY** **7130**
 NITRIC OXIDE SIGNALING IN HYPERGRAVITY IN DUCED NE URONAL
 PLASTICITY
 03/23/1998 - 08/31/2002 FY02: \$0 Total: \$636,166
Prin. Invest.: G R HOLSTEIN, G P MARTINELLI
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 6276 **MT SINAI SCH OF MED OF THE CUNY** **7131**
 "VESTIBULAR INFLUENCES ON AUTONOMIC CARDIOVASCULAR
 09/08/1997 - 12/31/2001 FY02: \$0 Total: \$848,810
Prin. Invest.: H KAUFMANN
Tech. Officer: GSFC/V SCHNEIDER
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1173 **MT SINAI SCH OF MED OF THE CUNY** **7132**
 NEUROLAB COMPLETION PROPOSAL: ANATOMICAL STUDIES O F CENTRAL
 VESTIBULAR ADAPTATION
 04/17/2000 - 03/31/2003 FY02: \$0 Total: \$238,548
Prin. Invest.: G R HOLSTEIN
Tech. Officer: ARC/M F VASQUES, ARC/P D SAVAGE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 9 128 **MT SINAI SCH OF MED OF THE CUNY** **7133**
 VALIDATION CENTRIFUGATION AS A COUNTER MEASURE FOR OTOLIGH
 DECONDITIONING DURIN SPACEFLIGHT
 06/14/2001 - 09/30/2004 FY02: \$401,046 Total: \$501,046
Prin. Invest.: S MOORE
Tech. Officer: JSC/M E ANDERSON
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 2 951 **NEW YORK UNIV** **7134**
 EFFECTS OF GRAVITY ON POSTNATL MOTOR DEVELOPMENT
 12/22/1994 - 07/31/2001 FY02: \$0 Total: \$878,767
Prin. Invest.: K D WALTON
Tech. Officer: ARC/W E HINDS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1426 **NEW YORK UNIV** **7135**
 GRAVITATION & DEVELOPMENT MOTRICITY
 07/26/2000 - 07/31/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: K D WALTON
Tech. Officer: ARC/MM AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 7583 **NEW YORK UNIV** **7136**
 JOINT CENTER FOR COMPUTATIONAL MODELING (JCCM)
 08/04/1998 - 12/31/2001 FY02: \$0 Total: \$203,000
Prin. Invest.: M BERGER
Tech. Officer: GSFC/D S SPICER
CASE Category: 21 – MATHEMATICS

NAG 5 9246 **NEW YORK UNIV** **7137**
 SENSITIVITY OF THE ATMOSPHERIC SHOWERS OF EXTREMEL Y HIGH
 ENERGY COSMIC RAYS TO UNKNOWN ASPECTS OF
 03/14/2000 - 03/14/2003 FY02: \$105,751 Total: \$299,869
Prin. Invest.: G FARRAR
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9871 **NEW YORK UNIV** **7138**
 AN INVESTIGATION OF THE PREDICTABILITY OF THE NSIPP FORECAST
 SYSTEM
 08/08/2000 - 08/14/2003 FY02: \$0 Total: \$185,000
Prin. Invest.: R KLEEMAN
Tech. Officer: GSFC/M REINECKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11669 **NEW YORK UNIV** **7139**
 TOOLS FOR GALAXY ASTROPHYSICS WITH SIRTFF (L TSA 200 1)
 01/28/2002 - 01/31/2007 FY02: \$93,037 Total: \$93,037
Prin. Invest.: D W HOGG
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 12100 **NEW YORK UNIV** **7140**
 PROBING COSMOLOGY WITH DEEP SURVEYS
 04/24/2002 - 04/30/2005 FY02: \$66,357 Total: \$66,357
Prin. Invest.: R SCOCCIMARRO
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12419 **NEW YORK UNIV** **7141**
 ICE-SHELF OCEAN INTERACTIONS ALONG THE WESTERN ANTARTIC PEN-
 INSULA
 08/07/2002 - 07/31/2005 FY02: \$84,921 Total: \$84,921
Prin. Invest.: D HOLLAND
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12427 **NEW YORK UNIV** **7142**
 AN INVESTIGATION OF PREDICTABILITY OF THE NSIPP FO RECAST
 SYSTEM.
 08/19/2002 - 08/14/2005 FY02: \$55,976 Total: \$55,976
Prin. Invest.: R KLEEMAN
Tech. Officer: GSFC/M RIENECKER
CASE Category: 33 – OCEANOGRAPHY

NAG 9 1024 **NEW YORK UNIV** **7143**
 CANCER RISK MECHANISM FOLLOWING REPEATED EXPOSURE TO
 HIGH LET RADIATION
 06/04/1998 - 08/30/2002 FY02: \$207,400 Total: \$796,734
Prin. Invest.: F J BURNS
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 56 – MEDICL

NCC 2 5417 **NEW YORK UNIV** **7144**
 SOFTWARE FOR IMAGE DISCRIMINABILITY & QUALITY MODE LING
 02/15/2001 - 05/31/2001 FY02: \$0 Total: \$63,912
Prin. Invest.: M LANDY
Tech. Officer: ARC/A J AHUMADA, ARC/J B MULLIGAN
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 5472 **NEW YORK UNIV** **7145**
 VISION MODELING FOR THE SYNTHETIC VISION PROJECT
 10/25/2001 - 10/31/2002 FY02: \$68,474 Total: \$68,474
Prin. Invest.: M S LANDY
Tech. Officer: ARC/B L BEARD, ARC/D FOYLE
CASE Category: 69 – PSYCHOLOGY, OTHER

NEW YORK

NASA'S UNIVERSITY PROGRAM

NCC 2 5513 **NEW YORK UNIV** **7146**
 USER INTERFACES FOR IMAGE DISCRIMINABILITY MODELS
 08/02/2002 - 07/31/2003 FY02: \$42,735 Total: \$42,735
Prin. Invest.: M S LANDY
Tech. Officer: ARC/A J AHUMADA, ARC/A B WATSON
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NGT 8 52893 **NEW YORK UNIV** **7147**
 NANOTOOLS FROM BIOLOGY: ANTIBODY TECHNOLOGY APPLIED TO CARBON NANOTUBE PROCESSING
 06/28/2000 - 10/30/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: S WILSON
Tech. Officer: MSFC/S NASH-STEVEN
CASE Category: 12 – CHEMISTRY

NCC 8 182 **NIAGARA UNIV** **7148**
 ALGORITHM DEVELOPMENT AND SCIENCES ANALYSIS OF STANDARD DATA PRODUCTS FROM LIGHTNING INSTR. SPACE
 04/26/1999 - 07/31/2003 FY02: \$0 Total: \$67,514
Prin. Invest.: W BOECK
Tech. Officer: MSFC/R BLAKESLEE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2533 **POLYTECHNIC UNIV - BROOKLYN,NY** **7149**
 REFLECTION & REFRACTION OF SOUND WAVES THROUGH GLOW DISCHARGES
 01/25/2001 - 12/31/2002 FY02: \$65,000 Total: \$130,000
Prin. Invest.: M OTUGEN
Tech. Officer: GRC/D B ZAMAN
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2679 **POLYTECHNIC UNIV - BROOKLYN,NY** **7150**
 MICRO-OPTICAL DISTRIBUTED SENSORS FOR AERO PROPULS ION APPLICATIONS
 12/17/2001 - 09/30/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D OTUGAN
Tech. Officer: GRC/R SEASHOLTZ
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11365 **POLYTECHNIC UNIV - BROOKLYN,NY** **7151**
 ALGORITHMS AND ARCHITECTURES FOR CONTROL OF DISTRIBUTED SPACECRAFT FORMATIONS
 10/05/2001 - 09/30/2003 FY02: \$62,895 Total: \$62,895
Prin. Invest.: V KAPILA
Tech. Officer: GSFC/J A LEITNER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 8 1370 **POLYTECHNIC UNIV - BROOKLYN,NY** **7152**
 R/S "DIFFUSION, VISCOSITY AND CRYSTAL GROWTH OF PROTEINS IN MICROGRAVITY"
 05/28/1997 - 02/28/2002 FY02: \$0 Total: \$431,000
Prin. Invest.: A MYERSON
Tech. Officer: MSFC/B GYNES, MSFC/J MAYO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1455 **POLYTECHNIC UNIV - BROOKLYN,NY** **7153**
 R/S THERMODYNAMIC & SPECTROSCOPIC STUDIES OF SECONDARY NUCLEATION IN MICROGRAVITY
 02/01/1998 - 07/31/2002 FY02: \$13,333 Total: \$296,000
Prin. Invest.: A S MEYERSON
Tech. Officer: MSFC/C TALLEY
CASE Category: 43 – CHEMICAL ENGR

NGT 8 52879 **POLYTECHNIC UNIV - BROOKLYN,NY** **7154**
 GRADUATE STUDENT RESEARCH PROGRAM DEVELOPMENT OF HEALTH MONITORING TECHNIQUES FOR AEROSPACE
 09/08/1999 - 10/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: F LIN
Tech. Officer: MSFC/J DOWDY
CASE Category: 44 – CIVIL ENGR

NAG 1 2089 **RENSSELAER POLYTECHNIC INST** **7155**
 EVOLUTION IN DECENTRALIZED EMERGENT COMPUTATION MY 1/2
 07/08/1998 - 05/30/2001 FY02: -\$567 Total: \$264,072
Prin. Invest.: P HAJELA, K E JANSEN
Tech. Officer: LARC/J SOBIESKI, LARC/J R ROGERS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02089 **RENSSELAER POLYTECHNIC INST** **7156**
 DEVELOPMENT OF HIGH PERFORMANCE AVALANCHE PHOTO- DETECTORS (177-2.5UM) USING LATTICE MATCHED GAL-X
 05/01/2002 - 04/30/2003 FY02: \$125,062 Total: \$125,062
Prin. Invest.: P DUTTA
Tech. Officer: LARC/M N ABEDIN
CASE Category: 13 – PHYSICS

NAG 3 2351 **RENSSELAER POLYTECHNIC INST** **7157**
 THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE STABILITY OF AN EVAPORATING CONSTRAINED VAPOR BUBBLE
 03/24/2000 - 11/30/2003 FY02: \$51,300 Total: \$132,800
Prin. Invest.: D C WAYNER
Tech. Officer: GRC/R SKARDA
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2383 **RENSSELAER POLYTECHNIC INST** **7158**
 R & D WORK ON THE CONSTRAINED VAPOR BUBBLE SYSTEM FOR A MICROGRAVITY EXPERIMENT
 04/18/2000 - 04/21/2005 FY02: \$150,000 Total: \$464,250
Prin. Invest.: P C WAGNER
Tech. Officer: GRC/J SKARDA
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2525 **RENSSELAER POLYTECHNIC INST** **7159**
 THE PREPARATION OF SIC NANOTUBES & NANOLAYERS #207 -01-253B
 01/17/2001 - 01/23/2003 FY02: \$71,883 Total: \$199,194
Prin. Invest.: D INTERRANTE
Tech. Officer: GRC/D LARKIN
CASE Category: 12 – CHEMISTRY

NAG 3 2552 **RENSSELAER POLYTECHNIC INST** **7160**
 MINORITY ENGINEERING PROGRAM MINORITY ENGINEERING PROGRAM
 03/06/2001 - 12/01/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: M D SMITH
Tech. Officer: GRC/T ROGERS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2714 **RENSSELAER POLYTECHNIC INST** **7161**
 DYNAMICS AND STABILITY OF CAPILLARY SYSTEMS: MOVING LIQUIDS BY DESIGN
 02/25/2002 - 11/30/2005 FY02: \$17,000 Total: \$17,000
Prin. Invest.: D HIRSA
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 7598 **RENSSELAER POLYTECHNIC INST** **7162**
 ORIGIN OF LIFE: INTERSTELLAR MOLECULES TO INTRONS
 07/15/1998 - 12/31/2002 FY02: \$952,494 Total: \$3,752,712
Prin. Invest.: D P FERRIS
Tech. Officer: GSFC/M A MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 7884 **RENSSELAER POLYTECHNIC INST** **7163**
 THE NATURE AND EVOLUTION OF INTERSTELLAR & CIRCUMSTELLAR ICES
 & ORGANIC MATTER
 12/01/1998 - 12/31/2003 FY02: \$16,871 Total: \$64,595
Prin. Invest.: D C WHITTET
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8976 **RENSSELAER POLYTECHNIC INST** **7164**
 PARTICIPATING SCIENTIST: ANALYSIS OF THE MSI/NIS SPECTRA OF EROS
 01/24/2000 - 03/31/2002 FY02: \$0 Total: \$70,887
Prin. Invest.: M J GAFFEY
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 9148 **RENSSELAER POLYTECHNIC INST** **7165**
 AN INVENTORY OF CARBONACEOUS MOLECULES IN INTERSTELLAR ICES
 & THEIR RELATION TO COMETS
 03/03/2000 - 03/14/2003 FY02: \$55,900 Total: \$164,458
Prin. Invest.: D WHITTET
Tech. Officer: GSFC/M MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9607 **RENSSELAER POLYTECHNIC INST** **7166**
 A LABORATORY INVESTIGATION OF PHOTOCHEMICAL PROCESSES ON
 TITAN
 05/12/2000 - 05/14/2002 FY02: \$0 Total: \$266,000
Prin. Invest.: J P FERRIS
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10345 **RENSSELAER POLYTECHNIC INST** **7167**
 CHARACTERIZATIONS OF ASTEROID SURFACE MATERIALS: METEORITE
 PARENT BODIES & ASTEROID EVOLUTION
 02/01/2001 - 02/14/2003 FY02: \$50,800 Total: \$100,800
Prin. Invest.: D J GAFFEY
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11662 **RENSSELAER POLYTECHNIC INST** **7168**
 ENANTIOMERIC EXCESSES IN THE EARLY SOLAR SYSTEM-THE ROLE OF
 CIRCULARLY POLARIZED RADIATION
 02/07/2002 - 02/14/2005 FY02: \$30,000 Total: \$30,000
Prin. Invest.: D WHITTET
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 8 1468 **RENSSELAER POLYTECHNIC INST** **7169**
 R/S EVOLUTION OF LOCAL MICROSTRUCTURES SPATIAL INSTABILITIES OF
 COARSENING CLUSTERS
 02/24/1998 - 01/31/2003 FY02: \$112,500 Total: \$513,759
Prin. Invest.: M E GLICKSMAN
Tech. Officer: MSFC/L B JETER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1696 **RENSSELAER POLYTECHNIC INST** **7170**
 FOLLOW-ON RESEARCH ACTIVITIES FOR THE RENSSELAER ISOTHERMAL
 DENDRITIC GROWTH EXPERIMENT (RIDGE)
 05/15/2000 - 11/30/2003 FY02: \$100,000 Total: \$235,000
Prin. Invest.: M E GLICKSMAN, M B KOSS
Tech. Officer: MSFC/P M DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1795 **RENSSELAER POLYTECHNIC INST** **7171**
 EXPERIMENTAL INVESTIGATION INTO ADVANCED PROPULSION FORTH
 GENERATION SPACE TRANSPORTATION
 04/12/2001 - 03/31/2004 FY02: \$40,000 Total: \$139,000
Prin. Invest.: L N MYRABO, H NAGAMATSU
Tech. Officer: MSFC/J W LEHNER
CASE Category: 46 – MECHANICAL ENGR

NCC 2 5494 **RENSSELAER POLYTECHNIC INST** **7172**
 CREATION OF ENCAPSULATED SPIECES IN FULLERENE AND DIAMOND
 BASED NANOSTRUCTURES
 06/05/2002 - 05/31/2003 FY02: \$43,000 Total: \$43,000
Prin. Invest.: P M AJAYAN
Tech. Officer: ARC/T R GOVINDAN, ARC/A GRADY-HEISER
CASE Category: 13 – PHYSICS

NCC 8 97 **RENSSELAER POLYTECHNIC INST** **7173**
 SPACE AND GROUND BASED CRYSTAL GROWTH USING MAGNETICALLY
 COUPLED BAFFLE
 06/13/1996 - 12/31/2003 FY02: \$172,843 Total: \$969,090
Prin. Invest.: A G OSTROGORSKY
Tech. Officer: MSFC/D SCHAEFER
CASE Category: 13 – PHYSICS

NGT 3 52341 **RENSSELAER POLYTECHNIC INST** **7174**
 POWDER LUBRICATED JOURNAL BEARING DEVELOPMENT
 06/29/1998 - 08/31/2001 FY02: -\$3,186 Total: \$60,814
Prin. Invest.: J A TICHY
Tech. Officer: GRC/D MONTEGANI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50382 **RENSSELAER POLYTECHNIC INST** **7175**
 MAIN BELT ASTEROIDS: COMPOSITIONAL EVIDENCE FOR DYNAMIC
 EARLY SOLAR SYSTEM PROCESSES/STUDENT: PAUL
 05/20/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M GAFFEY
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2484 **ROCHESTER INST OF TECHNOLOGY** **7176**
 SPIN-ON GLASSY ELECTROLYTES FOR THIN-FILM MICROELECTRONIC
 BATTERIES
 09/11/2000 - 11/30/2002 FY02: \$0 Total: \$46,182
Prin. Invest.: D P RAFFAELLE
Tech. Officer: GRC/N HAGEDORN
CASE Category: 12 – CHEMISTRY

NAG 3 2593 **ROCHESTER INST OF TECHNOLOGY** **7177**
 DEVELOPMENT OF ADVANCED GRAVITY-INDEPENDENT HIGH HEAT FLUX
 PHASE CHANGE HEAT EXCHANGER TECH & DESIGN
 05/11/2001 - 06/30/2003 FY02: \$42,462 Total: \$84,924
Prin. Invest.: D RAFFAELLE
Tech. Officer: GRC/S BAILEY
CASE Category: 13 – PHYSICS

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 3 2595 ROCHESTER INST OF TECHNOLOGY 7178
 QUANTUM DOT DEVICE CHARACTERIZATION AND DEVELOPMENT
 04/30/2001 - 05/31/2004 FY02: \$0 Total: \$50,000
Prin. Invest.: D P RAFFAELLE
Tech. Officer: GRC/S BAILEY
CASE Category: 13 – PHYSICS

NAG 3 2596 ROCHESTER INST OF TECHNOLOGY 7179
 SIC SOLAR CELLS SIC SOLAR CELLS
 04/30/2001 - 05/31/2002 FY02: \$0 Total: \$36,889
Prin. Invest.: Z RAFFAELLE
Tech. Officer: GRC/S BAILEY
CASE Category: 13 – PHYSICS

NAG 5 9090 ROCHESTER INST OF TECHNOLOGY 7180
 A PROGRAM TO DEVELOP HYBRIDIZED 2K X 2K SI PIN ARRAYS FOR SPACE
 02/17/2000 - 01/31/2003 FY02: \$0 Total: \$679,700
Prin. Invest.: Z NINKOV
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 10051 ROCHESTER INST OF TECHNOLOGY 7181
 FOREST FIRES IMAGING EXPERIMENT SYSTEMS
 09/29/2000 - 08/31/2003 FY02: \$2,495,000 Total: \$4,770,275
Prin. Invest.: A VODECEK
Tech. Officer: GSFC/T D GUBBELS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11009 ROCHESTER INST OF TECHNOLOGY 7182
 SYNERGISTIC APPLICATIONS OF EO-1 AND LANDSAT 7 FOR CANOPY TEMPERA
 06/06/2001 - 06/14/2003 FY02: \$0 Total: \$69,997
Prin. Invest.: D SCHOTT
Tech. Officer: GSFC/J A SMITH
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 11298 ROCHESTER INST OF TECHNOLOGY 7183
 YEAR ONE OF SOLICITED PROPOSAL ENTITLED, "LANDSAT RADIOMETRIC CALIBRATION: TOWARDS A 20 YEAR RECORD
 08/29/2001 - 08/31/2004 FY02: \$28,500 Total: \$123,489
Prin. Invest.: J SCHOTT
Tech. Officer: GSFC/B L MARKHAM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02051 ROCHESTER INST OF TECHNOLOGY 7184
 WILDFIRE AIRBORNE SENSOR PROGRAM (WASP)
 09/10/2002 - 11/30/2003 FY02: \$1,370,001 Total: \$1,370,001
Prin. Invest.: MCKEOWN
Tech. Officer: SSC/M GIARDINO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 786 ROCHESTER INST OF TECHNOLOGY 7185
 INTEGRATED POWER SOURCES INTEGRATED POWER SOURCES
 03/23/2000 - 04/30/2003 FY02: \$25,000 Total: \$100,000
Prin. Invest.: D P RAFAELLE
Tech. Officer: GRC/A F HEPP
CASE Category: 13 – PHYSICS

NCC 3 806 ROCHESTER INST OF TECHNOLOGY 7186
 SOLID STATE LITHIUM POLYMER ELECTROLYTE DEVELOPMENT
 06/07/2000 - 05/31/2001 FY02: -\$1,169 Total: \$48,831
Prin. Invest.: D P RAFFAELLE
Tech. Officer: GRC/A F HEPP
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 3 807 ROCHESTER INST OF TECHNOLOGY 7187
 THIN FILM SOLAR CELL PROCESSING AND DEVELOPMENT THIN FILM SOLAR CELL PROCESSING AND DEVELOPMENT
 06/07/2000 - 05/31/2001 FY02: -\$560 Total: \$69,440
Prin. Invest.: D P RAFFAELLE
Tech. Officer: GRC/A HEPP
CASE Category: 13 – PHYSICS

NCC 3 937 ROCHESTER INST OF TECHNOLOGY 7188
 SCANNING, TUNNELING OPTICAL RESONANCE MICROSCOPY (STORM)
 02/12/2002 - 01/24/2005 FY02: \$91,466 Total: \$91,466
Prin. Invest.: D P RAFFAELLE
Tech. Officer: GRC/D BAILEY
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 953 ROCHESTER INST OF TECHNOLOGY 7189
 WIDE BANDGAP SPACE PHOTOVOLTAICS DEVELOPMENT WIDE BANDGAP SPACE PHOTOVOLTAICS DEVELOPMENT
 04/11/2002 - 03/31/2005 FY02: \$47,095 Total: \$47,095
Prin. Invest.: D RAFFAELLE
Tech. Officer: GRC/G LANDIS
CASE Category: 13 – PHYSICS

NCC 3 956 ROCHESTER INST OF TECHNOLOGY 7190
 HIGH PURITY SINGLE WALL NANOTUBE ANODES HIGH PURITY SINGLE WALL NANOTUBE ANODES
 05/02/2002 - 04/17/2005 FY02: \$20,000 Total: \$20,000
Prin. Invest.: D P RAFFAELLE
Tech. Officer: GRC/A F HEPP
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC13 98001 ST UN NY COL-ENV SCI & FORESTRY 7191
 A CENTER FOR EXPLORING AND DEVELOPING COMMERCIAL APPLICATIONS OF REMOTE SENSING AND GEO-SPATIAL TECH
 09/01/1998 - 12/31/2002 FY02: \$125,000 Total: \$625,000
Prin. Invest.: P HOPKINS
Tech. Officer: SSC/N SOVIK
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 01003 STATE U NY COLL OF ENVIR SCI & FORESTRY 7192
 APPLYING REMOTE SENSING TO FOREST MANAGEMENT IN STATE AGENCIES
 06/01/2001 - 05/31/2002 FY02: \$0 Total: \$449,010
Prin. Invest.: P HOPKINS
Tech. Officer: SSC/N SOVIK
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6227 STATE UNIV OF NEW YORK - ALBANY 7193
 DETECTING INTERACTIONS BETWEEN VEGETATION AND THE NORTH-EASTERN UNITED STATES
 09/12/1997 - 12/31/2001 FY02: \$0 Total: \$296,085
Prin. Invest.: D R FITZJARRALD
Tech. Officer: GSFC/D WICKLAND
CASE Category: 11 – ASTRONOMY

NAG 5 7469 STATE UNIV OF NEW YORK - ALBANY 7194
 CASE STUDY INVESTIGATIONS OF LARGE-AMPLITUDE INERTIAL GRAVITY WAVE ENVIRONMENTS AND MESOSCALE
 06/03/1998 - 06/30/2001 FY02: \$0 Total: \$129,936
Prin. Invest.: L BOSART
Tech. Officer: GSFC/A NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8815 STATE UNIV OF NEW YORK - ALBANY 7195
 GENETIC COMPLEXITY IN THE RNA WORLD: AN EXAMINATION OF THE
 GENETIC LOAD IN RNA POPULATIONS
 10/06/1999 - 09/30/2001 FY02: \$0 Total: \$155,360
Prin. Invest.: N E LEHMAN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 - ASTRONOMY

NAG 5 9676 STATE UNIV OF NEW YORK - ALBANY 7196
 TECHNOLOGY & POLICY ASPECTS OF APPLYING REMOTE SENSING TO
 FOREST MANAGEMENT IN STATE AGENCIES
 05/31/2000 - 05/31/2001 FY02: \$0 Total: \$275,000
Prin. Invest.: P F HOPKINS
Tech. Officer: GSFC/A J TUYAHOV
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 9690 STATE UNIV OF NEW YORK - ALBANY 7197
 DEVELOPING & TESTING OF NEW TECHNIQUES FOR CONSERVATIONAL
 BIOGEOLOGICAL MINERALEXPLORATION
 06/19/2000 - 11/30/2003 FY02: \$45,053 Total: \$159,642
Prin. Invest.: H MASSONE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 11008 STATE UNIV OF NEW YORK - ALBANY 7198
 RELATIONSHIP BETWEEN CORE CONVECTIVE STRUCTURE AND INTEN-
 SITY CHANGE IN TROPICAL CYCLONES
 06/06/2001 - 06/14/2004 FY02: \$84,150 Total: \$164,150
Prin. Invest.: J MOLINARI
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG13 02043 STATE UNIV OF NEW YORK - ALBANY 7199
 APPLYING REMOTE SENSING TO FOREST MANAGEMENT IN STATE AGEN-
 CIES
 08/01/2002 - 05/31/2003 FY02: \$428,000 Total: \$428,000
Prin. Invest.: P F HOPKINS
Tech. Officer: SSC/M GIARDINO
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAS 1 18942 STATE UNIV OF NEW YORK - ALBANY 7200
 SAGE III SCIENCE SUPPORT - P.I. - DR. V. MOHNEN
 01/31/1990 - 01/31/2005 FY02: \$40,000 Total: \$627,630
Prin. Invest.: V MOHNEN
Tech. Officer: LARC/G L MADDREA, LARC/L R MCMASTER
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 2 5380 STATE UNIV OF NEW YORK - ALBANY 7201
 A PRELIMINARY TEST OF THE CO2 RECTIFIER HYPOTHESIS USING
 EXISTING UPPER TROPOSPHERIC MEASUREMENTS...
 04/15/2000 - 10/14/2002 FY02: \$0 Total: \$48,710
Prin. Invest.: M KRITZ
Tech. Officer: ARC/L PFISLER
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 2 5504 STATE UNIV OF NEW YORK - ALBANY 7202
 ANALYS OF CARBON DIOXIDE AND RADON MEASUREMENTS MADE IN THE
 UPPER TROPOSPHERE OVER THE UNITED STATE
 07/19/2002 - 06/30/2003 FY02: \$24,572 Total: \$24,572
Prin. Invest.: M KRITZ
Tech. Officer: ARC/L PFISTER, ARC/R S HIRSKIND
CASE Category: 31 - ATMOSPHERIC SCIENCE

NCC 3 891 STATE UNIV OF NEW YORK - ALBANY 7203
 POLYTYPE MAPPING AND DEFECT CHARACTERIZATION IN SILICON CAR-
 BIDE HETEROEPIAXIAL STRUCTURES
 06/04/2001 - 04/30/2003 FY02: \$65,000 Total: \$120,000
Prin. Invest.: D DUDLEY
Tech. Officer: GRC/P NEUDECK
CASE Category: 45 - ELECTRICAL ENGR

NCC 5 283 STATE UNIV OF NEW YORK - ALBANY 7204
 PERIODIC, TRANSIENT, AND SPATIALLY INHOMOGENEOUS INFLUENCES
 ON C EXCHANGE IN AMAZONIA
 06/23/1998 - 12/31/2002 FY02: \$255,377 Total: \$1,413,239
Prin. Invest.: D R FRITZJARRALD
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 30431 STATE UNIV OF NEW YORK - ALBANY 7205
 PHOTOCHEMICAL MINERALIZATION OF DISSOLVED ORGANIC MATTER AND
 THE GLOBAL CARBON CYCLE (STUDENT: EMIL
 08/26/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D KIEBER
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 9069 STATE UNIV OF NEW YORK - BINGHAMTON 7206
 USE OF ROTATIONAL & GRAVITATIONAL OBSERVATIONS TO INFER CORE-
 MANTLE COUPLING & LONG TIDAL PERIODS
 03/08/2000 - 05/31/2002 FY02: \$0 Total: \$107,000
Prin. Invest.: S DICKMAN
Tech. Officer: GSFC/H FREY
CASE Category: 32 - GEOLOGICAL SCIENCE

NCC 1 336 STATE UNIV OF NEW YORK - BINGHAMTON 7207
 RELIABILITY CRITERIA-BASED FLIGHT SYSTEM CONTROL MY 1/3
 04/30/1999 - 01/31/2002 FY02: \$1 Total: \$159,255
Prin. Invest.: N WU
Tech. Officer: LARC/C M BELCASTRO, LARC/C M BELCASTRO
CASE Category: 41 - AERONAUTICAL ENGR

NCC 1 02009 STATE UNIV OF NEW YORK - BINGHAMTON 7208
 FAULT TOLERANT CONTROL OF AEROSPACE VEHICLES
 02/12/2002 - 01/31/2005 FY02: \$56,000 Total: \$56,000
Prin. Invest.: N E WU
Tech. Officer: LARC/C M BELCASTRO
CASE Category: 41 - AERONAUTICAL ENGR

NAG 1 2238 STATE UNIV OF NEW YORK - BUFFALO 7209
 FILTERED MASS DENSITY FUNCTION FOR DESIGN SIMULATIONS OF
 HIGH SPEED AIRBREATHING PROPULSION SYS.
 09/20/1999 - 08/31/2002 FY02: \$27,317 Total: \$94,817
Prin. Invest.: P GIVI
Tech. Officer: LARC/J P DRUMMOND
CASE Category: 46 - MECHANICAL ENGR

NAG 2 1429 STATE UNIV OF NEW YORK - BUFFALO 7210
 A NEW SEMI-ACTIVE APPROACH FOR DYNAMIC RESPONSE MODIFICATION
 OF HELICOPTERS
 08/11/2000 - 08/31/2002 FY02: \$0 Total: \$46,994
Prin. Invest.: G LEE
Tech. Officer: ARC/C TUNG
CASE Category: 41 - AERONAUTICAL ENGR

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 3 2225 STATE UNIV OF NEW YORK - BUFFALO 7211
 LARGE EDDY SIMULATION OF GRAVITATIONAL EFFECTS ON TRANSITIONAL
 AND TURBULENT GAS-JET DIFFUSION FLAME
 01/22/1999 - 08/10/2003 FY02: \$95,809 Total: \$359,720
Prin. Invest.: D GIVI
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9390 STATE UNIV OF NEW YORK - BUFFALO 7212
 THE PLANETARY GEOLOGY AND GEOPHYSICS UNDERGRADUATE RE-
 SEARCH PROGRAM
 04/04/2000 - 04/14/2003 FY02: \$92,830 Total: \$241,430
Prin. Invest.: T GREGG
Tech. Officer: GSFC/J A GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9619 STATE UNIV OF NEW YORK - BUFFALO 7213
 VOLCANIC EVOLUTION & EROSIONAL HISTORY OF TYRRHENA & HADRIACA
 PATERAE, MARS
 05/18/2000 - 05/14/2003 FY02: \$55,000 Total: \$164,200
Prin. Invest.: T GREGG
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9873 STATE UNIV OF NEW YORK - BUFFALO 7214
 A NEW CLASS OF UNNATURAL FOLDING OLIGOMERS: HELICES WITH
 NANO-SIZED CAVITIES
 08/10/2000 - 08/31/2003 FY02: \$112,500 Total: \$346,322
Prin. Invest.: B GONG
Tech. Officer: GSFC/S DAVISON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10608 STATE UNIV OF NEW YORK - BUFFALO 7215
 REMOTE SENSING OF GROUND WATER: CALIBRATION OF ENVIRONMENTAL
 GROUND WATER FLOW MODELS TO SATELLITE
 03/15/2001 - 03/14/2004 FY02: \$85,321 Total: \$200,739
Prin. Invest.: M BECKER
Tech. Officer: GSFC/M BECKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11835 STATE UNIV OF NEW YORK - BUFFALO 7216
 EVOLUTION OF WESTERN HESPERIA PLANUM, MARS
 03/06/2002 - 02/28/2005 FY02: \$45,000 Total: \$45,000
Prin. Invest.: T K GREGG
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12409 STATE UNIV OF NEW YORK - BUFFALO 7217
 ASSESSMENT, MONITORING, AND MODELING OF LCLUC AND THEIR IM-
 PACTS ON GROUNDWATER RESOURCES, ECOSYSTEM
 08/01/2002 - 07/31/2004 FY02: \$63,875 Total: \$63,875
Prin. Invest.: M SULTAN
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 01034 STATE UNIV OF NEW YORK - BUFFALO 7218
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/22/2001 - 06/30/2003 FY02: \$0 Total: \$22,000
Prin. Invest.: K LEWIS
Tech. Officer: LARC/S L PADULA
CASE Category: 49 – ENGINEERING, OTHER

NGT 1 52185 STATE UNIV OF NEW YORK - BUFFALO 7219
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/12/1998 - 06/30/2002 FY02: \$0 Total: \$66,001
Prin. Invest.: K E LEWIS
Tech. Officer: LARC/J SOBIESKI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52228 STATE UNIV OF NEW YORK - BUFFALO 7220
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/18/2000 - 12/31/2001 FY02: -\$1,029 Total: \$20,972
Prin. Invest.: K E LEWIS, T J HALECKI
Tech. Officer: LARC/S L PADULA
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2040 STATE UNIV OF NEW YORK - STONY BROOK 7221
 SPARC DATA CENTER MY 1/3
 03/27/1998 - 12/31/2000 FY02: -\$171 Total: \$179,117
Prin. Invest.: M A GELLER
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2065 STATE UNIV OF NEW YORK - STONY BROOK 7222
 OCEAN BUOY SHORTWAVE (OBS): A DATA SET FOR SATELLITE RETRIEVAL
 AND GCM VALIDATION
 05/01/1998 - 11/30/2000 FY02: -\$1 Total: \$126,277
Prin. Invest.: R A WALISER
Tech. Officer: LARC/D S MCDUGAL, LARC/J L RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2166 STATE UNIV OF NEW YORK - STONY BROOK 7223
 SAGE II RESEARCH ON THE CONTROLLING PROCESSES OF UPPER
 TROPOSPHERIC & STRATOSPHERIC WATER VAPOR
 03/17/1999 - 06/14/2003 FY02: \$65,787 Total: \$338,787
Prin. Invest.: M A GELLER
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01052 STATE UNIV OF NEW YORK - STONY BROOK 7224
 CENTER FOR EMERGING TECHNOLOGIES: LONG ISLAND TECHNOLOGY
 CENTER
 03/30/2001 - 04/14/2003 FY02: \$0 Total: \$997,800
Prin. Invest.: Y SHAMASH
Tech. Officer: LARC/R R ANTCLIFF
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1325 STATE UNIV OF NEW YORK - STONY BROOK 7225
 APPLICATIONS OF COMPUTATIONAL GEOMETRY IN AIR TRAFFIC MANAGE-
 MENT
 05/19/1999 - 08/31/2002 FY02: \$20,000 Total: \$105,000
Prin. Invest.: J S MITCHELL
Tech. Officer: ARC/G MEYER
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1379 STATE UNIV OF NEW YORK - STONY BROOK 7226
 EFFECT OF SIMULATED MICROGRAVITY ON ACTIVATED TRANSCRIPTION
 08/16/1999 - 02/28/2003 FY02: \$50,423 Total: \$257,046
Prin. Invest.: M A MORROW
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1517 STATE UNIV OF NEW YORK - STONY BROOK 7227
 ELUCIDATING THE MOLECULAR EVENTS OF BONE MECHANORECEPTION
 08/31/2001 - 08/14/2003 FY02: \$288,788 Total: \$428,377
Prin. Invest.: M HADJIARYROU
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 - BIOLOGY (EXCLUDING ENVIR)

NAG 3 2693 STATE UNIV OF NEW YORK - STONY BROOK 7228
 MICROSTRUCTURAL ENGINEERING AND AN INTEGRATED PROCESSING
 APPROACH FOR REVOLUTIONARY TBC'S
 02/12/2002 - 01/09/2005 FY02: \$200,000 Total: \$200,000
Prin. Invest.: C C BERNDT
Tech. Officer: GRC/J J ELDRIDGE
CASE Category: 47 - METAL & MATERIALS ENGR

NAG 5 3718 STATE UNIV OF NEW YORK - STONY BROOK 7229
 LABORATORY SPECTROSCOPIC MEASUREMENTS RELEVANT TO RE-
 SEARCH
 01/24/1997 - 02/28/2003 FY02: \$2,076 Total: \$439,441
Prin. Invest.: D VARANABI
Tech. Officer: GSFC/M J KURYLO
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 3950 STATE UNIV OF NEW YORK - STONY BROOK 7230
 OPTIMIZATION OF A BIOCHEMICAL COUNTERMEASURE
 02/12/1997 - 02/14/2002 FY02: \$0 Total: \$1,047,235
Prin. Invest.: C T RUBIN
Tech. Officer: GSFC/V SCHNEIDER
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 5 4043 STATE UNIV OF NEW YORK - STONY BROOK 7231
 LIDAR MEASUREMENTS AND ANALYSIS IN THE NETWORK FOR T STRATO-
 SPHERIC CHANGE
 05/06/1997 - 03/31/2002 FY02: \$0 Total: \$1,397,451
Prin. Invest.: P SOLOMON
Tech. Officer: GSFC/M J KURYLO
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 4071 STATE UNIV OF NEW YORK - STONY BROOK 7232
 STRATOSPHERIC AND MESOSPHERIC TRACE GAS STUDIES USING MM-WAVE
 RECEIVERS
 03/21/1997 - 12/31/2001 FY02: -\$20 Total: \$555,529
Prin. Invest.: R L DE ZAFRA
Tech. Officer: GSFC/M J KURYLO
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 6601 STATE UNIV OF NEW YORK - STONY BROOK 7233
 DEVELOPMENT AND VALIDATION OF A TROPICAL ISOPRENE EMISSION
 MODEL
 12/09/1997 - 03/31/2002 FY02: \$0 Total: \$117,349
Prin. Invest.: M LERDAU
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 6879 STATE UNIV OF NEW YORK - STONY BROOK 7234
 STUDIES OF EXCITED SPECIES IN PLANETARY UPPER ATMOSPHERES
 01/30/1998 - 08/14/2002 FY02: \$0 Total: \$266,738
Prin. Invest.: J L FOX
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 - ASTRONOMY

NAG 5 7134 STATE UNIV OF NEW YORK - STONY BROOK 7235
 ULTRAVIOLET INVESTIGATIONS OF WAVE-COUPLING IN THE MIDDLE ATMOSPHERE
 03/03/1998 - 02/14/2001 FY02: -\$3,294 Total: \$221,709
Prin. Invest.: D A GELLER
Tech. Officer: GSFC/A DOUGLASS
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 7978 STATE UNIV OF NEW YORK - STONY BROOK 7236
 A COMPREHENSIVE STUDY OF NEUTRON STAR PHOTOSPHERES _
 (LTS98)
 01/06/1999 - 12/31/2003 FY02: \$75,000 Total: \$253,000
Prin. Invest.: F M WALTER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 - ASTRONOMY

NAG 5 8106 STATE UNIV OF NEW YORK - STONY BROOK 7237
 COSMIC RAYS IN INTERPLANETARY SPACE
 02/04/1999 - 05/15/2001 FY02: -\$15,746 Total: \$227,172
Prin. Invest.: D A FORMAN
Tech. Officer: GSFC/J LING
CASE Category: 11 - ASTRONOMY

NAG 5 8169 STATE UNIV OF NEW YORK - STONY BROOK 7238
 SEDIMENTARY GEOCHEMISTRY OF MARTIAN SAMPLES FROM THE PATH-
 FINDER MISSION
 02/16/1999 - 08/31/2001 FY02: \$0 Total: \$59,500
Prin. Invest.: S M MCLENNAN
Tech. Officer: HQ/J BOYCE
CASE Category: 11 - ASTRONOMY

NAG 5 8377 STATE UNIV OF NEW YORK - STONY BROOK 7239
 SYSTEMATIC STUDY OF EXPLOSIONS IN CORE COLLAPSE SUPERNOVA -
 REOB. DUE TO PI TRANSFER FROM NAG5-3099
 03/08/1999 - 12/31/2000 FY02: -\$2 Total: \$28,835
Prin. Invest.: F SWETSY
Tech. Officer: GSFC/D WEST
CASE Category: 22 - COMPUTER SCIENCE

NAG 5 8980 STATE UNIV OF NEW YORK - STONY BROOK 7240
 WERNER BANDS OF H₂ IN CIRCUMSTELLAR ENVIRONMENTS OF SE-
 LECTED CLASSICAL T TAURI STARS - FUSE
 01/24/2000 - 01/31/2002 FY02: \$0 Total: \$45,500
Prin. Invest.: F M WALKER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

NAG 5 9029 STATE UNIV OF NEW YORK - STONY BROOK 7241
 ADSORPTION OF SIMPLE ORGANIC MOLECULES ONTO PYRITE: POSSIBLY AN
 IMPORTANT STEP IN THE ORIGIN OF LIFE
 02/08/2000 - 12/31/2001 FY02: \$0 Total: \$45,519
Prin. Invest.: M A SCHOONEN
Tech. Officer: GSFC/M MEYER
CASE Category: 11 - ASTRONOMY

NAG 5 9053 STATE UNIV OF NEW YORK - STONY BROOK 7242
 A SELF-CONSISTENT GLOBAL VELOCITY GRADIENT TENSOR FIELD MODEL
 02/10/2000 - 02/14/2002 FY02: \$0 Total: \$170,000
Prin. Invest.: W E HOLT
Tech. Officer: GSFC/H V FREY
CASE Category: 32 - GEOLOGICAL SCIENCE

NAG 5 9680 STATE UNIV OF NEW YORK - STONY BROOK 7243
 THE STABILITY OF ORBITAL CONFIGURATIONS AND THE ULTIMATE
 CONFIGURATIONS OF PLANETARY AND SATELLITE
 06/21/2000 - 06/14/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: J J LISSAUR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9786 STATE UNIV OF NEW YORK - STONY BROOK 7244
 TRAVEL SUPPORT AND WAVAS PROJECT SUPPORT OF SPARC
 07/11/2000 - 07/31/2001 FY02: \$0 Total: \$34,726
Prin. Invest.: M A GELLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9958 STATE UNIV OF NEW YORK - STONY BROOK 7245
 THE EVOLUTION OF STELLAR CORONAE FROM THE PMS THROUGH THE
 ZAMS
 09/13/2000 - 09/14/2002 FY02: \$0 Total: \$45,000
Prin. Invest.: F M WALTER
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10284 STATE UNIV OF NEW YORK - STONY BROOK 7246
 VERTICAL PROFILES OF LATENT HEATING IN TRMM: VALIDATION &
 ASSIMILATION IN THE GEOS DATA ASSIMILATION
 01/31/2001 - 01/31/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: M ZHANG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10318 STATE UNIV OF NEW YORK - STONY BROOK 7247
 THE EARLY EVOLUTION OF THE CIRCUMSTELLAR ENVIRONMENT OF
 SOLAR-LIKE STARS FUSE 2000
 01/25/2001 - 01/31/2002 FY02: \$0 Total: \$36,000
Prin. Invest.: F M WALTER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10506 STATE UNIV OF NEW YORK - STONY BROOK 7248
 SURFICIAL PROCESSES ON MARS: AN EXPERIMENTAL APPROACH
 03/05/2001 - 02/28/2003 FY02: \$60,000 Total: \$120,000
Prin. Invest.: S MCLENNAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10583 STATE UNIV OF NEW YORK - STONY BROOK 7249
 SEDIMENTARY GEOCHEMISTRY ON MARS
 03/19/2001 - 02/28/2004 FY02: \$28,000 Total: \$56,000
Prin. Invest.: S MCLENNAN
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10772 STATE UNIV OF NEW YORK - STONY BROOK 7250
 EARLY BATSE GRB AFTERGLOWS (ADP 2000)
 04/26/2001 - 04/30/2002 FY02: \$0 Total: \$10,000
Prin. Invest.: R A WIJERS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10995 STATE UNIV OF NEW YORK - STONY BROOK 7251
 COSMIC RAYS IN INTERPLANETARY SPACE: SCATTERING THEORY IN
 THREE DIMENSIONAL TURBULENCE
 05/31/2001 - 05/31/2004 FY02: \$60,124 Total: \$178,050
Prin. Invest.: M A FORMAN
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 11033 STATE UNIV OF NEW YORK - STONY BROOK 7252
 INTRASEASONAL VARIABILITY IN THE INDIAN OCEAN
 06/08/2001 - 06/30/2004 FY02: \$64,826 Total: \$124,802
Prin. Invest.: D WALISER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11240 STATE UNIV OF NEW YORK - STONY BROOK 7253
 TROPICAL UPWELLING AND STRATOSPHERIC WATER VAPOR VARIABILITY
 08/15/2001 - 08/31/2004 FY02: \$0 Total: \$73,956
Prin. Invest.: M GELLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11615 STATE UNIV OF NEW YORK - STONY BROOK 7254
 PROPOSAL FOR SPARK DATA CENTER
 01/17/2002 - 01/31/2005 FY02: \$75,000 Total: \$75,000
Prin. Invest.: M GELLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12070 STATE UNIV OF NEW YORK - STONY BROOK 7255
 MODELS OF PLANETARY THERMOSPHERES/IONOSPHERES
 04/18/2002 - 04/30/2005 FY02: \$88,213 Total: \$88,213
Prin. Invest.: J L FOX
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12441 STATE UNIV OF NEW YORK - STONY BROOK 7256
 THE PECULIAR B STAR HD 28867E
 08/06/2002 - 08/14/2003 FY02: \$17,800 Total: \$17,800
Prin. Invest.: F M WALTER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 8 1698 STATE UNIV OF NEW YORK - STONY BROOK 7257
 MICROGRAVITY PROCESSING OF POLYMER THIN FILMS
 06/02/2000 - 11/30/2003 FY02: \$100,000 Total: \$235,000
Prin. Invest.: M RAFAILOVICH
Tech. Officer: MSFC/P DOTY
CASE Category: 12 – CHEMISTRY

NAG 8 1700 STATE UNIV OF NEW YORK - STONY BROOK 7258
 DEFECTS NUMERICALLY DECREASED (DENUDE)
 08/07/2000 - 11/30/2003 FY02: \$95,000 Total: \$187,500
Prin. Invest.: D LARSON
Tech. Officer: MSFC/P M DOTY
CASE Category: 13 – PHYSICS

NAG 9 1433 STATE UNIV OF NEW YORK - STONY BROOK 7259
 LOW INTENSITY MECHANICAL COUNTERMEASURE TO PROHIBIT
 OSTEOPOROSIS DURING LONGTERM SPACEFLIGHT
 06/19/2002 - 02/28/2003 FY02: \$99,903 Total: \$99,903
Prin. Invest.: C RUBIN
Tech. Officer: JSC/S MCCOLLUM
CASE Category: 56 – MEDICAL

NAS 1 98142 STATE UNIV OF NEW YORK - STONY BROOK 7260
 CERES SCIENCE INVESTIGATIONS
 10/29/1998 - 10/31/2003 FY02: \$164,037 Total: \$658,951
Prin. Invest.: R D CESS
Tech. Officer: LARC/B A WIELICKI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 957 STATE UNIV OF NEW YORK - STONY BROOK 7261
 HIGH RESOLUTION TRIPLE-AXIS X-RAY DIFFRACTION (HRT XD) AND
 SYNCHROTRON WHITE BEAM X-RAY TOPOGRAPHY ()
 04/24/2002 - 01/07/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: D DUDLEY
Tech. Officer: GRC/R OKOJIE
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 5 342 STATE UNIV OF NEW YORK - STONY BROOK 7262
 INTERDISCIPLINARY GLOBAL CHANGE RESEACH
 06/23/1998 - 03/14/2002 FY02: \$0 Total: \$136,741
Prin. Invest.: M GELLER
Tech. Officer: GSFC/B CARLSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 8 93 STATE UNIV OF NEW YORK - STONY BROOK 7263
 COMBINED SYNCHROTRON WHITE X-RAY TOPOGRAPHY & HIGH RESOLU-
 TION TRIPLE AXIS X-RAY DIFFRACTION CHARACTE
 04/22/1996 - 03/31/2001 FY02: -\$577 Total: \$417,986
Prin. Invest.: M DUDLEY, R J MATYI
Tech. Officer: MSFC/C TALLEY, MSFC/F R SZOFRAN
CASE Category: 13 – PHYSICS

NCC 8 100 STATE UNIV OF NEW YORK - STONY BROOK 7264
 RESEARCH ENTITLED "ORBITAL PROCESSING OF EUTECTICS
 06/13/1996 - 10/31/2000 FY02: -\$4,895 Total: \$651,354
Prin. Invest.: D LARSON
Tech. Officer: MSFC/T TURNER
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 30124 STATE UNIV OF NEW YORK - STONY BROOK 7265
 ENVIRONMENTAL CONTROLS OVER 2-METHYL-3-BUTEN-2-01
 09/30/1997 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: M LERDAU, GRAY
Tech. Officer: GSFC/M Y WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50322 STATE UNIV OF NEW YORK - STONY BROOK 7266
 EVOLUTION OF THE THREE-DIMENSIONAL MOISTURE STRUCTURE ASSO-
 CIATED WITH THE LIFE CYCLE OF THE MADDEN
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D WALISER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9383 STATE UNIV OF NEW YORK COL - PLATTSBURGH 7267
 TRACE ELEMENT ANALYSIS OF COSMIC DUST
 04/04/2000 - 06/30/2003 FY02: \$49,000 Total: \$140,700
Prin. Invest.: G J FLYNN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11904 STATE UNIV OF NEW YORK COL - PLATTSBURGH 7268
 SYNCHROTRON-BASED X-RAY MICROANALYSIS FACILITY FOR CHEMICAL
 AND MINERALOGICAL CHARACTERIZATION
 04/25/2002 - 04/30/2005 FY02: \$247,000 Total: \$247,000
Prin. Invest.: G J FLYNN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12358 STATE UNIV OF NEW YORK COL - PLATTSBURGH 7269
 CARBON IDENTIFICATION AND CHARACTERIZATION IN INTE RPLANETARY
 DUST PARTICLES: AN EXAMINATION
 07/09/2002 - 06/30/2005 FY02: \$55,519 Total: \$55,519
Prin. Invest.: G J FLYNN
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1109 STATE UNIV OF NEW YORK COL - PLATTSBURGH 7270
 JSC ASTROBIOLOGY INST
 05/11/1999 - 05/13/2003 FY02: \$20,000 Total: \$95,000
Prin. Invest.: G J FLYNN
Tech. Officer: JSC/E K GIBSON
CASE Category: 13 – PHYSICS

NAG 5 4691 STATE UNIV OF NEW YORK COLL - PURCHASE 7271
 CARBON AND NITROGEN ABUNDANCES IN INTERPLANETARY TO PRE-
 BIOTIC ORGANIC MATTER ON EARTH
 06/26/1997 - 10/31/2001 FY02: \$0 Total: \$73,550
Prin. Invest.: D J FLYNN
Tech. Officer: GSFC/M A MEYER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9370 STATE UNIV OF NEW YORK COLL - PURCHASE 7272
 VALIDATION AND IMPROVEMENT OF DAO ANALYSES USING FLIGHT DATA
 RECORDER OBSERVATIONS
 04/12/2000 - 03/31/2003 FY02: \$77,000 Total: \$215,000
Prin. Invest.: J TENENBAUM
Tech. Officer: GSFC/M HELFAND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10221 STATE UNIV OF NEW YORK COLL - PURCHASE 7273
 EXPERIMENTAL STUDY OF THE IMPACT DISRUPTION OF MET EORITIC
 SAMPLES: PARENT BODY FRAGMENTATION & THE
 01/11/2001 - 01/14/2004 FY02: \$30,500 Total: \$60,500
Prin. Invest.: G FLYNN
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTIINTERDISCIPL, OTHER

NAG 3 2464 STATE UNIV OF NEW YORK COLL, BUFFALO 7274
 DYNAMICS OF AEROSOL PARTICLES IN STATIONARY ISOTROPIC TURBU-
 LENCE
 06/16/2000 - 11/30/2003 FY02: \$57,000 Total: \$134,000
Prin. Invest.: H MENG
Tech. Officer: GRC/F P CHIARAMONTE 111
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4544 STATE UNIV OF NEW YORK COLL, BUFFALO 7275
 PLANETARY GEOLOGY AND GEOPHYSICS UNDERGRADUATE RES
 05/13/1997 - 03/31/2001 FY02: \$0 Total: \$204,086
Prin. Invest.: GREGG
Tech. Officer: GSFC/J G GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NEW YORK

NASA'S UNIVERSITY PROGRAM

NAG 5 7579 STATE UNIV OF NEW YORK COLL, BUFFALO 7276
 FUNDING FOR 'DEBRIS FLOW HAZARD ASSESSMENT, PICO D E ORIZABA, MEXICO' (SENH98-0089)
 08/04/1998 - 07/31/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: M F SHERIDAN
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7581 STATE UNIV OF NEW YORK COLL, BUFFALO 7277
 FUNDING FOR 'TEPHROSTRATIGRAPHIC AND SATELLITE IMA GERY ANALYSIS OF THE KAMCHATKAN SHORELINE...' (SE)
 08/04/1998 - 01/31/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: M BURSIK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICALSCIENCE

NAG 5 10648 STATE UNIV OF NEW YORK COLL, BUFFALO 7278
 ANALYSIS OF VOCANOTECTONICS DEFORMATION & VOLCANIC HAZARDS USING TOPSAR & SRTM, MONO BASIN CALIFORNI
 04/02/2001 - 04/14/2003 FY02: \$35,000 Total: \$70,000
Prin. Invest.: M I BURSIK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11331 STATE UNIV OF NEW YORK COLL, BUFFALO 7279
 ATTITUDE DETERMINATION SCHEMES FOR THE CEGANS SENSORS
 09/27/2001 - 11/30/2001 FY02: \$0 Total: \$5,900
Prin. Invest.: J CRASSIDIS
Tech. Officer: GSFC/D A QUINN
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 12179 STATE UNIV OF NEW YORK COLL, BUFFALO 7280
 DEVELOPMENT OF AUTOMATED SPACECRAFT ALIGNMENT AND CALIBRATION ALGORITHMS
 05/10/2002 - 05/14/2003 FY02: \$45,998 Total: \$45,998
Prin. Invest.: J CRASSIDIS
Tech. Officer: GSFC/R HARMAN
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 3 2419 SYRACUSE UNIV 7281
 MEASUREMENT OF TURBULENT PRESSURE AND TEMPERATURE FLUCTUATIONS IN A GAS TURBINE COMBUSTOR
 05/11/2000 - 03/31/2003 FY02: \$93,841 Total: \$252,551
Prin. Invest.: D LAGRAFF
Tech. Officer: GRC/D A POVINELLI
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 3 2427 SYRACUSE UNIV 7282
 RAPIDLY SHEARED BUBBLY SUSPENSIONS RAPIDLY SHEARED BUBBLY SUSPENSIONS
 05/24/2000 - 04/30/2005 FY02: \$70,000 Total: \$206,500
Prin. Invest.: D SANGANI
Tech. Officer: GRC/H K NAHRA
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 6822 SYRACUSE UNIV 7283
 STUDIES OF REACTIONS ON INTERSTELLAR GRAIN ANALOGUES IN A UV-RICH ENVIRONMENT
 01/12/1998 - 12/31/2001 FY02: \$0 Total: \$229,476
Prin. Invest.: G VIDALI
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 9093 SYRACUSE UNIV 7284
 ENERGETICS OF MOLECULAR HYDROGEN FORMATION
 02/17/2000 - 01/31/2003 FY02: \$0 Total: \$135,940
Prin. Invest.: G VIDALI
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 11227 SYRACUSE UNIV 7285
 APPLY SENSE, ANALYZE, INTERPRET AND DECIDE (SAID) TO THE DEVELOPMENT OF INTELLIGENT ALGORITHMS& SYS
 08/13/2001 - 08/14/2003 FY02: \$0 Total: \$997,800
Prin. Invest.: P K VARSHNEY
Tech. Officer: GSFC/E J MASUOKA
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11438 SYRACUSE UNIV 7286
 MOLECULE FORMATION ON DUST GRAIN ANALOGUES: STUDY OF KINETICS AND ENERGETICS
 12/04/2001 - 12/31/2004 FY02: \$72,000 Total: \$72,000
Prin. Invest.: G VIDALI
Tech. Officer: GSFC/H HASAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12391 SYRACUSE UNIV 7287
 FABRICATION OF LINBO3 CYLINDER "D" SHAPED FIBER
 07/22/2002 - 07/31/2003 FY02: \$6,000 Total: \$6,000
Prin. Invest.: D KORNREIGH
Tech. Officer: GSFC/H SHAW
CASE Category: 13 – PHYSICS

NAS 3 00172 SYRACUSE UNIV 7288
 ENHANCED 3D VISCOUS INVERSE DESIGN CFD CODE
 11/03/2000 - 09/30/2002 FY02: \$40,000 Total: \$181,504
Prin. Invest.: N AVAILABLE
Tech. Officer: GRC/C COLES-HAMILTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 1 01004 SYRACUSE UNIV 7289
 AN ADVANCED INTERACTIVE DISCOVERY ENVIRONMENT FOR ENGINEERING EDUCATION
 02/07/2001 - 12/31/2003 FY02: \$950,000 Total: \$1,948,000
Prin. Invest.: B D DAVIDSON, E D LIDDY
Tech. Officer: LARC/R D BRAUN, LARC/K A CANNON
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1142 UNIV OF ROCHESTER 7290
 PROPOSAL FOR INFRARED SUBMILLIMETER, AND RADIO ASTRONOMY
 07/22/1997 - 05/31/2002 FY02: \$0 Total: \$1,479,766
Prin. Invest.: W J FORREST, J L PIPHER
Tech. Officer: ARC/C R MCCREIGHT, ARC/R E MCMURRAY
CASE Category: 13 – PHYSICS

NAG 2 1280 UNIV OF ROCHESTER 7291
 DEVELOPMENT OF DETECTOR ARRAYS FOR LOW-BACKGROUND SPACE ASTRONOMY
 01/12/1999 - 02/28/2002 FY02: \$0 Total: \$195,000
Prin. Invest.: W J FORREST
Tech. Officer: ARC/C R MCCREIGHT
CASE Category: 45 – ELECTRICAL ENGR

NAG 2 1452 **UNIV OF ROCHESTER** **7292**
 DEVELOPMENT OF OPTIMIZED 1K X 1K MULTIPLEXER FOR N GST
 02/01/2001 - 12/31/2002 FY02: \$450,000 Total: \$900,000
Prin. Invest.: W J FORREST
Tech. Officer: ARC/C R MCCREIGHT, ARC/R E MCMURRAY, JR
CASE Category: 11 – ASTRONOMY

NAG 2 1533 **UNIV OF ROCHESTER** **7293**
 DEVELOPMENT OF 10 UM HGCDTE DETECTOR ARRAYS FOR PA SSVILEY
 COOLED SPACE MISSIONS
 02/12/2002 - 01/31/2003 FY02: \$65,753 Total: \$65,753
Prin. Invest.: W J FORREST, J L PIPHER
Tech. Officer: ARC/C R MCCREIGHT, ARC/R E MCCMURRAY
CASE Category: 11 – ASTRONOMY

NAG 3 2348 **UNIV OF ROCHESTER** **7294**
 LIQUID CRYSTAL POINT-DIFFRACTION INTERFEROMETER (L CPDI) MATE-
 RIALS AND DEVICES FOR MICROGRAVITY FLUI
 03/08/2000 - 11/30/2003 FY02: \$88,352 Total: \$220,128
Prin. Invest.: K MARSHALL
Tech. Officer: GRC/D GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 6119 **UNIV OF ROCHESTER** **7295**
 SUNSPOT DYNAMICS
 08/08/1997 - 08/31/2001 FY02: \$0 Total: \$173,100
Prin. Invest.: D H THOMAS
Tech. Officer: GSFC/W J WAGNER
CASE Category: 11 – ASTRONOMY

NAG 5 6267 **UNIV OF ROCHESTER** **7296**
 DEVELOPMENT OF LOW DARK CURRENT, HIGH QUANTUM EFFI R PAS-
 SIVELY COOLED SPACE EXPERIMENTS
 08/21/1997 - 06/30/2003 FY02: \$110,000 Total: \$715,562
Prin. Invest.: J L PIPHER
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 8428 **UNIV OF ROCHESTER** **7297**
 THE PHYSICS OF RADIATIVE MHD JETS: A NUMERICAL STUDY OF MAGNE-
 TIZED YSO OUTFLOWS
 06/02/1999 - 06/14/2003 FY02: \$0 Total: \$278,780
Prin. Invest.: A FRANK
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8642 **UNIV OF ROCHESTER** **7298**
 DEVELOPMENT OF 2 - 10 MICRON HGCDTE ARRAYS FOR EXP LORER
 MISSIONS AND SOFIA.
 07/08/1999 - 06/30/2002 FY02: \$0 Total: \$492,402
Prin. Invest.: J L PIPHER
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9351 **UNIV OF ROCHESTER** **7299**
 DEVELOPMENT OF EXTRINSIC GERMANIUM BLOCKED-IMPURIT Y-BAND
 DETECTOR ARRAYSFOR FAR-IRRED ASTRONOMY
 03/30/2000 - 12/31/2002 FY02: \$170,000 Total: \$468,000
Prin. Invest.: D M WATSON
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 13 – PHYSICS

NAG 5 10429 **UNIV OF ROCHESTER** **7300**
 NGST DETECTOR ARRAY TESTING AT THE UNIV OF R OCHESTER
 02/22/2001 - 02/28/2003 FY02: \$0 Total: \$183,000
Prin. Invest.: D J FORREST
Tech. Officer: GSFC/M GREENHOUSE
CASE Category: 11 – ASTRONOMY

NAG 5 11557 **UNIV OF ROCHESTER** **7301**
 MULTISENSORY INTERACTIONS SUBSERVING ORIENTING BEH AVIOR
 01/09/2002 - 03/31/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: G PAIGE
Tech. Officer: GSFC/G FOGLEMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1382 **UNIV OF ROCHESTER** **7302**
 EN VIVO HEMOPOIESIS IN 3-DIMENSIONAL HUMAN BONE MARROW
 CULTURE UNDER SIMULATED MICROGRAVITY
 07/09/1997 - 07/08/2001 FY02: -\$613 Total: \$518,387
Prin. Invest.: D WU
Tech. Officer: MSFC/C TALLEY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1360 **UNIV OF ROCHESTER** **7303**
 CIRCADIAN RYTHMS AN DCONTROL OF HEMATOPOIESIS
 07/27/2001 - 09/30/2004 FY02: \$146,000 Total: \$225,000
Prin. Invest.: J H WU
Tech. Officer: JSC/D RISEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 104 **UNIV OF ROCHESTER** **7304**
 THE NUCLEATION OF REFRACTORY VAPORS & ITS IMPACT ON ASTRO-
 PHYSICAL PROCESSES/STUDENT: DANIEL MARTINE
 05/25/2000 - 08/31/2003 FY02: \$0 Total: \$22,000
Prin. Invest.: R H HEIST
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 43 – CHEMICAL ENGR

NGT 5 50360 **UNIV OF ROCHESTER** **7305**
 EXPERIMENTAL EFFOR FOR THE OBSERVATION OF MACROSCO PIC
 QUANTUM COHERENCE IN AN RF - SQUID
 05/25/2001 - 05/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M BOCKO
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NORTH CAROLINA

NAG 1 01014 **DUKE UNIV** **7306**
 IMPACT OF MODEL UNCERTAINTY ON SPATIAL COMPENSATN IN STRUC-
 TURAL ACOUSTIC CONTROL
 03/27/2001 - 12/31/2003 FY02: \$61,884 Total: \$112,419
Prin. Invest.: R L CLARK
Tech. Officer: LARC/R H CABELL
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01062 **DUKE UNIV** **7307**
 THE MECHANICS OF FLAPPING FLIGHT
 04/11/2001 - 01/31/2004 FY02: \$75,620 Total: \$111,343
Prin. Invest.: K C HALL
Tech. Officer: LARC/D ECOX
CASE Category: 41 – AERONAUTICAL ENGR

NORTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NAG 2 1377 **DUKE UNIV** **7308**
 EVOLUTION OF GENE REGULATORY SYSTEM: STRUCTURAL & FUNCTIONAL ANALYSES OF EVOLUTIONARY DIVERSIFICATION
 08/19/1999 - 09/30/2002 FY02: \$65,407 Total: \$381,865
Prin. Invest.: G A WRAT
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 1838 **DUKE UNIV** **7309**
 DENSITY EQUILIBRATION IN FLUIDS NEAR THE LIQUID-VAPOR CRITICAL POINT
 04/22/1996 - 04/30/2003 FY02: \$0 Total: \$350,000
Prin. Invest.: H MEYER
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2372 **DUKE UNIV** **7310**
 GRAVITY AND GRANULAR MATERIALS GRAVITY AND GRANULAR MATERIALS
 04/07/2000 - 11/30/2003 FY02: \$133,060 Total: \$301,710
Prin. Invest.: R P BEHRINGER
Tech. Officer: GRC/R A WILKINSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2627 **DUKE UNIV** **7311**
 MODELING OF UNSTEADY THREE-DIMENSIONAL FLOWS IN MULTISTAGE MACHINES
 06/07/2001 - 04/02/2005 FY02: \$96,444 Total: \$114,687
Prin. Invest.: K C HALL
Tech. Officer: GRC/A P KURKOV
CASE Category: 46 – MECHANICAL ENGR

NAG 5 3665 **DUKE UNIV** **7312**
 A STUDY OF CARBON MONOXIDE USING TRACE CONSTITUENT DATA ASSIMILATION: A NEW APPROACH IN GLOBAL ...
 01/15/1997 - 12/31/2000 FY02: \$0 Total: \$646,175
Prin. Invest.: P KABIBHATLA
Tech. Officer: GSFC/R ROOD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8533 **DUKE UNIV** **7313**
 TO WHAT EXTENT CAN INCREASED EVAPOTRANSPIRATION DUE TO GROUNDWATER BASED IRRIGATION IN THE GREAT
 07/02/1999 - 07/14/2003 FY02: \$0 Total: \$233,754
Prin. Invest.: S ROJSTACZER
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9348 **DUKE UNIV** **7314**
 PHYSICAL VARIABILITY, ECOSYSTEM RESPONSE & BIOGEOCHEMICAL CONSEQUENCES IN THE PACIFIC OCEAN: UNDERSTANDING
 03/28/2000 - 04/30/2003 FY02: \$178,378 Total: \$481,640
Prin. Invest.: R T BARBER
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9605 **DUKE UNIV** **7315**
 CONTINUED DEVELOPMENT & APPLICATION OF DATA ASSIMILATION TECHNIQUES FOR TROPOSPHERIC CHEMISTRY STUDIES
 05/31/2000 - 05/31/2003 FY02: \$236,736 Total: \$575,166
Prin. Invest.: P KASIBHATLA
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10270 **DUKE UNIV** **7316**
 MAGNETOSPHERIC, IONOSPHERIC, & ATMOSPHERIC EFFECT OF INTENSE LIGHTNING-GENERATED ELECTROMAGNETIC
 01/08/2001 - 01/14/2004 FY02: \$77,687 Total: \$151,663
Prin. Invest.: S CUMMER
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11400 **DUKE UNIV** **7317**
 SUPPORT FOR THE NASA-HYDROMETEOROLOGY SCIENCE TEAM OFFICE
 01/10/2002 - 07/14/2003 FY02: \$60,069 Total: \$60,069
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11401 **DUKE UNIV** **7318**
 THE IMPACTS OF LAND-USE/LAND-COVER CHANGE IN AMAZONIA ON HYDROMETEOROLOGICAL PROCESSES AT
 01/10/2002 - 02/28/2003 FY02: \$214,647 Total: \$214,647
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11402 **DUKE UNIV** **7319**
 A STUDY OF TELECONNECTIONS USING A NESTED GCM-RCM & SATELLITE OBSERVATIONS
 02/05/2002 - 06/30/2003 FY02: \$227,776 Total: \$227,776
Prin. Invest.: R AVISSAR
Tech. Officer: GSFC/Y SUD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11680 **DUKE UNIV** **7320**
 IMPACT OF FIELD-SCALE HETEROGENEITY IN SURFACE MOISTURE AND VEGETATION COVER ON REGIONAL SCALE FLUX
 01/31/2002 - 01/31/2005 FY02: \$3,999 Total: \$3,999
Prin. Invest.: J ALBERTSON
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12072 **DUKE UNIV** **7321**
 MAGNETOSPHERIC RADIO TOMOGRAPHY: OBSERVABLES, ALGORITHMS, AND EXPERIMENTAL ANALYSIS
 04/19/2002 - 04/30/2005 FY02: \$73,120 Total: \$73,120
Prin. Invest.: S A CUMMER
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12336 **DUKE UNIV** **7322**
 THE HIERARCHICAL STRUCTURE OF ORGANISMS: IS THERE AN INCREASING TENDENCY IN EVOLUTION?
 07/15/2002 - 06/30/2004 FY02: \$60,075 Total: \$60,075
Prin. Invest.: D MCSHEA
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12497 **DUKE UNIV** **7323**
 "CONSTRUCTING GRIDDED GLOBAL MAPS FOR ISLSCP II"
 08/29/2002 - 02/28/2004 FY02: \$50,000 Total: \$50,000
Prin. Invest.: R B JACKSON
Tech. Officer: GSFC/B W MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1581 **DUKE UNIV** **7324**
 R/S DIFFERENTIATION AND MAINTENANCE OF SKELETAL AND CARDIAC
 MUSCLE IN SIMULATED GRAVITY
 04/28/1999 - 11/30/2002 FY02: \$165,000 Total: \$565,000
Prin. Invest.: W E KRAUS
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1715 **DUKE UNIV** **7325**
 RESEARCH ENTITLED: DYNAMIC STRUCTURAL MODELING AND AND
 TESTING OF THIN-FILM STRUCTURE.
 03/23/2000 - 06/02/2003 FY02: \$0 Total: \$121,102
Prin. Invest.: L N VIRGIN, K N SLADE
Tech. Officer: MSFC/M TINKER, MSFC/L CURTIS
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1781 **DUKE UNIV** **7326**
 QUANTUM COHERENCE IN ULTRACOLD FERMIONIC VAPORS
 05/01/2001 - 04/30/2005 FY02: \$75,000 Total: \$145,000
Prin. Invest.: J E THOMAS
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 9 83 **DUKE UNIV** **7327**
 PREBREATHE REDUCTION PROTOCOL
 03/11/1999 - 04/01/2003 FY02: \$279,999 Total: \$704,999
Prin. Invest.: R VANN
Tech. Officer: JSC/M GERNHARDT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 02009 **DUKE UNIV** **7328**
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/12/2002 - 05/31/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: L VIRGIN, D HOLLAND
Tech. Officer: LARC/K BELVIN
CASE Category: 46 – MECHANICAL ENGR

NGT 5 69 **DUKE UNIV** **7329**
 A REGIONAL ASSESSMENT OF THE RATE AND DIRECTION OF CHANGE IN
 SOIL ORGANIC CARBON POOLS DUE TO LAND
 05/28/1998 - 09/14/2001 FY02: \$0 Total: \$62,100
Prin. Invest.: B SCHLESINGER
Tech. Officer: GSFC/M S BURRELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30355 **DUKE UNIV** **7330**
 EFFECTS OF PRECIPITATION VARIABILITY & DESERTIFICATION ON WATER
 DYNAMICS IN ARID LANDS: A PATCH & LA
 08/24/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J REYNOLDS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30379 **DUKE UNIV** **7331**
 THE INFLUENCE OF IRRIGATION ON WARM SEASON PRECIPITATION IN
 THE GREW PLAINS/NATHAN J. MOORE
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$45,412
Prin. Invest.: S ROJSTACZER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30397 **DUKE UNIV** **7332**
 MECHANISMS CONTROLLING THE RESPONSE OF DETRIFICATION TO
 ANTHROPOGENIC NITROGEN DEPOSITION (STUDENT
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: W H SCHLESSINGER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30472 **DUKE UNIV** **7333**
 MONITORING AND MODELING THE RESPONSE OF COASTAL ECOSYSTEMS
 AND CARBON STORAGE TO RISING SEA LEVEL
 08/27/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: N L CHRISTENSEN
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50224 **DUKE UNIV** **7334**
 VARYING EOLIAN DUST INPUTS AND SPATIOTEMPORAL PATTERNS OF
 CHANGE ON CARIBBEAN CORAL REEFS
 09/29/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R T BARBER, M HAYES
Tech. Officer: HQ/A NURRIDIN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50266 **DUKE UNIV** **7335**
 CYTOSKELETAL CONTRIBUTIONS TO CHANGES IN ELASTICITY OF MAM-
 MALIAN MYOCYTES AFTER CYCLIC MECHANICAL
 07/07/1999 - 06/30/2001 FY02: -\$2,641 Total: \$41,359
Prin. Invest.: G TRUSKEY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 6045 **EAST CAROLINA UNIV** **7336**
 SC2000/SC2001 COMPUTATIONAL SCIENCE LEADERSHIP PROGRAM FOR
 HIGH SCHOOL TEACHERS
 08/23/2000 - 07/31/2002 FY02: \$0 Total: \$108,000
Prin. Invest.: J C HUSKAMP
Tech. Officer: ARC/J P ZIEBARTH, ARC/M J LEON
CASE Category: 22 – COMPUTER SCIENCE

NAG13 02034 **EAST CAROLINA UNIV** **7337**
 EVALUATING THE EFFECTS OF BOTTOM TRAWLS IN THE PAMLICO RIVER,
 NC: AN APPLICATION OF REMOTE SENSING
 02/26/2002 - 02/24/2003 FY02: \$74,999 Total: \$74,999
Prin. Invest.: D CORBETT
Tech. Officer: SSC/R MILLER
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 1 01027 **EAST CAROLINA UNIV** **7338**
 THE LIVES, CAREERS, AND ENGINEERING ACCOMPLISHMENTS OF
 WILBUR AND ORVILLE WRIGHT
 03/13/2001 - 12/31/2002 FY02: \$48,000 Total: \$139,874
Prin. Invest.: L TISE
Tech. Officer: LARC/S E MASSENBERG
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1165 **EAST CAROLINA UNIV** **7339**
 HYPERGRAVITY EFFECTS ON THE MATERNAL-FETAL SYSTEM
 03/27/2000 - 03/14/2003 FY02: \$0 Total: \$58,902
Prin. Invest.: H W BURDEN
Tech. Officer: ARC/A E RONCA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NORTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NAG 1 2229 **ELIZABETH CITY STATE UNIV** **7340**
 A PILOT COMPUTER AIDED DESIGN AND MANUFACTUREING CURRICULM
 THAT PROMOTES ENGINEERING
 09/15/1999 - 07/31/2001 FY02: -\$1 Total: \$200,000
Prin. Invest.: E LAWRENCE
Tech. Officer: LARC/G D REESE
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2150 **ELIZABETH CITY STATE UNIV** **7341**
 CONTROLLING CHAOS IN JOSEPHSON JUNCTION CONTROLLING CHAOS
 IN JOSEPHSON JUNCTION
 04/07/1998 - 05/31/2002 FY02: \$0 Total: \$244,272
Prin. Invest.: D SENGUPTA, S K KANA, K D EDOH
Tech. Officer: GRC/M ANDRO, GRC/E J PETRIK
CASE Category: 21 – MATHEMATICS

NAG 3 2556 **ELIZABETH CITY STATE UNIV** **7342**
 AIR TRAFFIC ANALYSIS AIR TRAFFIC ANALYSIS
 03/01/2001 - 02/28/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: D PENDHARKAR
Tech. Officer: GRC/D C ROBINSON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 5 9371 **ELIZABETH CITY STATE UNIV** **7343**
 MATHEMATICS OF THE GREAT DISMAL SWAMP
 04/06/2000 - 03/31/2003 FY02: \$102,000 Total: \$305,776
Prin. Invest.: L HAYDEN
Tech. Officer: GSFC/B MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9372 **ELIZABETH CITY STATE UNIV** **7344**
 YOU BE THE SCIENTIST WITH SATELLITE IMAGERY IN EX/ EC COMMUNI-
 TITES
 04/06/2000 - 03/31/2003 FY02: \$95,000 Total: \$284,791
Prin. Invest.: L B HAYDEN
Tech. Officer: GSFC/B MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11842 **ELIZABETH CITY STATE UNIV** **7345**
 PLANNING AND DEVELOPMENT OF CONFERENCE ACTIVITIES RELATING
 TO PUBLIC SCHOOL CURRICULA ENHANCEMENT US
 03/11/2002 - 03/14/2003 FY02: \$8,188 Total: \$8,188
Prin. Invest.: W PORTER
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12554 **ELIZABETH CITY STATE UNIV** **7346**
 CLONING, EXPRESSION AND GROWTH OF H.PYLORI PROTEIN CRYSTALS
 IN MICROGRAVITY.
 09/12/2002 - 09/30/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: D BANERJEE
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 5 121 **ELIZABETH CITY STATE UNIV** **7347**
 REGIONAL NETWORK RESOURCES AND TRAINING SITE AT ECSU
 08/15/1995 - 08/14/2001 FY02: \$0 Total: \$2,639,000
Prin. Invest.: L HAYDEN
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 533 **ELIZABETH CITY STATE UNIV** **7348**
 ECSU - NRTS CONTINUATION/MUSPIN NRTS PROGRAM.
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$707,694
Prin. Invest.: L HAYDEN
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2227 **FAYETTEVILLE STATE UNIV** **7349**
 TEACHING INTEGRATED MATHEMATICS AND SCIENCE WITH TECHNOLOGY
 AND NASA RESOURCES: A PARTNERSHIP
 08/23/1999 - 07/31/2001 FY02: -\$1 Total: \$200,000
Prin. Invest.: I EDWARDS
Tech. Officer: LARC/S MASSENBERG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02107 **FAYETTEVILLE STATE UNIV** **7350**
 PRE-COLL PROGRAM - HUMAN SPACE FLIGHT INST
 07/25/2002 - 09/30/2002 FY02: \$20,000 Total: \$20,000
Prin. Invest.: L EDWARDS
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 21 – MATHEMATICS

NAG 5 9155 **FAYETTEVILLE STATE UNIV** **7351**
 MATHEMATICS/SCIENCE EDUCATION CENTER PRECOLL PROGRAM
 03/03/2000 - 02/28/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: L EDWARDS
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2300 **JOHNSON C. SMITH UNIV** **7352**
 THE DEVELOPMENT OF A PASSIVE MILLIMETER WAVE IMAGI NG SYSTEM
 WITH SUPER-RESOLUTION
 11/16/1999 - 12/31/2002 FY02: \$0 Total: \$195,192
Prin. Invest.: D E MILLER
Tech. Officer: GRC/D M BLANKSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2225 **NORTH CAROLINA A&T STATE UNIV** **7353**
 ACCESS TO SPACE THROUGH RESEARCH AND EDUCATION MY 1/2
 08/24/1999 - 12/31/2001 FY02: \$1 Total: \$200,001
Prin. Invest.: F FERGUSON
Tech. Officer: LARC/R S CALLOWAY, LARC/B K OUTLAW
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02077 **NORTH CAROLINA A&T STATE UNIV** **7354**
 PERF EVAL & MODELING OF AFFORDABLE COMPOSITES MANUFACTURED
 USING STITCHING & Z-PINNING PROCESSES
 04/05/2002 - 04/04/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: A D KELKAR
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 1413 **NORTH CAROLINA A&T STATE UNIV** **7355**
 MOTION PLANNING IN A SOCIETY OF INTELLIGENT MOBILE AGENTS
 07/05/2000 - 06/14/2002 FY02: \$0 Total: \$120,416
Prin. Invest.: A C ESTERLINE
Tech. Officer: ARC/M G SHATTO
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1430 **NORTH CAROLINA A&T STATE UNIV** **7356**
 COMBUSTION SENSORS: GAS TURBINE APPLICATIONS
 08/16/2000 - 12/31/2001 FY02: -\$5,096 Total: \$138,301
Prin. Invest.: M HUMAN
Tech. Officer: ARC/G ZILLIAC
CASE Category: 46 – MECHANICAL ENGR

NAG 2 1469 **NORTH CAROLINA A&T STATE UNIV** **7357**
 EXAMINING THE PILOT & CONTROLLER PERFORMANCE DATA WHEN IN A
 FREE FLIGHT WITH WEATHER PHENOMENON
 04/12/2001 - 08/14/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: C NTUEN
Tech. Officer: ARC/S LOZITO, ARC/R ASHFORD
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 6028 **NORTH CAROLINA A&T STATE UNIV** **7358**
 RONALD E. MCNAIR GRADUATE RESEARCH FELLOWSHIP PROGRAM
 02/22/1999 - 05/14/2002 FY02: \$0 Total: \$970,500
Prin. Invest.: R M SALAMI, L SHARPE
Tech. Officer: ARC/A CARDENAS, ARC
CASE Category: 45 – ELECTRICAL ENGR

NAG 2 6061 **NORTH CAROLINA A&T STATE UNIV** **7359**
 NASA RONALD E MCNAIR GRADUATE RESEARCH FELLOWSHIP PROGRAM
 08/15/2002 - 08/14/2004 FY02: \$647,000 Total: \$647,000
Prin. Invest.: J MONROE
Tech. Officer: ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2165 **NORTH CAROLINA A&T STATE UNIV** **7360**
 DEVELOPMENT OF A STRUCTURAL DAMAGE DIAGNOSTIC AND MONITORING
 SYSTEM FOR ROCKETENGINES PHASE I: DAMA
 06/11/1998 - 10/31/2000 FY02: -\$6,501 Total: \$83,499
Prin. Invest.: Y ELLEN, L SHARPE
Tech. Officer: GRC/D F NOGA, GRC/A L JANKOVSKY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2584 **NORTH CAROLINA A&T STATE UNIV** **7361**
 ADVANCED CROSS ENTERPRISE TECHNOLOGY
 04/05/2001 - 03/11/2004 FY02: \$309,802 Total: \$849,672
Prin. Invest.: D DOGAN
Tech. Officer: GRC/G FUJIKAWA
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2650 **NORTH CAROLINA A&T STATE UNIV** **7362**
 CARBON FIBER REINFORCED CERAMIC COMPOSITES FOR PRO PULSION
 APPLICATION
 09/21/2001 - 10/31/2002 FY02: \$75,000 Total: \$80,000
Prin. Invest.: D N SHIVAKUMAR
Tech. Officer: GRC/M R FREEDMAN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2782 **NORTH CAROLINA A&T STATE UNIV** **7363**
 STUDY OF GAASSBN ALLOYS FOR SOLAR CELL APPLICATION S
 05/24/2002 - 06/23/2005 FY02: \$99,990 Total: \$99,990
Prin. Invest.: W COLLIS
Tech. Officer: GRC/R F LAWRENCE
CASE Category: 49 – ENGINEERING, OTHER

NAG 4 152 **NORTH CAROLINA A&T STATE UNIV** **7364**
 INVESTIGATION OF AERO SERVO STRUCTURAL INTERACTIO IN AERO-
 SPACE APPLICATIONS
 03/23/1998 - 09/18/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: S CHANDRA
Tech. Officer: DFRC/J BRADEN, DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 211 **NORTH CAROLINA A&T STATE UNIV** **7365**
 DEVELOPMENT AND EVALUATION OF FAULT-TOLERANT FLIGHT CONTROL
 SYSTEMS
 06/26/2000 - 06/14/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: D D SONG
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 7158 **NORTH CAROLINA A&T STATE UNIV** **7366**
 SELF-TIMED SYNCHRONOUS DIGITAL SYSTEM DESIGN
 03/11/1998 - 12/31/2002 FY02: \$0 Total: \$299,028
Prin. Invest.: A WALKER
Tech. Officer: GSFC/P CORONADO
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9170 **NORTH CAROLINA A&T STATE UNIV** **7367**
 NATIONAL CONFERENCE OF BLACK PHYSICS STUDENTS
 03/06/2000 - 03/14/2001 FY02: -\$3,200 Total: \$74,508
Prin. Invest.: E WILLIAMS
Tech. Officer: GSFC/J A JACKSON
CASE Category: 13 – PHYSICS

NAG 5 9419 **NORTH CAROLINA A&T STATE UNIV** **7368**
 LOW-POWER RF SOI-CMOS TECHNOLOGY FOR DISTRIBUTED SENSOR
 NETWORKS
 04/11/2000 - 08/30/2003 FY02: \$200,000 Total: \$300,000
Prin. Invest.: N DOGAN
Tech. Officer: GSFC/J MALONE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1632 **NORTH CAROLINA A&T STATE UNIV** **7369**
 POLYMERIZATION OF ADVANCED THERMOSETS IN MICRO- GRAVITY TO
 DEVELOP ULTRA LOW LOSS PLOYMERS
 09/17/1999 - 07/31/2002 FY02: -\$99,983 Total: \$0
Prin. Invest.: A KENNEDY
Tech. Officer: MSFC/A BEAM, MSFC/W LOVE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1646 **NORTH CAROLINA A&T STATE UNIV** **7370**
 STRUCTURAL HEALTH MONITORING OF AEROSPACE VEHICLES
 09/30/1999 - 09/30/2001 FY02: \$0 Total: \$200,000
Prin. Invest.: N
Tech. Officer: MSFC/A BEAM, MSFC/W LOVE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1865 **NORTH CAROLINA A&T STATE UNIV** **7371**
 INVESTIGATION OF THE NEXT-GENERATION DESIGN TOOL FOR AERO-
 SPACE NRA01OEOP
 05/29/2002 - 05/28/2005 FY02: \$80,788 Total: \$80,788
Prin. Invest.: S WANG
Tech. Officer: MSFC/W LOVE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1402 **NORTH CAROLINA A&T STATE UNIV** **7372**
 "ANALYTIC SOLUTION ALGORITHMS & SIMULATION FOR COMPRESSIBLE
 FLOW MODELS: COMPUTATIONAL BENCHMARKS"
 03/01/2002 - 02/28/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D CLEMENCE
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 21 – MATHEMATICS

NORTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NAG10 317 **NORTH CAROLINA A&T STATE UNIV** **7373**
 A WIRELESS RADIO LOCATION SYSTEM FOR USE IN AN IND OOR ENVIRONMENT
 06/17/2002 - 06/13/2005 FY02: \$99,542 Total: \$99,542
Prin. Invest.: D DUNN
Tech. Officer: KSC/D ABRAHAM
CASE Category: 49 – ENGINEERING, OTHER

NAS 3 01197 **NORTH CAROLINA A&T STATE UNIV** **7374**
 8CM, AND 30CM CARBON-CARBON GRIDS, USING INNOVATIV E MANUFAC-TURING PROCESS
 08/14/2001 - 05/28/2004 FY02: \$0 Total: \$40,000
Prin. Invest.: K SHIVAKUMAR
Tech. Officer: GRC/T HAAG
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 255 **NORTH CAROLINA A&T STATE UNIV** **7375**
 THE CENTER FOR AEROSPACE RESEARCH: A NASA CENTER OF EXCEL-LENCE
 05/13/1997 - 12/31/2002 FY02: \$1,000,000 Total: \$5,900,000
Prin. Invest.: E O DOSE
Tech. Officer: LARC/W WHIGGLOW, JR.
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01058 **NORTH CAROLINA A&T STATE UNIV** **7376**
 INTEGRATION OF NASA RESEARCHIN UNDERGRAD EDUCATION IN MATH-EMATICS, SCIENCE, ENGINEERING & TECHNOLOGY
 08/24/2001 - 06/30/2003 FY02: \$389,527 Total: \$1,091,248
Prin. Invest.: J D MONROE
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 4 105 **NORTH CAROLINA A&T STATE UNIV** **7377**
 ON THE PREVIEWED CONTROL ACTION FOR AIRCRAFT FLYING QUALITIES
 07/25/1996 - 03/30/2001 FY02: -\$6,191 Total: \$86,832
Prin. Invest.: D HOMAIFAR
Tech. Officer: DFRC/R K BOGUE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 349 **NORTH CAROLINA A&T STATE UNIV** **7378**
 INTEGRATION OF NASA RESEARCH INTO UNDERGRADUATE ED UCATION IN MATHEMATICSSCIENCE, ENGINEERING AND TE
 06/29/1998 - 02/28/2002 FY02: -\$91,248 Total: \$1,408,752
Prin. Invest.: J D MONROE
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTIINTERDISCIPL, OTHER

NGT 4 52409 **NORTH CAROLINA A&T STATE UNIV** **7379**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/04/1999 - 10/31/2001 FY02: -\$14,092 Total: \$29,908
Prin. Invest.: S CHANDRA, S WYLIE
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2804 **NORTH CAROLINA CENTRAL UNIV** **7380**
 INTEGRATION OF NANOTECHNOLOGY AND COMPUTATIONAL MO DELING NASA RELATED RESEARCH INTO THE UNDERGRADUA
 09/19/2002 - 09/22/2006 FY02: \$300,000 Total: \$300,000
Prin. Invest.: B V VIAHOVIC
Tech. Officer: GRC/R F LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2216 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7381**
 ALGORITHMIC ENHANCEMENTS FOR THE VULCAN NAVIER- STOKES SOLVER
 08/09/1999 - 08/31/2002 FY02: \$10,000 Total: \$60,001
Prin. Invest.: J R EDWARDS
Tech. Officer: LARC/J A WHITE, LARC/J P DRUMMOND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2222 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7382**
 AN INVESTIGATION OF TERMINAL GUIDANCE & CONTROL TECHNIQUES FOR A ROBOTIC MARSLANDER
 08/06/1999 - 05/15/2001 FY02: -\$4,777 Total: \$57,579
Prin. Invest.: G O WALBERG, B K BIRGE
Tech. Officer: LARC/E M QUEEN, LARC/R W POWELL
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 01002 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7383**
 LEVELS OF AUTOMTION IN THE COMMERCIAL AIRCRAFT COCKPIT AND PILOT SITUATION AWARENESS
 12/06/2000 - 12/31/2001 FY02: -\$5,332 Total: \$58,130
Prin. Invest.: D B KABER
Tech. Officer: LARC/A C TRUJILLO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01039 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7384**
 HUMAN RESPONSE ADAPTV AUTOMATN EARLY SENSOR/INFO ACQ FUNC & LATER STGS OF INFO PROCESSG IN SYS OPS
 04/19/2001 - 12/31/2001 FY02: -\$6 Total: \$39,965
Prin. Invest.: D KABER
Tech. Officer: LARC/L J PRINZEL
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 1 01041 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7385**
 MODEL DEVELOPMENT FOR HIGH PERFORMANCE PIEZO- CERAMIC-BASED ACTUATORS
 03/22/2001 - 08/28/2002 FY02: \$0 Total: \$33,886
Prin. Invest.: R C SMITH
Tech. Officer: LARC/J S HARRISON
CASE Category: 21 – MATHEMATICS

NAG 1 01064 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7386**
 ACTIVE SHIELDING & CONTROL OF ENVIRONMENTAL NOISE
 04/19/2001 - 12/31/2001 FY02: \$0 Total: \$10,009
Prin. Invest.: S C TSYNKOV
Tech. Officer: LARC/C L STREETT, LARC/H L ATKINS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01069 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7387**
 UNINHABITED AERIAL VEHICLES (UAV) FLIGHT CONTROL USING DISTRIB-UTED ACTUATION & SENSING
 05/18/2001 - 09/30/2003 FY02: \$72,591 Total: \$115,899
Prin. Invest.: N E CHOKANI, C E HALL
Tech. Officer: LARC/D L RANEY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01103 **NORTH CAROLINA STATE UNIV. - RALEIGH** **7388**
 MULTISCALE MODELING OF NANOCOMPOSITES
 06/19/2001 - 06/30/2003 FY02: \$0 Total: \$19,993
Prin. Invest.: F G YUAN
Tech. Officer: LARC/E H GLASSGEN, LARC/E SAETHER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01111 NORTH CAROLINA STATE UNIV. - RALEIGH 7389
 A COMPUTATIONAL INTELLIGENT (CI) APPROACH TO THE PRECISION MARS
 LANDER PROBLEM
 08/09/2001 - 05/15/2002 FY02: \$0 Total: \$35,413
Prin. Invest.: G D WALBERG
Tech. Officer: LARC/E M QUEEN, LARC/R W POWELL
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 01119 NORTH CAROLINA STATE UNIV. - RALEIGH 7390
 POST-STALL FLIGHT UNSTEADY AERODYNAMIC STUDY AND GAIN-
 SCHEDULED CONTROLLER DESIGN
 08/16/2001 - 08/31/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: F WU
Tech. Officer: LARC/P C MURPHY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01128 NORTH CAROLINA STATE UNIV. - RALEIGH 7391
 ENHANCEMENT OF BUCKLING LOAD WITH THE USE OF ACTIVE MATERIALS
 09/27/2001 - 11/30/2002 FY02: \$0 Total: \$26,106
Prin. Invest.: F G YUAN
Tech. Officer: LARC/D R AMBER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02007 NORTH CAROLINA STATE UNIV. - RALEIGH 7392
 CHARACTERIZING PRETURBULENCE ENVIRONMENT SENSOR DEV, NEW HAZ-
 ARD ALGORITHMS & EXPERIMENTAL FLT PLANNING
 11/30/2001 - 11/30/2002 FY02: \$99,636 Total: \$99,636
Prin. Invest.: M L KAPLAN
Tech. Officer: LARC/F H PROCTOR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02031 NORTH CAROLINA STATE UNIV. - RALEIGH 7393
 RESEARCH ON AERODYNAMIC HEATING AT HYPERSONIC SPEEDS USING
 UNSTRUCTURED GRIDS
 01/10/2002 - 12/31/2002 FY02: \$173,514 Total: \$173,514
Prin. Invest.: F R DEJARNETTE, K J WEILMUNSTER, H H HAMILTON
Tech. Officer: LARC/R A THOMPSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02052 NORTH CAROLINA STATE UNIV. - RALEIGH 7394
 SOLUTION ADAPTIVE SCHEMES FOR THE VULCAN NAVIER-STOKES
 SOLVER
 02/12/2002 - 02/11/2005 FY02: \$49,238 Total: \$49,238
Prin. Invest.: J R EDWARDS, D S MCRAE
Tech. Officer: LARC/J A WHITE
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 1 02056 NORTH CAROLINA STATE UNIV. - RALEIGH 7395
 AUTH IN ADAPTIVE AUTOMATION APPLIED TO VARIOUS STAGES OF
 HUMAN-MACHINE SYS INFORMATION PROCESSING
 02/25/2002 - 12/31/2002 FY02: \$50,067 Total: \$50,067
Prin. Invest.: D B KABER
Tech. Officer: LARC/L J PRINZEL, LARC/M D EUNKING
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 1 02080 NORTH CAROLINA STATE UNIV. - RALEIGH 7396
 MODEL DEVELOPMENT FOR HIGHPERFORMANCE PIEZOCERAMIC -BASED
 ACTUATORS
 04/01/2002 - 03/31/2003 FY02: \$36,982 Total: \$36,982
Prin. Invest.: R C SMITH
Tech. Officer: LARC/J S HARRISON
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02086 NORTH CAROLINA STATE UNIV. - RALEIGH 7397
 LOAD TRANSFER AND FRACTURE OF CARBON NANOTUBES MY 1/3
 04/22/2002 - 06/30/2005 FY02: \$25,000 Total: \$25,000
Prin. Invest.: F G YUAN
Tech. Officer: LARC/E SAETHER, LARC/E H GLAESSGEN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02091 NORTH CAROLINA STATE UNIV. - RALEIGH 7398
 CHITIN-BASED MECHANICAL PROPERTIES EVALUATION
 05/01/2002 - 05/15/2003 FY02: \$39,498 Total: \$39,498
Prin. Invest.: F G YUAN
Tech. Officer: LARC/R L SPELLMAN
CASE Category: 46 – MECHANICAL ENGR

NAG 2 1281 NORTH CAROLINA STATE UNIV. - RALEIGH 7399
 VISUAL FACTORS AFFECTING PILOT'S JUDGEMENTS OF TRAJECTORY-TO-
 TOUCHDOWN DURING EMERGENCY LANDINGS
 01/11/1999 - 12/31/2001 FY02: \$0 Total: \$185,999
Prin. Invest.: D H MERSHON, C M MAYER
Tech. Officer: ARC/I BARSHI
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 1502 NORTH CAROLINA STATE UNIV. - RALEIGH 7400
 PHOSPHOINOSITIDE SIGNALING AND PLANT GRAVITROPISM: A TRANS-
 GENIC APPROACH
 07/16/2001 - 07/14/2003 FY02: \$142,292 Total: \$189,298
Prin. Invest.: I Y PERERA
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1566 NORTH CAROLINA STATE UNIV. - RALEIGH 7401
 A GENOMIC ANALYSIS OF PLANT GRAVITY SENSING AND RESPONSE
 06/12/2002 - 05/31/2003 FY02: \$400,000 Total: \$400,000
Prin. Invest.: C BROWN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2658 NORTH CAROLINA STATE UNIV. - RALEIGH 7402
 THREE-DIMENSIONAL NUMERICAL SIMULATION OF ROCKET-BASED
 COMBINED-CYCLE ENGINE RESPONSE DURING MODE T
 01/25/2002 - 01/24/2005 FY02: \$63,031 Total: \$63,031
Prin. Invest.: J R EDWARDS
Tech. Officer: GRC/C J STEFFEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2706 NORTH CAROLINA STATE UNIV. - RALEIGH 7403
 INVESTIGATION OF INTERACTIONS BETWEEN BIOCONVECTION AND
 NATURAL CONVECTION AND BIOFILM GROWTH IN PO
 02/12/2002 - 02/11/2006 FY02: \$31,379 Total: \$31,379
Prin. Invest.: A V KUZNETSOV
Tech. Officer: GRC/R D GREEN
CASE Category: 46 – MECHANICAL ENGR

NAG 5 3743 NORTH CAROLINA STATE UNIV. - RALEIGH 7404
 NASA SPECIALIZED CENTER OF RESEARCH AND TRAINING IN BIOLOGY
 03/19/1997 - 03/14/2003 FY02: \$0 Total: \$4,028,631
Prin. Invest.: E DAVIES
Tech. Officer: GSFC/D P LISKOWSKY
CASE Category: 59 – LIFE SCIENCE, OTHER

NORTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NAG 5 6586 NORTH CAROLINA STATE UNIV. - RALEIGH 7405
 REFINING REMOTE SENSING ESTIMATES OF NUTRIENT CONC ENTRA-
 TIONS BASED ON TEMPERATURE
 11/07/1997 - 10/31/2002 FY02: \$0 Total: \$189,527
Prin. Invest.: D KAMYKOWSKI
Tech. Officer: GSFC/C A TREES
CASE Category: 33 – OCEANOGRAPHY

NAG 5 7153 NORTH CAROLINA STATE UNIV. - RALEIGH 7406
 X-RAY EMISSION AND DYNAMICS OF SUPERNOVA REMNANTS - ATP
 03/31/1998 - 03/14/2002 FY02: \$0 Total: \$382,170
Prin. Invest.: S P REYNOLDS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8215 NORTH CAROLINA STATE UNIV. - RALEIGH 7407
 EDUCATIONAL OUTREACH FOR RESEARCH "PRODUCTION OF ENERGETIC
 PARTICLES AT HELIOSPHERIC SHOCKS". THIS
 03/04/1999 - 10/31/2000 FY02: -\$1,475 Total: \$8,500
Prin. Invest.: D C ELLISON
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 8865 NORTH CAROLINA STATE UNIV. - RALEIGH 7408
 SEAWIFS DATA COLLECTION, CALIBRATION & PROCESSING FOR THE
 INDIAN OCEAN
 12/06/1999 - 12/31/2002 FY02: \$0 Total: \$165,884
Prin. Invest.: J MORRISON
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9490 NORTH CAROLINA STATE UNIV. - RALEIGH 7409
 SOFTWARE PACKAGE FOR ANALYSIS OF THERMAL X-RAY SPECTRA OF
 SUPERNOVA REMNANTS
 04/17/2000 - 04/14/2002 FY02: \$0 Total: \$87,400
Prin. Invest.: K J BORKOWSKI
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10940 NORTH CAROLINA STATE UNIV. - RALEIGH 7410
 X-RAY EMISSION AND DYNAMICS OF SUPERNOVA REMNANTS (ATP 2000)
 05/15/2001 - 05/14/2004 FY02: \$142,927 Total: \$282,927
Prin. Invest.: S P REYNOLDS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11830 NORTH CAROLINA STATE UNIV. - RALEIGH 7411
 DRIVERS OF LANDCOVER AND LANDUSE CHANGE ASSOCIATED WITH
 LAND RESTITUTION POLICIES IN GAU
 02/28/2002 - 02/28/2003 FY02: \$24,953 Total: \$24,953
Prin. Invest.: S WALSH
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1479 NORTH CAROLINA STATE UNIV. - RALEIGH 7412
 R/S GROWTH AND PROPERTIES OF CARBON
 03/19/1998 - 04/30/2003 FY02: \$66,667 Total: \$425,000
Prin. Invest.: J BERNHOLC
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1686 NORTH CAROLINA STATE UNIV. - RALEIGH 7413
 OPTICAL CHARACTERIZATION OF GAS PHASE CHEMISTRY AND SURFACE
 CHEMISTRY DURING HIGH PRESSURE PROCESS
 05/09/2000 - 12/31/2003 FY02: \$120,000 Total: \$284,000
Prin. Invest.: N DIETZ
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1817 NORTH CAROLINA STATE UNIV. - RALEIGH 7414
 MODELS OF MASS TRANSPORT DURING MICROGRAVITY CRYSTAL
 GROWTH OF ALLOYED SEMICONDUCTORS
 07/10/2001 - 11/30/2002 FY02: \$120,000 Total: \$156,000
Prin. Invest.: N MA
Tech. Officer: MSFC/P DOTY
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1087 NORTH CAROLINA STATE UNIV. - RALEIGH 7415
 INTEGRATED PRESSURE BLADDER-RESTRAINT STRUCTURE FOR AD-
 VANCED EXTRAVEHICULAR MOBILITY UNIT
 02/12/1999 - 02/11/2003 FY02: \$0 Total: \$81,144
Prin. Invest.: M H MOHAMAD
Tech. Officer: JSC/C H LIN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1423 NORTH CAROLINA STATE UNIV. - RALEIGH 7416
 DEVELOP SELF-CALIBRATING DISSOLVED OXYGEN MICROSENS OR ARRAY
 06/13/2002 - 10/30/2002 FY02: \$80,000 Total: \$80,000
Prin. Invest.: C KIM
Tech. Officer: JSC/D JAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG10 308 NORTH CAROLINA STATE UNIV. - RALEIGH 7417
 CAPTURING SELECTED LECTURES FROM THE COURSE "SPACE BIOLOGY"
 IN DIGITAL FORMAT: PHASE I
 09/24/2001 - 09/16/2003 FY02: \$0 Total: \$38,338
Prin. Invest.: D S BROWN
Tech. Officer: KSC/J LETCHWORTH
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAS 1 01082 NORTH CAROLINA STATE UNIV. - RALEIGH 7418
 HEALTH MONITORING OF RLV AIRFRAME STRUCTURES
 05/30/2001 - 05/31/2003 FY02: \$280,402 Total: \$499,999
Prin. Invest.: F G YUAN, K PETERS
Tech. Officer: LARC/P H JOHNSTON
CASE Category: 41 – AERONAUTICAL ENGR

NAS 1 18944 NORTH CAROLINA STATE UNIV. - RALEIGH 7419
 SAGE III SCIENCE INVESTIGATION SUPPORT; P.I. PROFESSOR SAXENA
 10/06/1989 - 01/31/2005 FY02: \$61,554 Total: \$675,491
Prin. Invest.: V SAXENA
Tech. Officer: LARC/G MADDREA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 1 407 NORTH CAROLINA STATE UNIV. - RALEIGH 7420
 RESEARCH ON STREAMLINES AND AERODYNAMIC HEATING FOR UN-
 STRUCTURED GRIDS ON HIGH SPEED VEHICLES
 08/28/2000 - 06/30/2001 FY02: -\$125 Total: \$24,550
Prin. Invest.: F R DEJARNETTE
Tech. Officer: LARC/H H HAMILTON
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01008 NORTH CAROLINA STATE UNIV. - RALEIGH 7421
 UAV (UNINHABITED AERIAL VEHICLE) FLIGHT TESTING 4 ADVANCED
 TECHNOLOGY CONCEPTS
 11/28/2000 - 11/30/2003 FY02: \$65,000 Total: \$119,917
Prin. Invest.: N CHOKANI, C E HALL, S N HEINZEN
Tech. Officer: LARC/A E WASHBURN
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02040 NORTH CAROLINA STATE UNIV. - RALEIGH 7422
 DEVELOPMENT AND FLIGHT TEST VALIDATION OF A AUTO RETURN
 FUNCTION
 07/16/2002 - 07/15/2004 FY02: \$45,895 Total: \$45,895
Prin. Invest.: C E HALL, N CHOKANI, S N HEINZEN
Tech. Officer: LARC/E B JACKSON, LARC/D D VICROY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5506 NORTH CAROLINA STATE UNIV. - RALEIGH 7423
 VIRTUAL MOLECULAR DESIGN OF SMART NANOPOROUS MATERIALS
 INSPIRED BY NUEROFILAMENT STRUCTURE AND FUNC
 08/01/2002 - 07/31/2003 FY02: \$18,750 Total: \$18,750
Prin. Invest.: D W BRENNER
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYYAPPAN
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 8 95 NORTH CAROLINA STATE UNIV. - RALEIGH 7424
 FUNDAMENTAL ASPECTS OF VAPOR DEPOSITION AND ETCHING UNDER
 DIFFUSION CONTROLLED TRANSPORT
 05/31/1996 - 08/31/2001 FY02: -\$432 Total: \$690,701
Prin. Invest.: K J BACHMANN
Tech. Officer: MSFC/S SPEARMAN, MSFC/J GRISHAM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 159 NORTH CAROLINA STATE UNIV. - RALEIGH 7425
 APPLICATION OF REMOTE SENSING TECHNOLOGIES IN THE FOREST
 SECTOR
 10/28/1998 - 10/27/2003 FY02: \$0 Total: \$120,000
Prin. Invest.: R ABT
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 1 01004 NORTH CAROLINA STATE UNIV. - RALEIGH 7426
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 05/16/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: D KABER
Tech. Officer: LARC/L J PRINZEL, III
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 01007 NORTH CAROLINA STATE UNIV. - RALEIGH 7427
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/04/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: L SILVERBERG
Tech. Officer: LARC/D E COX
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 01032 NORTH CAROLINA STATE UNIV. - RALEIGH 7428
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/22/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: H T BANKS
Tech. Officer: LARC/W P WINIFREE
CASE Category: 21 – MATHEMATICS

NGT 1 02004 NORTH CAROLINA STATE UNIV. - RALEIGH 7429
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/06/2002 - 06/30/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: H T BANKS, N L GIBSON
Tech. Officer: LARC/E R GENERAZIO
CASE Category: 21 – MATHEMATICS

NGT 1 02010 NORTH CAROLINA STATE UNIV. - RALEIGH 7430
 GRADUATE STUDENT RESEARCHERS PROGRAM / NEW AWARD
 06/06/2002 - 06/30/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: H K KHACHATOORIAN, R N ORNAN
Tech. Officer: LARC/P TROUTMAN
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 02032 NORTH CAROLINA STATE UNIV. - RALEIGH 7431
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 01/08/2002 - 12/31/2002 FY02: \$22,000 Total: \$22,000
Prin. Invest.: F R DEKARMETTE
Tech. Officer: LARC/R HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52196 NORTH CAROLINA STATE UNIV. - RALEIGH 7432
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/22/1998 - 06/30/2001 FY02: -\$1 Total: \$66,000
Prin. Invest.: M L JOYNER, H T BANKS
Tech. Officer: LARC/W P WINIFREE, LARC/R A WINCHESKI
CASE Category: 21 – MATHEMATICS

NGT 1 52242 NORTH CAROLINA STATE UNIV. - RALEIGH 7433
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/22/2000 - 06/30/2001 FY02: -\$2 Total: \$21,999
Prin. Invest.: G P
Tech. Officer: LARC/W P WINIFREE
CASE Category: 21 – MATHEMATICS

NGT 5 65 NORTH CAROLINA STATE UNIV. - RALEIGH 7434
 GSRP TRAINING GRANT - KRISTY DYER - THERMAL AND NON-THERMAL
 PHYSICS OF OUNGSUPERNOVA REMNANTS
 05/27/1998 - 08/14/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: S O REYNOLDS
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 30054 NORTH CAROLINA STATE UNIV. - RALEIGH 7435
 CONSTRAINING CARBON MONOXIDE SOURCES BY MODELING ITS STABLE
 ISOTOPES
 10/24/1997 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: D REICHLER
Tech. Officer: GSFC/A GHASSEM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30192 NORTH CAROLINA STATE UNIV. - RALEIGH 7436
 WATER, HEAT AND SALT BUDGET IN THE NORTHERN INDIAN
 OCEAN/STUDENT: WEI SHI
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J M MORRISON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NORTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NGT 5 40011 NORTH CAROLINA STATE UNIV. - RALEIGH 7437
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND FELLOWSHIP PROGRAM.
 01/30/1997 - 02/28/2002 FY02: -\$74,958 Total: \$853,383
Prin. Invest.: F R DEJARNETTE
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40109 NORTH CAROLINA STATE UNIV. - RALEIGH 7438
 NORTH CAROLINA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/02/2001 - 02/28/2005 FY02: \$256,250 Total: \$561,209
Prin. Invest.: F R DEJARNETTE
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01126 SHAW UNIV 7439
 SCIENTISTS PLUS ALLIES CONTRIBUTING TO EDUCATION (SPACE)
 09/25/2001 - 08/31/2002 FY02: \$0 Total: \$99,364
Prin. Invest.: P PIERCE RAMSEY
Tech. Officer: LARC/R HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 9195 SHAW UNIV 7440
 SHAW UNIV MSET PRE-COLL EXPERIENCE
 03/10/2000 - 02/28/2003 FY02: \$87,446 Total: \$269,363
Prin. Invest.: K SATAGOPAN
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2301 UNIV OF NORTH CAROLINA - CHAPEL HILL 7441
 CHEMICAL MODIFICATION OF NANOTUBES FOR COMPOSITES
 06/08/2000 - 05/31/2003 FY02: \$104,184 Total: \$257,049
Prin. Invest.: E T SAMULSKI
Tech. Officer: LARC/E J SIOCHI
CASE Category: 12 – CHEMISTRY

NAG 1 01061 UNIV OF NORTH CAROLINA - CHAPEL HILL 7442
 SCIENCE AND TECHNOLOGY OF NEW CARBON NANOTUBE- BASED COM- POSITES
 04/17/2001 - 01/31/2004 FY02: \$378,290 Total: \$761,260
Prin. Invest.: NOT AVAILABLE
Tech. Officer: LARC/J SMITH, JR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1188 UNIV OF NORTH CAROLINA - CHAPEL HILL 7443
 BONE MATRIX CHANGES DURING SKELETAL UNLOADING & RE LOADING
 08/15/2000 - 10/31/2002 FY02: \$0 Total: \$509,761
Prin. Invest.: M YAMAUCHI, W J GRZESKI
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 6278 UNIV OF NORTH CAROLINA - CHAPEL HILL 7444
 GREENHOUSE GAS (N2O, CH4) EXCHANGE AND N CYCLING D FERTILIZED (FACE) TEMPERATE FOREST
 09/12/1997 - 08/31/2001 FY02: \$0 Total: \$254,765
Prin. Invest.: S C WHALEN
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8924 UNIV OF NORTH CAROLINA - CHAPEL HILL 7445
 LABORATORY STUDIES OF THE OPTICAL CONSTANTS & MICR OPHYSICAL PROPERTIES OF STRATOSPHERIC & UPPER TR
 01/06/2000 - 12/31/2002 FY02: \$90,000 Total: \$293,536
Prin. Invest.: R E MILLER
Tech. Officer: GSFC/P DECOLA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11290 UNIV OF NORTH CAROLINA - CHAPEL HILL 7446
 SIMULATING OF LAND USE DYNAMICS IN SE ASIA: A CELL ULAR AUTOMA- TION APPROACH
 08/21/2001 - 08/31/2004 FY02: \$62,859 Total: \$250,750
Prin. Invest.: R RINDFUSS
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12504 UNIV OF NORTH CAROLINA - CHAPEL HILL 7447
 MOREHEAD PLANETARIUM AND SCIENCE CENTER
 08/21/2002 - 08/31/2003 FY02: \$1,454,692 Total: \$1,454,692
Prin. Invest.: R R GOLWALS
Tech. Officer: GSFC/L BILBROUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1580 UNIV OF NORTH CAROLINA - CHAPEL HILL 7448
 QUANTITATIVE, MULVARIATE METHOD/PRE-FLIGHT OPTI- MIATION, & POST- FLIGHT EVAL. MACR CRYSTAL GROWTH.
 02/04/1999 - 11/30/2002 FY02: \$193,998 Total: \$695,675
Prin. Invest.: C W CARTER, JR.
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5372 UNIV OF NORTH CAROLINA - CHAPEL HILL 7449
 NOVEL PROPERTIES OF CARBON NANOTUBES AND RELATED NANO- STRUCTURES
 03/23/2000 - 09/14/2002 FY02: \$14,994 Total: \$184,994
Prin. Invest.: J LU
Tech. Officer: ARC/M MEYYAPPAN
CASE Category: 13 – PHYSICS

NCC 2 5499 UNIV OF NORTH CAROLINA - CHAPEL HILL 7450
 LOW DIMENSION NANOSTRUCTURES & SYSTEMS FOR DEVICES AND SENSORS
 07/09/2002 - 06/30/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: J LU
Tech. Officer: ARC/H PARTRIDGE, ARC/M MEYYAPPAN
CASE Category: 13 – PHYSICS

NCC 5 295 UNIV OF NORTH CAROLINA - CHAPEL HILL 7451
 AGRICULTURAL COLONIZATION ON THE ECUADORIAN AMAZON : POPULA- TION, BIOPHYSICAL AND GEOGRAPHICAL FACTOR
 06/12/1998 - 12/31/2002 FY02: \$159,989 Total: \$971,882
Prin. Invest.: R BILSBORROW
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 337 UNIV OF NORTH CAROLINA - CHAPEL HILL 7452
 RADON-222 AND STABLE CARBON ISOTOPE TRACING OF CAR BON EXCHANGE AND TRACE GAS FLUXES IN OLD GROWTH A
 06/17/1998 - 12/31/2002 FY02: \$193,391 Total: \$975,991
Prin. Invest.: C S MARTENS
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30177 UNIV OF NORTH CAROLINA - CHAPEL HILL 7453
 THE MIGRATION ORIGINS OF DEFORESTATION IN A PROTECTED AREA:
 COLONIZATION, CLEAR-CUTTING, AND CORN IN
 08/12/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: T M WHITMORE
Tech. Officer: GSFC/L SMITH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 30389 UNIV OF NORTH CAROLINA - CHAPEL HILL 7454
 WIND DRIVEN TRANSPORT PROCESSES OFF THE OREGON COAST:
 DIRECT AND REMOTE SENSING OF COASTAL OCEAN PR
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J BANE
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 30390 UNIV OF NORTH CAROLINA - CHAPEL HILL 7455
 DISTRIBUTED HYDROLOGICAL MODELING OF URBANIZING ECOSYSTEMS:
 INVESTIGATING THE IMPACT OF URBANIZATION
 08/14/2001 - 08/31/2004 FY02: \$23,804 Total: \$44,274
Prin. Invest.: L BAND
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50311 UNIV OF NORTH CAROLINA - CHAPEL HILL 7456
 MONOLAYER-PROTECTED CLUSTERS: NEW AND UNUSUAL NANO METER-
 SCALE ELECTRONICS MATERIALS/STUDENT WORK
 07/07/2000 - 09/30/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: R W MURRAY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 8114 UNIV OF NORTH CAROLINA AT WILMINGTON 7457
 HIGH-TROPHIC LEVEL ECOSYSTEM RESPONSE TO CLIMATE CHANGE IN
 THE ANTARCTIC PENINSULA
 01/25/1999 - 12/31/2001 FY02: -\$2,621 Total: \$163,104
Prin. Invest.: S D EMSLIE
Tech. Officer: GSFC/J W CAMPBELL
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 9 1296 UNIV OF NORTH CAROLINA-GREENSBORO 7458
 SELF-REPORTING SPACE CORPS: EDIBLE BIOSENSORS
 04/27/2001 - 10/31/2002 FY02: \$0 Total: \$57,000
Prin. Invest.: C N STEWART
Tech. Officer: JSC/D RUSSO
CASE Category: 54 - ENVIRONMENTAL BIOLOGY

NAG 5 12537 UNIV OF NORTH CAROLINA, CHARLOTTE 7459
 DEVELOPING MODEL INSTRUCTIONAL LABORATORIES TO DECREASE THE
 SHORTAGE AND INCREASE THE RETENTION OF STUDENTS
 09/11/2002 - 09/14/2003 FY02: \$498,900 Total: \$498,900
Prin. Invest.: W R VEAL
Tech. Officer: GSFC/L BILLBROUGH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 8 52901 UNIV OF NORTH CAROLINA, CHARLOTTE 7460
 CHARACTERIZATION OF X-RAY OPTICS MANUFACTURE AND ITS APPLICATION
 TO WOLFRAM MICROSCOPE OPTICS.
 05/25/2001 - 08/01/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: S SMITH
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 - MECHANICAL ENGR

NAG 2 1203 WAKE FOREST UNIV 7461
 FOCUS AS A MODEL SYSTEM TO STUDY THE ROLE OF SUXIN TRANSPORT
 & THE ACTIN CYTOSKELETON IN GRAVITY...
 04/06/1998 - 04/30/2003 FY02: \$0 Total: \$399,796
Prin. Invest.: G K MUDAAY
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 - BIOLOGY (EXCLUDING ENVIR)

NAG 2 1507 WAKE FOREST UNIV 7462
 REGULATION OF AUXIN TRANSPORT BY PHOSPHORYLATION AND
 FLAVONOIDS DURING GRAVITROPISM IN ARABIDOPSIS
 07/20/2001 - 07/31/2003 FY02: \$150,073 Total: \$217,767
Prin. Invest.: G K MUDAY
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 - BIOLOGY (EXCLUDING ENVIR)

NAG 3 2515 WINSTON-SALEM STATE UNIV 7463
 GENERIC DIVIDE AND CONQUER INTERNET-BASED GENERIC DIVIDE AND
 CONQUER INTERNET-BASED
 12/22/2000 - 12/21/2003 FY02: \$0 Total: \$51,839
Prin. Invest.: D RADENSKI
Tech. Officer: GRC/G J FOLLEN
CASE Category: 22 - COMPUTER SCIENCE

NORTH DAKOTA

NAG13 02007 NORTH DAKOTA STATE UNIV 7464
 NASA SPACE GRANT/LAND GRANT EXTENSION GEOSPATIAL EDUCATION
 PROGRAM
 11/29/2001 - 09/15/2004 FY02: \$440,290 Total: \$440,290
Prin. Invest.: J NOWATZKI
Tech. Officer: SSC/A PEEK
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 4 52424 NORTH DAKOTA STATE UNIV 7465
 GRAD STUDENT RES PRO (GSRP)-PROPOSED TITLE : ADAPTIVE MULTISCALE
 ALGORITHMS FOR NONLINEAR EST OF AEROSOL SYSTEMS
 09/26/2000 - 09/25/2001 FY02: -\$498 Total: \$21,502
Prin. Invest.: Y XU
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 - AERONAUTICAL ENGR

NAG 9 1413 TURTLE MOUNTAIN COMM COLL 7466
 A RESERVATION COLLABORATION INITIATIVE FOR PRE- COLLEGE
 09/04/2002 - 09/08/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: C DAVIS
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NCC 1 02035 TURTLE MOUNTAIN COMM COLL 7467
 NASA-NORTH DAKOTA CONNECTION - A TRIBAL SCHOOL DISTANCE
 LEARNING INITIATIVE TURTLE MOUNTAIN COMMUNITY
 07/01/2002 - 06/30/2003 FY02: \$143,640 Total: \$143,640
Prin. Invest.: L J HENRY
Tech. Officer: LARC/R M STARR
CASE Category: 21 - MATHEMATICS

NAG 5 3616 UNIV OF NORTH DAKOTA 7468
 A PUBLIC ACCESS RESOURCE CENTER (PARC) EMPOWERING TO USE
 EOSDI IMPLEMENTATION PHASE
 11/22/1996 - 06/30/2003 FY02: \$350,076 Total: \$5,167,000
Prin. Invest.: G A SEIELSTAD
Tech. Officer: GSFC/J J COLLIER
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 5340 **UNIV OF NORTH DAKOTA** **7469**
 EVALUATION OF NASA POLARIMETRIC (NPOL) RADAR OBSERVATIONS
 COLLECTED DURING THE KEYS AREA MICROPHYSIC
 07/16/2001 - 12/31/2002 FY02: \$0 Total: \$74,217
Prin. Invest.: P KUCERA
Tech. Officer: WFF/J GERLACH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7950 **UNIV OF NORTH DAKOTA** **7470**
 CO2 BUDGET AND RECTIFICATION AIRBORNE STUDY--NORTH AMERICA
 (COBRA--NA)
 12/21/1998 - 12/14/2002 FY02: \$0 Total: \$180,250
Prin. Invest.: C A GRAINGER
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9656 **UNIV OF NORTH DAKOTA** **7471**
 MICROPHYSICAL CHARACTERISTICS OF CLOUDS DURING THE TRMM
 FIELD CAMPAIGNS
 06/05/2000 - 05/31/2003 FY02: \$0 Total: \$101,655
Prin. Invest.: C A GRAINGER
Tech. Officer: HQ/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11509 **UNIV OF NORTH DAKOTA** **7472**
 AIRBORNE MEASUREMENTS IN SUPPORT OF CRYSTAL-FACE
 01/02/2002 - 12/31/2003 FY02: \$251,625 Total: \$251,625
Prin. Invest.: M POELLOT
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12054 **UNIV OF NORTH DAKOTA** **7473**
 A PUBLIC ACCESS RESOURCE CENTER (PARC) EMPOWERING THE GEN-
 ERAL PUBLIC TO USE EOSDIS - IMPLEMENTATION
 04/22/2002 - 04/30/2003 FY02: \$649,924 Total: \$649,924
Prin. Invest.: G SEIELSTAD
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 283 **UNIV OF NORTH DAKOTA** **7474**
 CLOUD ELECTRIC FIELDS AND MICROPHYSICS STUDIES CLOUD ELECTRIC
 FIELDS AND MICROPHYSICS STUDIES
 05/23/2000 - 06/03/2003 FY02: \$0 Total: \$821,054
Prin. Invest.: D GRAINGER
Tech. Officer: KSC/F J MERCERET
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG13 01006 **UNIV OF NORTH DAKOTA** **7475**
 NORTHERN GREAT PLAINS CENTER OF PEOPLE AND THE ENVIRONMENT
 07/30/2001 - 04/30/2003 FY02: \$0 Total: \$1,496,700
Prin. Invest.: G A SEIELSTAD
Tech. Officer: SSC/B A SPIERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02047 **UNIV OF NORTH DAKOTA** **7476**
 NORTHERN GREAT PLAINS CENTER FOR PEOPLE AND THE ENVIRONMENT
 07/11/2002 - 06/30/2003 FY02: \$2,000,000 Total: \$2,000,000
Prin. Invest.: G SEIELSTAD
Tech. Officer: SSC/J ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99006 **UNIV OF NORTH DAKOTA** **7477**
 NORTHERN GREAT PLAINS REGIONAL EARTH SCIENCE APPLICATIONS
 CENTER
 03/01/1999 - 02/28/2003 FY02: \$0 Total: \$1,720,000
Prin. Invest.: P R ZIMMERMAN
Tech. Officer: SSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 310 **UNIV OF NORTH DAKOTA** **7478**
 A PUBLIC ACCESS RESOURCE CTR(PARC)EMPOWERING THE GENERAL
 PUBLIC TO USE EOSDIS(PHASE III-OPERATIONS)
 04/11/1998 - 02/28/2003 FY02: \$450,000 Total: \$2,652,300
Prin. Invest.: G SEIELSTAD
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 399 **UNIV OF NORTH DAKOTA** **7479**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/14/1999 - 04/30/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: C WOOD
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 503 **UNIV OF NORTH DAKOTA** **7480**
 A MULTI-USE AIRBORNE RESEARCH FACILITY
 06/20/2000 - 06/30/2003 FY02: \$126,541 Total: \$269,798
Prin. Invest.: M POELLET
Tech. Officer: GSFC/C YUHAS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 582 **UNIV OF NORTH DAKOTA** **7481**
 NORTH DAKOTA NASA EPSCOR PROGRAM
 08/16/2001 - 08/14/2004 FY02: \$0 Total: \$125,000
Prin. Invest.: S L DE SILVA
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40117 **UNIV OF NORTH DAKOTA** **7482**
 NORTH DAKOTA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/08/2001 - 02/28/2005 FY02: \$348,562 Total: \$597,124
Prin. Invest.: R ANDRES
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

OHIO

NAG 3 2443 **BOWLING GREEN STATE UNIV** **7483**
 PROPOSED TRIAL OF FRESHLY COLLECTED LANDSAT 7 TM D ATA FOR
 REMOTE SENSING APPLICATIONS IN NORTHWEST
 05/31/2000 - 09/30/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: D K VINCENT
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2790 **BOWLING GREEN STATE UNIV** **7484**
 HYBRID DIESEL VEHICLE PROJECT HYBRID DIESEL VEHICLE PROJECT
 07/01/2002 - 09/14/2003 FY02: \$950,000 Total: \$950,000
Prin. Invest.: B D PERSOL
Tech. Officer: GRC/S RIDDLEBAUGH
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1186 **BOWLING GREEN STATE UNIV** **7485**
 PATHOGEN REDUCTION ON LETTTUCE AND RADISHES USING HYDROGEN PEROXIDE
 01/10/2000 - 11/30/2001 FY02: \$0 Total: \$18,412
Prin. Invest.: D L HENTGES
Tech. Officer: JSC/V L KLOERIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 3 99202 **BOWLING GREEN STATE UNIV** **7486**
 PURCHASE OF DYNAMIC ELECTRIC MOTOR LOAD SIMULATOR
 09/24/1999 - 12/31/2000 FY02: \$0 Total: \$359,986
Prin. Invest.: S BALLARD
Tech. Officer: GRC/J L DOLCE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1333 **CASE WESTERN RESERVE UNIV** **7487**
 DISCRETE FILEDS FOR AIR TRAFFIC MANAGEMENT
 07/01/1999 - 03/31/2003 FY02: \$34,333 Total: \$120,943
Prin. Invest.: M S BRANICKY
Tech. Officer: ARC/G MEYER
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1356 **CASE WESTERN RESERVE UNIV** **7488**
 EFFECTS OF MICROGRAVITY ON ZEBRAFISH VESTIBULAR DE VELOPMENT
 07/23/1999 - 04/30/2002 FY02: \$21,783 Total: \$326,947
Prin. Invest.: S J MOORMAN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2160 **CASE WESTERN RESERVE UNIV** **7489**
 STABILITY LIMITS AND DYNAMICS OF NONAXISYMMETRIC L IQUID BRIDGES
 04/24/1998 - 05/31/2001 FY02: -\$1,843 Total: \$334,034
Prin. Invest.: I D ALEXANDER
Tech. Officer: GRC/J C DUH, GRC/B S SINGH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2204 **CASE WESTERN RESERVE UNIV** **7490**
 ESTABLISH THE GLENNAN MICROSYSTEM INITIATIVE ESTABLISH THE GLENNAN MICROSYSTEM INITIATIVE
 09/25/1998 - 01/01/2001 FY02: \$0 Total: \$2,258,000
Prin. Invest.: M MEHREGANY
Tech. Officer: GRC/L G MATUS
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2210 **CASE WESTERN RESERVE UNIV** **7491**
 THE FEASIBILITY OF APPLYING TOMOGRAPHIC TECHNIQUES IN THE ICING RESEARCH WIND TUNNEL
 11/19/1998 - 10/18/2003 FY02: \$79,996 Total: \$224,963
Prin. Invest.: S H IZEN
Tech. Officer: GRC/C R MERCER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2243 **CASE WESTERN RESERVE UNIV** **7492**
 ADVANCEMENT OR TRANSDUCER SENSOR SYSTEM FOR CRACK CONTAMINATION DETECTION
 03/12/1999 - 07/30/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: D HAZONY
Tech. Officer: GRC/D NG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2315 **CASE WESTERN RESERVE UNIV** **7493**
 MODELING OF BALLISTIC IMPACT BEHAVIOR OF INCONEL 7 18 ALLOYS WITH APPLICATIONS TO ENGINE BLADE CONTA
 12/30/1999 - 07/01/2002 FY02: \$0 Total: \$161,932
Prin. Invest.: V PRAKASH
Tech. Officer: GRC/J PEREIRA
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2331 **CASE WESTERN RESERVE UNIV** **7494**
 CANDLE FLAMES IN MICROGRAVITY CANDLE FLAMES IN MICROGRAVITY
 02/10/2000 - 04/30/2003 FY02: \$11,510 Total: \$67,833
Prin. Invest.: J S TIEN
Tech. Officer: GRC/D L KIETRICH
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2391 **CASE WESTERN RESERVE UNIV** **7495**
 SATELLITE AND TERRESTRIAL NETWORK ANALYSIS SATELLITE AND TERRESTRIAL NETWORK ANALYSIS
 04/13/2000 - 05/31/2001 FY02: \$0 Total: \$27,646
Prin. Invest.: J ISHAC
Tech. Officer: GRC/W HVANCIC
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2504 **CASE WESTERN RESERVE UNIV** **7496**
 INSITU MONITORING OF BIOLOGICAL MATERIAL USING LOW -COHERENCE INTERFEROMETRIC SENSORS
 11/13/2000 - 09/30/2002 FY02: \$0 Total: \$253,000
Prin. Invest.: B OVRYN
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2541 **CASE WESTERN RESERVE UNIV** **7497**
 TIME DEPENDENT NUMERICAL SIMULATIONS OF SOLIDIFICATION PROCESSES
 02/09/2001 - 02/05/2003 FY02: \$0 Total: \$0
Prin. Invest.: P L TAYLOR
Tech. Officer: GRC/A CHAIT
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2578 **CASE WESTERN RESERVE UNIV** **7498**
 RESEARCH INIATIVE IN SPACE COMMUNICATIONS AND NETWORKS
 03/30/2001 - 09/30/2002 FY02: \$0 Total: \$390,000
Prin. Invest.: F L MERAT
Tech. Officer: GRC/K BHASIN
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2581 **CASE WESTERN RESERVE UNIV** **7499**
 ANALYSIS OF DROPLET SPLASHING IN AIRCRAFT ICING CONDITIONS
 04/02/2001 - 08/31/2002 FY02: \$0 Total: \$47,774
Prin. Invest.: J D ALEXANDER
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2620 **CASE WESTERN RESERVE UNIV** **7500**
 INVESTIGATION OF ROTARY BLOOD PUMP FLOW USING PIV INVESTIGATION OF ROTARY BLOOD PUMP FLOW USING PIV
 06/29/2001 - 10/31/2003 FY02: \$0 Total: \$125,406
Prin. Invest.: J R KADAMBI
Tech. Officer: GRC/J M SANKOVIC
CASE Category: 56 – MEDICAL

NAG 3 2644 **CASE WESTERN RESERVE UNIV** **7501**
 INKJET METHODOLOGIES FOR THE FABRICATION OF SECONDARY LITHIUM-ION MICROBATTERIES INCORPORATING NANO
 08/17/2001 - 11/30/2002 FY02: \$98,382 Total: \$140,082
Prin. Invest.: D A SCHERSON
Tech. Officer: GRC/D L BRITTON
CASE Category: 12 – CHEMISTRY

NAG 3 2677 **CASE WESTERN RESERVE UNIV** **7502**
 ULTRA-SAFE PROPULSION: MODELING HIGH STRAIN RATE DEFORMATION, FRACTURE, AND IMPACT BEHAVIOR OF ADVANCED
 01/22/2002 - 12/14/2004 FY02: \$91,882 Total: \$91,882
Prin. Invest.: V PRAKASH
Tech. Officer: GRC/J M PEREIRA
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2742 **CASE WESTERN RESERVE UNIV** **7503**
 FLOW AND DISTRIBUTION OF FLUID PHASES THROUGH POROUS PLANT GROWTH MEDIA IN MICROGRAVITY
 03/19/2002 - 12/31/2004 FY02: \$96,904 Total: \$96,904
Prin. Invest.: J ALEXANDER
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2794 **CASE WESTERN RESERVE UNIV** **7504**
 MODELING OF BALLISTIC IMPACT BEHAVIOR OF INCONEL 718 ALLOYS WITH APPLICATIONS TO ENGINE BLADE CONTACT
 07/30/2002 - 07/09/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: V PRAKASH
Tech. Officer: GRC/J PEREIRA
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2799 **CASE WESTERN RESERVE UNIV** **7505**
 WIRELESS PROXIMITY NETWORKS FOR NASA APPLICATIONS WIRELESS PROXIMITY NETWORKS FOR NASA APPLICATIONS
 08/13/2002 - 03/31/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: F L MERAT
Tech. Officer: GRC/K BHASIN
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2807 **CASE WESTERN RESERVE UNIV** **7506**
 MICROMINIATURE MONITOR FOR VITAL ELECTROLYTE AND METABOLITE LEVELS OF ASTRONAUTS
 09/12/2002 - 07/31/2005 FY02: \$184,196 Total: \$184,196
Prin. Invest.: D GRATZL
Tech. Officer: GRC/M NALL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2808 **CASE WESTERN RESERVE UNIV** **7507**
 IN VIVO BIOLUMINESCENT MOLECULAR IMAGING WITH APPLICATION TO THE STUDY OF SECRETORY CLUSTERIN, A PROTEIN
 09/19/2002 - 07/31/2005 FY02: \$133,696 Total: \$133,696
Prin. Invest.: D L WILSON
Tech. Officer: GRC/M NALL
CASE Category: 49 – ENGINEERING, OTHER

NAG 4 222 **CASE WESTERN RESERVE UNIV** **7508**
 STABILITY AND PERFORMANCE EVALUATION OF LEARNING IN ARTIFICIAL NEURAL NETWORKS
 03/27/2002 - 03/31/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: K LOPARO
Tech. Officer: DFRC/D MACKALL
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 6715 **CASE WESTERN RESERVE UNIV** **7509**
 AN ELECTRON MICROSCOPY SURVEY OF CARBONATE-BEARING REGIONS OF ALH84001
 12/10/1997 - 11/30/2000 FY02: \$0 Total: \$120,000
Prin. Invest.: R HARVEY
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7019 **CASE WESTERN RESERVE UNIV** **7510**
 THE EVOLUTION OF GALAXIES HARBORING CENTRAL MASSIVE BLACK HOLES - ATP
 02/19/1998 - 02/14/2003 FY02: \$0 Total: \$260,505
Prin. Invest.: C MIHOS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 11059 **CASE WESTERN RESERVE UNIV** **7511**
 FEASIBILITY STUDY OF PLANS TO USE THE SUN AS A GRAVITATIONAL LENS FOR ASTRONOMY
 06/27/2001 - 06/30/2003 FY02: \$0 Total: \$99,995
Prin. Invest.: G STARKMAN
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11122 **CASE WESTERN RESERVE UNIV** **7512**
 RECOVERY AND STUDY OF ANTARCTIC MARTIAN METEORITES
 07/18/2001 - 07/14/2004 FY02: \$191,480 Total: \$377,895
Prin. Invest.: R HARVEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 8 1270 **CASE WESTERN RESERVE UNIV** **7513**
 DETERMINATION OF THE SURFACE ENERGY OF LIQUID CRYSTALS
 05/03/1996 - 05/31/2001 FY02: -\$74 Total: \$279,926
Prin. Invest.: C ROSENBLATT, P L TAYLOR
Tech. Officer: MSFC/C R TALLEY
CASE Category: 13 – PHYSICS

NAG 8 1727 **CASE WESTERN RESERVE UNIV** **7514**
 PROPOSAL "VIBRATION AND G-JITTER: TRANSPORT DISTURBANCES DUE TO RESIDUAL ACCELERATION/LOW GRAVITY."
 06/19/2000 - 11/30/2003 FY02: \$100,000 Total: \$239,837
Prin. Invest.: J I ALEXANDER
Tech. Officer: MSFC/P DOTY
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 8 1779 **CASE WESTERN RESERVE UNIV** **7515**
 SIMULATED MICROGRAVITY MEASUREMENT TECHNIQUES FOR THE STUDY OF DYNAMIC EFFECTS IN PHOSPHOLIPID SURFACES
 04/24/2001 - 04/30/2005 FY02: \$90,000 Total: \$170,000
Prin. Invest.: C ROSENBLATT, P L TAYLOR
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCA 3 201 **CASE WESTERN RESERVE UNIV** **7516**
 GLENNAN MICROSYSTEMS INITIATIVE FY00 PROJECTS GLENNAN MICROSYSTEMS INITIATIVE FY00PROJECTS
 05/12/2000 - 12/31/2002 FY02: \$675,000 Total: \$3,027,471
Prin. Invest.: M MEHREGANY, C LIU
Tech. Officer: GRC/L G MATUS
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 587 **CASE WESTERN RESERVE UNIV** **7517**
 TIME DEPENDENT NUMERICAL SIMULATIONS OF SOLIDIFICATION PROCESSES
 01/01/1998 - 12/31/2002 FY02: \$76,648 Total: \$439,490
Prin. Invest.: P L TAYLOR
Tech. Officer: GRC/A CHIT
CASE Category: 13 – PHYSICS

NCC 3 633 **CASE WESTERN RESERVE UNIV** **7518**
 COMBUSTION OF SOLID FUEL IN VERY LOW SPEED OXYGEN STREAMS
 06/30/1998 - 09/02/2003 FY02: \$160,000 Total: \$676,012
Prin. Invest.: J S TIEN
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 46 – MECHANICAL ENGR

NCC 3 653 **CASE WESTERN RESERVE UNIV** **7519**
 A STUDY OF THE TIME-DEPENDENT RESPONSE OF CERAMIC MATERIALS
 11/23/1998 - 11/01/2002 FY02: \$113,049 Total: \$418,713
Prin. Invest.: D A GASPARINI
Tech. Officer: GRC/N N NEMETH
CASE Category: 46 – MECHANICAL ENGR

NCC 3 658 **CASE WESTERN RESERVE UNIV** **7520**
 LOW STRETCH DIFFUSION FLAMES LOW STRETCH DIFFUSION FLAMES
 01/12/1999 - 12/08/2002 FY02: \$46,178 Total: \$231,837
Prin. Invest.: J S TIEN
Tech. Officer: GRC/S L OLSON
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 669 **CASE WESTERN RESERVE UNIV** **7521**
 FLAME SPREADING IN PARTIAL GRAVITY FLAME SPREADING IN PARTIAL GRAVITY
 02/03/1999 - 01/03/2003 FY02: \$52,016 Total: \$180,772
Prin. Invest.: J S TIEN
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 679 **CASE WESTERN RESERVE UNIV** **7522**
 DEVELOPMENT OF ADVANCED SENSORS FOR BANTAM VEHICLE APPLICATIONS
 02/24/1999 - 01/31/2002 FY02: \$0 Total: \$220,000
Prin. Invest.: C LIU
Tech. Officer: GRC/G W HUNTER
CASE Category: 43 – CHEMICAL ENGR

NCC 3 681 **CASE WESTERN RESERVE UNIV** **7523**
 THERMO-PHYSICAL PROPERTIES OF MOLTEN SEMICONDUCTOR S
 02/24/1999 - 02/17/2002 FY02: \$0 Total: \$5,000
Prin. Invest.: D H MATTHIESEN
Tech. Officer: GRC/A CHAIT
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 701 **CASE WESTERN RESERVE UNIV** **7524**
 DENTRITIC GROWTH AND COARSENING PHENOMENA IN SOLIDIFICATION
 04/20/1999 - 05/31/2003 FY02: \$63,945 Total: \$373,637
Prin. Invest.: P L TAYLOR
Tech. Officer: GRC/A CHAIT
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 714 **CASE WESTERN RESERVE UNIV** **7525**
 RAPID MANUFACTURING MONOLITHIC SILICON NITRIDE THRUST CELLS
 07/12/1999 - 12/31/2001 FY02: \$12,500 Total: \$498,552
Prin. Invest.: J D CRAWLEY
Tech. Officer: GRC/J LANG
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 766 **CASE WESTERN RESERVE UNIV** **7526**
 LONG TERM DURABILITY OF MATERIALS FOR AEROSPACE APPLICATIONS
 01/24/2000 - 12/11/2002 FY02: \$166,852 Total: \$426,184
Prin. Invest.: I E LOCCI
Tech. Officer: GRC/M V NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 772 **CASE WESTERN RESERVE UNIV** **7527**
 THE DEVELOPMENT OF SOLID STATE CO AND CO2 SENSOR FOR FIRE PROTECTION APPLICATIONS
 02/11/2000 - 01/23/2002 FY02: \$0 Total: \$220,000
Prin. Invest.: C C LIU
Tech. Officer: GRC/G W HUNTER
CASE Category: 43 – CHEMICAL ENGR

NCC 3 823 **CASE WESTERN RESERVE UNIV** **7528**
 GAS EVOLUTION EFFECT ON MASS TRANSFER IN ROTATING ELECTRO-CHEMICAL CELLS UNDER MICROGRAVITY CONDITION
 08/17/2000 - 11/30/2003 FY02: \$85,960 Total: \$184,115
Prin. Invest.: Y KAMOTANI
Tech. Officer: GRC/D GREEN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 830 **CASE WESTERN RESERVE UNIV** **7529**
 ADVANCED COPPER ALLOYS FOR REGENERATIVELY COOLED ROCKET ENGINE COMBUSTION CHAMBERLINERS
 12/08/2000 - 12/13/2002 FY02: \$203,657 Total: \$406,169
Prin. Invest.: D L ELLIS
Tech. Officer: GRC/M NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 838 **CASE WESTERN RESERVE UNIV** **7530**
 SOOT FORMATION IN PURELY CURVED PREMIXED FLAMES & LAMINAR FLAME SPEEDS OF SOOT FORMING FLAMES
 01/16/2001 - 11/30/2004 FY02: \$58,000 Total: \$114,500
Prin. Invest.: C SUNG
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 850 **CASE WESTERN RESERVE UNIV** **7531**
 NOVEL STRUCTURAL AND FUNCTIONAL CERAMICS
 01/17/2001 - 01/21/2003 FY02: \$374,255 Total: \$764,160
Prin. Invest.: S SAYIR
Tech. Officer: GRC/S C FARMER
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 892 **CASE WESTERN RESERVE UNIV** **7532**
 TECHNOLOGIES FOR ACTIVE CLEARANCE CONTROL
 05/22/2001 - 11/30/2001 FY02: \$0 Total: \$44,995
Prin. Invest.: S M PHILLIPS
Tech. Officer: GRC/B STEINETS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 893 **CASE WESTERN RESERVE UNIV** **7533**
 THE PACKAGING OF HIGH TEMPERATURE SIC BASED ELECTRONICS
 05/22/2001 - 12/31/2001 FY02: \$8,394 Total: \$8,394
Prin. Invest.: C C LIU
Tech. Officer: GRC/H HUNTER
CASE Category: 43 – CHEMICAL ENGR

NCC 3 895 **CASE WESTERN RESERVE UNIV** **7534**
 THERMALLY STABLE OHMIC CONTACTS ON 6H-SIC THERMALLY STABLE
 OHMIC CONTACTS ON 6H-SIC
 06/01/2001 - 04/30/2003 FY02: \$60,000 Total: \$119,400
Prin. Invest.: P PIROUZ
Tech. Officer: GRC/R OKOJIE
CASE Category: 13 – PHYSICS

NCC 3 898 **CASE WESTERN RESERVE UNIV** **7535**
 CERAMIC CANTED COIL SPRINGS FOR AEROSPACE SEALING APPLICA-
 TIONS
 07/31/2001 - 10/02/2002 FY02: \$100,100 Total: \$183,211
Prin. Invest.: J D CAWLEY
Tech. Officer: GRC/P DUNLAP
CASE Category: 46 – MECHANICAL ENGR

NCC 3 915 **CASE WESTERN RESERVE UNIV** **7536**
 FABRICATION OF SILICON CARBIDE-BASED MICROMIRROR DEVICES FOR
 OPTICAL APPLICATIONS
 09/18/2001 - 07/31/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: C A ZORMAN
Tech. Officer: GRC/K MIYOSHI
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 927 **CASE WESTERN RESERVE UNIV** **7537**
 MICROCHEMICAL AND GASEOUS SENSORS USING CARBON NANOTUBES
 AND MEMS FABRICATION TECHNOLOGY
 01/03/2002 - 09/30/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: C LIU
Tech. Officer: GRC/J D WRBANEK
CASE Category: 43 – CHEMICAL ENGR

NCC 3 941 **CASE WESTERN RESERVE UNIV** **7538**
 THE DEVELOPMENT OF SOLID STATE CO AND CO2 SENSOR FOR FIRE
 PROTECTION APPLICATIONS
 02/20/2002 - 10/31/2002 FY02: \$120,000 Total: \$120,000
Prin. Invest.: C LIU
Tech. Officer: GRC/G W HUNTER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 944 **CASE WESTERN RESERVE UNIV** **7539**
 DEVELOPMENT OF ADVANCED SENSORS FOR SECOND GENERATION
 VEHICLE APPLICATIONS
 03/11/2002 - 10/31/2002 FY02: \$90,000 Total: \$90,000
Prin. Invest.: C LIU
Tech. Officer: GRC/G W HUNTER
CASE Category: 43 – CHEMICAL ENGR

NCC 3 955 **CASE WESTERN RESERVE UNIV** **7540**
 RAPID MANUFACTURING MONOLITHIC SILICON NITRIDE THRU USE CELLS
 05/09/2002 - 01/15/2003 FY02: \$261,857 Total: \$261,857
Prin. Invest.: J D CAWLEY
Tech. Officer: GRC/J LANG
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 969 **CASE WESTERN RESERVE UNIV** **7541**
 DENDRITIC FORMATION AND CLOUD MICROPHYSICS PHENOMENA
 06/03/2002 - 05/31/2005 FY02: \$86,000 Total: \$86,000
Prin. Invest.: P L TAYLOR
Tech. Officer: GRC/A CHAIT
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 976 **CASE WESTERN RESERVE UNIV** **7542**
 REGENERATIVE ADAPTIVE SEAL TECHNOLOGY REGENERATIVE ADAPTIVE
 SEAL TECHNOLOGY
 06/28/2002 - 09/30/2002 FY02: \$56,192 Total: \$56,192
Prin. Invest.: J CRAWLEY
Tech. Officer: GRC/B M STEINETZ
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 983 **CASE WESTERN RESERVE UNIV** **7543**
 THE DEVELOPMENT OF CHEMICAL SENSORS FOR BIOMEDICAL AND
 ENVIRONMENTAL APPLICATIONS
 07/25/2002 - 01/09/2003 FY02: \$90,001 Total: \$90,001
Prin. Invest.: C LIU
Tech. Officer: GRC/G W HUNTER
CASE Category: 43 – CHEMICAL ENGR

NCC 3 984 **CASE WESTERN RESERVE UNIV** **7544**
 CONTROLLED-RELEASE MICROSYSTEMS FOR PHARMACOLOGICAL
 AGENT DELIVERY
 09/12/2002 - 07/31/2005 FY02: \$24,639 Total: \$24,639
Prin. Invest.: C ZORMAN
Tech. Officer: GRC/M M NALL
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 985 **CASE WESTERN RESERVE UNIV** **7545**
 ACOUSTICALLY INDUCED MICRODAMAGE TO PREVENT BONE LOSS
 09/12/2002 - 07/31/2005 FY02: \$34,491 Total: \$34,491
Prin. Invest.: D DAVY
Tech. Officer: GRC/J MYERS
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 999 **CASE WESTERN RESERVE UNIV** **7546**
 DEVELOPMENT OF ADVANCED OIL-FREE TURBOMACHINERY PERFORMANCE
 CHARACTERISTICS OF AIR-LUBRICATED COMPRESSORS
 09/13/2002 - 08/31/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: J M PRAHL
Tech. Officer: GRC/J M LUCERO
CASE Category: 46 – MECHANICAL ENGR

NCC 3 1001 **CASE WESTERN RESERVE UNIV** **7547**
 REMOTE AND ON-BOARD DETECTION, DIAGNOSES AND TREATMENT OF
 SERIOUS CARDIAC DYSRHYTHMIAS
 09/23/2002 - 02/22/2006 FY02: \$29,546 Total: \$29,546
Prin. Invest.: D S ROSENBAUM
Tech. Officer: GRC/D W YORK
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 1004 **CASE WESTERN RESERVE UNIV** **7548**
 THE PACKAGING OF HIGH TEMPERATURE SILICON CARBIDE (SiC) BASED
 ELECTRONICS
 09/16/2002 - 12/15/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: C LIU
Tech. Officer: GRC/G W HUNTER
CASE Category: 46 – MECHANICAL ENGR

NCC 3 1005 **CASE WESTERN RESERVE UNIV** **7549**
 SLURRY INFILTRATION DURING THE PROCESSING OF FIBER-REINFORCED
 CERAMIC MATRIX COMPOSITES: EXPERIMENTAL ANALYSIS
 09/18/2002 - 08/31/2003 FY02: \$39,538 Total: \$39,538
Prin. Invest.: J D ALEXANDER
Tech. Officer: GRC/F HURWITZ
CASE Category: 46 – MECHANICAL ENGR

<p>NCC 8 152 CASE WESTERN RESERVE UNIV 7550 DIFFUSION PROCESSES IN MOLTEN SEMICONDUCTORS 06/12/1998 - 03/31/2003 FY02: \$163,500 Total: \$1,933,497 <i>Prin. Invest.:</i> D H MATTHIESEN <i>Tech. Officer:</i> MSFC/J BRUNSON CASE Category: 13 – PHYSICS</p>	<p>NAG 3 1828 CLEVELAND STATE UNIV 7558 ULTRA-LOW-COST ROOM TEMPERATURE SIC THIN FILM 04/08/1996 - 05/31/2002 FY02: \$0 Total: \$50,000 <i>Prin. Invest.:</i> C GORADIA, M FAUR <i>Tech. Officer:</i> GRC/S G BAILEY CASE Category: 47 – METAL & MATERIALS ENGR</p>
<p>NGT 3 52350 CASE WESTERN RESERVE UNIV 7551 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE- SEARCH PROGRAM 06/23/1999 - 06/30/2002 FY02: \$0 Total: \$66,000 <i>Prin. Invest.:</i> J S TIEN <i>Tech. Officer:</i> GRC/J J MONTEGANI CASE Category: 47 – METAL & MATERIALS ENGR</p>	<p>NAG 3 2040 CLEVELAND STATE UNIV 7559 FPGA BASED RECONFIGURABLE PACKET SWITCH TEST BED 04/29/1997 - 07/31/2001 FY02: \$0 Total: \$129,907 <i>Prin. Invest.:</i> P P CHU <i>Tech. Officer:</i> GRC/R E JONES CASE Category: 45 – ELECTRICAL ENGR</p>
<p>NGT 3 52352 CASE WESTERN RESERVE UNIV 7552 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE- SEARCH PROGRAM 06/24/1999 - 08/31/2001 FY02: \$0 Total: \$44,000 <i>Prin. Invest.:</i> J R KADAMBI <i>Tech. Officer:</i> GRC/F J MONTEGANI CASE Category: 49 – ENGINEERING, OTHER</p>	<p>NAG 3 2075 CLEVELAND STATE UNIV 7560 MINORITY ENGINEERING PROGRAM PIPELINE 09/17/1997 - 09/30/2002 FY02: \$1,246 Total: \$87,292 <i>Prin. Invest.:</i> P CHARITY <i>Tech. Officer:</i> GRC/M L BOROWSKI CASE Category: 99 – MULTI INTERDISCIPL, OTHER</p>
<p>NGT 3 52374 CASE WESTERN RESERVE UNIV 7553 GRADUATE STUDENT RESEARCH 06/07/2001 - 06/30/2002 FY02: -\$1 Total: \$21,999 <i>Prin. Invest.:</i> J R KADAMBI <i>Tech. Officer:</i> GRC/F J MONTEGANI CASE Category: 46 – MECHANICAL ENGR</p>	<p>NAG 3 2232 CLEVELAND STATE UNIV 7561 MAPPING THE POSITION DEPENDENCE OF THE LIQUID WATER CONTENT 02/18/1999 - 12/31/2001 FY02: \$0 Total: \$14,000 <i>Prin. Invest.:</i> J LOCK <i>Tech. Officer:</i> GRC/C R MERCER CASE Category: 13 – PHYSICS</p>
<p>NGT 5 50274 CASE WESTERN RESERVE UNIV 7554 A MANTIS-LIKE ROBOT FOR AGILE OPERATION IN EXTREME ENVIRONMENTS/STUDENT: DANIEL KINGSLEY 06/15/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000 <i>Prin. Invest.:</i> R QUINN <i>Tech. Officer:</i> GSFC/K BLANDING CASE Category: 46 – MECHANICAL ENGR</p>	<p>NAG 3 2296 CLEVELAND STATE UNIV 7562 REAL TIME MONITORING SYSTEM 09/30/1999 - 05/12/2002 FY02: \$0 Total: \$59,450 <i>Prin. Invest.:</i> D M KOCHER <i>Tech. Officer:</i> GRC/D WHITE CASE Category: 99 – MULTI INTERDISCIPL, OTHER</p>
<p>NGT 5 50369 CASE WESTERN RESERVE UNIV 7555 COMBUSTION OF BLACK LIQUOR DEPOSITS 06/13/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000 <i>Prin. Invest.:</i> J TIEN <i>Tech. Officer:</i> GSFC/K BLANDING CASE Category: 99 – MULTI INTERDISCIPL, OTHER</p>	<p>NAG 3 2326 CLEVELAND STATE UNIV 7563 DEVELOPMENT OF A FAST ANALYSIS TOOL FOR THE INTERNATIONAL SPACE STATION (ISS) USING SOFT COMPUTING 02/04/2000 - 02/20/2003 FY02: \$26,650 Total: \$140,150 <i>Prin. Invest.:</i> P P LIN <i>Tech. Officer:</i> GRC/K JULES CASE Category: 49 – ENGINEERING, OTHER</p>
<p>NGT 5 50413 CASE WESTERN RESERVE UNIV 7556 TRI MODAL LOCOMOTION FOR A HEXAPOD LEGGED ROBOT STUDENT: THOMAS ALLEN 08/06/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000 <i>Prin. Invest.:</i> R QUINN <i>Tech. Officer:</i> GSFC/K BLANDING CASE Category: 99 – MULTI INTERDISCIPL, OTHER</p>	<p>NAG 3 2423 CLEVELAND STATE UNIV 7564 OPTICAL SCATTERING CHARACTERIZATION FOR THE GLENNAN MICRO- SYSTEMS MICROSCALE PARTICULATE CLASSIFIER 05/12/2000 - 04/15/2002 FY02: \$0 Total: \$10,000 <i>Prin. Invest.:</i> J A LOCK <i>Tech. Officer:</i> GRC/P S GREENSBERG CASE Category: 49 – ENGINEERING, OTHER</p>
<p>NCC 3 996 CENTRAL STATE UNIV - OHIO 7557 ANALYSIS AND DEVELOPMENT OF A SIC PIEZORESISTIVE PROBES FOR MEASURING TURBULENT INTENSITY IN A HIGH 09/10/2002 - 08/05/2004 FY02: \$50,000 Total: \$50,000 <i>Prin. Invest.:</i> T V REID <i>Tech. Officer:</i> GRC/G FRALICK CASE Category: 46 – MECHANICAL ENGR</p>	<p>NAG 3 2482 CLEVELAND STATE UNIV 7565 DEVELOPMENT OF A MULTI-DIMENSIONAL STIRLING ENGINE CODE FOR THERMODYNAMICS PERFORMANCE 08/02/2000 - 07/31/2004 FY02: \$142,175 Total: \$404,628 <i>Prin. Invest.:</i> D IBRAHIM <i>Tech. Officer:</i> GRC/L THIEMENE CASE Category: 46 – MECHANICAL ENGR</p>

NAG 3 2509 **CLEVELAND STATE UNIV** **7566**
 THE INTEGRATION OF LEGACY APPLICATIONS WITH CORBA THE INTEGRA-
 TION OF LEGACY APPLICATIONS WITH CORBA
 11/30/2000 - 11/16/2001 FY02: -\$2,073 Total: \$50,924
Prin. Invest.: J SANG
Tech. Officer: GRC/C KIM
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2514 **CLEVELAND STATE UNIV** **7567**
 STRUCTURAL MODELING OF ENGINE COMPONENTS AND MATER IAL
 PROCESSES
 12/18/2000 - 12/31/2002 FY02: \$127,530 Total: \$281,227
Prin. Invest.: J HEMANN
Tech. Officer: GRC/H E KAUTZ
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2531 **CLEVELAND STATE UNIV** **7568**
 POWER EFFICIENT REFLECTARRAY COMMUNICATIONS SYSTEM MODULA-
 TIONBN
 01/23/2001 - 12/31/2002 FY02: \$67,846 Total: \$101,678
Prin. Invest.: F XIONG
Tech. Officer: GRC/R R ROMANOFSKY
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2573 **CLEVELAND STATE UNIV** **7569**
 ROTODYNAMIC ANALYSIS AND FEASIBILITY STUDY OF A DI SK SPIN
 FACILITY
 03/22/2001 - 02/28/2003 FY02: \$46,500 Total: \$74,500
Prin. Invest.: J T SAWICKI
Tech. Officer: GRC/H KAUTZ
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2607 **CLEVELAND STATE UNIV** **7570**
 HIGH-LEVEL QUANTUM CHEMICAL CALCULATIONS ON PONTEN TIAL JET
 FUELS
 06/12/2001 - 03/14/2002 FY02: -\$1,602 Total: \$28,398
Prin. Invest.: D W BALL
Tech. Officer: GRC/M J ZEHE
CASE Category: 12 – CHEMISTRY

NAG 3 2619 **CLEVELAND STATE UNIV** **7571**
 ROBUST TIMING SYNCHRONIZATION IN AERONAUTICAL MOBI LE COMMU-
 NICATIONS SYSTEMS
 05/23/2001 - 08/31/2002 FY02: \$14,000 Total: \$28,000
Prin. Invest.: F XIONG
Tech. Officer: GSFC/K CHUN
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2631 **CLEVELAND STATE UNIV** **7572**
 INERTING AIRCRAFT FUEL SYSTEMS USING EXHAUST GASSE S
 06/13/2001 - 05/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: D G NEHEMANN
Tech. Officer: GRC/K KUNDU
CASE Category: 12 – CHEMISTRY

NAG 3 2664 **CLEVELAND STATE UNIV** **7573**
 TIME-SERIES THEMATIC MAPPER DATA AS A TOOL TO MODE L URBAN
 SPRAWL IN NORTHEAST OHIO
 11/08/2001 - 09/30/2002 FY02: \$10,033 Total: \$10,033
Prin. Invest.: D CLAPHAM
Tech. Officer: GRC/T M SCOTT
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 3 2672 **CLEVELAND STATE UNIV** **7574**
 TRANSITIONING ACOUSTO-ULTRASONICS TO NEW PRACTITIO NERS
 12/11/2001 - 02/28/2003 FY02: \$19,980 Total: \$19,980
Prin. Invest.: J HEMANN
Tech. Officer: GRC/G Y BAAKLINI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2683 **CLEVELAND STATE UNIV** **7575**
 X-RAY TOMOGRAPHY AND ULTRASONIC SPECTROSCOPY BASED RE-
 SEARCH FOR AEROSPACE MATERIALS
 01/04/2002 - 01/02/2003 FY02: \$166,567 Total: \$166,567
Prin. Invest.: J HEMANN
Tech. Officer: GRC/G Y BAAKLINI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2684 **CLEVELAND STATE UNIV** **7576**
 THERMOGRAPHIC AND ULTRASONIC RESEARCH ON AEROSPACE MATERI-
 ALS
 01/04/2002 - 01/02/2003 FY02: \$192,483 Total: \$192,483
Prin. Invest.: J HEMANN
Tech. Officer: GRC/G Y BAAKLINI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2699 **CLEVELAND STATE UNIV** **7577**
 OPTIMAL FILTERING FOR TURBOFAN HEALTH ESTIMATION OPTIMAL FIL-
 TERING FOR TURBOFAN HEALTH ESTIMATION
 01/29/2002 - 09/30/2004 FY02: \$34,458 Total: \$34,458
Prin. Invest.: D SIMON
Tech. Officer: GRC/N
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2745 **CLEVELAND STATE UNIV** **7578**
 UNSTEADY PROBABILISTIC ANALYSIS OF TURBOMACHINERY UNSTEADY
 PROBABILISTIC ANALYSIS OF TURBOMACHINERY
 04/17/2002 - 03/11/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: R GORLA
Tech. Officer: GRC/J J RUSICK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2774 **CLEVELAND STATE UNIV** **7579**
 A THEORETICAL LIGHT SCATTERING MODEL OF NANOPARTIC LE LASER
 TWEEZERS
 05/01/2002 - 05/31/2003 FY02: \$12,000 Total: \$12,000
Prin. Invest.: J LOCK
Tech. Officer: GRC/A DECKER
CASE Category: 13 – PHYSICS

NAG 3 2802 **CLEVELAND STATE UNIV** **7580**
 MATERIALS ENABLED TECHNOLOGIES FOR USE IN POWER DE VICES FOR
 AEROSPACE APPLICATIONS
 09/16/2002 - 06/30/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: D HEHEMANN
Tech. Officer: GRC/S G BAILEY
CASE Category: 12 – CHEMISTRY

NAG 8 1584 **CLEVELAND STATE UNIV** **7581**
 R/S ACOUSTICALLY ASSISTED BIOREACTOR FOR TERRESTRIAL AND MI-
 CROGRAVITY APPLICATIONS.
 01/14/1999 - 11/30/2003 FY02: \$30,000 Total: \$421,850
Prin. Invest.: J M BELOVICH
Tech. Officer: MSFC/B GUYNES
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NASW 02023 **CLEVELAND STATE UNIV** **7582**
 CONTRACTOR WILL PROVIDE SERVICES FOR THE NASA ENGINEERING
 AND TRAINING PROGRAM
 06/27/2002 - 06/26/2004 FY02: \$250,000 Total: \$250,000
Prin. Invest.: A LIOU
Tech. Officer: HQ/J MATURO
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 521 **CLEVELAND STATE UNIV** **7583**
 THE EFFECTS OF MULTIPLE SCATTERING IN PHOTON CORRE LEATION
 SPECTROSCOPY
 12/26/1996 - 11/30/2001 FY02: \$0 Total: \$294,000
Prin. Invest.: J A LOCK
Tech. Officer: GRC/A CHAIT
CASE Category: 13 – PHYSICS

NCC 3 581 **CLEVELAND STATE UNIV** **7584**
 ULTRASONIC SCANNER CONTROL AND DATA ACQUISITION
 12/09/1997 - 12/31/2002 FY02: \$0 Total: \$537,242
Prin. Invest.: J HEMANN
Tech. Officer: GRC/H KAUTZ
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 582 **CLEVELAND STATE UNIV** **7585**
 THE DEVELOPMENT OF ENGINEERING TOMOGRAPHY FOR MONO LITHIC
 AND COMPOSITE MATERIALS AND COMPONENTS
 12/09/1997 - 12/31/2002 FY02: \$0 Total: \$520,141
Prin. Invest.: J HEMANN
Tech. Officer: GRC/H E KAUTZ
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 595 **CLEVELAND STATE UNIV** **7586**
 SIMULATION AND PERFORMANCE ANALYSIS OF HYBRID SATE LLITE-
 TERRESTRIAL NETWORKS
 01/12/1998 - 02/27/2003 FY02: \$124,130 Total: \$500,168
Prin. Invest.: V K KONANGI
Tech. Officer: GRC/T M WALLETT, GRC/K B BHASIN
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 647 **CLEVELAND STATE UNIV** **7587**
 THE STUDY OF THE APPLICATION OF MODERN METHODS OF CONTROL
 AND INTERFACE TO SCIENTIFIC EFFORTS
 09/04/1998 - 09/30/2001 FY02: \$0 Total: \$246,970
Prin. Invest.: G L KRAMERICH
Tech. Officer: GRC/J M MULLINS
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 699 **CLEVELAND STATE UNIV** **7588**
 DEVELOPMENT OF DIGITAL CONTROL TECHNOLOGY FOR POWE R MAN-
 AGEMENT AND DISTRIBUTION SYSTEMS
 04/02/1999 - 05/14/2002 FY02: \$0 Total: \$437,669
Prin. Invest.: Z GAO
Tech. Officer: GRC/J F SOEDER
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 740 **CLEVELAND STATE UNIV** **7589**
 PHYSICAL PROPERTIES AND DURABILITY OF NEW MATERIAL S FOR SPACE
 AND COMMERCIAL APPLICATIONS
 10/21/1999 - 01/15/2003 FY02: \$28,312 Total: \$207,873
Prin. Invest.: P HAMBOURGER
Tech. Officer: GRC/S K RUTLEDGE
CASE Category: 13 – PHYSICS

NCC 3 749 **CLEVELAND STATE UNIV** **7590**
 ADVANCED MATERIALS DEVELOPMENT, EVALUATION, AND MO DELING
 FOR PROPULSION APPLICATIONS
 02/14/2000 - 02/28/2003 FY02: \$152,700 Total: \$368,175
Prin. Invest.: S N TEWARI
Tech. Officer: GRC/M NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 759 **CLEVELAND STATE UNIV** **7591**
 EPR INVESTIGATIONS OF SILANE POLYMERIZATIONS EPR INVESTIGA-
 TIONS OF SILANE POLYMERIZATIONS
 12/30/1999 - 11/30/2002 FY02: \$0 Total: \$198,279
Prin. Invest.: J MASNOVI
Tech. Officer: GRC/S R LEVINE
CASE Category: 43 – CHEMICAL ENGR

NCC 3 761 **CLEVELAND STATE UNIV** **7592**
 DESIGN LIFE METHODOLOGIES AND COMPUTER ALGORITHMS FOR THE
 ANALYSIS OF COMPONENTS FABRIATED FROM CERA
 01/11/2000 - 01/22/2002 FY02: -\$4,560 Total: \$125,386
Prin. Invest.: S F DUFFY
Tech. Officer: GRC/J MANDERSCHIED
CASE Category: 46 – MECHANICAL ENGR

NCC 3 764 **CLEVELAND STATE UNIV** **7593**
 SIMULATION AND PERFORMANCE ANALYSIS OF THE AERONAU TICAL
 TELECOMMUNICATION NETWORK
 01/14/2000 - 03/14/2003 FY02: \$107,562 Total: \$249,784
Prin. Invest.: V K KONANGI
Tech. Officer: GRC/R KERCZEWSKI
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 817 **CLEVELAND STATE UNIV** **7594**
 NEW SOLID POLYMER ELECTROLYTES FOR IMPROVED LITHIU M BATTER-
 IES
 07/24/2000 - 07/31/2001 FY02: \$0 Total: \$140,509
Prin. Invest.: D G HEHEMANN
Tech. Officer: GRC/A E HEPP
CASE Category: 12 – CHEMISTRY

NCC 3 818 **CLEVELAND STATE UNIV** **7595**
 STUDY ON DAMPING EFFECTS ON CONVECTION DURING DIRE CTIONAL
 SOLIDIFICATION
 07/24/2000 - 07/09/2001 FY02: \$0 Total: \$24,000
Prin. Invest.: D TEWARI
Tech. Officer: GRC/H DEGROH
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 829 **CLEVELAND STATE UNIV** **7596**
 SOLUTAL REDISTRIBUTION DURING DIRECTIONAL SOLIDIFI CATION
 10/10/2000 - 08/31/2002 FY02: \$0 Total: \$45,500
Prin. Invest.: S N TEWARI
Tech. Officer: GRC/H C DE GROH
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 853 **CLEVELAND STATE UNIV** **7597**
 DEVELOPMENT OF HIGH TEMPERATURE LOW THERMAL CONDUCTIVITY
 ENVIRONMENTAL & THERMAL BARRIER COATING
 01/23/2001 - 12/23/2002 FY02: \$154,870 Total: \$300,179
Prin. Invest.: S N TEWARI
Tech. Officer: GRC/L GREENBAUER-SENG
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 862 **CLEVELAND STATE UNIV** **7598**
 ENVIRONMENTAL DURABILITY OF MATERIALS FOR SPACE TRANSPORTATION
 02/14/2001 - 11/15/2002 FY02: \$145,628 Total: \$279,686
Prin. Invest.: S TEWARI
Tech. Officer: GRC/L A GREENBAUER-SENG
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 869 **CLEVELAND STATE UNIV** **7599**
 DYE-SENSITIZED SOLAR CELLS FOR SPACE POWER DYE-SENSITIZED SOLAR CELLS FOR SPACE POWER
 02/27/2001 - 09/03/2003 FY02: \$70,000 Total: \$140,000
Prin. Invest.: J D HARRIS
Tech. Officer: GRC/S G BAILEY
CASE Category: 12 – CHEMISTRY

NCC 3 876 **CLEVELAND STATE UNIV** **7600**
 FORMULATION & EVALUATION OF ORGANO-PHOSPHATE SOLUTIONS FOR HIGH TEMPERATURE LUBRICATION
 03/14/2001 - 05/20/2002 FY02: \$0 Total: \$26,168
Prin. Invest.: J E GATICA
Tech. Officer: GRC/W MORALES
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 883 **CLEVELAND STATE UNIV** **7601**
 ANALYSIS & CHARACTERIZATION OF ADVANCED MATERIALS FOR AEROSPACE APPLICATIONS
 03/29/2001 - 03/31/2003 FY02: \$81,557 Total: \$238,468
Prin. Invest.: D G NEHEMANN
Tech. Officer: GRC/S G BAILEY
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 908 **CLEVELAND STATE UNIV** **7602**
 INVESTIGATION OF THE UTILIZATION OF MODERN INDUSTRIAL METHODS, PROCESSES, ERGONOMICS, AND THE INTERFACIAL PHENOMENA
 08/13/2001 - 09/30/2004 FY02: \$59,153 Total: \$139,153
Prin. Invest.: G L KRAMERICH
Tech. Officer: GRC/J MULLINS
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 909 **CLEVELAND STATE UNIV** **7603**
 REFLECTIVITY FREQUENCY RESPONSE OF IN-FIBER BRAGG GRATINGS
 08/16/2001 - 07/31/2002 FY02: \$10,000 Total: \$15,000
Prin. Invest.: J A LOCK
Tech. Officer: GRC/G ADAMOVSKY
CASE Category: 13 – PHYSICS

NCC 3 914 **CLEVELAND STATE UNIV** **7604**
 THERMAL TESTING OF FIBER OPTIC BRAGG GRATINGS UNDER DYNAMIC EXCITATION
 09/18/2001 - 12/30/2002 FY02: \$9,095 Total: \$17,095
Prin. Invest.: D FLANAGAN
Tech. Officer: GRC/D ADAMOVSKY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 3 931 **CLEVELAND STATE UNIV** **7605**
 ADVANCED DIGITAL CONTROL TECHNOLOGY FOR POWER MANAGEMENT AND DISTRIBUTION SYSTEMS
 01/16/2002 - 12/18/2004 FY02: \$200,001 Total: \$200,001
Prin. Invest.: Z GAO
Tech. Officer: GRC/J F SOEDER
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 939 **CLEVELAND STATE UNIV** **7606**
 DAMPING CONCEPTS FOR ROTATING BLADES AND ROTORDYNAMICS
 02/13/2002 - 01/31/2003 FY02: \$59,764 Total: \$59,764
Prin. Invest.: S N TEWARI
Tech. Officer: GRC/R V MINER
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 971 **CLEVELAND STATE UNIV** **7607**
 STUDY OF HOMOGENEOUS CATALYTIC EFFECTS IN ORGANIC SOLUTIONS OF PHOSPHATES AND TRANSITION METALS
 06/17/2002 - 06/11/2003 FY02: \$31,992 Total: \$31,992
Prin. Invest.: J E GATICA
Tech. Officer: GRC/W MORALES
CASE Category: 43 – CHEMICAL ENGR

NGT 3 52387 **CLEVELAND STATE UNIV** **7608**
 GRADUATE STUDY RESEARCH - DEVELOPMENT OF A NONLINEAR MULTIVARIABLE CONTROL STRUCTURE FOR ADVANCED PROCESS CONTROL
 08/19/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: Z GAO
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 10233 **COLL OF WOOSTER** **7609**
 MULTIWAVELENGTH OBSERVATIONS OF HERCULES X-1; EUVE MINI-GRANT, #97-MINIGRANT-002
 01/25/2001 - 01/31/2002 FY02: -\$4,939 Total: \$4,700
Prin. Invest.: B BOROSON
Tech. Officer: GSFC/K HARTNETT
CASE Category: 11 – ASTRONOMY

NAG 5 10396 **COLL OF WOOSTER** **7610**
 WIND IONIZATION IN HIGH MASS X-RAY BINARIES FUSE
 02/12/2001 - 02/14/2002 FY02: -\$2,919 Total: \$33,281
Prin. Invest.: B BOROSON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 8 1433 **COLL OF WOOSTER** **7611**
 TURBIDITY AND UNIVERSALITY AROUND A LIQUID-LIQUID CRITICAL POINT
 02/06/1998 - 01/31/2003 FY02: \$50,000 Total: \$199,500
Prin. Invest.: D T JACOBS
Tech. Officer: MSFC/J W POE
CASE Category: 13 – PHYSICS

NAG 3 1778 **CUYAHOGA COMM COLL** **7612**
 MENTOR INTERSHIP PARTNERSHIP PROGRAM
 08/16/1995 - 06/30/2002 FY02: \$10,000 Total: \$109,822
Prin. Invest.: R L MOSS
Tech. Officer: GRC/F H YARRIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2663 **CUYAHOGA COMM COLL** **7613**
 NASA/CCC SCHOLARSHIP PROGRAM NASA/CCC SCHOLARSHIP PROGRAM
 10/23/2001 - 10/22/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: T L BUTLER
Tech. Officer: GRC/R ROMERO
CASE Category: 99 – MULTI INTERDISCIPLINARY, OTHER

NAG 5 12154 **CUYAHOGA COMM COLL** **7614**
 HIGH TECH ACADEMY
 05/23/2002 - 06/30/2005 FY02: \$500,000 Total: \$500,000
Prin. Invest.: A JOHNSON
Tech. Officer: GSFC/C HOLLINGSWORTH
CASE Category: 99 – MULTI INTERDISCIPLINARY, OTHER

NAG13 02059 **CUYAHOGA COMM COLL** **7615**
 PRESERVING FINGER LAKES FOR THE FUTURE
 09/27/2002 - 09/25/2004 FY02: \$1,425,000 Total: \$1,425,000
Prin. Invest.: R BROWER
Tech. Officer: SSC/M MICK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 3 98099 **CUYAHOGA COMM COLL** **7616**
 REPLICA OF SCIENCE ENGRG MATH. & AEROSPACE ACADEMY (SEMAA) IN
 CONNECTION W/NAS3-97168 (MAEL)
 06/30/1998 - 12/31/2001 FY02: -\$755,714 Total: \$8,828,206
Prin. Invest.: L L DARLING
Tech. Officer: GRC/R L BONDURANT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4341 **DENISON UNIV** **7617**
 LAB SPECTROSCOPY CH4 AND H2
 04/23/1997 - 11/30/2001 FY02: -\$46 Total: \$112,762
Prin. Invest.: D E MICKELSON
Tech. Officer: GSFC/R BEEBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11966 **DENISON UNIV** **7618**
 LAB SPECTROSCOPY OF CH4,H2 AND H2O
 04/04/2002 - 03/31/2004 FY02: \$28,693 Total: \$28,693
Prin. Invest.: M E MICKELSON
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2768 **HEIDELBERG COLL** **7619**
 SCIENCE FACILITIES INITIATIVE SCIENCE FACILITIES INITIATIVE
 04/24/2002 - 02/28/2003 FY02: \$998,000 Total: \$998,000
Prin. Invest.: D A KRIEGER
Tech. Officer: GRC/F SAVINO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2564 **JOHN CARROLL UNIV** **7620**
 LIGHTING INNOVATIONS INST SUPPORT OF THE MEMS INCANDESCENT
 LIGHT SOURCE PROJECT
 03/12/2001 - 01/31/2002 FY02: \$0 Total: \$45,000
Prin. Invest.: R L HANSLER
Tech. Officer: GRC/S WRBANEK
CASE Category: 13 – PHYSICS

NCC 3 945 **JOHN CARROLL UNIV** **7621**
 LIGHTING INNOVATIONS INST SUPPORT OF THE MEMS INCANDESCENT
 LIGHT SOURCE PROJECT IN 2002.
 03/15/2002 - 02/06/2003 FY02: \$40,000 Total: \$40,000
Prin. Invest.: R L HANSLER
Tech. Officer: GRC/M L TUMA
CASE Category: 13 – PHYSICS

NCC 3 948 **JOHN CARROLL UNIV** **7622**
 DEVELOPMENT OF MEMS WHITELIGHT SOURCE DEVELOPMENT OF MEMS
 WHITELIGHT SOURCE
 05/02/2002 - 12/31/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: R HANSLER
Tech. Officer: GRC/M L TUMA
CASE Category: 13 – PHYSICS

NAG 2 1497 **KENT STATE UNIV** **7623**
 THE EFFECTS OF MICROGRAVITY ON THE ECOLOGY OF BIOFILM
 BACTERIA
 07/05/2001 - 06/30/2003 FY02: \$119,470 Total: \$210,134
Prin. Invest.: L G LEFF
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2416 **KENT STATE UNIV** **7624**
 LANDSCAPE PARAMETERIZATION AND CLASSIFICATION FOR VISUALIZA-
 TION OF LANDSAT ETM - OHIOVIEW
 05/09/2000 - 07/20/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: D MUNRO-STASIUK
Tech. Officer: GRC/T SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2539 **KENT STATE UNIV** **7625**
 LIQUID CRYSTAL BASED BEAM STEERING DEVICE AND OPTICAL TELE-
 SCOPES
 02/08/2001 - 01/15/2004 FY02: \$163,460 Total: \$374,753
Prin. Invest.: P BROS
Tech. Officer: GRC/J POUCH
CASE Category: 13 – PHYSICS

NAG 5 11266 **KENT STATE UNIV** **7626**
 HYDRODYNAMIC INSTABILITIES AND EDDY-MEAN FLOW INTERACTION IN
 THE SOUTHERN OCEAN
 09/10/2001 - 07/14/2003 FY02: \$96,292 Total: \$165,400
Prin. Invest.: D L WITTER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1389 **KENT STATE UNIV** **7627**
 BED REST & NEUROVASCULAR FUNCTION
 11/23/2001 - 10/31/2003 FY02: \$359,134 Total: \$359,134
Prin. Invest.: D D MACLEAN, M D LAWRENCE
Tech. Officer: JSC/C LLOYD
CASE Category: 56 – MEDICAL

NCC 3 563 **KENT STATE UNIV** **7628**
 THIN FILM BATTERIES
 06/17/1997 - 01/31/2001 FY02: -\$262 Total: \$146,738
Prin. Invest.: C VARCAS ABURTO, R URIBE
Tech. Officer: GRC/A F HEPP
CASE Category: 12 – CHEMISTRY

NCC 3 721 **KENT STATE UNIV** **7629**
 E-BEAM SENSITIVE POLYIMIDES E-BEAM SENSITIVE POLYIMIDES
 07/02/1999 - 09/21/2003 FY02: \$105,609 Total: \$348,263
Prin. Invest.: R J TWIEG
Tech. Officer: GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 734 **KENT STATE UNIV** **7630**
 THIN FILM TECHNOLOGY FOR SPACE POWER THIN FILM TECHNOLOGY
 FOR SPACE POWER
 09/23/1999 - 02/28/2001 FY02: \$0 Total: \$99,994
Prin. Invest.: D CHOWDHURY
Tech. Officer: GRC/A HEPP
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 3 52309 **KENT STATE UNIV** **7631**
 GRADUATE STUDENT RESEARCHERS PROGRAM - HIGH PERFORMANCE COMPUTING AND COMMUNICATION (HPPC)
 07/25/1995 - 10/01/2000 FY02: \$4,012 Total: \$61,988
Prin. Invest.: S RYAN
Tech. Officer: GRC/L SHAW
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 2 1017 **MIAMI UNIV** **7632**
 GRAVIPERCEPTION IN STARCH-DEFICIENT PLANTS IN BIORACK
 10/31/1995 - 12/31/2001 FY02: \$0 Total: \$297,282
Prin. Invest.: J Z KISS
Tech. Officer: ARC/C M WINGET, ARC/G C JAHNS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2436 **MIAMI UNIV** **7633**
 BUILDING AND ENHANCING AN OHIOVIEW GEOSPATIAL DIGITAL LIBRARY FOR K-12, HIGHER EDUCATION AND THEGE
 05/22/2000 - 05/15/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: J MILLARD
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 1200 **MIAMI UNIV** **7634**
 ANALYSIS OF A NOVEL SENSORY MECHANISM IN ROOT PHOTOTROPISM
 09/05/2000 - 04/30/2003 FY02: \$151,849 Total: \$313,408
Prin. Invest.: J Z KISS
Tech. Officer: ARC/D REISS-BUBENHEIM, ARC/R W BERTHLOD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 7789 **NORTHEASTERN OHIO UNIV COL OF MEDICINE** **7635**
 THE EFFECT OF HYPERGRAVITY ON BONE CELL CULTURES
 11/16/1998 - 07/31/2002 FY02: \$0 Total: \$374,743
Prin. Invest.: W J LANDIS
Tech. Officer: GSFC/M M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 3 2544 **OHIO NORTHERN UNIV** **7636**
 A FUZZY CONTROLLER REMOTE POWER SWITCH
 04/19/2001 - 07/08/2001 FY02: \$0 Total: \$2,500
Prin. Invest.: F L GRISMORE
Tech. Officer: GRC/R BUTTON
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 02066 **OHIO STATE UNIV** **7637**
 MODELING FOR ULTRASONIC HEALTH MONITORING OF FOAMS WITH EMBEDDED SENSORS
 03/14/2002 - 03/13/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: S I ROKHLIN
Tech. Officer: LARC/W T YOST
CASE Category: 13 – PHYSICS

NAG 2 1411 **OHIO STATE UNIV** **7638**
 ANALYSIS OF THE INTERACTION OF ENVIRONMENTAL SIGNAL TRANSDUCTION PATHWAYS USING TRANSDUCTION
 06/21/2000 - 06/14/2003 FY02: \$160,541 Total: \$413,296
Prin. Invest.: M L EVANS
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2138 **OHIO STATE UNIV** **7639**
 ULTRASOUND THERMAL FIELD IMAGING OF OPAQUE FLUIDS ULTRASOUND THERMAL FIELD IMAGING OF OPAQUE FLUIDS
 03/06/1998 - 12/31/2002 FY02: \$0 Total: \$332,700
Prin. Invest.: C D ANDERECK
Tech. Officer: GRC/D W GRIFFIN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2316 **OHIO STATE UNIV** **7640**
 MAGNETIC NOZZLE STUDIES FOR ADVANCED ROCKET PROPELLSION
 01/07/2000 - 06/21/2002 FY02: \$0 Total: \$129,998
Prin. Invest.: P J TURCHI
Tech. Officer: GRC/C H WILLIAMS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2339 **OHIO STATE UNIV** **7641**
 COMPUTATIONAL NONEQUILIBRIUM PLASMA DYNAMICS COMPUTATIONAL NONEQUILIBRIUM PLASMA DYNAMICS
 02/23/2000 - 06/30/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: I ADAMOVIH
Tech. Officer: GRC/S J SCHNEIDER
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2410 **OHIO STATE UNIV** **7642**
 DEMONSTRATING THE VALUE OF SATELLITE INFORMATION FOR DEVELOPMENT AND PLANNING IN APPALACHIAN OHIO -
 05/11/2000 - 05/31/2001 FY02: -\$1,371 Total: \$103,629
Prin. Invest.: J K KLEIN
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2412 **OHIO STATE UNIV** **7643**
 OHIOVIEW WORK (2 PROPOSALS) DESIGN OF A USER FRIENDLY DATA MINING APPROACH FOR GEO-REFERENCED IMAGE
 05/04/2000 - 09/30/2001 FY02: \$0 Total: \$230,000
Prin. Invest.: D L MORRISON
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2428 **OHIO STATE UNIV** **7644**
 OHIO VIEW PRODUCT DEFINITION WORKSHOPS OHIO VIEW PRODUCT DEFINITION WORKSHOPS
 05/31/2000 - 07/30/2001 FY02: \$0 Total: \$20,000
Prin. Invest.: S DAVIS
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2438 **OHIO STATE UNIV** **7645**
 PLASMA THRUSTERS RESEARCH (PARTS I AND III) PLASMA THRUSTERS RESEARCH (PARTS I AND III)
 05/19/2000 - 05/18/2002 FY02: \$0 Total: \$89,999
Prin. Invest.: D Y YORK
Tech. Officer: GRC/E J PENCIL
CASE Category: 13 – PHYSICS

NAG 3 2522 **OHIO STATE UNIV** **7646**
 CHARACTERIZATION OF COMPOSITE RESPONSE AT HIGH RATES OF LOADING
 01/09/2001 - 11/30/2001 FY02: \$0 Total: \$45,070
Prin. Invest.: GILAT
Tech. Officer: GRC/R K GOLDBERG
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2549 **OHIO STATE UNIV** **7647**
 THERMALLY STABLE OHMIC CONTRACTS ON 4H & 6H-SIC MICRODEVICES
 FOR HIGH TEMPERATURE APPLICATION
 02/26/2001 - 02/28/2003 FY02: \$0 Total: \$40,477
Prin. Invest.: L BRILLSON
Tech. Officer: GRC/R S OKOJIE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2675 **OHIO STATE UNIV** **7648**
 ATOMIC SCALE MODELING OF THE STRUCTURE & DYNAMICS OF DISLO-
 CATIONS IN COMPLEX ALLOYS AT HIGH TEMPERA
 12/14/2001 - 12/14/2004 FY02: \$99,136 Total: \$99,136
Prin. Invest.: M J MILLS
Tech. Officer: GRC/R D NOEBE
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2700 **OHIO STATE UNIV** **7649**
 DENDRITIC CRYSTAL GROWTH DENDRITIC CRYSTAL GROWTH
 01/29/2002 - 01/17/2006 FY02: \$79,949 Total: \$79,949
Prin. Invest.: S TANVEER
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2748 **OHIO STATE UNIV** **7650**
 STUDY OF HIGH STRAIN RATE RESPONSE OF COMPOSITES STUDY OF
 HIGH STRAIN RATE RESPONSE OF COMPOSITES
 03/21/2002 - 02/28/2003 FY02: \$46,931 Total: \$46,931
Prin. Invest.: A GILAT
Tech. Officer: GRC/R GOLDBERG
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2788 **OHIO STATE UNIV** **7651**
 MAGNETOGASDYNAMIC POWER EXTRACTION AND FLOW CONDIT IONING
 FOR A GAS TURBINE ENGINEERING EVALUATION S
 06/10/2002 - 06/30/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: I V ADAMOVICH
Tech. Officer: GRC/S J SCHNEIDER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 3525 **OHIO STATE UNIV** **7652**
 QUASAR ABSORPTION IN THE UV: PROBING THE INTERGALA
 11/13/1996 - 03/14/2003 FY02: \$0 Total: \$552,600
Prin. Invest.: D H WEINBERG
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 3983 **OHIO STATE UNIV** **7653**
 MILLIMETER AND SUBMILLIMETER SPECTROSCOPY OF MOLEC IMPOR-
 TANCE
 03/03/1997 - 12/31/2002 FY02: \$134,076 Total: \$756,089
Prin. Invest.: F C DEELUCIA
Tech. Officer: GSFC/M J KURYLO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6001 **OHIO STATE UNIV** **7654**
 SATELITE AND MODEL ANALYSIS OF THE ATMOSPHERIC MOI LATITUDES
 09/10/1997 - 07/31/2001 FY02: \$0 Total: \$368,150
Prin. Invest.: D BROMWICH
Tech. Officer: HQ/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6817 **OHIO STATE UNIV** **7655**
 SPATIAL AND TEMPORAL VARIABILITY OF NET ANNUAL ACC UMULATION
 AND CLIMATE IN GREENLAND
 01/07/1998 - 01/31/2001 FY02: -\$4 Total: \$305,109
Prin. Invest.: E S MOSLEY-THOMPSON
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7150 **OHIO STATE UNIV** **7656**
 STANDARD & NONSTANDARD STELLAR MODELS: IMPLICATIONS FOR
 CLUSTER AGES AND LATE EVOLUTIONAERY STAGES
 04/02/1998 - 09/14/2002 FY02: \$0 Total: \$300,142
Prin. Invest.: M H PINSONNEAULT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7252 **OHIO STATE UNIV** **7657**
 SUBMILLIMETER LABORATORY INVESTIGATIONS: SPECTROS COPY & COL-
 LISIONS
 05/07/1998 - 04/30/2002 FY02: \$0 Total: \$150,360
Prin. Invest.: E HERBST
Tech. Officer: GSFC/H THRONSON
CASE Category: 11 – ASTRONOMY

NAG 5 7286 **OHIO STATE UNIV** **7658**
 SHIFTING BOUNDARIES OF THE ANTARCTIC ICE SHEET
 10/19/1998 - 10/31/2002 FY02: \$0 Total: \$278,474
Prin. Invest.: K C JEZEK
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7574 **OHIO STATE UNIV** **7659**
 FUNDING FOR GRAVITY & TIME VARYING GRAVITY FIELD RE COVERY
 (SENH98-0144)
 08/04/1998 - 07/31/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: C K SHUM
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7685 **OHIO STATE UNIV** **7660**
 EDUCATIONAL OUTREACH FOR THE LANDSAT-7 MISSION SCI ENCE OFFICE
 09/11/1998 - 06/30/2002 FY02: \$0 Total: \$77,425
Prin. Invest.: C MERRY
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7750 **OHIO STATE UNIV** **7661**
 MODELING AND OBSERVATIONAL STUDY OF THE GLOBAL ATM OSPHERIC
 IMPACTS OF ANTARCTIC SEA ICE ANOMALIES
 10/20/1998 - 12/31/2002 FY02: \$0 Total: \$245,536
Prin. Invest.: D H BROMWICH
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7848 **OHIO STATE UNIV** **7662**
 THE GLACIER DYNAMICS AND MASS FLUX OF ANTARCTIC IC E STREAMS
 FROM RADARSAT INSAR
 11/23/1998 - 12/31/2002 FY02: \$0 Total: \$130,318
Prin. Invest.: R R FORSTER
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

OHIO

NASA'S UNIVERSITY PROGRAM

NAG 5 7903 **OHIO STATE UNIV** **7663**
 RADIATIVE AND COLLISIONAL ATOMIC DATA FOR UV AND OPTICAL ASTRONOMY
 12/10/1998 - 12/31/2002 FY02: \$0 Total: \$157,868
Prin. Invest.: D K PRADHAN
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 8397 **OHIO STATE UNIV** **7664**
 PROBING THE PHYSICS OF VARIABLE ACTIVE GALACTIC NUCLEI
 04/16/1999 - 10/31/2003 FY02: \$0 Total: \$248,500
Prin. Invest.: B M PETERSON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8423 **OHIO STATE UNIV** **7665**
 ATOMIC PROCESSES IN X-RAY ASTROPHYSICS (ATP 98)
 04/15/1999 - 04/14/2003 FY02: \$0 Total: \$189,346
Prin. Invest.: A K PRADHAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8455 **OHIO STATE UNIV** **7666**
 BAYESIAN HIERARCHICAL AIR-SEA INTERACTION MODELING : DEVELOPMENT AND APPLICATION TO THE LABR
 04/12/1999 - 05/31/2003 FY02: \$0 Total: \$49,620
Prin. Invest.: K N BERLINER
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8608 **OHIO STATE UNIV** **7667**
 RADARSAT: THE ANTARCTIC MAPPING PROJECT
 06/10/1999 - 06/30/2001 FY02: \$0 Total: \$432,220
Prin. Invest.: K C JEZEK
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8632 **OHIO STATE UNIV** **7668**
 MODELING GREENLAND OUTLET GLACIERS
 06/28/1999 - 06/30/2001 FY02: \$0 Total: \$70,761
Prin. Invest.: C DER VEEN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8913 **OHIO STATE UNIV** **7669**
 ABSORBING OUTFLOWS IN AGN PI TRANSFER FROM SAO
 06/22/2000 - 09/30/2001 FY02: \$0 Total: \$217,314
Prin. Invest.: S MATHUR
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 21 – MATHEMATICS

NAG 5 9335 **OHIO STATE UNIV** **7670**
 A GEOPHYSICAL APPROACH TO STUDY THE ROLE OF ICE SHEET MASS BALANCE IN GLOBAL SEA LEVEL CHANGE
 03/30/2000 - 04/30/2003 FY02: \$60,060 Total: \$357,521
Prin. Invest.: C K SHUM
Tech. Officer: GSFC/K PARTINGTON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9518 **OHIO STATE UNIV** **7671**
 REGIONAL SCALE METEOROLOGICAL ANALYSIS & PREDICTION USING GPS OCCULTATION & EOS DATA
 05/10/2000 - 04/30/2003 FY02: \$263,940 Total: \$695,955
Prin. Invest.: D BROMWICH
Tech. Officer: GSFC/R KAKAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9538 **OHIO STATE UNIV** **7672**
 RADARSAT ANTARCTIC MAPPING PROJECT: ANTARCTIC IMAGING CAMPAIGN 2
 05/23/2000 - 05/31/2005 FY02: \$558,886 Total: \$1,954,257
Prin. Invest.: K JEZEK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9596 **OHIO STATE UNIV** **7673**
 A REGIONAL INTEGRATED MONITORING SYSTEM FOR THE HYDROLOGY OF THE PAN-ARCTIC LAND MASS
 05/11/2000 - 04/30/2003 FY02: \$58,868 Total: \$127,204
Prin. Invest.: D BROMWICH
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9883 **OHIO STATE UNIV** **7674**
 LITHOSPHERIC ANALYSIS OF SATELLITE MAGNETOMETER OBSERVATION
 08/24/2000 - 08/31/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: R R VON FRESE
Tech. Officer: GSFC/P TAYLOR
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9936 **OHIO STATE UNIV** **7675**
 LIFTING THE SHROUD AROUND BROAD ABSORPTION LINE QUASARS WITH XMM
 09/06/2000 - 09/14/2002 FY02: \$0 Total: \$37,300
Prin. Invest.: S MATHUR
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9937 **OHIO STATE UNIV** **7676**
 X-RAY SPECTRA OF Z>4 QUASARS
 09/06/2000 - 09/14/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: S MATHUR
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10112 **OHIO STATE UNIV** **7677**
 MAPPING ANTARCTIC ICE SHEET MARGINS AND SNOW MELT ZONES OVER DECADEAL TIME SCALES FOR UNDERSTANDING
 11/21/2000 - 11/14/2003 FY02: \$94,193 Total: \$182,730
Prin. Invest.: K JEZEK
Tech. Officer: GSFC/K PARTINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10160 **OHIO STATE UNIV** **7678**
 SATELLITE AND MODEL ANALYSIS OF THE ATMOSPHERIC MOISTURE BUDGET IN HIGH LATITUDES
 12/20/2000 - 03/31/2002 FY02: \$0 Total: \$78,767
Prin. Invest.: D BROMWICH
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10199 **OHIO STATE UNIV** **7679**
 AIRBORNE GEOPHYSICS AND REMOTE SENSING APPLIED TO STUDY
 GREENLAND ICE DYNAMICS
 12/21/2000 - 12/31/2001 FY02: \$0 Total: \$63,604
Prin. Invest.: B CSATHO
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10207 **OHIO STATE UNIV** **7680**
 SUBMILLIMETER LABORATORY INVESTIGATIONS: SPECTROSCOPY & COLLISIONS
 01/03/2001 - 12/31/2003 FY02: \$85,000 Total: \$165,000
Prin. Invest.: E HERBST
Tech. Officer: GSFC/G STRINGFELLO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10266 **OHIO STATE UNIV** **7681**
 SPATIAL AND TEMPORAL VARIABILITY OF GREENLAND ACCUMULATION
 AND CLIMATE FROM THE PARCA CORES
 01/09/2001 - 12/31/2001 FY02: \$0 Total: \$70,217
Prin. Invest.: E MOSLEY-THOMPSON
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10275 **OHIO STATE UNIV** **7682**
 DETERMINING ICE SHEET ACCUMULATION RATES FROM RADAR REMOTE
 SENSING
 01/12/2001 - 01/14/2002 FY02: \$0 Total: \$54,903
Prin. Invest.: K JEZEK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10320 **OHIO STATE UNIV** **7683**
 FUV SPECTROSCOPY OF NARROW LINE SEYFERT 1 GALAXIES FUSE 2000
 01/30/2001 - 01/31/2003 FY02: \$0 Total: \$83,900
Prin. Invest.: S MATHUR
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10619 **OHIO STATE UNIV** **7684**
 NEAR REAL-TIME GPS/LEO PRECISION ORBIT DETERMINATION FOR
 OPERATIONAL WEATHER FORECASTING WITH GPS
 03/19/2001 - 03/31/2004 FY02: \$105,385 Total: \$223,274
Prin. Invest.: D BRZEZINSKA
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10678 **OHIO STATE UNIV** **7685**
 SEARCHING FOR EXTRA-SOLAR SYSTEM PLANETS USING GRAVITATIONAL
 MICROLENSING
 04/24/2001 - 04/30/2004 FY02: \$45,000 Total: \$90,000
Prin. Invest.: D DEPOY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10978 **OHIO STATE UNIV** **7686**
 MODELLING GREENLAND OUTLET GLACIERS
 05/29/2001 - 05/31/2003 FY02: \$40,000 Total: \$81,805
Prin. Invest.: C V DER VEEN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11383 **OHIO STATE UNIV** **7687**
 MOBILE SENSOR WEB FOR POLAR ICE SHEET MEASUREMENTS
 11/01/2001 - 10/31/2006 FY02: \$75,000 Total: \$75,000
Prin. Invest.: K JEZEK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11462 **OHIO STATE UNIV** **7688**
 ATOMIC DATA FOR MULTI-WAVELENGTH SPECTRAL FORMATION
 12/10/2001 - 12/31/2004 FY02: \$58,000 Total: \$58,000
Prin. Invest.: A K PRADHAN
Tech. Officer: GSFC/H HASAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11749 **OHIO STATE UNIV** **7689**
 "UNDERSTANDING RECENT MASS CHANGES OF THE GREENLAND ICE
 SHEET"
 02/12/2002 - 02/14/2005 FY02: \$190,000 Total: \$190,000
Prin. Invest.: C J VAN DER VEEN
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11794 **OHIO STATE UNIV** **7690**
 SATELLITE AND MODEL ANALYSIS OF THE ATMOSPHERIC MOISTURE
 BUDGET IN HIGH LATITUDES - BRIDGE FUNDING
 02/28/2002 - 02/28/2003 FY02: \$55,047 Total: \$55,047
Prin. Invest.: D BROMWICH
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11984 **OHIO STATE UNIV** **7691**
 THEORETICAL X-RAY ATOMIC ASTROPHYSICS AND SPECTROSCOPY: THE
 RMAX NETWORK
 04/12/2002 - 04/14/2004 FY02: \$75,000 Total: \$75,000
Prin. Invest.: A K PRADHAN
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12290 **OHIO STATE UNIV** **7692**
 COMPUTER HARDWARE UPGRADES IN SUPPORT OF ICE SHEET DATA
 PROCESSING AND ANALYSIS
 06/20/2002 - 06/14/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: K JEZEK
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12407 **OHIO STATE UNIV** **7693**
 MODELING MASS BALANCE GREENLAND AND ANTARCTIC ICE SHEET
 08/01/2002 - 07/31/2004 FY02: \$99,571 Total: \$99,571
Prin. Invest.: D BROMWICH
Tech. Officer: GSFC/W ABDALATI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12585 **OHIO STATE UNIV** **7694**
 DETERMINATION AND CHARACTERIZATION OF 20TH CENTURY GLOBAL
 SEA LEVEL RISE
 09/17/2002 - 09/30/2005 FY02: \$135,000 Total: \$135,000
Prin. Invest.: C K SHUM
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

OHIO

NASA'S UNIVERSITY PROGRAM

NAG 8 1441 **OHIO STATE UNIV** **7695**
GRAVITATIONAL EFFECTS IN BOSE-EINSTEIN CONDENSATE OF ATOMIC GASES
03/06/1998 - 01/31/2003 FY02: \$100,000 Total: \$313,250
Prin. Invest.: T HO
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 8 1470 **OHIO STATE UNIV** **7696**
R/S INTERDIFFUSION IN THE PRESENCE OF FREE CONVECTION
03/26/1998 - 01/31/2003 FY02: \$21,667 Total: \$262,500
Prin. Invest.: P K GUPTA
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1670 **OHIO STATE UNIV** **7697**
FUNDAMENTAL STUDIES OF CRYSTAL GROWTH OF MICROPOROUS MATERIALS
06/05/2000 - 11/30/2003 FY02: \$112,500 Total: \$328,417
Prin. Invest.: P K DUTTA
Tech. Officer: MSFC/P DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1765 **OHIO STATE UNIV** **7698**
QUANTUM GASES IN NOVEL ENVIRONMENTS: OPTICAL LATTICES AND RAPIDLY ROTATING POTENTIALS
05/01/2001 - 04/30/2004 FY02: \$0 Total: \$25,000
Prin. Invest.: T L HO
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 9 1005 **OHIO STATE UNIV** **7699**
ORIENTATION FOR INTERVENTION: SUPPORTING MISSION AWARENESS IN SPACE OPERATIONS
05/06/1998 - 06/30/2002 FY02: \$0 Total: \$242,292
Prin. Invest.: D D WOODS
Tech. Officer: JSC/B J WOOLFORD
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG10 263 **OHIO STATE UNIV** **7700**
DEVELOPMENT OF GRAVITY SENSITIVE PLANT CELLS CERATODON IN MICROGRAVITY
07/14/1999 - 11/30/2002 FY02: \$145,000 Total: \$470,354
Prin. Invest.: F SACK
Tech. Officer: KSC/G ETHERIDGE
CASE Category: 55 – AGRICULTURE

NAG10 320 **OHIO STATE UNIV** **7701**
ROBOTIC TOMATO HARVESTER ROBOTIC TOMATO HARVESTER
07/25/2002 - 07/31/2003 FY02: \$99,998 Total: \$99,998
Prin. Invest.: P LING
Tech. Officer: KSC/J C SAGER
CASE Category: 55 – AGRICULTURE

NAG13 00039 **OHIO STATE UNIV** **7702**
HIERARCHICAL SEGMENTATION AND ATTRIBUTION OF HIGH RESOLUTION AERIAL IMAGES
05/19/2000 - 09/30/2001 FY02: \$0 Total: \$200,000
Prin. Invest.: K BOYER
Tech. Officer: SSC/B DAVIS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 3 02116 **OHIO STATE UNIV** **7703**
ACTIVE NOISE CONTROL IN SUPERSONIC JETS USING PLASMA ACTUATORS NRA PHASE I
03/08/2002 - 11/08/2002 FY02: \$100,000 Total: \$100,000
Prin. Invest.: M SAMIMY
Tech. Officer: GRC/J E BRIDGES, GRC/J E GRADY
CASE Category: 41 – AERONAUTICAL ENGR

NAS 5 02001 **OHIO STATE UNIV** **7704**
DEVELOP, FABRICATE, TEST LABORATORY PROTOTYPE DIGITAL RECEIVER.
03/11/2002 - 08/31/2002 FY02: \$260,505 Total: \$260,505
Prin. Invest.: J T JOHNSON
Tech. Officer: GSFC/F PERI
CASE Category: 45 – ELECTRICAL ENGR

NCA 3 206 **OHIO STATE UNIV** **7705**
GLENNAN MICROSYSTEMS INITIATIVE FY 01 PROJECTS
02/26/2001 - 03/31/2003 FY02: \$150,000 Total: \$290,000
Prin. Invest.: P DUTTA
Tech. Officer: GRC/M V ZELLER
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 2 1261 **OHIO STATE UNIV** **7706**
VISUALIZING TIME-VARYING DATA DISTRIBUTIONS IN EOS APPLICATIONS
04/26/2001 - 02/28/2003 FY02: \$66,661 Total: \$114,139
Prin. Invest.: H SHEN
Tech. Officer: ARC/D L KAO, ARC/V R WATSON
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 899 **OHIO STATE UNIV** **7707**
DEVELOPMENT OF ADVANCED SOLAR CELL TECHNOLOGY DEVELOPMENT OF ADVANCED SOLAR CELL TECHNOLOGY
06/20/2001 - 06/30/2002 FY02: \$7,000 Total: \$30,000
Prin. Invest.: S A RINGEL
Tech. Officer: GRC/E B CLARK
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 949 **OHIO STATE UNIV** **7708**
THERMALLY STABLE OHMIC CONTACTS ON 5H AND 6H-SiC MICRODEVICES FOR HIGH TEMPERATURE APPLICATIONS
03/29/2002 - 02/28/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: L BRILLSON
Tech. Officer: GRC/R S OKOJIE
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 974 **OHIO STATE UNIV** **7709**
ADVANCED III-V SPACE PHOTOVOLTAICS ON LATTICE-ENGINEERED SUBSTRATES
06/27/2002 - 06/30/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: S A RINGEL
Tech. Officer: GRC/E CLARK
CASE Category: 45 – ELECTRICAL ENGR

NGT 3 52363 **OHIO STATE UNIV** **7710**
GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RESEARCH PROGRAM
06/12/2000 - 09/18/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: P K DUTTA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 43 – CHEMICAL ENGR

NGT 3 52373 **OHIO STATE UNIV** **7711**
 GRADUATE STUDENT RESEARCH
 06/07/2001 - 08/31/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: V V SUBRAMANIAM
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 46 – MECHANICAL ENGR

NGT 5 131 **OHIO STATE UNIV** **7712**
 THE ROLE OF THE OCEAN IN CONVECTIVE BURST INITIA- TION &
 MAINTENANCE: IMPLICATIONS FOR TROPICAL CY
 06/06/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: J HOBGOOD
Tech. Officer: GSFC/M S BURRELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 30178 **OHIO STATE UNIV** **7713**
 METEOROLOGICAL PROCESSES CONTROLLING THE SPATIAL & TEMPORAL
 VARIABILITY OF NET ANNUAL ACCUMULATION:
 08/12/1999 - 08/31/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: E MOSLEY-THOMPSON
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 51 **OHIO STATE UNIV** **7714**
 ACID SULFATE DRAINAGE: A MODEL SYSTEM FOR UNDERSTA NDI NG
 POTENTIAL BIOMINERALIZATION PROCESSION MARS
 07/11/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: J BIGHAM
Tech. Officer: JSC/R MORRIS
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 1 2036 **OHIO UNIV** **7715**
 MODIFYING & TESTING ATC CONTROLLER INTERFACE (CI) FOR DATA LINK
 CLEARANCES
 03/24/1998 - 02/28/2001 FY02: -\$5,265 Total: \$381,716
Prin. Invest.: J M RANKIN, P MATTSON
Tech. Officer: LARC/R W WILLS
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 2299 **OHIO UNIV** **7716**
 HAPTICS-AUGMENTED SCIENCE EDUCATION
 05/16/2000 - 05/15/2001 FY02: \$0 Total: \$30,430
Prin. Invest.: R L WILLIAMS
Tech. Officer: LARC/J M SEATON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 1 01094 **OHIO UNIV** **7717**
 HAPTICS-AUGMENTED EDUCATION
 06/01/2001 - 05/31/2004 FY02: \$39,975 Total: \$53,975
Prin. Invest.: R L WILLIAMS
Tech. Officer: LARC/J M SEATON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2385 **OHIO UNIV** **7718**
 WEATHER DATALINK RESEARCH WEATHER DATALINK RESEARCH
 04/05/2000 - 07/10/2001 FY02: \$0 Total: \$199,976
Prin. Invest.: T A SKIDMORE
Tech. Officer: GRC/P E POINSATTE
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2575 **OHIO UNIV** **7719**
 AVIATION WEATHER DATALINK FLIGHT TEST EVALUATIONS RESEARCH
 AND DEVELOPMENT
 03/23/2001 - 10/19/2001 FY02: -\$2,384 Total: \$47,339
Prin. Invest.: T SKIDMORE
Tech. Officer: GRC/P POINSATTE
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2612 **OHIO UNIV** **7720**
 FLIGHT DEMONSTRATION OF A 3-DIMENSIONAL COCKPIT DI SPLAY OF
 TRAFFIC INFORMATION
 07/31/2001 - 09/23/2003 FY02: \$36,176 Total: \$72,043
Prin. Invest.: J RANKIN
Tech. Officer: GRC/B BREM
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 7645 **OHIO UNIV** **7721**
 FUNDING FOR 'ANALYSIS OF POLAR OERSTED, SUNSAT, MA DSAT, AND
 POGO DATA' (SENH98-0063)
 08/27/1998 - 12/31/2002 FY02: \$0 Total: \$224,500
Prin. Invest.: R R VON FRESE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10349 **OHIO UNIV** **7722**
 PROPOSAL #537 DEVELOP A DYNAMIC RESOURCE MANAGE- MENT AP-
 PROACH FOR ADAPTIVE AGENT-BASED REAL-TI
 02/05/2001 - 02/14/2003 FY02: \$199,469 Total: \$393,388
Prin. Invest.: L WELCH
Tech. Officer: GSFC/B B PFARR
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11025 **OHIO UNIV** **7723**
 COOLING FLOWS AND RADIO GALAXIES: THE CHANDRA ERA (LTSA 2000)
 06/13/2001 - 06/14/2005 FY02: \$103,000 Total: \$203,000
Prin. Invest.: B MCNAMARA
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 8 1789 **OHIO UNIV** **7724**
 FUTURE IMPROVEMENT OF A TRAJECTORY LINERIZATION FLIGHT CON-
 TROLLER FOR X-33
 03/06/2001 - 12/31/2002 FY02: \$0 Total: \$34,833
Prin. Invest.: J J ZHU
Tech. Officer: MSFC/D R KRUPP
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 5 00185 **OHIO UNIV** **7725**
 ADAPTIVE MANAGEMENT OF COMPUTING & NETWORK RESOURCES FOR
 REAL-TIME SENSOR WEBS.
 08/31/2000 - 12/31/2002 FY02: \$0 Total: \$342,988
Prin. Invest.: L WELCH
Tech. Officer: GSFC/B PFAR
CASE Category: 22 – COMPUTER SCIENCE

NAS 8 01105 **OHIO UNIV** **7726**
 THEORETICAL VALIDATION, FEV & IMPLEMETNATION OF AL GORITHMS, &
 PREFORMING SIMULATION TESTING
 05/18/2001 - 05/31/2003 FY02: \$982,687 Total: \$1,351,705
Prin. Invest.: J ZHU, D A LAWRENCE
Tech. Officer: MSFC/J M RANKIN
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 351 **OHIO UNIV** **7727**
 A DTED TERRAIN AVOIDANCE SYS UTILIZING GPS AND RADAR ALTIMETER
 MONITORING, RE NRA 98-LARC-10
 09/01/1999 - 12/31/2002 FY02: \$490,000 Total: \$1,443,000
Prin. Invest.: J M RANKIN, D DIGGLE, M U DE HAAG
Tech. Officer: LARC/R M HUESCHEN, LARC/R V PARRISH
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1030 **OHIO UNIV** **7728**
 WEATHER-RELATED PILOT DECISION-MAKING CONTEXT CATE GORIZA-
 TION
 03/25/1998 - 12/31/2000 FY02: -\$4,795 Total: \$127,591
Prin. Invest.: C E MCCOY
Tech. Officer: ARC/J M ORASANU
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1258 **OHIO UNIV** **7729**
 EXTREME DECISION-MAKING: WEATHER RELATED PILOT DEC ISION-
 MAKING
 04/20/2001 - 11/14/2001 FY02: -\$12,826 Total: \$64,373
Prin. Invest.: C E MCCOY
Tech. Officer: ARC/J ORASANU
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 3 680 **OHIO UNIV** **7730**
 A STUDY OF MULTI-USER TCPTRAFFIC OVER ACTS A STUDY OF MULTI-
 USER TCPTRAFFIC OVER ACTS
 03/10/1999 - 05/15/2001 FY02: -\$4,964 Total: \$85,971
Prin. Invest.: S OSTERMANN
Tech. Officer: GRC/W D IVANCIC
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2645 **OHIO WESLEYAN UNINERITY** **7731**
 IMPROVEMENTS TO CAMPUS INFRASTRUCTURE AT OHIO WESL EYAN UNIV
 10/23/2001 - 08/11/2003 FY02: \$1,497,000 Total: \$1,497,000
Prin. Invest.: W C LOUTHAN
Tech. Officer: GRC/F SAVINO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10453 **OHIO WESLEYAN UNINERITY** **7732**
 INFORMAL & UNDERGRADUATE SCIENCE EDUCATION OPPORT UNITIES AT
 OHIO WESLEYAN UNIV
 02/28/2001 - 02/28/2003 FY02: \$0 Total: \$1,373,000
Prin. Invest.: W LOUTHAN
Tech. Officer: HQ/J ROSENDHAL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 02003 **UNIV OF AKRON** **7733**
 CHARACTERIZATION OF DURABILITY OF POLYMER MATRIX COMPOSITES &
 ADHESIVE JOINTS IN CRYOTANK ENVIRONMT
 11/14/2001 - 11/13/2004 FY02: \$105,811 Total: \$105,811
Prin. Invest.: R B PIPES
Tech. Officer: LARC/E S WEISER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02035 **UNIV OF AKRON** **7734**
 POLYIMIDE/CARBON NANOCOMPOSITES
 01/15/2002 - 12/31/2002 FY02: \$58,286 Total: \$58,286
Prin. Invest.: F W HARRIS, L DAI
Tech. Officer: LARC/J W CONNELL
CASE Category: 12 – CHEMISTRY

NAG 3 2182 **UNIV OF AKRON** **7735**
 FAST POTENTIAL THEORETIC METHODS FOR FAR-FIELD SOU ND RADIA-
 TION PROBLEMS
 07/18/1998 - 06/30/2001 FY02: -\$123 Total: \$29,877
Prin. Invest.: D I HAIHARAN
Tech. Officer: GRC/J R SCOTT
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2279 **UNIV OF AKRON** **7736**
 SYSTEM AND PROPAGATION AVAILABILITY ANALYSIS FOR N ASA'S AD-
 VANCED AIR TRANSPORTATION TECHNOLOGIES (A
 07/12/1999 - 08/14/2001 FY02: -\$18,200 Total: \$55,900
Prin. Invest.: O C UGWEJE
Tech. Officer: GRC/R J ACOSTA
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2390 **UNIV OF AKRON** **7737**
 HIGH TEMPERATURE ADHESIVES AND STRUCTURAL RESINS HIGH TEM-
 PERATURE ADHESIVES AND STRUCTURAL RESINS
 04/12/2000 - 06/30/2001 FY02: \$0 Total: \$65,832
Prin. Invest.: F W HARRIS
Tech. Officer: GRC/C CHUANG
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2420 **UNIV OF AKRON** **7738**
 A NEW FINITE ELEMENT FORMULATION ANALYSIS OF AEROS PACE
 STRUCTURES
 05/11/2000 - 08/25/2003 FY02: \$1 Total: \$120,032
Prin. Invest.: S N PATNAIK
Tech. Officer: GRC/G R HALFORD
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2442 **UNIV OF AKRON** **7739**
 STEREO IMAGING VELOCIMETRY OF MIXING DRIVEN BY BUOYANCY
 INDUCED FLOW FIELDS
 05/23/2000 - 11/30/2003 FY02: \$35,561 Total: \$108,555
Prin. Invest.: C BATUR
Tech. Officer: GRC/W B DUVAL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2444 **UNIV OF AKRON** **7740**
 NE OHIO URBAN GROWTH MONITORING AND MODELING PROTOTYPE
 05/24/2000 - 09/30/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: D SIEBERT
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2494 **UNIV OF AKRON** **7741**
 COMPRESSOR SURGE INCEPTION AND SURGE DISCRIMINATIO N FROM
 TIME SERIES
 11/08/2000 - 04/27/2002 FY02: \$0 Total: \$44,519
Prin. Invest.: H K QAMMAR
Tech. Officer: GRC/M BRIGHT
CASE Category: 21 – MATHEMATICS

NAG 3 2512 **UNIV OF AKRON** **7742**
 GRAVITATIONAL INFLUENCES ON FLAME PROPAGATION THRO UGH NON-
 UNIFORM PRE-MIXED GAS SYSTEMS
 12/08/2000 - 11/30/2004 FY02: \$15,367 Total: \$32,055
Prin. Invest.: D PERRY
Tech. Officer: GRC/K R SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2537 **UNIV OF AKRON** **7743**
APPLICATION OF PERIODIC BOUNDARY CONDITIONS IN THE AEROACOUSTICS OF TURBOMACHINERY
02/08/2001 - 01/31/2004 FY02: \$25,077 Total: \$40,077
Prin. Invest.: S SAWYER
Tech. Officer: GRC/E ENVIA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2566 **UNIV OF AKRON** **7744**
INFRASTRUCTURE ADDITIONS FOR A POLYMER NANOTECHNOLOGY CENTER AT THE UNIV OF AKRON
03/16/2001 - 12/31/2002 FY02: \$0 Total: \$998,000
Prin. Invest.: F N KELLEY
Tech. Officer: GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2572 **UNIV OF AKRON** **7745**
LOW MELT VISCOSITY RESINS FOR RESIN TRANSFER MOLDING
03/22/2001 - 01/31/2002 FY02: \$0 Total: \$44,637
Prin. Invest.: F W HARRIS
Tech. Officer: GRC/C CHUANG
CASE Category: 12 – CHEMISTRY

NAG 3 2632 **UNIV OF AKRON** **7746**
DEVELOPMENT OF AN OPTICAL REAL-TIME POLARIMETRIC IMAGING SYSTEM FOR AEROSPACE APPLICATIONS
06/07/2001 - 05/31/2002 FY02: \$6,527 Total: \$64,950
Prin. Invest.: G C GIAKOS
Tech. Officer: GRC/D NG
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 2777 **UNIV OF AKRON** **7747**
PERFORMANCE OF FORCE AND DISPLACEMENT METHODS IN THE DESIGN OPTIMIZATION OF FLEXURAL STRUCTURES
05/06/2002 - 03/31/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: S N PATNAIK
Tech. Officer: GRC/G R HALFORD
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 02002 **UNIV OF AKRON** **7748**
CYBER SIMULATION FOR COMPOSITE MATERIALS AND STRUCTURES IN AERONAUTICS AND AEROSPACE
12/05/2001 - 12/31/2004 FY02: \$138,334 Total: \$138,334
Prin. Invest.: B R PIPES
Tech. Officer: LARC/J H STARNES, JR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02003 **UNIV OF AKRON** **7749**
EXPERIMENTS AND MODELS FOR POLYMERIC MICROSPHERE FOAMS
12/18/2001 - 12/31/2004 FY02: \$87,252 Total: \$87,252
Prin. Invest.: R B PIPES
Tech. Officer: LARC/E S WEISER
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 2 1325 **UNIV OF AKRON** **7750**
LEXICAL ACCESS AND DUAL TASK PERFORMANCE DETERMINING THE LOCUS OF THE BOTTLENECK
03/13/2002 - 03/31/2003 FY02: \$23,924 Total: \$23,924
Prin. Invest.: P ALLEN
Tech. Officer: ARC/E RUTHRUFF, ARC/R W REMINGTON
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 3 567 **UNIV OF AKRON** **7751**
DETERMINATION OF OPTIMUM HEATING ZONE LENGTH & CONTROL TERMOCOUPLE PLACEMENT FOR GRIDMAN CRYSTAL G
07/01/1997 - 07/31/2001 FY02: -\$76 Total: \$38,921
Prin. Invest.: C BATUR
Tech. Officer: GRC/W B DUVAL
CASE Category: 46 – MECHANICAL ENGR

NCC 3 578 **UNIV OF AKRON** **7752**
ENHANCEMENTS TO NURBS-BASED FE AIRFOIL MODLER-SAB ER
10/24/1997 - 11/30/2002 FY02: \$69,590 Total: \$307,666
Prin. Invest.: A F SALEEB, D A TROWBRIDGE
Tech. Officer: GRC/S A THORP
CASE Category: 46 – MECHANICAL ENGR

NCC 3 716 **UNIV OF AKRON** **7753**
THEORY, MODELING, SOFTWARE AND HARDWARE DEVELOPMENT IN COMPUTATIONAL MATERIALS SCIENCE
06/25/1999 - 07/06/2003 FY02: \$164,726 Total: \$523,420
Prin. Invest.: G W YOUNG
Tech. Officer: GRC/A CHAIT
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 744 **UNIV OF AKRON** **7754**
DESIGN, PROGRESSIVE MODELING, MANUFACTURE, AND TESTING OF COMPOSITE SHIELD FOR TURBINE ENGINE BLADE
12/01/1999 - 11/17/2001 FY02: \$0 Total: \$363,515
Prin. Invest.: E SANCAKTAR
Tech. Officer: GRC/G D ROBERTS
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 752 **UNIV OF AKRON** **7755**
STUDIES ON STRESS-STRAIN RELATIONSHIPS OF POLYMERIC MATERIALS USED IN SPACE APPLICATIONS
12/28/1999 - 09/30/2001 FY02: \$0 Total: \$234,212
Prin. Invest.: S C JANA
Tech. Officer: GRC/A FREED
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 765 **UNIV OF AKRON** **7756**
DEVELOPMENT OF EFFICIENT NUMERICAL ALGORITHMS FOR PREDICTION OF FAR-FIELD ACOUSTIC NOISE
02/07/2000 - 01/02/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: K KREIDER
Tech. Officer: GRC/J SCOTT
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 768 **UNIV OF AKRON** **7757**
ADVANCED STRUCTURAL, IMPACT AND LIFE ANALYSES OF AEROSPACE COMPONENTS
02/02/2000 - 02/28/2003 FY02: \$194,102 Total: \$494,419
Prin. Invest.: V K ARYA
Tech. Officer: GRC/G R HALFORD
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 788 **UNIV OF AKRON** **7758**
DEFORMATION AND LIFE OF POLYMER MATRIX COMPOSITE (PMC) FLYWHEEL ROTORS
03/27/2000 - 08/28/2002 FY02: \$16,333 Total: \$113,265
Prin. Invest.: D F SALEEB
Tech. Officer: GRC/A ARNOLD
CASE Category: 46 – MECHANICAL ENGR

NCC 3 794 **UNIV OF AKRON** **7759**
 HOMOPOLYROTAXANES AND HOMOPOLYROTAXAND NETWORKS OF PEO
 04/20/2000 - 11/17/2002 FY02: \$91,395 Total: \$257,193
Prin. Invest.: C PUGH
Tech. Officer: GRC/M MEADOR
CASE Category: 12 – CHEMISTRY

NCC 3 802 **UNIV OF AKRON** **7760**
 POLYMER SOLID ELECTROLYTES FOR RECHARGEABLE BATTERIES
 05/23/2000 - 11/17/2002 FY02: \$103,186 Total: \$256,613
Prin. Invest.: F W HARRIS
Tech. Officer: GRC/M MEADOR
CASE Category: 12 – CHEMISTRY

NCC 3 808 **UNIV OF AKRON** **7761**
 DEFECT DETECTION SCHEMES AND ALGORITHMIC DEVELOPMENT FOR
 LARGE-SCALE SIMULATIONS OF DAMAGING VISCO-
 06/16/2000 - 03/14/2003 FY02: \$226,034 Total: \$623,034
Prin. Invest.: A F SALEEB
Tech. Officer: GRC/S M ARNOLD
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 820 **UNIV OF AKRON** **7762**
 MODEL-BASED CONTROL OF BATTERIES AND FUEL CELLS FOR LONGER
 LIFE
 08/09/2000 - 02/28/2002 FY02: \$0 Total: \$112,644
Prin. Invest.: D T HARTLEY
Tech. Officer: GRC/M MANZO
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 828 **UNIV OF AKRON** **7763**
 RESEARCH AND DEVELOPMENT OF IMPROVED RF SIGNAL SWITCHING
 AND DISTRIBUTION TECHNIQUES IN CIVILAVIATION
 09/29/2000 - 09/30/2001 FY02: -\$1,626 Total: \$23,113
Prin. Invest.: O C UGWUJE
Tech. Officer: GRC/H NGUYEN
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 831 **UNIV OF AKRON** **7764**
 DESIGN OPTIMIZATION OF STRUCTURAL PANELS WITH ANALYSIS APPROXIMATORS AT THE SUBPROBLEM LEVEL
 12/12/2000 - 11/30/2002 FY02: \$86,236 Total: \$173,040
Prin. Invest.: S N PATNAIK
Tech. Officer: GRC/D HOPKINS
CASE Category: 46 – MECHANICAL ENGR

NCC 3 839 **UNIV OF AKRON** **7765**
 RESEARCH IN INNOVATIVE USE OF SMART MATERIALS IN PULSION
 SYSTEM COMPONENTS-CONTROL AND EXPERIMENTATION
 12/20/2000 - 12/31/2002 FY02: \$83,571 Total: \$152,233
Prin. Invest.: G SONG
Tech. Officer: GRC/H LEE
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 877 **UNIV OF AKRON** **7766**
 HIGH TEMPERATURE FUEL CELLS
 03/14/2001 - 03/05/2003 FY02: \$240,000 Total: \$404,334
Prin. Invest.: R K EBY
Tech. Officer: GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 929 **UNIV OF AKRON** **7767**
 NON-CONTRACTING PASSIVE-ADAPTIVE TURBINE FINGER SEAL DEVELOPMENT
 01/03/2002 - 09/30/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: M J BRAUN
Tech. Officer: GRC/M P PROCTOR
CASE Category: 46 – MECHANICAL ENGR

NCC 3 932 **UNIV OF AKRON** **7768**
 FEA STUDY OF IMPACT-PENETRATION FOR LIGHTWEIGHT JET ENGINE
 CONTAINMENT
 12/28/2001 - 12/31/2002 FY02: \$115,039 Total: \$115,039
Prin. Invest.: W K BINIENDA
Tech. Officer: GRC/G D ROBERTS
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 968 **UNIV OF AKRON** **7769**
 POLYIMIDE AND EPOXY BASED NANOCOMPOSITES WITH NANO FIBERS
 AND EXFOLIATED CLAY
 05/31/2002 - 11/30/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D H RENEKER
Tech. Officer: GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 992 **UNIV OF AKRON** **7770**
 EXTEND THE BASE CAPABILITIES OF "COMPARE" TO INCLUDE DAMAGE
 MODELING
 07/30/2002 - 07/31/2003 FY02: \$73,000 Total: \$73,000
Prin. Invest.: A SALEEB
Tech. Officer: GRC/S M ARNOLD
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 998 **UNIV OF AKRON** **7771**
 MODEL-BASED CONTROL OF BATTERIES AND FUEL CELLS FOR LONGER
 LIFE
 09/06/2002 - 12/31/2002 FY02: \$30,322 Total: \$30,322
Prin. Invest.: T T HARTLEY
Tech. Officer: GRC/T B MILLER
CASE Category: 45 – ELECTRICAL ENGR

NGT 3 52364 **UNIV OF AKRON** **7772**
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RESEARCH PROGRAM
 06/13/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D PERRY
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 12 – CHEMISTRY

NAG 2 1581 **UNIV OF CINCINNATI** **7773**
 AIRCRAFT AND AIRSPACE MODELING APPROACHES TO CAPACITY ENHANCEMENT IN AIR MANAGEMENT
 09/20/2002 - 09/14/2003 FY02: \$15,306 Total: \$15,306
Prin. Invest.: G L SLATER
Tech. Officer: ARC/T J DAVIS, ARC/T FARLEY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2437 **UNIV OF CINCINNATI** **7774**
 OHIOVIEW UNDERGRADUATE DISTANCE LEARNING PROTOTYPE OHIOVIEW UNDERGRADUATE DISTANCE LEARNING PROTOTYPE
 05/22/2000 - 09/30/2001 FY02: -\$78 Total: \$359,922
Prin. Invest.: D BECK
Tech. Officer: GRC/T SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2451 **UNIV OF CINCINNATI** **7775**
 MICROSCOPIC FLOW VISUALIZATION IN DE-MIXING FLUIDS DURING POLY-
 MERIC MEMBRANE FORMATION IN LOW-G
 06/01/2000 - 11/30/2003 FY02: \$95,000 Total: \$240,000
Prin. Invest.: W B KRANTZ
Tech. Officer: GRC/H C DEGROH
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2462 **UNIV OF CINCINNATI** **7776**
 INTEGRATED ATOMIZER/SWIRLER FOR LEAN DIRECT INJECT ION COMBUS-
 TION
 06/14/2000 - 06/18/2003 FY02: \$157,791 Total: \$279,000
Prin. Invest.: S JENG
Tech. Officer: GRC/R R TACINA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2487 **UNIV OF CINCINNATI** **7777**
 A SIMULATION STUDY OF SIGE HBTS FOR POWER APPLICAT IONS AT
 MICROWAVE FREQUENCIES
 09/27/2000 - 09/07/2003 FY02: \$49,854 Total: \$147,693
Prin. Invest.: K P ROENKER
Tech. Officer: GRC/G E PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2669 **UNIV OF CINCINNATI** **7778**
 EFFECTS OF EXIT BOUNDARY CONDITIONS ON PULSE DETON ATION
 ENGINE PERFORMANCE
 11/30/2001 - 11/16/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: E J GUTMARK
Tech. Officer: GRC/H D PERKINS
CASE Category: 46 – MECHANICAL ENGR

NAG 5 8986 **UNIV OF CINCINNATI** **7779**
 ULTRA-HOT WINDS FROM DO WHITE DWARFS - FUSE
 01/27/2000 - 01/31/2003 FY02: \$0 Total: \$10,600
Prin. Invest.: M L SITKO
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9418 **UNIV OF CINCINNATI** **7780**
 ORDOVICIAN BIODIVERSITY: GEOGRAPHY AND ENVIRONMENT
 04/11/2000 - 06/30/2003 FY02: \$50,900 Total: \$149,748
Prin. Invest.: A I MILLER
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9475 **UNIV OF CINCINNATI** **7781**
 IR SPECTROSCOPY OF DUSTY PROTOSTELLAR DISKS
 04/20/2000 - 04/30/2003 FY02: \$60,000 Total: \$180,000
Prin. Invest.: M SITKO
Tech. Officer: GSFC/J BOYCE
CASE Category: 13 – PHYSICS

NAG 5 10384 **UNIV OF CINCINNATI** **7782**
 DYNAMICS AND CONTROL OF DISTRIBUTED SPACECRAFT.
 02/07/2001 - 12/14/2002 FY02: \$90,174 Total: \$197,149
Prin. Invest.: T WILLIAMS
Tech. Officer: GSFC/D FOLTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11684 **UNIV OF CINCINNATI** **7783**
 "A DIAGNOSTIC STUDY OF POSSIBLE ENHANCEMENT OF THE HYDRO-
 LOGIC CYCLE"
 02/07/2002 - 02/14/2005 FY02: \$90,000 Total: \$90,000
Prin. Invest.: S ISLAM
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 3 01120 **UNIV OF CINCINNATI** **7784**
 DEVELOPMENT OF AN INTEGRATED LOOP HEAT PIPE, USING COHERENT
 POROUS SILICON AS A WICK
 03/21/2001 - 12/31/2002 FY02: \$110,000 Total: \$229,999
Prin. Invest.: T HENSEN
Tech. Officer: GRC/E GOLLIHER
CASE Category: 46 – MECHANICAL ENGR

NAS 3 02113 **UNIV OF CINCINNATI** **7785**
 NRA INTERGRATION OF PULSE DETONATION ENGINE (PDE) WITH AIR-
 FRAME FOR POWER LIFT
 04/15/2002 - 01/15/2003 FY02: \$99,994 Total: \$99,994
Prin. Invest.: E J GUTMARK
Tech. Officer: GRC/L S HULTGREN, GRC/D ERCEGOVIC
CASE Category: 41 – AERONAUTICAL ENGR

NAS 3 02130 **UNIV OF CINCINNATI** **7786**
 NRA AWARD FOR STUDY "ADVANCED POROUS ACOUSTIC LINE FOR
 EFFECTIVE FAN AND TURBINE NOISE SUPPRESSION
 04/16/2002 - 01/16/2003 FY02: \$99,994 Total: \$99,994
Prin. Invest.: E J GUTMARK
Tech. Officer: GRC/C QUINN, GRC/J E GRADY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1139 **UNIV OF CINCINNATI** **7787**
 ADVANCED TRAJECTORY ANALYSIS WITH APPLICATION TO A IR TRAFFIC
 CONTROL
 09/03/1999 - 07/31/2002 FY02: \$39,591 Total: \$142,203
Prin. Invest.: G L SLATER
Tech. Officer: ARC/T J DAVIS, ARC/D R ISAACSON
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 981 **UNIV OF CINCINNATI** **7788**
 MARS EXTRA-VEHICULAR ACTIVITY (EVA) MARS EXTRA-VEHICULAR ACTIV-
 ITY (EVA)
 07/17/2002 - 07/07/2004 FY02: \$88,966 Total: \$88,966
Prin. Invest.: R BECK
Tech. Officer: GRC/C T RAMOS
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 3 52383 **UNIV OF CINCINNATI** **7789**
 GRADUATE STUDENT RESEARCHERS PROGRAM - NANOWIRES F OR
 PHOTOVOLTAIC AND NANO-ELECTRIC DEVICES
 08/15/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C BURDA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 12 – CHEMISTRY

NGT 5 30108 **UNIV OF CINCINNATI** **7790**
 SPACE-TIME CHARACTERIZATION OF REMOTELY SENSED SOI L MOISTURE
 02/10/1998 - 09/30/2001 FY02: -\$5 Total: \$65,995
Prin. Invest.: S ISLAM
Tech. Officer: GSFC/G ASRAR
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30453 **UNIV OF CINCINNATI** **7791**
 A DIAGNOSTIC STUDY OF A POSSIBLE ACCELERATION OF THE HYDRO-
 LOGIC CYCLE. STUDENT: DAVID L. SMALL
 08/20/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S ISLAM
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50265 **UNIV OF CINCINNATI** **7792**
 NEGATIVE REGULATION OF OSTEOCLASTOGENESIS BY ESTROGENS VIA
 DIRECT ACTIONS ON HEMATOPOIETIC CELLS
 07/07/1999 - 06/30/2001 FY02: -\$1,477 Total: \$42,523
Prin. Invest.: J W PIKE
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2318 **UNIV OF DAYTON** **7793**
 QUALITY OF SERVICE FOR REAL-TIME APPLICATIONS OVER NEXT GEN-
 ERATION DATA NETWORKS
 02/09/2000 - 12/31/2000 FY02: -\$12,243 Total: \$117,757
Prin. Invest.: M ATIQUZZAMAN
Tech. Officer: GRC/W D IVANCIC
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9804 **UNIV OF DAYTON** **7794**
 STUDIES WITH SYNTHETIC INTERSTELLAR DIAMOND: RARE GAS INCOR-
 PORATION AND PHASE STABILITY
 07/14/2000 - 07/14/2003 FY02: \$32,000 Total: \$92,000
Prin. Invest.: A PHELPS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9808 **UNIV OF DAYTON** **7795**
 FE-MG CARBONATES AS A MONITOR PHASE OF CARBON DIOXIDE AND
 OXYGEN FUGACITY ON MARS
 07/17/2000 - 06/30/2003 FY02: \$23,000 Total: \$68,000
Prin. Invest.: A M KOZIOL
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAS 1 99148 **UNIV OF DAYTON** **7796**
 OPERATIONS AND MODELING ANALYSIS
 09/27/1999 - 09/30/2003 FY02: \$143,691 Total: \$294,191
Prin. Invest.: C E EBELING
Tech. Officer: LARC/W D MORRIS
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 3 771 **UNIV OF DAYTON** **7797**
 A FERROELECTRIC TUNABLE PRE-SELECT FILTER/LNA HYBRID CIRCUIT
 WITH A VOLTAGE CONTROLLABLE IMPEDANCE
 02/10/2000 - 11/08/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: G SUBRAMANYAM
Tech. Officer: GRC/F MIRANDA
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 882 **UNIV OF DAYTON** **7798**
 DESIGN OF FREQUENCY AGILE COMPONENTS USING PATTERNED FER-
 ROELECTRIC FILMS FOR K- AND KA-BAND APPLICATIONS
 04/18/2001 - 12/04/2001 FY02: \$0 Total: \$22,633
Prin. Invest.: G SUBRAMANYAM
Tech. Officer: GRC/F A MIRANDA
CASE Category: 45 – ELECTRICAL ENGR

NGT 3 52351 **UNIV OF DAYTON** **7799**
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE-
 SEARCH PROGRAM
 06/23/1999 - 07/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: V JAIN
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2244 **UNIV OF TOLEDO** **7800**
 DEV DYNAM CONFIGURABLE OBJ-ORIENTED FRAMEWORK FOR DISTRIBUTED
 MULTI-MODAL COMPUTATIONAL AEROSPACE SYSTEMS SIMULATION
 09/23/1999 - 08/31/2002 FY02: \$0 Total: \$207,104
Prin. Invest.: A AETEH, V A REED
Tech. Officer: LARC/W K GERDES
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2269 **UNIV OF TOLEDO** **7801**
 DEVELOPMENT OF NOVEL METHODS FOR THE REDUCTION OF NOISE AND
 WEIGHT IN HELICOPTER TRANSMISSIONS
 06/29/1999 - 06/30/2002 FY02: \$0 Total: \$320,052
Prin. Invest.: T G KEITH
Tech. Officer: GRC/T L KRANTZ
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2338 **UNIV OF TOLEDO** **7802**
 CHEMISTRY OF AVIATION FUELS CHEMISTRY OF AVIATION FUELS
 02/23/2000 - 12/31/2002 FY02: \$155,625 Total: \$445,039
Prin. Invest.: K L DEWITT
Tech. Officer: GRC/M RABINOWITZ
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2408 **UNIV OF TOLEDO** **7803**
 INVESTIGATION OF PRESSURIZED WAVE BEARING INVESTIGATION OF
 PRESSURIZED WAVE BEARING
 05/01/2000 - 12/31/2002 FY02: \$65,000 Total: \$141,138
Prin. Invest.: T G KEITH
Tech. Officer: GRC/D P FLEMING
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2409 **UNIV OF TOLEDO** **7804**
 DISSEMINATION OF REMOTE SENSING TECHNOLOGY IN NORTHWEST
 OHIO THROUGH EDUCATIONAL AND COMMUNITY OUTREACH
 05/04/2000 - 09/30/2001 FY02: \$0 Total: \$105,000
Prin. Invest.: D P CZAJKOWSKI
Tech. Officer: GRC/T M SCOTT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2502 **UNIV OF TOLEDO** **7805**
 DEVELOPMENT OF COMPUTATIONAL AEROACOUSTICS CODE FOR JET
 AND FAN NOISE AND FLOW PREDICTION
 11/07/2000 - 10/31/2002 FY02: \$132,221 Total: \$261,903
Prin. Invest.: T G KEITH
Tech. Officer: GRC/E ENVIA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2505 **UNIV OF TOLEDO** **7806**
 CFD SIMULATION OF CASING TREATMENT OF AXIAL FLOW COMPRES-
 SORS
 11/13/2000 - 11/12/2002 FY02: \$138,546 Total: \$273,196
Prin. Invest.: T G KEITH
Tech. Officer: GRC/J ADMACZYK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2507 **UNIV OF TOLEDO** **7807**
 DEVELOPMENT OF ADVANCED CASING TREATMENTS FOR FLOW CONTROL
 11/20/2000 - 11/05/2001 FY02: \$0 Total: \$119,190
Prin. Invest.: T G KEITH, JR.
Tech. Officer: GRC/M D HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2508 **UNIV OF TOLEDO** **7808**
 ESTABLISHMENT OF A DATA EXCHANGE MECHANISM FOR ZOO MING IN THE NPSS ARCHITECTURE
 11/29/2000 - 11/15/2001 FY02: \$0 Total: \$60,014
Prin. Invest.: A A AFJEH
Tech. Officer: GRC/G J FOLLEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2565 **UNIV OF TOLEDO** **7809**
 CRYOGENIC NANOELECTRONICS FOR SPACE BORNE POWER SYSTEMS
 03/14/2001 - 03/14/2003 FY02: \$45,180 Total: \$67,473
Prin. Invest.: V J KAPOOR
Tech. Officer: GRC/R L PATTERSON
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2594 **UNIV OF TOLEDO** **7810**
 SIMULATION OF COORDINATED SATELLITE OPERATION
 04/17/2001 - 04/02/2004 FY02: \$75,000 Total: \$124,999
Prin. Invest.: D D JOHNSON
Tech. Officer: GRC/J D STEGEMAN
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 3 2641 **UNIV OF TOLEDO** **7811**
 INVESTIGATION OF DYNAMIC FORCE/VIBRATION TRANSMISSION CHARACTERISTICS OF FOUR-SQUARE TYPE GEAR DURA
 07/16/2001 - 03/31/2002 FY02: \$0 Total: \$31,295
Prin. Invest.: A KAHRAMAN
Tech. Officer: GRC/R HANDSCHUH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2646 **UNIV OF TOLEDO** **7812**
 ADVANCED CONCEPTS RESEARCH FOR FLYWHEEL TECHNOLOGY APPLICATIONS
 08/30/2001 - 05/08/2003 FY02: \$127,648 Total: \$177,647
Prin. Invest.: T G KEITH
Tech. Officer: GRC/R F BEACH
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2673 **UNIV OF TOLEDO** **7813**
 REVIEW OF NASA-GLENN COMPRESSOR RESEARCH REVIEW OF NASA-GLENN COMPRESSOR RESEARCH
 12/11/2001 - 06/30/2002 FY02: \$19,661 Total: \$19,661
Prin. Invest.: T G KEITH
Tech. Officer: GRC/A J STRAZISAR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2674 **UNIV OF TOLEDO** **7814**
 SULFUR OXIDATION AND CONTRAIL PRECURSOR CHEMISTRY SULFUR OXIDATION AND CONTRAIL PRECURSOR CHEMISTRY
 12/14/2001 - 10/14/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: K DEWITT
Tech. Officer: GRC/M J RABINOWITZ
CASE Category: 12 – CHEMISTRY

NAG 3 2756 **UNIV OF TOLEDO** **7815**
 RESEARCH INITIATIVES INVOLVING ADVANCED ELECTROMECHANICAL COMPONENTS
 03/28/2002 - 03/20/2003 FY02: \$126,234 Total: \$126,234
Prin. Invest.: T G KEITH
Tech. Officer: GRC/A F KASCAK
CASE Category: 46 – MECHANICAL ENGR

NAG 5 3248 **UNIV OF TOLEDO** **7816**
 THE EFFECT OF ROTATION ON STELLAR WINDS: ASYMMETRIES AND BIPOLAR STRUCTURES IN CIRCUMSTELLAR ENVIRONMENTS
 10/09/1996 - 08/31/2001 FY02: \$0 Total: \$400,000
Prin. Invest.: J E BJORKMAN
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 4338 **UNIV OF TOLEDO** **7817**
 NEAR-IR EMISSION AND ABSORPTION CHARACTERISTICS OF MANTLE MATERIALS
 04/21/1997 - 03/31/2001 FY02: -\$10,310 Total: \$145,690
Prin. Invest.: D N WITT
Tech. Officer: GSFC/H THRONSON
CASE Category: 11 – ASTRONOMY

NAG 5 4957 **UNIV OF TOLEDO** **7818**
 THE EVOLUTION OF INTERSTELLAR GAS - MASSIVE STARS
 06/27/1997 - 06/30/2003 FY02: \$0 Total: \$420,154
Prin. Invest.: S R FEDERMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6624 **UNIV OF TOLEDO** **7819**
 MAPPING THE DIFFUSE GALACTIC LIGHT AND EXTENDED RED EMISSION WITH PIONEER10 AND 11
 11/20/1997 - 12/31/2000 FY02: -\$6,730 Total: \$96,322
Prin. Invest.: A WITT
Tech. Officer: GSFC/J LING
CASE Category: 11 – ASTRONOMY

NAG 5 7754 **UNIV OF TOLEDO** **7820**
 OSCILLATOR STRENGTHS FOR ULTRAVIOLET ATOMIC AND MOLECULAR TRANSITIONS
 11/25/1998 - 06/30/2001 FY02: \$0 Total: \$117,462
Prin. Invest.: S R FEDERMAN
Tech. Officer: GSFC/H HASAN
CASE Category: 11 – ASTRONOMY

NAG 5 8052 **UNIV OF TOLEDO** **7821**
 TERRESTRIAL ENVIRONMENT VARIABLES DERIVED FROM EOS PLATFORM SENSORS
 01/15/1999 - 01/31/2002 FY02: \$0 Total: \$156,377
Prin. Invest.: K P CZAJKOWSKI
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8054 **UNIV OF TOLEDO** **7822**
 CIRCUMSTELLAR ENVIRONMENTS OF HIGH- AND INTERMEDIATE-MASS STARS: FROM THE PRE-MAIN-SEQUENCE TO LB
 01/19/1999 - 01/14/2004 FY02: \$98,994 Total: \$385,182
Prin. Invest.: K S BJORKMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8183 **UNIV OF TOLEDO** **7823**
 DUST AND CONDENSATE CLOUDS IN THE MARTIAN POLAR RE GIONS
 02/16/1999 - 08/31/2003 FY02: \$0 Total: \$178,600
Prin. Invest.: P B JAMES
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8671 **UNIV OF TOLEDO** **7824**
 USE OF THERMAL INFRARED SATELLITE DATA IN CLIMATE CHANGE
 STUDIES
 07/08/1999 - 07/14/2003 FY02: \$0 Total: \$334,317
Prin. Invest.: K P CZAJKOWSKI
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8794 **UNIV OF TOLEDO** **7825**
 THE GEOMETRY AND EVOLUTION OF LOW-MASS STAR FORMAT ION (ATP
 98)
 09/07/1999 - 09/14/2003 FY02: \$0 Total: \$61,782
Prin. Invest.: J E BJORKMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8961 **UNIV OF TOLEDO** **7826**
 MOLECULAR HYDROGEN EXCITATION IN PHOTODISSOCIATION REGIONS -
 FUSE
 01/21/2000 - 10/31/2001 FY02: \$0 Total: \$74,200
Prin. Invest.: S R FEDERMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9202 **UNIV OF TOLEDO** **7827**
 MOVING BEYOND THE STANDARD PARADIGM: THE IMPORTANC E OF
 INTERSTELLAR DUST FROM THE MILKY WAY TO HIGH
 03/14/2000 - 03/14/2003 FY02: \$35,332 Total: \$101,190
Prin. Invest.: A WITT
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9376 **UNIV OF TOLEDO** **7828**
 INTERSTELLAR DUST IN GALAXIES (LTSA - 99)
 04/11/2000 - 04/14/2005 FY02: \$97,186 Total: \$284,299
Prin. Invest.: A N WITT
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10305 **UNIV OF TOLEDO** **7829**
 EFFECTS OF STAR FORMATION & STELLAR DEATH ON INTER STELLAR
 GAS ASSOCIATED WITH CEP OB2 (FUSE00)
 01/29/2001 - 01/31/2003 FY02: \$0 Total: \$36,800
Prin. Invest.: S R FEDERMAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11440 **UNIV OF TOLEDO** **7830**
 OSCILLATOR STRENGTHS FOR ULTRAVIOLET ATOMIC AND MOLECULAR
 TRANSITIONS
 12/04/2001 - 12/31/2005 FY02: \$78,000 Total: \$78,000
Prin. Invest.: S R FEDERMAN
Tech. Officer: GSFC/H HASAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12186 **UNIV OF TOLEDO** **7831**
 CONDENSATES AND DUST IN THE POLAR REGIONS OF MARS: MOC WIDE
 ANGLE DATA
 05/13/2002 - 05/14/2005 FY02: \$73,233 Total: \$73,233
Prin. Invest.: P JAMES
Tech. Officer: GSFC/J BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12320 **UNIV OF TOLEDO** **7832**
 MASS LOSS IN DENEK (FUSE 2001)
 08/06/2002 - 08/14/2003 FY02: \$23,700 Total: \$23,700
Prin. Invest.: N D MORRISON
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 8 1380 **UNIV OF TOLEDO** **7833**
 FOR RESEARCH ENTITLED "SEARCHING FOR THE BEST PROTEIN CRYSTALS"
 06/19/1997 - 07/31/2001 FY02: \$0 Total: \$604,995
Prin. Invest.: G BORGOTAH
Tech. Officer: MSFC/B GUYNES, MSFC/J MAYO
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1578 **UNIV OF TOLEDO** **7834**
 INFLUENCE OF IMPURITIES ON PROTEIN CRYSTAL GROWTH
 01/28/1999 - 11/30/2002 FY02: \$114,000 Total: \$421,600
Prin. Invest.: C A SCHALL
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1825 **UNIV OF TOLEDO** **7835**
 SEARCHING FOR THE BEST PROTEIN CRYSTALS; INTE- GRATION OF
 SYNCHRONTRON-BASED CRYSTAL MEASUREMENTS
 08/29/2001 - 11/30/2004 FY02: \$354,000 Total: \$455,000
Prin. Invest.: G E BORGSTAHL
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1838 **UNIV OF TOLEDO** **7836**
 OPTIMIZATION OF CRYOGENIC COOLING OF PROTEIN CRYSTALS
 10/04/2001 - 11/30/2004 FY02: \$313,000 Total: \$313,000
Prin. Invest.: C SCHALL
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 3 01116 **UNIV OF TOLEDO** **7837**
 AEROELASTIC MODELING AND ANALYSIS OF UEET FAN AND COMPRESSOR
 DESIGN
 06/18/2001 - 09/18/2004 FY02: \$277,500 Total: \$332,500
Prin. Invest.: T KEITH
Tech. Officer: GRC/J MINNS
CASE Category: 46 – MECHANICAL ENGR

NCC 3 524 **UNIV OF TOLEDO** **7838**
 COMPUTATIONAL SIMULATION OF COMPOSITE BEHAVIOR
 12/26/1996 - 12/11/2002 FY02: \$141,003 Total: \$726,530
Prin. Invest.: T G KEITH
Tech. Officer: GRC/P MURTHY
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 527 **UNIV OF TOLEDO** **7839**
 AEROELASTIC ANALYSIS FOR AEROPROPULSION APPLICATIONS
 12/26/1996 - 06/30/2001 FY02: \$0 Total: \$234,068
Prin. Invest.: T G KEITH, JR.
Tech. Officer: GRC/O MEHMED, GRC/G L STEFKO
CASE Category: 46 – MECHANICAL ENGR

NCC 3 605 **UNIV OF TOLEDO** **7840**
 AEROELASTIC STABILITY AND RESPONSE OF ROTATING STRUCTURES
 04/03/1998 - 12/31/2002 FY02: \$115,000 Total: \$518,759
Prin. Invest.: T KEITH
Tech. Officer: GRC/O MEHMED
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 717 **UNIV OF TOLEDO** **7841**
 MULTI-STAGE AEROELASTIC ANALYSIS FOR PROPULSION MULTI-STAGE
 AEROELASTIC ANALYSIS FOR PROPULSION
 06/29/1999 - 11/19/2001 FY02: \$0 Total: \$127,731
Prin. Invest.: T G KEITH, JR.
Tech. Officer: GRC/O MEHMED
CASE Category: 46 – MECHANICAL ENGR

NCC 3 719 **UNIV OF TOLEDO** **7842**
 CENTRIFUGAL COMPRESSOR AEROELASTIC ANALYSIS CODEE CENTRIFUGAL
 COMPRESSOR AEROELASTIC ANALYSIS CODEE
 06/24/1999 - 02/15/2002 FY02: \$1 Total: \$168,730
Prin. Invest.: T G KEITH
Tech. Officer: GRC/D C JANETZKE
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 774 **UNIV OF TOLEDO** **7843**
 ACTIVE CONTROL ANALYSIS FOR AEROELASTIC INSTABILITIES IN TURBO-
 MACHINES
 02/14/2000 - 11/01/2001 FY02: \$0 Total: \$115,916
Prin. Invest.: T KEITH
Tech. Officer: GRC/D JANETZKE
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 855 **UNIV OF TOLEDO** **7844**
 NEXT GENERATION OF HALL THRUSTERS FOR SPACE PROPULSION
 01/25/2001 - 10/18/2002 FY02: \$114,548 Total: \$261,710
Prin. Invest.: T G KEITH
Tech. Officer: GRC/D REDDY
CASE Category: 13 – PHYSICS

NCC 3 881 **UNIV OF TOLEDO** **7845**
 MICROWAVE LOW NOISE AMPLIFIER USING SILICON GERMANIUM NANOTECHNOLOGY
 03/26/2001 - 10/15/2003 FY02: \$25,000 Total: \$104,632
Prin. Invest.: V J KAPOOR
Tech. Officer: GRC/G E PONCHAK
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 907 **UNIV OF TOLEDO** **7846**
 NOVEL DAMPING CONCEPTS FOR MECHANICAL BACKUP BEARINGS AND
 PASSIVE MAGNETICALLY SUSPENDED ROTORS
 08/02/2001 - 10/31/2002 FY02: \$69,244 Total: \$104,244
Prin. Invest.: T G KEITH
Tech. Officer: GRC/K MCLALLIN
CASE Category: 46 – MECHANICAL ENGR

NCC 3 916 **UNIV OF TOLEDO** **7847**
 TECHNOLOGY VALIDATION AND RISK REDUCTION RESEARCH FOR FLY-
 WHEEL TECHNOLOGY
 09/20/2001 - 01/31/2003 FY02: \$125,297 Total: \$168,419
Prin. Invest.: T G KEITH
Tech. Officer: GRC/R BEACH
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 922 **UNIV OF TOLEDO** **7848**
 ANALYSIS AND OPTIMIZATION OF MIXING ENHANCEMENT DEVICES
 10/25/2001 - 10/22/2002 FY02: \$93,183 Total: \$93,183
Prin. Invest.: T G KEITH
Tech. Officer: GRC/N J GEORGIADIS
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 923 **UNIV OF TOLEDO** **7849**
 TURBOMACHINERY HEAT TRANSFER AND LOSS MODELING FOR 3D
 NAVIER-STOKES CODES
 11/29/2001 - 11/30/2002 FY02: \$148,130 Total: \$148,130
Prin. Invest.: T G KEITH
Tech. Officer: GRC/R E GAUGLER
CASE Category: 46 – MECHANICAL ENGR

NCC 3 924 **UNIV OF TOLEDO** **7850**
 RESEARCH IN CONTROLS FOR FLYWHEEL TECHNOLOGY APPLICATIONS
 12/10/2001 - 12/31/2002 FY02: \$107,369 Total: \$107,369
Prin. Invest.: T G KEITH
Tech. Officer: GRC/F R BEACH
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 925 **UNIV OF TOLEDO** **7851**
 VALIDATION AND ENHANCEMENT OF COMPREHENSIVE COMBUSTION
 MODELING AND SIMULATION
 12/10/2001 - 12/31/2002 FY02: \$140,000 Total: \$140,000
Prin. Invest.: T G KEITH
Tech. Officer: GRC/N LIU
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 926 **UNIV OF TOLEDO** **7852**
 TURBINE INTERNAL AND FILM COOLING MODELING FOR 3D NAVIER-
 STOKES CODES
 12/10/2001 - 12/05/2002 FY02: \$181,258 Total: \$181,258
Prin. Invest.: T G KEITH
Tech. Officer: GRC/R E GAUGLER
CASE Category: 46 – MECHANICAL ENGR

NCC 3 943 **UNIV OF TOLEDO** **7853**
 DYNAMIC ENGINE SIMULATOR RIG USING MAGNETIC BEARINGS
 03/12/2002 - 10/31/2002 FY02: \$45,525 Total: \$45,525
Prin. Invest.: T G KEITH
Tech. Officer: GRC/G MONTAGUE
CASE Category: 46 – MECHANICAL ENGR

NCC 3 954 **UNIV OF TOLEDO** **7854**
 EXPERIMENTAL STUDY OF TRACTION DRIVES EXPERIMENTAL STUDY OF
 TRACTION DRIVES
 04/16/2002 - 04/02/2003 FY02: \$78,000 Total: \$78,000
Prin. Invest.: T G KEITH
Tech. Officer: GRC/W MORALES
CASE Category: 46 – MECHANICAL ENGR

OKLAHOMA

NASA'S UNIVERSITY PROGRAM

NCC 3 995 **UNIV OF TOLEDO** **7855**
 MICROSTRUCTURAL ANALYSIS OF ADVANCED TURBINE MATERIALS
 08/15/2002 - 09/30/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: T G KEITH
Tech. Officer: GRC/M V NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 3 52342 **UNIV OF TOLEDO** **7856**
 MICROMACHINED CANTILEVERED TRANSMISSION LINE SWITCHES FOR
 MICROWAVE APPLICATIONS
 07/18/1998 - 10/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: D J KAPOOR
Tech. Officer: GRC/D MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 3 52375 **UNIV OF TOLEDO** **7857**
 GRADUATE STUDENT RESEARCH
 06/07/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: V J KAPOOR
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2301 **WILBERFORCE UNIV** **7858**
 STUDENT OUTREACH WITH RENEWABLE ENERGY TECHNOLOGY (SORET)
 CONSORTIUM
 11/05/1999 - 10/28/2002 FY02: \$0 Total: \$599,915
Prin. Invest.: D R BUFFINGER
Tech. Officer: GRC/A F HEPP
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1237 **WRIGHT STATE UNIV** **7859**
 ROLES FOR TECHNOLOGY IN THE FACILITATION OF DISTRIBUTED WORK
 IN COMPLEX DYNAMIC DOMAINS
 07/16/1998 - 10/31/2000 FY02: -\$893 Total: \$141,402
Prin. Invest.: V L SHALIN
Tech. Officer: ARC/W J CLANCEY
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1529 **WRIGHT STATE UNIV** **7860**
 HUMAN CENTERED SUPPORT FOR TELEOPERATED PLANETARY EXPLORA-
 TION II
 11/19/2001 - 11/14/2002 FY02: \$70,000 Total: \$70,000
Prin. Invest.: V L SHALIN
Tech. Officer: ARC/J TRIMBLE
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2637 **WRIGHT STATE UNIV** **7861**
 DEFECTS IN AIGAN/GAN HEMT DEVICES DEFECTS IN AIGAN/GAN HEMT
 DEVICES
 06/18/2001 - 06/30/2002 FY02: \$0 Total: \$119,269
Prin. Invest.: D C LOOK
Tech. Officer: GRC/J FREEMAN
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 4188 **WRIGHT STATE UNIV** **7862**
 MODEL STUDIES OF EXCITED STATES OF N₂ AND N₂⁺ IN THE IONOSPHERE
 03/27/1997 - 03/31/2003 FY02: \$0 Total: \$209,608
Prin. Invest.: D L FOX
Tech. Officer: GSFC/M M MELLOTT, SR
CASE Category: 13 – PHYSICS

NCC 2 1203 **WRIGHT STATE UNIV** **7863**
 ROLES FOR TECHNOLOGY IN THE FACILITATION OF DISTRIBUTED WORK
 IN COMPLEX DYNAMIC DOMAINS
 09/15/2000 - 02/14/2003 FY02: \$44,989 Total: \$167,250
Prin. Invest.: V L SHALIN
Tech. Officer: ARC/W J CLANCEY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1351 **WRIGHT STATE UNIV** **7864**
 ROLES FOR TECHNOLOGY IN THE FACILITATION OF DISTRIBUTED WORK
 IN COMPLEX DYNAMIC DOMAINS ANALYSIS
 06/25/2002 - 09/30/2002 FY02: \$30,669 Total: \$30,669
Prin. Invest.: V SHALIN
Tech. Officer: ARC/J ORASANU, ARC/M CONNORS
CASE Category: 74 – LINGUISTICS

NGT 5 30091 **WRIGHT STATE UNIV** **7865**
 AEROSPACE MEDICINE TRAINING PROGRAM
 09/11/1997 - 12/30/2001 FY02: \$600,000 Total: \$2,658,212
Prin. Invest.: S R MOHLER
Tech. Officer: GSFC/R J WILLIAMS
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 5 30428 **WRIGHT STATE UNIV** **7866**
 "CENTURY 21" VISION: NASA TRAINING BY THE RESIDENCY IN AEROSPACE
 MEDICINE"
 04/26/2002 - 12/31/2006 FY02: \$600,000 Total: \$600,000
Prin. Invest.: S MOHLER
Tech. Officer: GSFC/R S WILLIAMS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

OKLAHOMA

NAG 1 02016 **OKLAHOMA STATE UNIV** **7867**
 MODELING INTERACTION BETWEEN PERMEABILITY & DAMAGE IN POLYMER
 LAMINATES FOR THE NASA REUSABLE LAUNCH VEHICLE
 12/11/2001 - 12/10/2004 FY02: \$80,112 Total: \$80,112
Prin. Invest.: S ROY
Tech. Officer: LARC/T S GATES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 1852 **OKLAHOMA STATE UNIV** **7868**
 STUDIES OF PARTICLES SEDIMENTATION BY NOVEL SCATTERING TECHNI-
 QUE
 05/01/1996 - 04/30/2002 FY02: \$0 Total: \$399,992
Prin. Invest.: O TONG, B ACKERSON
Tech. Officer: GRC/B SINGH
CASE Category: 13 – PHYSICS

NAG 3 2780 **OKLAHOMA STATE UNIV** **7869**
 CHARACTERIZATION OF ENVIRONMENTAL DURABILITY OF POLYMER
 MATRIX COMPOSITE
 05/24/2002 - 06/23/2003 FY02: \$31,660 Total: \$31,660
Prin. Invest.: S ROY
Tech. Officer: LARC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 4 216 **OKLAHOMA STATE UNIV** **7870**
 CFD-BASED AEROSERVOELASTIC AND FLIGHT DYNAMICS ANALYSIS OF A
 FLIGHT RESEARCH VEHICLE
 01/11/2001 - 11/30/2001 FY02: \$0 Total: \$59,995
Prin. Invest.: D S ARENA
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NASA'S UNIVERSITY PROGRAM

OKLAHOMA

NAG 5 7451 **OKLAHOMA STATE UNIV** **7871**
 TERRESTRIAL ENVIRONMENTAL VARIABLES DERIVED FROM E OS PLAT-
 FORM SENSORS
 07/09/1998 - 12/31/2001 FY02: \$0 Total: \$47,226
Prin. Invest.: S J STADLER
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1159 **OKLAHOMA STATE UNIV** **7872**
 ROLE OF VITAMIN E IN PREVENTING BOND DAMAGE
 09/29/1999 - 06/30/2001 FY02: -\$111 Total: \$206,151
Prin. Invest.: B J STOECKER
Tech. Officer: JSC/C W LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1332 **OKLAHOMA STATE UNIV** **7873**
 MONOLITHIC INTERGRATED RADIATION_SENSOR USING STIMULATED LU-
 MINESCENCE FROM ALUMINA
 07/17/2001 - 07/13/2004 FY02: \$274,858 Total: \$743,256
Prin. Invest.: S MCKEEVER
Tech. Officer: JSC/M GOLIGHTLY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 3 903 **OKLAHOMA STATE UNIV** **7874**
 INFRARED AVIONICS SIGNAL DISTRIBUTION: (PHASE 2: EXPERIMENT
 SETUP AND VERIFICATION)
 07/13/2001 - 07/19/2002 FY02: \$0 Total: \$29,882
Prin. Invest.: M ATIQUZZAMAN
Tech. Officer: GRC/D NGO
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 185 **OKLAHOMA STATE UNIV** **7875**
 TEACHING FROM SPACE PROGRAM
 04/03/1997 - 01/31/2002 FY02: \$0 Total: \$3,984,243
Prin. Invest.: S K MARKS
Tech. Officer: GSFC/L L BILBROUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 561 **OKLAHOMA STATE UNIV** **7876**
 AEROSPACE EDUCATION SERVICES PROGRAM
 06/28/2001 - 05/31/2006 FY02: \$9,768,748 Total: \$12,768,748
Prin. Invest.: T COLLINS
Tech. Officer: GSFC/L BILLBROUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 629 **OKLAHOMA STATE UNIV** **7877**
 TEACHING FROM SPACE
 02/27/2002 - 01/31/2007 FY02: \$848,171 Total: \$848,171
Prin. Invest.: S MARKS
Tech. Officer: GSFC/L BILBROUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC13 02002 **OKLAHOMA STATE UNIV** **7878**
 FIELD TESTING OF A SENSOR-BASED APPLICATOR FOR NITROGEN AND
 PHOSPHORUS FERTILIZATION
 01/25/2002 - 12/28/2004 FY02: \$189,601 Total: \$189,601
Prin. Invest.: G JOHSON
Tech. Officer: SSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 4 52412 **OKLAHOMA STATE UNIV** **7879**
 AEROSEROELASTIC AND FLIGHT DYNAMICS
 05/12/1999 - 06/30/2002 FY02: -\$15,266 Total: \$28,734
Prin. Invest.: A ARENA
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52425 **OKLAHOMA STATE UNIV** **7880**
 (GSRP) OPEN PORT STABILIZED SENSOR SYSTEM AEROSERV OELASTIC
 PREDICTION WITH COMPARISONS TO FLIGHT TE
 07/16/2001 - 06/30/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D S ARENA
Tech. Officer: DFRC/K K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 50420 **OKLAHOMA STATE UNIV** **7881**
 TECHNIQUES AND INSTRUMENTS FOR IN-SITU DATING OF M ARTIAN
 SEDIMENTS STUDENT: MICHAEL BLAIR
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S MCKEEVERS
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7378 **ORAL ROBERTS UNIV** **7882**
 EXPERIMENTAL APPARATUS TO TEST THE STABILITY OF SP INNING
 SPACECRAFT UNDER THRUST
 05/06/1998 - 05/14/2001 FY02: \$0 Total: \$48,000
Prin. Invest.: D HALSMER
Tech. Officer: GSFC/R HARMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1427 **UNIV OF OKLAHOMA - NORMAN** **7883**
 EFFECT OF HYPERGRAVITY, VIBRATION, & RADIATION ON GENETIC &
 DEVELOPMENTAL STABILITY IN DROSOPHILIA..
 08/03/2000 - 07/31/2003 FY02: \$265,474 Total: \$777,078
Prin. Invest.: J T THOMPSON, JR
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2388 **UNIV OF OKLAHOMA - NORMAN** **7884**
 GRAVITATIONAL EFFECTS ON FLOW INSTABILITY AND TRAN SITION IN LOW
 DENSITY JETS
 04/10/2000 - 11/30/2003 FY02: \$95,000 Total: \$235,250
Prin. Invest.: A K AGRAWAI
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2528 **UNIV OF OKLAHOMA - NORMAN** **7885**
 SCTP OVER LONG BANDWIDTH DELAY PRODUCT NETWORKS
 01/22/2001 - 06/30/2002 FY02: \$0 Total: \$75,243
Prin. Invest.: D ATIQUZZAMAN
Tech. Officer: GRC/W D IVANCIC
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 3505 **UNIV OF OKLAHOMA - NORMAN** **7886**
 MULTIWAVELENGTH STUDIES OF SUPERNOVAE
 11/25/1996 - 09/30/2002 FY02: \$20,000 Total: \$270,000
Prin. Invest.: E A BARON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 9165 **UNIV OF OKLAHOMA - NORMAN** **7887**
 COMPREHENSIVE SUPERNOVA SPECTROSCOPY - ADP - 99
 03/31/2000 - 03/31/2002 FY02: \$0 Total: \$90,000
Prin. Invest.: D BRANCH
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9745 **UNIV OF OKLAHOMA - NORMAN** **7888**
 X-RAY SPECTRAL & VARIABILITY STUDIES OF AGN ADP 99
 06/29/2000 - 08/14/2002 FY02: \$0 Total: \$50,440
Prin. Invest.: K M LEIGHLY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9991 **UNIV OF OKLAHOMA - NORMAN** **7889**
 NGC 6300: A NEW, BRIGHT, COMPTON-THICK SEYFERT 2 GALAXY
 09/14/2000 - 08/31/2002 FY02: \$0 Total: \$25,433
Prin. Invest.: K M LEIGHLY
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10048 **UNIV OF OKLAHOMA - NORMAN** **7890**
 FAR UV SPECTROSCOPY OF NARROW-LINE SEYFERT 1 GALAXY RE
 1034+39
 10/04/2000 - 08/15/2002 FY02: \$0 Total: \$35,500
Prin. Invest.: K LEIGHLY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 10171 **UNIV OF OKLAHOMA - NORMAN** **7891**
 NARROW-LINE SEYFERT 1 GALAXIES (LTSA 98)
 12/18/2000 - 03/31/2004 FY02: \$78,414 Total: \$161,654
Prin. Invest.: K M LEIGHLY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10366 **UNIV OF OKLAHOMA - NORMAN** **7892**
 WIND EMISSION IN NARROW-LINE SEYFERT 1 GALAXIES (FUZE 00)
 02/05/2001 - 02/14/2003 FY02: \$0 Total: \$70,000
Prin. Invest.: K M LEIGHLY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12127 **UNIV OF OKLAHOMA - NORMAN** **7893**
 RADIATIVE TRANSFER IN 3-D MOVING FLOWS: UNDERSTANDING STARS,
 SUPERNOVAE, AND COSMOLOGY
 04/29/2002 - 04/30/2005 FY02: \$145,632 Total: \$145,632
Prin. Invest.: E BARON
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 9 1280 **UNIV OF OKLAHOMA - NORMAN** **7894**
 INTEGRATED CREW PERFORMANCE ASSESMENT AND TRAINING
 02/02/2001 - 12/31/2003 FY02: \$164,406 Total: \$308,165
Prin. Invest.: R SCHLEGEL
Tech. Officer: JSC/B WOOLFORD
CASE Category: 56 – MEDICAL

NCC 2 1355 **UNIV OF OKLAHOMA - NORMAN** **7895**
 GENETIC AND DEVELOPMENTAL STABILITY IN RESPONSE TO LONG TERM
 EXPOSURE OF DROSOPHILAMELANOGASTER TO A
 07/29/2002 - 07/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: J N THOMPSON
Tech. Officer: ARC/D REISS-BUBENHEIM
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5382 **UNIV OF OKLAHOMA - NORMAN** **7896**
 MINERALS & SUBMICROMETER FORMS AS BIOSIGNATURES
 05/16/2000 - 05/14/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: R D ELMORE
Tech. Officer: ARC/D BLAKE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 3 787 **UNIV OF OKLAHOMA - NORMAN** **7897**
 INSTABILITY AND BREAKUP OF GAS JETS INJECTED IN CO FLOWING
 LIQUIDS
 03/28/2000 - 11/30/2003 FY02: \$85,000 Total: \$210,000
Prin. Invest.: D N PARTHASAEATHY
Tech. Officer: GRC/J B MCQUILLEN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 791 **UNIV OF OKLAHOMA - NORMAN** **7898**
 ENHANCEMENT OF MICROGRAVITY FIBER IMPREGNATION USING ELEC-
 TROHYDYNAMIC INDUCTION PUMPING
 04/11/2000 - 05/31/2001 FY02: -\$7,667 Total: \$37,330
Prin. Invest.: D C LAI
Tech. Officer: GRC/H C DEGROH
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 171 **UNIV OF OKLAHOMA - NORMAN** **7899**
 TO SUPPORT RESEARCH UNDER THE EXPERIMENTAL PROGRAM COM-
 PETITIVE RESEARCH
 12/16/1996 - 05/14/2002 FY02: \$0 Total: \$2,500,000
Prin. Invest.: V DUCA-SNOWDEN
Tech. Officer: GSFC/J DASCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 398 **UNIV OF OKLAHOMA - NORMAN** **7900**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/14/1999 - 09/30/2001 FY02: \$0 Total: \$448,800
Prin. Invest.: V DUCA-SNOWDEN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 586 **UNIV OF OKLAHOMA - NORMAN** **7901**
 OKLAHOMA NASA/EPSCOR PROGRAM
 08/31/2001 - 08/31/2005 FY02: \$186,093 Total: \$496,906
Prin. Invest.: V DUCA-SNOWDEN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30151 **UNIV OF OKLAHOMA - NORMAN** **7902**
 INVESTIGATION OF LAND-ATMOSPHERE INTERACTIONS USING THE OKLA-
 HOMA MESONET/NASA EARTH SCIENCE
 09/01/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: K CRAWFORD
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40013 **UNIV OF OKLAHOMA - NORMAN** **7903**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATIONAL AND
 FELLOWSHIP PROGRAM.
 01/30/1997 - 02/28/2001 FY02: -\$46,532 Total: \$760,968
Prin. Invest.: V DUCA-SNOWDEN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40111 UNIV OF OKLAHOMA - NORMAN 7904
 OKLAHOMA SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$259,032 Total: \$471,532
Prin. Invest.: V DUCA-SNOWDEN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

OREGON

NCC 2 1190 OREGON GRADUATE INST OF SCI & TECH 7905
 IMPLEMENTATION OF SENSOR FUSION ALGORITHMS IN MATLAB
 07/25/2000 - 03/31/2001 FY02: \$0 Total: \$30,000
Prin. Invest.: M PAVEL
Tech. Officer: ARC/A J AHUMADA
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1215 OREGON GRADUATE INST OF SCI & TECH 7906
 HUMAN ERROR MODELING - PROCESS & EVALUATION
 03/05/2001 - 10/31/2001 FY02: \$0 Total: \$70,112
Prin. Invest.: M PAVEL
Tech. Officer: ARC/B L BEARD
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1218 OREGON GRADUATE INST OF SCI & TECH 7907
 ROBUST INTELLIGENT SYSTEMS BASED ON INFORMATION FU SION
 03/14/2001 - 02/28/2003 FY02: \$263,000 Total: \$532,000
Prin. Invest.: M PAVEL
Tech. Officer: ARC/J C COUGLAN, ARC/M SCHWABACHER
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1253 OREGON GRADUATE INST OF SCI & TECH 7908
 BIOLOGICAL COMPUTING FOR ROBOT NAVIGATION & CONTROL
 04/08/2001 - 02/28/2003 FY02: \$199,035 Total: \$535,035
Prin. Invest.: M A JABRI
Tech. Officer: ARC/T R GOVINDAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1264 OREGON GRADUATE INST OF SCI & TECH 7909
 MODEL BIASED, DATA DRIVEN ADAPTIVE FAILURE PREDICTION
 05/21/2001 - 02/28/2003 FY02: \$90,000 Total: \$210,000
Prin. Invest.: T LEEN
Tech. Officer: ARC/I TUMER
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1199 OREGON HEALTH SCIENCES UNIV 7910
 HOW DO CELL DIVISION PLANCES SPECIFY REGIONAL GENE EXPRESSION
 PATTERNS IN EARLY EMBRYOS?
 04/02/1998 - 04/30/2002 FY02: \$0 Total: \$490,495
Prin. Invest.: M V DANILCHIK
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1287 OREGON STATE UNIV 7911
 TRAINING PILOTS TO PRIORITIZE TASKS
 02/01/1999 - 02/14/2003 FY02: \$43,945 Total: \$236,465
Prin. Invest.: K H FUNK
Tech. Officer: ARC/R K DISMUKES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1341 OREGON STATE UNIV 7912
 INTERACTIONS BETWEEN GRAVITY & LIGHT IN DETERMINING PLANT-
 FORM ANALYSIS USING THE LAXY-2 MUTANT TOMA
 07/21/1999 - 08/31/2002 FY02: \$85,920 Total: \$499,859
Prin. Invest.: T L LOMAX
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1546 OREGON STATE UNIV 7913
 NUMERICAL SIMULATIONS OF THE MARTIAN ATMOSPHERE
 04/02/2002 - 03/31/2003 FY02: \$24,105 Total: \$24,105
Prin. Invest.: J R BARNES
Tech. Officer: ARC/R M HABERLE, ARC/R E YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2463 OREGON STATE UNIV 7914
 DEVELOPMENT AND EVALUATION OF HIGH TEMPERATURE AND SPECIAL-
 IZED FIBER BRAGG GRATINGS
 06/15/2000 - 09/30/2001 FY02: -\$1,002 Total: \$46,951
Prin. Invest.: T K PLANT
Tech. Officer: GRC/G ADAMOVSKY
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 4947 OREGON STATE UNIV 7915
 "COUPLED ATMOSPHERE/OCEAN PROCESSES & PRIMARY PROD IN THE
 SOUTHERN OCEAN"
 06/23/1997 - 06/30/2001 FY02: -\$386,449 Total: \$2,913,551
Prin. Invest.: M R ABBOTT
Tech. Officer: GSFC/J A MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6156 OREGON STATE UNIV 7916
 EFFECT OF OCEAN TIDES ON THE LONG TERM ORBITAL AND OF THE
 EARTH-MOON SYSTEM
 09/11/1997 - 09/14/2001 FY02: \$0 Total: \$60,000
Prin. Invest.: G D EGBERT
Tech. Officer: GSFC/B BILLS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6242 OREGON STATE UNIV 7917
 MODELING CARBON DYNAMICS AND THEIR ECONOMIC IMPLICATIONS:
 PACIFIC NORTHWESTERN USA AND NORTHWESTERN
 08/19/1997 - 08/31/2001 FY02: \$0 Total: \$580,000
Prin. Invest.: D E HARMON
Tech. Officer: GSFC/G C GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7506 OREGON STATE UNIV 7918
 ASSESSING POTENTIAL AND ACTUAL FOREST PRODUCTIVITY ACROSS
 SOUTHWESTERN OREGON WITH TWO SIMULATIONS
 06/26/1998 - 06/30/2003 FY02: \$0 Total: \$260,910
Prin. Invest.: R H WARING
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7531 OREGON STATE UNIV 7919
 EVALUATING MODEL PREDICTIONS OF CO2 AND WATER VAPOR EX-
 CHANGE WITH FLUX MEASUREMENTS IN A POND
 06/11/1998 - 06/30/2002 FY02: \$0 Total: \$651,594
Prin. Invest.: M H UNSWORTH
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

OREGON

NASA'S UNIVERSITY PROGRAM

NAG 5 7551 **OREGON STATE UNIV** **7920**
 REDUCING UNCERTAINTY IN CARBON AND ENERGY EXCHANGE OVER
 PINE FORESTS: INFLUENCE OF AGE,MANAGEMENT
 06/22/1998 - 06/30/2002 FY02: \$0 Total: \$841,355
Prin. Invest.: B LAW
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7686 **OREGON STATE UNIV** **7921**
 LIMITS TO CLOUD SUSCEPTIBILITY.
 09/15/1998 - 09/30/2002 FY02: \$0 Total: \$294,000
Prin. Invest.: J A COAKLEY, JR.
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7856 **OREGON STATE UNIV** **7922**
 BIGFOOT--CHARACTERIZING LAND COVER, LAI, AND NPP A T THE LAND-
 SCAPE SCALE FOR EOS/MODIS VALIDATION
 12/14/1998 - 11/30/2001 FY02: \$0 Total: \$711,925
Prin. Invest.: W B COHEN
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8261 **OREGON STATE UNIV** **7923**
 CONSTRUCTION TO COMPLETE THE ENVIRONMENTAL COMPUTI NG CEN-
 TER
 02/17/1999 - 07/31/2002 FY02: \$0 Total: \$2,000,000
Prin. Invest.: G DALRYMPLE
Tech. Officer: GSFC/R A SCHIFFER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8315 **OREGON STATE UNIV** **7924**
 INTEGRATING MICROWAVE AND HYPERSPECTRAL REMOTE SENSING FOR
 ESTIMATING VEGETATION STRUCTUREAND BIOMA
 03/24/1999 - 02/28/2002 FY02: \$6,849 Total: \$118,358
Prin. Invest.: B E LAW
Tech. Officer: HQ/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8400 **OREGON STATE UNIV** **7925**
 USING DISTRIBUTED OBJECT-BASED FRAMEWORKS TO SUPPORT EOS
 DATA ACCESS AND VISUALIZATION
 05/20/1999 - 05/31/2002 FY02: \$0 Total: \$127,000
Prin. Invest.: M S ABBOTT
Tech. Officer: GSFC/K MOE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 8601 **OREGON STATE UNIV** **7926**
 SPATIAL VARIATION OF SURFACE MOISTURE FLUXES IN SPG
 06/17/1999 - 06/14/2003 FY02: \$20,066 Total: \$179,968
Prin. Invest.: L MAHRT
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8969 **OREGON STATE UNIV** **7927**
 EOS TERRA DIRECT BROADCAST RECEIVING STATION: SUPPORT FOR
 OCEAN & TERRESTRIAL ECOLOGY
 01/24/2000 - 12/31/2001 FY02: \$0 Total: \$550,000
Prin. Invest.: M R ABBOTT
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9159 **OREGON STATE UNIV** **7928**
 JASON-1 INVESTIGATION: ALTIMETRIC STUDIES OF OCEAN TIDAL DYNAM-
 ICS
 03/06/2000 - 03/31/2003 FY02: \$62,791 Total: \$177,582
Prin. Invest.: G D EGBERT
Tech. Officer: GSFC/R RAY
CASE Category: 33 – OCEANOGRAPHY

NAG 5 9428 **OREGON STATE UNIV** **7929**
 SYNTHESIS & ALTERATION OF HIGHER MOLECULAR WEIGHT ORGANIC
 COMPOUNDS UNDER HYDROTHERMAL CONDITIONS
 04/11/2000 - 04/14/2003 FY02: \$98,872 Total: \$293,072
Prin. Invest.: B T SIMONEIT
Tech. Officer: GSFC/M MEYER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9446 **OREGON STATE UNIV** **7930**
 MICROBES IN SILICATE ROCKS ON EARTH: ANALOGUES OF EXTANT &
 FOSSIL MICROBIAL HABITATS ON OTHER
 04/13/2000 - 04/14/2003 FY02: \$0 Total: \$99,042
Prin. Invest.: M FISK
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9677 **OREGON STATE UNIV** **7931**
 SUPPORT FOR THE GOF C BOREAL FOREST WORKSHOP, NASA SIBERIAN
 NETWORK, AND EWG BOREAL FOREST PROJECT
 06/02/2000 - 10/31/2002 FY02: \$0 Total: \$38,641
Prin. Invest.: O N KRANKINA
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9771 **OREGON STATE UNIV** **7932**
 STUDIES OF MGS TES AND MPF MET DATA
 06/29/2000 - 06/30/2003 FY02: \$60,000 Total: \$179,200
Prin. Invest.: J R BARNES
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10614 **OREGON STATE UNIV** **7933**
 GOF C SUPPORT, WORKSHOP IN RUSSIA
 03/16/2001 - 08/31/2002 FY02: \$0 Total: \$39,173
Prin. Invest.: O N KRANKINA
Tech. Officer: GSFC/G GUTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10623 **OREGON STATE UNIV** **7934**
 THE REFINEMENT OF THE ATMOSPHERIC CORRECTION ALGOR ITHM FOR
 SPACE-DERIVING THE MARINE CHLOROPHYLL
 03/19/2001 - 03/14/2004 FY02: \$119,333 Total: \$264,828
Prin. Invest.: K S SHIFRIN
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11046 **OREGON STATE UNIV** **7935**
 DYNAMICS AND CIRCULATION OF THE MARTIAN ATMOSPHERE
 06/20/2001 - 06/30/2004 FY02: \$77,000 Total: \$151,000
Prin. Invest.: J BARNES
Tech. Officer: GSFC/D BOGAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11105 **OREGON STATE UNIV** **7936**
 ADVANCED VALIDATION OF AMSR WIND SPEED MEASUREMENT USING
 BUOY, SCATTEROMETER, AND NWP SURFACE ANALYS
 07/13/2001 - 08/31/2004 FY02: \$58,860 Total: \$87,669
Prin. Invest.: M H FREILICH
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11125 **OREGON STATE UNIV** **7937**
 COUPLED ATMOSPHERE/OCEAN PROCESSES AND PRIMARY PRO DUC-
 TION IN THE SOUTHERN OCEAN
 08/01/2001 - 06/30/2003 FY02: \$931,566 Total: \$1,201,593
Prin. Invest.: M R ABBOTT
Tech. Officer: GSFC/J MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11148 **OREGON STATE UNIV** **7938**
 A ONE-YEAR PILOT STUDY FOR THE INCLUSION OF ACTIVE OPTICAL
 SENSORS INTO PALACE FLOATS
 07/30/2001 - 07/31/2002 FY02: -\$15,272 Total: \$12,705
Prin. Invest.: E BOSS
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11190 **OREGON STATE UNIV** **7939**
 ECOSYSTEMS STRUCTURE AND CARBON CYCLING IN THE NOR TH
 PACIFIC: MODELING & DATA ASSIMILATION
 08/17/2001 - 08/31/2004 FY02: \$75,608 Total: \$292,558
Prin. Invest.: Y SPITZ
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11222 **OREGON STATE UNIV** **7940**
 LINKING IN-SITU MEASUREMENTS, REMOTE SENSING, AND MODELS TO
 VALIDATE MODIS PRODUCTS RELATED TO TH
 08/09/2001 - 07/31/2004 FY02: \$176,756 Total: \$201,384
Prin. Invest.: D P TURNER
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11223 **OREGON STATE UNIV** **7941**
 USING REMOTE SENSING & IN SITU NETWORK OBSERVATION S TO
 EVALUATE & IMPROVE THE PERFORMANCE OF
 08/09/2001 - 07/31/2004 FY02: \$78,978 Total: \$155,068
Prin. Invest.: B LAW
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11231 **OREGON STATE UNIV** **7942**
 REGIONAL CARBON DIOXIDE FLUXES OVER HETEROGENEOUS TERRAIN
 08/13/2001 - 08/14/2004 FY02: \$212,711 Total: \$397,236
Prin. Invest.: L MAHRT
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11250 **OREGON STATE UNIV** **7943**
 DRIVING FORCES OF CHANGE IN REGIONAL CARBON STOCKS : COMPARI-
 SON OF THE WESTERN OREGON, AND ST. PET
 08/20/2001 - 08/14/2004 FY02: \$54,697 Total: \$241,935
Prin. Invest.: O KRANKINA
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11404 **OREGON STATE UNIV** **7944**
 TESTING SPATIAL CORRELATION OF SUBDUCTION INTERPLA TE COU-
 PLING AND FOREARC MORPHO-TECTONICS
 11/28/2001 - 11/30/2003 FY02: \$49,995 Total: \$49,995
Prin. Invest.: C GOLDFINGER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11534 **OREGON STATE UNIV** **7945**
 PARAMETERIZATIONS OF THE VERTICAL VARIABILITY OF TROPICAL
 CIRRUS CLOUD MICROPHYSICAL AND OPTICAL P
 01/03/2002 - 12/31/2003 FY02: \$110,380 Total: \$110,380
Prin. Invest.: C H TWOHY
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11586 **OREGON STATE UNIV** **7946**
 IMPROVED OBSERVATION AND MODELING OF FLUXES BETWEEN THE
 SNOW PACK AND THE ATMOSPHERE
 01/25/2002 - 01/31/2005 FY02: \$127,000 Total: \$127,000
Prin. Invest.: L MAHRT
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11652 **OREGON STATE UNIV** **7947**
 LASER 40AR/39AR DATING OF IMPACT MELT ROCKS: THE C HRONOLOGY
 OF LUNAR BASIN FORMATION
 01/28/2002 - 01/31/2005 FY02: \$40,000 Total: \$40,000
Prin. Invest.: R DUNCAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12351 **OREGON STATE UNIV** **7948**
 INVESTIGATION OF ENDOLITHIC MICROORGANISMS IN OLIV INE-BEARING
 ROCKS
 07/03/2002 - 06/30/2005 FY02: \$60,965 Total: \$60,965
Prin. Invest.: M FISK
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12378 **OREGON STATE UNIV** **7949**
 LOW FREQUENCY VARIABILITY OF THE SOUTH ATLANTIC CI RCUATION
 AND INTERBASIN EXCHANGES: OBSERV
 07/16/2002 - 07/14/2005 FY02: \$71,994 Total: \$71,994
Prin. Invest.: R P MATANO
Tech. Officer: GSFC/S HAKKINEN
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12404 **OREGON STATE UNIV** **7950**
 SCATTERING CHARACTERISTICS OF PHYTOPLANKTON TAXONO MIC
 GROUPS AND THEIR EFFECT ON REFLECTANCE
 08/01/2002 - 07/31/2005 FY02: \$65,300 Total: \$65,300
Prin. Invest.: W PEGAU
Tech. Officer: GSFC/C TREES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12443 **OREGON STATE UNIV** **7951**
 3RD INTERNATIONAL SUMMER SCHOOL ON INVERSE METHODS AND DATA
 ASSIMILATION.
 08/06/2002 - 08/14/2003 FY02: \$41,430 Total: \$41,430
Prin. Invest.: A BENNET
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

OREGON

NASA'S UNIVERSITY PROGRAM

NAS 1 98140 OREGON STATE UNIV 7952
 CHARACTERIZATION OF CLOUDS AND THE ANISOTROPY OF EMITTED AND REFLECTED RADIANCES
 10/29/1998 - 10/29/2002 FY02: \$188,358 Total: \$749,593
Prin. Invest.: J COAKLEY
Tech. Officer: LARC/B A WIELICKI, LARC/R L HUFFMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99104 OREGON STATE UNIV 7953
 DETERMINATION OF THE INDIRECT RADIATIVE FORCING DUE TO AEROSOLS
 05/17/1999 - 05/16/2003 FY02: \$78,362 Total: \$102,312
Prin. Invest.: J M COAKLEY, JR.
Tech. Officer: LARC/G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 31360 OREGON STATE UNIV 7954
 MODIS INVESTIGATION
 12/30/1991 - 06/14/2003 FY02: \$611,000 Total: \$5,348,000
Prin. Invest.: M R ABBOTT
Tech. Officer: GSFC/H OSEROFF
CASE Category: 33 – OCEANOGRAPHY

NAS 5 32965 OREGON STATE UNIV 7955
 SEAWINDS PRINCIPAL INVESTIGATOR & SCIENCE TEAM ACTIVITIES
 09/15/1995 - 12/31/2004 FY02: \$2,307,635 Total: \$9,847,720
Prin. Invest.: D H FREILICH
Tech. Officer: GSFC/C RABER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5427 OREGON STATE UNIV 7956
 PREPARATION OF THE ZAPS INSTRUMENT PACKAGE FOR THE VAILULU MISSION
 03/09/2001 - 01/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: G P KLINKHAMMER
Tech. Officer: ARC/M T FLYNN, ARC/C A STOCKER
CASE Category: 33 – OCEANOGRAPHY

NCC 2 5515 OREGON STATE UNIV 7957
 MEDUSA - SEA FLOOR MONITORING SYSTEM
 08/07/2002 - 07/31/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: G P KLINKHAMMER
Tech. Officer: ARC/M FLYNN
CASE Category: 33 – OCEANOGRAPHY

NGT 2 52245 OREGON STATE UNIV 7958
 MESOSCALE MODEL OF THE MARTIAN ATMOSPHERE
 08/11/1998 - 08/14/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J R BARNES
Tech. Officer: ARC/R M HABERLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 5 96 OREGON STATE UNIV 7959
 GLOBAL CLIMATE CHANGE EFFECTS ON CARBON SEQUESTRATION MEDIATED BY SOIL MICROORGANISMS
 08/20/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R P DICK, V GEWIN
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30181 OREGON STATE UNIV 7960
 FUNCTIONAL GROUPING OF PLANTS IN FLORIDA SCRUB HABITAT/STUDENT: TAMMY FOSTER
 08/23/1999 - 08/31/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: B BOND
Tech. Officer: GSFC/M Y WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30185 OREGON STATE UNIV 7961
 RIGHT WHALE ECOLOGY IN THE NORTHWEST ATLANTIC OCEAN/STUDENT-MARK BAUMGARTNER
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B MATE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30214 OREGON STATE UNIV 7962
 COMBINING FIELD MEASUREMENTS AND SATELLITE IMAGERY WITH A PROBABILISTIC MODEL TO QUANTIFY UNCERTAIN
 08/24/1999 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: W B COHEN
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30347 OREGON STATE UNIV 7963
 ASYSTEMATIC STUDY OF THE OPTICAL PROPERTIES OF NON SPHERICAL OCEANIC PARTICLES/STUDENT: SEAN HERRING
 08/21/2000 - 08/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: W PEGAU
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30387 OREGON STATE UNIV 7964
 SCALING UP NOCTURNAL CO2 AND WATER VAPOR FLUXES WITH MICROMETEOROLOGICAL NETWORKS/REINA NAKAMURA
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: L MAHRT
Tech. Officer: GSFC/W WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40103 OREGON STATE UNIV 7965
 OREGON SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/01/2001 - 02/28/2005 FY02: \$356,250 Total: \$761,053
Prin. Invest.: A C KLEIN
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2741 PORTLAND STATE UNIV 7966
 CAPILLARY FLOW IN INTERIOR CORNERS CAPILLARY FLOW IN INTERIOR CORNERS
 04/04/2002 - 12/31/2003 FY02: \$85,500 Total: \$85,500
Prin. Invest.: M M WEISLOGEL
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9579 PORTLAND STATE UNIV 7967
 RECOGNIZING THE SIGNATURES OF HYPERTHERMOPHILIC BIOFILMS: GEYSERITES, EPITHERMAL DEPOSITS & ANCI
 05/10/2000 - 04/30/2002 FY02: \$0 Total: \$178,960
Prin. Invest.: S CADY
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11309 **PORTLAND STATE UNIV** **7968**
 ICE SHELVES AND LANDFAST ICE ON THE ANTARCTIC PERI METER
 CHARACTERISTICS AND EFFECTS OF CLIMATE CHAN
 08/30/2001 - 08/31/2003 FY02: \$0 Total: \$10,300
Prin. Invest.: C HULBE
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11441 **PORTLAND STATE UNIV** **7969**
 GENETIC COMPLEXITY IN THE RNA WORLD: AN EXAMINATION OF THE
 GENETIC LOAD IN RNA POPULATIONS
 12/17/2001 - 09/30/2002 FY02: \$80,000 Total: \$80,000
Prin. Invest.: N LEHMAN
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11442 **PORTLAND STATE UNIV** **7970**
 MICROBIAL INTERACTIONS WITH REDUCED MINERALS: A SYSTEM FOR
 EARLY TERRESTRIAL ANDEXTRATERRES
 12/20/2001 - 11/30/2002 FY02: \$105,000 Total: \$105,000
Prin. Invest.: T STEVENS
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2010 **UNIV OF OREGON - EUGENE** **7971**
 ATMOSPHERIC AND SPECTROSCOPIC RESEARCH IN THE FAR INFRARED
 02/23/1998 - 02/21/2002 FY02: \$0 Total: \$112,000
Prin. Invest.: K PARK
Tech. Officer: LARC/I G NOLT
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 6109 **UNIV OF OREGON - EUGENE** **7972**
 THE FORMATION AND EVOLUTION OF LSB GALAXIES
 07/24/1997 - 10/31/2001 FY02: \$0 Total: \$164,039
Prin. Invest.: D SCHOMBERT
Tech. Officer: GSFC/D GOLOMBEK
CASE Category: 11 – ASTRONOMY

NAG 5 8505 **UNIV OF OREGON - EUGENE** **7973**
 INSTABILITIES IN PROTOSTELLAR STAR/DISK SYSTEMS (A TP - 98)
 05/10/1999 - 04/30/2003 FY02: \$0 Total: \$76,358
Prin. Invest.: J IMAMURA
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10709 **UNIV OF OREGON - EUGENE** **7974**
 ACCRETION FLOWS IN MAGNETIC WHITE DWARF SYSTEMS (ADP 2000)
 04/23/2001 - 04/30/2002 FY02: \$0 Total: \$28,250
Prin. Invest.: J IMAMURA
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11300 **UNIV OF OREGON - EUGENE** **7975**
 GALAXY PHOTOMETRY FOR NASA/IPAC EXTRAGALACTIC DATA BASE
 08/29/2001 - 08/31/2004 FY02: \$0 Total: \$37,709
Prin. Invest.: J SCHOMBERT
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1089 **UNIV OF OREGON - EUGENE** **7976**
 AFFECT & AERONAUTICAL DECISION-MAKING
 02/02/1999 - 01/14/2003 FY02: \$35,622 Total: \$403,935
Prin. Invest.: R MAURO
Tech. Officer: ARC/I BARSHI
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1304 **UNIV OF OREGON - EUGENE** **7977**
 AFFECT AND AERONAUTICAL DECISION MAKING
 02/05/2002 - 01/31/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: R MAURO
Tech. Officer: ARC/I BARSHI, ARC/R K DISMUKES
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 5409 **UNIV OF OREGON - EUGENE** **7978**
 CULTURE COLLECTION OF MICRO-ORGANISMS FROM EXTREME ENVIRON-
 MENTS & THE ROLE OF THE UV-SHIELDING PIGM
 11/22/2000 - 12/31/2002 FY02: \$93,774 Total: \$187,538
Prin. Invest.: R W CASTENHOLZ
Tech. Officer: ARC/B M BEBATH, ARC/M L FONDA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 3 880 **UNIV OF OREGON - EUGENE** **7979**
 DEVELOPMENT OF A SELF-PACED COMPUTER BASED TRAINING PRO-
 GRAM ON IN-FLIGHT ICING
 03/23/2001 - 06/30/2002 FY02: \$80,195 Total: \$291,069
Prin. Invest.: R MAURO
Tech. Officer: GRC/T H BOND
CASE Category: 41 – AERONAUTICAL ENGR

PENNSYLVANIA

NAG 5 7964 **BLOOMSBURG UNIV** **7980**
 REMOTE SENSING OF FRACTAL PLANETARY SURFACES
 01/11/1999 - 01/14/2002 FY02: \$0 Total: \$146,300
Prin. Invest.: M K SHEPARD
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 11539 **BLOOMSBURG UNIV** **7981**
 REMOTE SENSING OF PLANETARY SURFACES
 01/03/2002 - 12/31/2004 FY02: \$34,500 Total: \$34,500
Prin. Invest.: M K SHEPARD
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8679 **BUCKNELL UNIV** **7982**
 INVESTIGATION OF AERODYNAMIC AND RADIOMETRIC LAND SURFACE
 TEMPERATURES
 07/27/1999 - 08/14/2003 FY02: \$25,448 Total: \$195,508
Prin. Invest.: R D CRAGO
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8699 **BUCKNELL UNIV** **7983**
 IMPROVED PREDICTION OF MOMENTUM AND SCALAR FLUXES USING
 MODIS IMAGERY
 08/17/1999 - 08/14/2003 FY02: \$0 Total: \$56,250
Prin. Invest.: R D CRAGO
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10129 **BUCKNELL UNIV** **7984**
 SATELLITE-BASED ESTIMATION OF AERODYNAMIC ROUGHNESS FOR GLO-
 BAL CLIMATE STUDIES
 12/06/2000 - 12/14/2001 FY02: -\$5,000 Total: \$0
Prin. Invest.: R D CRAGO
Tech. Officer: GSFC/M F JASINSKI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NAG 5 10821 **BUCKNELL UNIV** **7985**
 SOFTWARE AND HARDWARE SYSTEM FOR PREDICTING THE COMPUTATIONAL SPEED OF HIGH PERFORMANCE COMPUTERS
 04/26/2001 - 11/14/2002 FY02: \$0 Total: \$75,497
Prin. Invest.: M F ABURDENE
Tech. Officer: GSFC/J DORBAND
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 2090 **CARNEGIE - MELLON UNIV** **7986**
 NOVEL SCALABLE ALGORITHMS FOR AEROSPACE DESIGN OPTIMIZATION ON MASSIVELY PARALLEL COMPUTERS
 07/21/1998 - 08/31/2001 FY02: -\$45,247 Total: \$231,156
Prin. Invest.: O GHATTAS
Tech. Officer: LARC/R T BIEDRON, GSFC/J SOBIESKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1230 **CARNEGIE - MELLON UNIV** **7987**
 APPLICATION SPECIFIC SUPER COMPUTING
 06/16/1998 - 04/30/2001 FY02: -\$1,000 Total: \$1,148,288
Prin. Invest.: T C MOWRY, O C GHATTAS, D R O'HALLARON
Tech. Officer: ARC/C H SCHULBACH
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 2 1393 **CARNEGIE - MELLON UNIV** **7988**
 MODEL-BASED PROGRAMMING SKUNKWORKS
 02/01/2000 - 04/30/2002 FY02: \$0 Total: \$140,000
Prin. Invest.: R SIMMONS
Tech. Officer: ARC/M SHIRLEY
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1402 **CARNEGIE - MELLON UNIV** **7989**
 AUTOMATED VERIFICATION OF DIAGNOSTIC MODELS
 04/12/2000 - 05/31/2002 FY02: \$0 Total: \$145,000
Prin. Invest.: R G SIMMONS
Tech. Officer: ARC/M LOWRY
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1441 **CARNEGIE - MELLON UNIV** **7990**
 HUAU FLIGHTDYNAMICS & CONTROL
 09/28/2000 - 04/30/2002 FY02: \$0 Total: \$197,070
Prin. Invest.: W C MESSNER, C E THORPE
Tech. Officer: ARC/M B TISCHLER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1472 **CARNEGIE - MELLON UNIV** **7991**
 EFFECTIVE TEAM SUPPORT: FROM MODELING TO SOFTWARE AGENTS
 04/06/2001 - 03/31/2003 FY02: \$160,433 Total: \$603,209
Prin. Invest.: B JOHN, K SYCARA
Tech. Officer: ARC/M P MATESSA
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1537 **CARNEGIE - MELLON UNIV** **7992**
 MY PERSONAL ROVER A DOMESTIC EDUCATIONAL SCIENCE R OVER
 02/15/2002 - 02/14/2003 FY02: \$149,051 Total: \$149,051
Prin. Invest.: I R NOURBAKHS
Tech. Officer: ARC/R MORRIS, ARC/D CLANSY
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1569 **CARNEGIE - MELLON UNIV** **7993**
 ORGANIZATIONAL METRICS
 06/25/2002 - 01/31/2003 FY02: \$63,376 Total: \$63,376
Prin. Invest.: K CARLEY
Tech. Officer: ARC/J ORASANU, ARC/M CONNORS
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 2 6054 **CARNEGIE - MELLON UNIV** **7994**
 SOLVING IMPORTANT PROBLEMS FASTER
 02/20/2002 - 02/14/2003 FY02: \$300,000 Total: \$300,000
Prin. Invest.: T MOWRY
Tech. Officer: ARC/J T ONUFER
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2159 **CARNEGIE - MELLON UNIV** **7995**
 LATEAL MOTION OF PARTICLES AND BUBBLES CAUSED BY PHORETIC FLOWS NEAR A SOLID INTERFACE
 04/22/1998 - 12/31/2002 FY02: \$20,000 Total: \$400,000
Prin. Invest.: P J SIDES, Y E SOLOMENTSER, J L ANDERSON
Tech. Officer: GRC/R B ROGERS
CASE Category: 13 – PHYSICS

NAG 3 2449 **CARNEGIE - MELLON UNIV** **7996**
 MICROSCALE HYDRODYNAMICS NEAR MOVING CONTACT LINES MICROSCALE HYDRODYNAMICS NEAR MOVING CONTACT LINE
 06/12/2000 - 05/18/2005 FY02: \$154,000 Total: \$390,696
Prin. Invest.: S GAROFF
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2640 **CARNEGIE - MELLON UNIV** **7997**
 NANOSTRUCTURAL ELECTROCHEMICALLY ACTIVE SYSTEMS FOR LITHIUM-ION BATTERIES
 06/25/2001 - 05/31/2004 FY02: \$100,000 Total: \$150,000
Prin. Invest.: P N KUMTA
Tech. Officer: GRC/D L BRITTON
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 6548 **CARNEGIE - MELLON UNIV** **7998**
 A NEW LOOK AT CLUSTER EVOLUTION (LTSA)
 10/29/1997 - 10/31/2002 FY02: \$50,100 Total: \$199,600
Prin. Invest.: R NICHOL
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7707 **CARNEGIE - MELLON UNIV** **7999**
 ANTARCTIC METEORITE SEARCH DEMONSTRATION
 09/17/1998 - 08/31/2001 FY02: \$0 Total: \$1,182,000
Prin. Invest.: W WHITTAKER
Tech. Officer: GSFC/D LAVERY
CASE Category: 11 – ASTRONOMY

NAG 5 7926 **CARNEGIE - MELLON UNIV** **8000**
 THE VIPER SUNYAEV-ZELDOVICH SURVEY (LTSA 98)
 01/03/1999 - 12/31/2004 FY02: \$90,000 Total: \$360,000
Prin. Invest.: A K ROMER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8093 **CARNEGIE - MELLON UNIV** **8001**
 AN AUTOMATED SYSTEM FOR THE REDUCTION AND ANALYSIS OF X-RAY DATA FROM GALAXIES
 02/01/1999 - 06/30/2001 FY02: \$0 Total: \$146,198
Prin. Invest.: A F PTAK
Tech. Officer: GSFC/P HUNTER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9309 **CARNEGIE - MELLON UNIV** **8002**
 ARTIFICIAL INTELLIGENCE TECHNIQUES FOR MINERAL IDENTIFICATION
 FROM NEAR INFRARED SPECTRA ONBOARD FUTURE
 03/20/2000 - 03/14/2002 FY02: \$0 Total: \$97,500
Prin. Invest.: C GLYMOUR
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9899 **CARNEGIE - MELLON UNIV** **8003**
 XMM SURVEY OF THE SHARC SAMPLE: CONSTRAINING OMEGA AND
 CLUSTER FORMATION
 09/06/2000 - 09/14/2001 FY02: \$0 Total: \$12,700
Prin. Invest.: A ROMER
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9902 **CARNEGIE - MELLON UNIV** **8004**
 MISSION SCIENTIST FOR ESA'S X-RAY MULTI-MIRROR MISSION
 08/25/2000 - 08/31/2003 FY02: \$169,137 Total: \$493,442
Prin. Invest.: R E GRIFFITHS
Tech. Officer: GSFC/N WHITE
CASE Category: 11 – ASTRONOMY

NAG 5 9922 **CARNEGIE - MELLON UNIV** **8005**
 XMM SEARCHES FOR IRON LINES IN LOW LUMINOSITY AGN: A TEST OF
 ACCRETION THEORIES
 09/05/2000 - 06/30/2001 FY02: -\$15,011 Total: \$1,399
Prin. Invest.: A F PTAK
Tech. Officer: GSFC/P M ATKINS
CASE Category: 11 – ASTRONOMY

NAG 5 10014 **CARNEGIE - MELLON UNIV** **8006**
 'FOSSIL GROUPS' IN THE BRIGHT SHARC SURVEY
 09/21/2000 - 09/30/2003 FY02: \$14,000 Total: \$32,100
Prin. Invest.: R C NICHOL
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10043 **CARNEGIE - MELLON UNIV** **8007**
 X-RAY SPECTRAL STATISTICS OF A COMPLETE HARD X-RAY -SELECTED
 SAMPLE OF AGNS
 11/02/2000 - 10/31/2002 FY02: \$0 Total: \$33,400
Prin. Invest.: T MIYAJI
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10170 **CARNEGIE - MELLON UNIV** **8008**
 X-RAY SPECTROSCOPY OF LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI
 WITH XMM
 12/18/2000 - 12/31/2001 FY02: -\$6,757 Total: \$2,967
Prin. Invest.: A F PTAK
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10739 **CARNEGIE - MELLON UNIV** **8009**
 VEXT: A VIRTUAL OBSERVATORY EXPLORATORY TOOLKIT. FULLY FUNDS
 YEAR 1 OF AWARD
 05/17/2001 - 05/31/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: J SCHNEIDER
Tech. Officer: GSFC/P E HUNTER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10740 **CARNEGIE - MELLON UNIV** **8010**
 ADVANCED GALAXY CLUSTER DETECTION SOFTWARE.
 04/12/2001 - 06/30/2003 FY02: \$0 Total: \$130,000
Prin. Invest.: R NICHOL
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10875 **CARNEGIE - MELLON UNIV** **8011**
 AGN X-RAY SPECTRAL EVOLUTION (LTSA 2000)
 05/10/2001 - 08/31/2006 FY02: \$92,408 Total: \$186,318
Prin. Invest.: T MIYAJI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11634 **CARNEGIE - MELLON UNIV** **8012**
 X-RAY CLUSTERS AS COSMOLOGICAL PROBES (LTSA 01)
 01/29/2002 - 01/31/2007 FY02: \$68,190 Total: \$68,190
Prin. Invest.: A K ROMER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11888 **CARNEGIE - MELLON UNIV** **8013**
 X-RAY SPECTROSCOPY OF LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI
 WITH XMM
 04/04/2002 - 11/30/2003 FY02: \$5,812 Total: \$5,812
Prin. Invest.: T DIMATTEO
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 11998 **CARNEGIE - MELLON UNIV** **8014**
 ARTIFICIAL INTELLIGENCE METHODS FOR IDENTIFYING MINERAL COM-
 POSITION.
 05/05/2002 - 04/30/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: C GLYMOUR
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1674 **CARNEGIE - MELLON UNIV** **8015**
 SHAPRE EVOLUTION KINETICS OF SMALL PARTICLES
 06/28/2000 - 11/30/2003 FY02: \$90,000 Total: \$220,250
Prin. Invest.: G S ROHRER, W M MULLINS
Tech. Officer: MSFC/P DOTY
CASE Category: 12 – CHEMISTRY

NAG 8 1704 **CARNEGIE - MELLON UNIV** **8016**
 LATTICE BOLTZMANN COMPUTATIONS OF BINARY DIFFUSION IN LIQUIDS
 UNDER STOCHASTIC MICROGRAVITY
 05/24/2000 - 11/30/2002 FY02: \$60,000 Total: \$181,250
Prin. Invest.: R F SEKERKA
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1799 **CARNEGIE - MELLON UNIV** **8017**
 RESEARCH ENTITLED, "ULTRA-HIGH DENSITY MEMS- ACTUATED-PROBE
 MASS DATA STORAGE"
 04/24/2001 - 04/23/2004 FY02: \$724,591 Total: \$1,239,591
Prin. Invest.: L R CARLEY
Tech. Officer: MSFC/A KEYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1842 **CARNEGIE - MELLON UNIV** **8018**
 ELECTROSMOTIC & ELECTROPHORETIC SELF-ASSEMBLY TECHNIQUES
 TO PROMOTE MASS TRANSFER ON BIOSENSORS
 08/31/2001 - 11/30/2004 FY02: \$266,000 Total: \$333,000
Prin. Invest.: R D TILTON
Tech. Officer: MSFC/B GUYNES
CASE Category: 12 – CHEMISTRY

NAG 9 1090 **CARNEGIE - MELLON UNIV** **8019**
 ANTARTIC METEORITE SEARCH DEMONSTRATION
 02/26/1999 - 04/15/2001 FY02: \$0 Total: \$1,817,801
Prin. Invest.: T KANADE, W WHITAKER
Tech. Officer: HQ/D LAVERY
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1092 **CARNEGIE - MELLON UNIV** **8020**
 AUTONOMOUS ROVER TECHNOLOGY
 03/15/1999 - 04/30/2002 FY02: \$0 Total: \$1,341,800
Prin. Invest.: T KANADE
Tech. Officer: JSC/D LAVERY
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1226 **CARNEGIE - MELLON UNIV** **8021**
 DISTRIBUTED MULTI-ROBOT ASSEMBLY AND CONSTRUCTION
 05/12/2000 - 05/15/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: R SIMMONS
Tech. Officer: JSC/T PENDLETON, JSC/C CULBERT
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1232 **CARNEGIE - MELLON UNIV** **8022**
 STRATEGIC POSITIONING AND ATTITUDE COMPUTING ENGINE FOR HOM-
 ING ORBITING GADGETRY
 05/15/2000 - 12/31/2001 FY02: \$0 Total: \$250,000
Prin. Invest.: O AMIDI
Tech. Officer: JSC/R D JUDAY
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1240 **CARNEGIE - MELLON UNIV** **8023**
 SKYWORKER PHASE II SPACE SOLAR POWER
 06/29/2000 - 12/30/2000 FY02: \$0 Total: \$124,624
Prin. Invest.: R W WHITTAKER
Tech. Officer: JSC/C J CULBERT, JSC/H ALDRIDGE
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1242 **CARNEGIE - MELLON UNIV** **8024**
 RESEARCH GRANT
 06/30/2000 - 09/30/2002 FY02: -\$444 Total: \$21,556
Prin. Invest.: D HERSHBERGER, D HERSHBERGER
Tech. Officer: JSC/C FARMER, JSC/W TARKINGTON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 9 1248 **CARNEGIE - MELLON UNIV** **8025**
 AUTONOMOUS RECONNAISSANCE ROVER FOR EVA ROBOTIC AS SIS-
 TANCE
 07/18/2000 - 07/16/2003 FY02: \$0 Total: \$150,000
Prin. Invest.: D APOSTOLOPOULOS
Tech. Officer: JSC/C J CULBERT, JSC/C FARMER
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1256 **CARNEGIE - MELLON UNIV** **8026**
 SUN SYNCHRONOUS CIRCUMNAVIGATION
 08/21/2000 - 12/20/2001 FY02: \$0 Total: \$1,078,139
Prin. Invest.: W R WHITTAKER
Tech. Officer: JSC/C J CULBERT, JSC/H ALDRIDGE
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1276 **CARNEGIE - MELLON UNIV** **8027**
 PITTSBURGH PUBLIC SCHOOL DIST/CARNEGIE MELLON UNIV TEAM PAR-
 TICIPATION IN FIRST COMPET
 02/22/2001 - 05/01/2001 FY02: -\$19,446 Total: \$15,554
Prin. Invest.: W WHITTAKER
Tech. Officer: JSC/C CULBERT
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1326 **CARNEGIE - MELLON UNIV** **8028**
 DISTRIBUTED MULTI ROBOT ASSEMBLY AND CONSTRUCTION
 06/19/2001 - 11/30/2002 FY02: \$0 Total: \$181,000
Prin. Invest.: R SIMMONS, S SINGH
Tech. Officer: JSC/C L FARMER
CASE Category: 22 – COMPUTER SCIENCE

NAG 9 1327 **CARNEGIE - MELLON UNIV** **8029**
 SELF ADAPTIVE PERCEPTION SYSTEMS FOR VARYING ENVIORNMENTS
 06/21/2001 - 06/20/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: R SIMMONS, S BURKETT
Tech. Officer: JSC/C FARMER
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1440 **CARNEGIE - MELLON UNIV** **8030**
 PATH PLANNING FOR FREE FLYING ROBOTS
 07/22/2002 - 07/21/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: H CHOSET
Tech. Officer: JSC/C L FARMER
CASE Category: 22 – COMPUTER SCIENCE

NAS 3 27735 **CARNEGIE - MELLON UNIV** **8031**
 COORDINATED APPROACH TO DEVELOPMENT & VALIDATION OF
 AEROELASTIC CODES
 05/30/1996 - 03/31/2001 FY02: \$0 Total: \$569,130
Prin. Invest.: J H GRIFFIN
Tech. Officer: GRC/R DEL ROSARIO, GRC/G L STEFKO
CASE Category: 46 – MECHANICAL ENGR

NCC 2 1188 **CARNEGIE - MELLON UNIV** **8032**
 HIGH DEPENDABILITY COMPUTING CONSORTIUM
 07/11/2000 - 12/31/2001 FY02: \$0 Total: \$1,043,461
Prin. Invest.: J H MORRIS
Tech. Officer: ARC/M E DUENAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1226 **CARNEGIE - MELLON UNIV** **8033**
 SIMULATING LEARNING OF COMPLEX, DYNAMIC TASKS
 03/23/2001 - 02/28/2003 FY02: \$105,891 Total: \$262,891
Prin. Invest.: J R ANDERSON
Tech. Officer: ARC/M MATESSA
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1227 **CARNEGIE - MELLON UNIV** **8034**
 AUTOMATED DISCOVERY PROCEDURES FOR GENE EXPRESSION & REGU-
 LATION FROM MICROARRAY & SERIAL ANALYSIS O
 03/16/2001 - 02/28/2003 FY02: \$291,073 Total: \$589,073
Prin. Invest.: C GLYMOUR
Tech. Officer: ARC/J COUGHLAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1241 **CARNEGIE - MELLON UNIV** **8035**
 FORMAL VERIFICATION TOOLS & TECHNIQUES FOR AUTONOMOUS SYSTEMS
 03/28/2001 - 11/30/2002 FY02: \$50,000 Total: \$125,000
Prin. Invest.: J WING
Tech. Officer: ARC/R MORRIS, ARC/D J CLANCY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1243 **CARNEGIE - MELLON UNIV** **8036**
 HETEROGENEOUS MULTI-ROVER COORDINATION OF PLANETARY EXPLORATION
 04/05/2001 - 02/28/2003 FY02: \$513,000 Total: \$913,697
Prin. Invest.: R SIMMONS
Tech. Officer: ARC/R MORRIS, ARC/D J CLANCY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1298 **CARNEGIE - MELLON UNIV** **8037**
 THE HIGH DEPENDABILITY COMPUTING PROGRAM (HDCP)
 12/13/2001 - 12/14/2002 FY02: \$2,750,000 Total: \$2,750,000
Prin. Invest.: J H MORRIS, W SCHERLIS
Tech. Officer: ARC/M R LOWRY, ARC/M DUENAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1317 **CARNEGIE - MELLON UNIV** **8038**
 EFFECTIVE TEAM SUPPORT: FROM TASK AND COGNITIVE MODELING TO SOFTWARE AGENTS FOR TIMECRITICAL COMPL
 03/05/2002 - 02/28/2003 FY02: \$485,993 Total: \$485,993
Prin. Invest.: B E JOHN
Tech. Officer: ARC/R REMINGTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1319 **CARNEGIE - MELLON UNIV** **8039**
 THE SUMMER ROBOTIC AUTONOMY COURSE
 03/13/2002 - 08/31/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: I R NOURBAKSH
Tech. Officer: ARC/M DUENAS
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1324 **CARNEGIE - MELLON UNIV** **8040**
 REAL TIME FAULT DETECTION AND SITUATION AWARENESS FOR ROVERS
 03/13/2002 - 08/31/2003 FY02: \$44,295 Total: \$44,295
Prin. Invest.: R G SIMMONS
Tech. Officer: ARC/M SHIRLEY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5438 **CARNEGIE - MELLON UNIV** **8041**
 INTELLIGENT SPACE ROBOTS IN THE NEXT 20 YEARS A SUMMER STUDY
 06/21/2001 - 10/31/2001 FY02: -\$6,997 Total: \$13,650
Prin. Invest.: R SIMMONS
Tech. Officer: ARC/D CLANCY, ARC/J LAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 223 **CARNEGIE - MELLON UNIV** **8042**
 NATIONAL ROBOTICS ENGINEERING CONSORTIUM
 08/26/1997 - 07/31/2002 FY02: \$0 Total: \$13,867,615
Prin. Invest.: T KANADE
Tech. Officer: GSFC/B H HANKS
CASE Category: 11 – ASTRONOMY

NCC 5 431 **CARNEGIE - MELLON UNIV** **8043**
 EVENTSCOPE: A 3D, NETWORKED ROBOTIC LEARNING ENVIRONMENT. IN RESPONSE TO NASA COOPERATIVE AGREEMENT
 09/20/1999 - 09/30/2002 FY02: \$34,888 Total: \$363,253
Prin. Invest.: P COPPIN
Tech. Officer: GSFC/R E GABRYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52232 **CARNEGIE - MELLON UNIV** **8044**
 LANDMARK BASED NAVIGATION FOR A PLANETARY ROVER
 08/26/1997 - 09/30/2000 FY02: -\$2,220 Total: \$63,780
Prin. Invest.: M HEBERT
Tech. Officer: ARC/M H SIMS
CASE Category: 46 – MECHANICAL ENGR

NGT 2 52277 **CARNEGIE - MELLON UNIV** **8045**
 AUTOMATED SURFACE MISSION PLANNING (STUDENT: PAUL D. THOMPSON)
 06/12/2001 - 08/31/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: W L WHITTAKER
Tech. Officer: ARC/M H SIMS
CASE Category: 22 – COMPUTER SCIENCE

NGT 2 52286 **CARNEGIE - MELLON UNIV** **8046**
 PROBABILISTIC PLANNING AND EXECUTION FOR SITE SURVEY
 05/22/2002 - 08/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R SIMMONS
Tech. Officer: ARC/D SMITH, ARC/S LAU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 3 52370 **CARNEGIE - MELLON UNIV** **8047**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT RESEARCHERS PROGRAM
 06/20/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: P N KUMTA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 3 52379 **CARNEGIE - MELLON UNIV** **8048**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT RESEARCHERS PROGRAM
 06/21/2001 - 07/31/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: M E MCHENRY
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 50279 **CARNEGIE - MELLON UNIV** **8049**
 EFFICIENT MACHINE LEARNING ALGORITHMS FOR SCIENCE STUDENT: ALEXANDER G. GRAY
 06/20/2000 - 07/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: A W MOORE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50347 **CARNEGIE - MELLON UNIV** **8050**
 INTEGRATING FEATURE TRACKING AND SHAPE-FROM-MOTION FOR ROBOT VISUAL NAVIGATION/STUDENT: DENNIS STEL
 05/07/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S SINGH
Tech. Officer: HQ/K BLANDING
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NGT 9 64 **CARNEGIE - MELLON UNIV** **8051**
 LEARNING SHAPE AND BEHAVIOR BY OBSERVING PUSHING
 07/09/2002 - 07/14/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R SIMMONS
Tech. Officer: JSC/C FARMER
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 01118 **DREXEL UNIV** **8052**
 RECONFIGURABLE CONTROL OF AIRCRAFT IN NONLINEAR FLIGHT RE-
 GIMES
 08/16/2001 - 08/31/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: B C CHANG
Tech. Officer: LARC/C M BELCASTRO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1436 **DREXEL UNIV** **8053**
 ALTERED SIGNAL TRANSDUCTION & DIFFERENTIAL GENE EXPRESSION IN
 PC12 PHEOCYTOMOCYTOMA CELLS IN CULTUR
 09/19/2000 - 08/31/2002 FY02: \$64,965 Total: \$491,857
Prin. Invest.: P I LELKES
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 1884 **DREXEL UNIV** **8054**
 COMBUSTION OF UNCONFINED DROPLET CLUSTERS IN MICRO GRAVITY
 06/01/1996 - 09/30/2000 FY02: -\$30,933 Total: \$290,794
Prin. Invest.: D A RUFF
Tech. Officer: GRC/D D ROSS, GRC/M A SACKSTEDTER
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2212 **DREXEL UNIV** **8055**
 DEVELOPMENT OF LEAN DIRECT WALL INJECTION (LDWI)CO MBUSTOR
 12/03/1998 - 11/30/2001 FY02: \$47 Total: \$141,229
Prin. Invest.: K J CHOI
Tech. Officer: GRC/R R TACINA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2295 **DREXEL UNIV** **8056**
 DEVELOPMENT AND VERIFICATION OF AN IMPROVED MODEL OF THE ICE
 ACCRETION PROCESS
 09/29/1999 - 02/09/2001 FY02: -\$19,651 Total: \$63,324
Prin. Invest.: D A RUFF
Tech. Officer: GRC/M G POTAPCZUK
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 6964 **DREXEL UNIV** **8057**
 STELLAR AND BINARY EVOLUTION IN GLOBULAR CLUSTERS - ATP
 02/10/1998 - 02/14/2002 FY02: \$0 Total: \$350,826
Prin. Invest.: S L MCMILLAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8929 **DREXEL UNIV** **8058**
 SCHOOL-BASED UV-B MONITORING PROJECT IN SUPPORT OF EOS-CHEM
 01/13/2000 - 01/14/2003 FY02: \$82,633 Total: \$267,582
Prin. Invest.: D R BROOKS
Tech. Officer: GSFC/E HILSENATH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9264 **DREXEL UNIV** **8059**
 BINARY EVOLUTION IN GLOBULAR CLUSTERS - ATP
 03/13/2000 - 03/31/2003 FY02: \$0 Total: \$152,411
Prin. Invest.: S MCMILLAN
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10026 **DREXEL UNIV** **8060**
 NASA ESS HPCC PROGRAM
 10/27/2000 - 10/14/2002 FY02: \$129,832 Total: \$344,832
Prin. Invest.: D VALLIERES
Tech. Officer: GSFC/J FISCHER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10775 **DREXEL UNIV** **8061**
 STELLAR AND BINARY EVOLUTION IN STAR CLUSTERS (ATP 2000)
 04/24/2001 - 04/30/2004 FY02: \$74,892 Total: \$144,892
Prin. Invest.: S L MCMILLAN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11119 **DREXEL UNIV** **8062**
 NUMERICAL RELATIVISTIC ASTROPHYSICS AT THE LABORATORY OF HIGH
 ENERGY ASTROPHYSICS (LHEA).
 08/09/2001 - 03/14/2003 FY02: \$10,193 Total: \$46,374
Prin. Invest.: M VALLIERES
Tech. Officer: GSFC/J CENTRELLA
CASE Category: 11 – ASTRONOMY

NAG 5 11340 **DREXEL UNIV** **8063**
 LIPSOSOME-ENCAPSULATED ENZYMES AS OPTICAL NANOSENSORS FOR
 THE DETECTION OF BIOLOGICAL PROCESSES
 09/14/2001 - 09/14/2002 FY02: \$0 Total: \$6,000
Prin. Invest.: M A WHEATLEY
Tech. Officer: GSFC/H SHAW
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 12243 **DREXEL UNIV** **8064**
 PROBING THE EVOLUTION OF AGN CLUSTERING (LTSA 2001)
 06/05/2002 - 06/14/2007 FY02: \$97,964 Total: \$97,964
Prin. Invest.: M VOGLEY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 9 1380 **DREXEL UNIV** **8065**
 INNOVATIVE CARDIAC TISSUE ENGINEERING IN RWV BIOREACTORS
 09/13/2001 - 09/04/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: P LELKES
Tech. Officer: JSC/N PELLIS
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NAG13 00040 **DREXEL UNIV** **8066**
 APPLICATION OF AN INTEGRATED MONITORING & MODELING SYSTEM
 NARRAGANSETT BAY - INTERNET-BASED TECHNOL
 08/23/2000 - 08/22/2003 FY02: \$578,045 Total: \$1,464,549
Prin. Invest.: M PIASECKI, M SPAULDING
Tech. Officer: SSC/R MILLER
CASE Category: 39 – ENVIRONMENTAL SCI,OTHER

NCC 1 278 **DREXEL UNIV** **8067**
 EFFECTS OF ELECTROMAGNETIC-INDUCED FAILURE MODES: MODELING
 AND ANALYSIS MY 1/3
 02/25/1998 - 12/31/2000 FY02: \$0 Total: \$190,900
Prin. Invest.: A C LAU, B C CHANG
Tech. Officer: LARC/C M BELCASTRO
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 297 **DREXEL UNIV** **8068**
 A STUDY OF THE CHEMISTRY OF SULFUR IN THE INTER- TROPICAL AND SOUTH PACIFIC CONVERGENCE ZONES-----
 04/28/1998 - 10/31/2002 FY02: \$0 Total: \$498,742
Prin. Invest.: A R BANDY, D C THORNTON
Tech. Officer: LARC/J L ROPER, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 409 **DREXEL UNIV** **8069**
 AN AIRBORNE STUDY OF THE CHEMISTRY OF SULFUR IN THE ATMOSPHERE OF THE WESTERN NORTH PACIFIC OCEAN
 09/11/2000 - 03/31/2003 FY02: \$351,460 Total: \$661,800
Prin. Invest.: A R BANDY
Tech. Officer: LARC/V E DELUORO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 3 822 **DREXEL UNIV** **8070**
 EXPERIMENTAL AND MODEL DEVELOPMENT FOR INVESTIGATION OF SOOTING AND RADIATION EFFECTS IN MICROGRAVITY
 08/17/2000 - 12/31/2002 FY02: \$155,913 Total: \$371,243
Prin. Invest.: D CHOI
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 825 **DREXEL UNIV** **8071**
 DEVELOPMENT OF THERMALLY SPRAYED FGM EROSION/OXIDATION RESISTANT COATING FOR POLYMERIC SUBSTRATES
 09/26/2000 - 08/31/2003 FY02: \$70,936 Total: \$141,696
Prin. Invest.: D KNIGHT
Tech. Officer: GRC/J K SUTTER
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 835 **DREXEL UNIV** **8072**
 A PRELIMINARY INVESTIGATION OF THE E-BEAM INDUCED POLYMERIZATION OF MALEIMIDE AND NORBORNENE END-CAP
 12/15/2000 - 04/24/2003 FY02: \$71,349 Total: \$163,730
Prin. Invest.: D R PALMESE
Tech. Officer: GRC/M A MEADOR
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 847 **DREXEL UNIV** **8073**
 COMBUSTION OF UNSUPPORTED DROPLET CLUSTERS IN MICROGRAVITY
 01/11/2001 - 12/18/2003 FY02: \$71,253 Total: \$130,945
Prin. Invest.: D A RUFF
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 913 **DREXEL UNIV** **8074**
 INVESTIGATION OF SOOTING AND RADIATION EFFECTS ON THE BURNING OF LARGE ETHANOL AND HEPTANE DROPLETS
 08/31/2001 - 07/12/2002 FY02: \$0 Total: \$11,250
Prin. Invest.: D Y CHOI
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 1003 **DREXEL UNIV** **8075**
 DETERMINATION OF COOL FLAME QUENCHING DISTANCES AT MICROGRAVITY
 09/13/2002 - 09/15/2003 FY02: \$65,509 Total: \$65,509
Prin. Invest.: H PEARLMAN
Tech. Officer: GRC/J E BROOKER
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 1006 **DREXEL UNIV** **8076**
 LOW-TEMPERATURE OXIDATION AND COOL FLAMES EXPERIMENT
 09/19/2002 - 09/18/2004 FY02: \$141,356 Total: \$141,356
Prin. Invest.: H PEARLMAN
Tech. Officer: GRC/D L URBAN
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 130 **DREXEL UNIV** **8077**
 PC12 PHEOCHROMOCUTOMA CELLS
 05/31/2001 - 05/30/2003 FY02: \$185,000 Total: \$353,150
Prin. Invest.: P LELKE
Tech. Officer: JSC/D RISIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 6858 **FRANKLIN-MARSHALL COLL** **8078**
 STATISTICAL ALGORITHMS FOR THE ANALYSIS OF SPACE-BASED DATASETS
 02/09/1998 - 02/14/2002 FY02: -\$31 Total: \$63,881
Prin. Invest.: D BACKMAN
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NCC 2 5365 **FRANKLIN-MARSHALL COLL** **8079**
 THE NSTARS PROJECT: DATABASE, ASTROPHYSICS AND ASTRONOMY RESEARCH AND SCIENTIFIC WORKSHOPS
 02/01/2000 - 01/31/2001 FY02: \$0 Total: \$63,250
Prin. Invest.: D BACKMAN
Tech. Officer: ARC/L CAROFF
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1840 **HAHNEMANN UNIV** **8080**
 DETERGENT INTERACTIONS AFFECTING MEMBRANE PROTEIN CRYSTALLIZATION: ANALYSIS & USE IN SCREEN DESIGN
 09/28/2001 - 11/30/2004 FY02: \$314,000 Total: \$395,000
Prin. Invest.: P J LOLL, J M WEINCEK
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9285 **HAVERFORD COLL** **8081**
 LARGE-SCALE STRUCTURE IN THE X-RAY BACKGROUND AND LIMITS ON COSMOLOGICAL PARAMETERS FROM THE INTEGRAL
 04/17/2000 - 04/30/2003 FY02: \$0 Total: \$54,764
Prin. Invest.: S P BOUGHN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 1 2248 **LEHIGH UNIV** **8082**
 ANALYSIS OF PIV IMAGING OF COUPLED GAP-WAKE INSTABILITIES/TURBULENCE: SOURCE OF NOISE
 10/25/1999 - 09/30/2000 FY02: -\$2,831 Total: \$12,169
Prin. Invest.: D O ROCKWELL
Tech. Officer: LARC/M J WALSH
CASE Category: 46 – MECHANICAL ENGR

NGT 5 50418 **LEHIGH UNIV** **8083**
 WHEN AND HOW DID TOPOGRAPHY DEVELOP IN THE NORTHERN APPALACHIAN MOUNTAINS AN INTEGRATIVE GIS-BASED APPROACH
 08/14/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: F J PAZZAGLIA
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NAG 5 10172 **LINCOLN UNIV - PA.** **8084**
 LINCOLN'S ADVANCED SCIENCE AND ENGINEERING REINFOR CEMENT
 (LASER) PROGRAM
 01/03/2001 - 01/14/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: R LANGLEY
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 662 **LINCOLN UNIV - PA.** **8085**
 NASA/LINCOLN UNIVERSITY TEACHER EDUCATION PARTNERSHIP: MINOR-
 ITY UNIVERSITY MATHEMATICS, SCIENCE, & TEC
 08/21/2002 - 08/31/2005 FY02: \$199,482 Total: \$199,482
Prin. Invest.: O RICHARD
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12416 **MUHLENBERG COLL** **8086**
 INTRODUCING NEW TECHNOLOGIES INTO THE CLASSROOM K- 16
 07/29/2002 - 07/31/2005 FY02: \$1,455,000 Total: \$1,455,000
Prin. Invest.: R MILLIGAN
Tech. Officer: HQ/S CANRIGHT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 3368 **PENN. ST. U. ERIE-BEHREND COLL** **8087**
 ISO SOLAR SYSTEM MISSION-TEAM MEMBER SUPPORT
 08/28/1996 - 09/30/2001 FY02: -\$5,861 Total: \$54,139
Prin. Invest.: R F KNACKE
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 50387 **PENN. STATE UNIV.-RADNOR** **8088**
 UNVEILING THE ACCRETION DISKS WHICH FUEL ACTIVE GALACTIC
 NUCLEI (STUDENT: KAREN LEWIS)
 06/03/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M ERACLEOUS
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1044 **PENNSYLVANIA STATE UNIV -HERSHEY MED.** **8089**
 NEUROVASCULAR RESPONSE TO BED REST
 07/15/1998 - 07/14/2001 FY02: \$0 Total: \$340,560
Prin. Invest.: L I SINOWAY
Tech. Officer: JSC/C F SAWIN
CASE Category: 56 – MEDICAL

NAG 9 1259 **PENNSYLVANIA STATE UNIV -HERSHEY MED.** **8090**
 BED REST & NEUROVASCULAR FUNCTION
 09/25/2000 - 11/06/2001 FY02: -\$161,411 Total: \$32,197
Prin. Invest.: D MACLEAN
Tech. Officer: JSC/C W LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2147 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8091**
 NUMERICAL SIMULATIONS FOR LANDING GEAR NOISE GENERATION AND
 RADIATION (REF:NRA 98-LARC-5)
 02/05/1999 - 12/31/2001 FY02: \$0 Total: \$386,954
Prin. Invest.: P J MORRIS, L N LONG
Tech. Officer: LARC/R R ANTOLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2208 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8092**
 SIMULATION OF THE NOISE RADIATED BY RECTANGULAR JETS
 06/24/1999 - 02/28/2002 FY02: \$0 Total: \$120,000
Prin. Invest.: P J MORRIS, L N LONG
Tech. Officer: LARC/R A GOLUB, LARC/D P GARBER
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2273 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8093**
 ADAPTIVE INTERFACE APPROACH USING A REAL TIME BIOCYBERNETIC
 SYSTEM: CONTROL OF HAZARDOUS
 02/25/2000 - 02/24/2002 FY02: -\$956 Total: \$29,044
Prin. Invest.: W J RAY
Tech. Officer: LARC/L J PRINZEL
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 1 01009 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8094**
 THE PHYSICAL MECHANISMS FOR TONAL NOISE GENERATION BY SLATS
 01/23/2001 - 01/31/2004 FY02: \$102,601 Total: \$202,504
Prin. Invest.: P J MORRIS
Tech. Officer: LARC/M R KHORRAMI, LARC/B A SINGER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01085 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8095**
 AN EFFICIENT SCHEME FOR UPDATING SPARSE CHOLESKY FACTORS
 05/24/2001 - 03/31/2002 FY02: \$0 Total: \$20,002
Prin. Invest.: P RAGHAVAN
Tech. Officer: LARC/J C NEWMAN
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 02065 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8096**
 SIMULATION OF METAL DEPOSITION USING ELECTRON BEAM
 03/14/2002 - 11/13/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: V V SEMAK
Tech. Officer: LARC/K M TAMINGER
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 1302 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8097**
 PARTICIPATION AS MISSION SCIENTIST IN OBSERVATIONS FROM THE
 MIDDLE STRATOSPHERE DURING SOLVE
 03/05/1999 - 01/31/2001 FY02: -\$2,303 Total: \$101,697
Prin. Invest.: W H BRUNE
Tech. Officer: ARC/E P CONDON, ARC/R S HIPSKIND
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1342 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8098**
 MOLECULAR CONTROL OF CELL GROWTH DURING GRAVITY RESPONSES
 OF MAIZE SEEDINGS
 07/20/1999 - 07/14/2003 FY02: \$59,036 Total: \$339,434
Prin. Invest.: D J COSGROVE
Tech. Officer: ARC/M M AVERNER, ARC/D D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1366 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8099**
 GRAVITROPISM IN CHARA RHIZOIDS
 07/30/1999 - 07/14/2003 FY02: \$44,673 Total: \$259,890
Prin. Invest.: S G GILROY
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1410 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8100**
 OBSTACLE DETECTION ALGORITHMS FOR ROTORCRAFT NAVIGATION
 06/13/2000 - 05/14/2001 FY02: \$0 Total: \$59,240
Prin. Invest.: R KASTURI, O I CAMPS
Tech. Officer: ARC/A J AHUMADA, ARC/J B MULLIGAN
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1453 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8101
 MEASUREMENTS OF OH AND HO2 USING ATHOS ON THE DC-8 DURING
 SOLVE
 01/26/2001 - 01/31/2003 FY02: \$100,000 Total: \$200,000
Prin. Invest.: W H BRUNE
Tech. Officer: ARC/E P CONDON, ARC/R S HIPSKIND
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 2 1487 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8102
 WIRE DETECTION ALGORITHMS FOR NAVIGATION
 06/26/2001 - 06/30/2002 FY02: \$0 Total: \$34,410
Prin. Invest.: R KASTURI, O I CAMPS
Tech. Officer: ARC/A J AHUMADA, ARC/J B MULLIGAN
CASE Category: 22 - COMPUTER SCIENCE

NAG 2 1524 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8103
 EVALUATION OF SI-O-C FOAM CERAMICS IN SIMULATED AE ROTHEMAL
 ENVIRONMENTS
 09/14/2001 - 12/31/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: J R HELLMANN
Tech. Officer: ARC/D T ELLERBY, ARC/S M JOHNSON
CASE Category: 47 - METAL & MATERIALS ENGR

NAG 3 1871 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8104
 MICROGRAVITY EFFECTS ON TRANSENDOTHELIAL TRANSPORT
 05/22/1996 - 10/21/2001 FY02: -\$4,661 Total: \$455,339
Prin. Invest.: J M TAZBELL
Tech. Officer: GRC/J S LING, GRC/B S SINGH
CASE Category: 13 - PHYSICS

NAG 3 2151 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8105
 MODELING OF COMBUSTION RESPONSE OF GAS TURBINE SPR AY
 SWIRL-STABILIZED INJECTORS TO ACOUSTIC OSCILLA
 04/07/1998 - 12/31/2001 FY02: \$0 Total: \$135,000
Prin. Invest.: V G YANG
Tech. Officer: GRC/K L BREISACHER
CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2328 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8106
 A NUMERICAL AND EXPERIMENTAL STUDY OF THE FLOW AND NOISE FROM
 SUBSONIC AND SUPERSONIC JETS
 03/17/2000 - 09/30/2002 FY02: \$0 Total: \$181,700
Prin. Invest.: P J MORRIS
Tech. Officer: GRC/M D DAHL
CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2374 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8107
 MOLECULAR DYNAMIC OF FLUID SOLID SYSTEMS MOLECULAR DYNAMIC
 OF FLUID SOLID SYSTEMS
 03/31/2000 - 12/04/2003 FY02: \$45,000 Total: \$120,000
Prin. Invest.: D BANAVAR
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2448 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8108
 HEALTH MANAGEMENT AND LIFE EXTENDING CONTROL OF GA S TURBINE
 ENGINES
 05/30/2000 - 05/14/2003 FY02: \$55,000 Total: \$150,000
Prin. Invest.: A RAY
Tech. Officer: GRC/T GUO
CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2470 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8109
 DYNAMICS OF PARTICLES IN STATIONARY ISOTROPIC TURB ULENCE
 07/11/2000 - 11/30/2003 FY02: \$0 Total: \$68,000
Prin. Invest.: D R COLLINS
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2501 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8110
 COMBUSTION BEHAVIOR OF ADVANCED MONOPROPELLANTS COMBUS-
 TION BEHAVIOR OF ADVANCED MONOPROPELLANTS
 12/11/2000 - 10/31/2003 FY02: \$97,500 Total: \$197,500
Prin. Invest.: D KUO
Tech. Officer: GRC/B D REED
CASE Category: 42 - ASTRONAUTICAL ENGR

NAG 3 2546 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8111
 EXPERIMENTAL AND THEORETICAL STUDIES OF WET GRANUL AR MEDIA
 02/26/2001 - 01/31/2004 FY02: \$79,159 Total: \$155,304
Prin. Invest.: D E SCHIFFER
Tech. Officer: GRC/J H AGUI
CASE Category: 43 - CHEMICAL ENGR

NAG 3 2561 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8112
 DIELECTRIC MATERIALS DEVELOPMENT FOR HIGH TEMPERATURE
 03/16/2001 - 05/08/2003 FY02: \$50,000 Total: \$120,000
Prin. Invest.: D T LANAGAN
Tech. Officer: GRC/G E SCHWARZE
CASE Category: 47 - METAL & MATERIALS ENGR

NAG 3 2590 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8113
 MEMS NOZZLE OPTIMIZATION STUDIES FOR DECOMPOSING S OLID
 MICROPROPULSION TECHNOLOGY
 04/19/2001 - 05/31/2004 FY02: \$30,000 Total: \$88,903
Prin. Invest.: D A LEVIN
Tech. Officer: GRC/B D REED
CASE Category: 42 - ASTRONAUTICAL ENGR

NAG 3 2598 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8114
 FLYWHEEL TECHNOLOGY DEVELOPMENT FOR SMALL SATELITE APPLICA-
 TIONS
 04/27/2001 - 04/30/2003 FY02: \$101,143 Total: \$160,888
Prin. Invest.: H HOFMANN
Tech. Officer: GRC/B KENNY
CASE Category: 45 - ELECTRICAL ENGR

NAG 3 2603 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8115
 INVESTIGATION OF ULTRAHIGH POWER DENSITY MACHINE D ESIGNS
 05/04/2001 - 12/31/2001 FY02: \$0 Total: \$79,997
Prin. Invest.: D HOFMANN
Tech. Officer: GRC/G V BROWN
CASE Category: 45 - ELECTRICAL ENGR

NAG 3 2656 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8116
 PREDICTION OF GAS LUBRICATED FOIL JOURNAL BEARING PERFOR-
 MANCE
 01/24/2002 - 01/21/2005 FY02: \$99,980 Total: \$99,980
Prin. Invest.: M CARPINO
Tech. Officer: GRC/S A HOWARD
CASE Category: 46 - MECHANICAL ENGR

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NAG 3 2657 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8117
 THRUST AUGMENTATION MEASUREMENTS USING PULSE DETONATION
 EJECTOR
 01/22/2002 - 12/11/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: R J SANTORO
Tech. Officer: GRC/D T PALAC
CASE Category: 46 - MECHANICAL ENGR

NAG 3 2659 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8118
 OPTIMIZATION OF ACTIVE CONTROL OF GAS TURBINE COMBUSTION
 USING MAIN FLOW MODULATION IN LOW EMISSION
 12/22/2001 - 12/11/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D A SANTAVICCA
Tech. Officer: GRC/C T CHANG
CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2729 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8119
 DYNAMICS OF DROPS AND BUBBLES IN CONFINED FLOWS OF COMPLEX
 FLUIDS
 04/02/2002 - 03/31/2006 FY02: \$74,130 Total: \$74,130
Prin. Invest.: A BORHAN
Tech. Officer: GRC/M M HASAN
CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2746 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8120
 MICROGRAVITY EFFECTS ON TRANSVASCULAR TRANSPORT AND VASCULAR
 CONTROL
 04/02/2002 - 02/28/2006 FY02: \$114,190 Total: \$114,190
Prin. Invest.: D M TARBELL
Tech. Officer: GRC/P A PARSONS
CASE Category: 49 - ENGINEERING, OTHER

NAG 3 2778 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8121
 INTELLIGENT CONTROL OF AUTONOMOUS PROPULSION SYSTEMS
 05/16/2002 - 12/13/2002 FY02: \$200,001 Total: \$200,001
Prin. Invest.: K R REICHARD
Tech. Officer: GRC/J LITT
CASE Category: 41 - AERONAUTICAL ENGR

NAG 3 2795 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8122
 INTEGRATION OF QUANTUM DOTS INTO PROTOCRYSTALLINE SILICON
 SOLAR CELLS
 09/06/2002 - 09/08/2003 FY02: \$70,000 Total: \$70,000
Prin. Invest.: C R WRONSKI
Tech. Officer: GRC/S G BAILEY
CASE Category: 45 - ELECTRICAL ENGR

NAG 4 160 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8123
 LEARNING USING ERAST AIRCRAFT/LUAV
 02/08/1999 - 09/30/2001 FY02: -\$84 Total: \$230,334
Prin. Invest.: B GRABOWSKI, J A GOODE
Tech. Officer: DFRC/M MC CARTHY, DFRC/E L DUKE
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 5 3970 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8124
 USE OF ARABIDOPSIS TRANSPOSON MUTANTS IN THE STUDY
 03/05/1997 - 02/28/2001 FY02: -\$237 Total: \$469,950
Prin. Invest.: N V FEDOROFF
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 5 4301 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8125
 A STUDY OF PLANETARY SYSTEMS AROUND NEUTRON STARS
 04/09/1997 - 05/31/2002 FY02: \$0 Total: \$297,000
Prin. Invest.: D WOLSZCZAN
Tech. Officer: GSFC/D NAVA
CASE Category: 11 - ASTRONOMY

NAG 5 4553 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8126
 THE GLOBAL WATER CYCLE: EXTENSION ACROSS THE EARTH
 06/12/1997 - 06/30/2002 FY02: \$0 Total: \$5,263,454
Prin. Invest.: E J BARRON
Tech. Officer: GSFC/M WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 4840 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8127
 THE REGENERATING PROTOPLAST AS A SINGLE CELL MODEL IN PLANTS
 06/26/1997 - 05/31/2002 FY02: \$0 Total: \$366,770
Prin. Invest.: R CYR
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 5 5169 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8128
 PROJECT DROPPS: THE DISTRIBUTION AND ROLE OF PARTICLES IN THE
 POLAR SUMMER MESOSPHERE
 03/13/1998 - 12/31/2002 FY02: \$0 Total: \$168,596
Prin. Invest.: J D MITCHELL
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 - PHYSICS

NAG 5 5174 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8129
 VALIDATION AND PROMPT DISTRIBUTION OF ACCESS DATA FUNDING FOR
 FIRST YEAR OF GRANT
 03/09/1998 - 03/31/2002 FY02: \$0 Total: \$109,080
Prin. Invest.: S COUTU
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5220 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8130
 GRANT NAG5-5220 - HIGH ENERGY ANTIMATTER TELESCOPE (HEAT) - PI
 DR. JAMES BEATTY
 03/16/1999 - 11/30/2002 FY02: \$43,000 Total: \$504,000
Prin. Invest.: J J BEATTY
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5248 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8131
 COSMIC RAY ENERGISTICS AND MASS (CREAM) COSMIC RAY ENERGISTICS
 AND MASS (CREAM)
 03/12/2000 - 11/30/2002 FY02: \$160,000 Total: \$456,000
Prin. Invest.: BEATTY
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5250 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8132
 FIRST YEAR OF THREE YEAR EFFORT FOR PI DR. STEPHANE COUTU
 03/23/2000 - 11/30/2002 FY02: \$160,000 Total: \$456,000
Prin. Invest.: S E COUTU
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 - PHYSICS

NAG 5 5256 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8133
 MODIFICATION OF IONIZATION PROPERTIES IN THE MIDDLE ATMOSPHERE
 BY GRAVITY WAVES
 03/20/2000 - 02/10/2003 FY02: \$155,400 Total: \$669,656
Prin. Invest.: C L CROSKEY
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5277 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8134
 RESEARCH IN X-RAY ASTRONOMY RESEARCH IN X-RAY ASTRONOMY
 06/01/2000 - 05/15/2003 FY02: \$285,000 Total: \$550,000
Prin. Invest.: D N BURROWS, G P GARMIRE
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5313 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8135
 GRAVITY WAVE FORCING THE MESOSPHERE AND LOWER THERMO-
 SPHERE MOUNTAIN AND CONNECTIVE WAVES
 02/08/2001 - 02/09/2004 FY02: \$98,931 Total: \$178,218
Prin. Invest.: C L CROSKEY
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5356 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8136
 NEW TRACK IMAGING TECHNOLOGY FOR NEXT-GENERATION GAMMA-RAY
 TELESCOPES
 04/09/2002 - 12/31/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: T N JACKSON
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5363 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8137
 COSMIC-RAY SPECTRUM AND COMPOSITION AT HIGH ENERGY FIRST
 YEAR OF FUNDING
 05/16/2002 - 03/31/2007 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S COUTU
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5369 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8138
 LAYERS IN THE EQUATORIAL MESOSPHERE, MOTIONS AND A EROSL
 ROCKET AND RADAR STUDY (LEMMA)
 06/25/2002 - 06/18/2005 FY02: \$119,691 Total: \$119,691
Prin. Invest.: J MITCHELL
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5375 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8139
 ROCKET INVESTIGATION OF SCATTERING LAYERS IN THE BOTTOMSIDE
 EQUATORIAL F REGION IONOSPHERE
 06/19/2002 - 06/10/2005 FY02: \$10,704 Total: \$10,704
Prin. Invest.: T WHEELER
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6389 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8140
 MODELING THE AIR-SEA FLUXES OF CARBONYL SULFIDE AND CARBON
 MONOXIDE USING REMOTELY SENSED DATA
 10/17/1997 - 08/31/2001 FY02: -\$1 Total: \$179,505
Prin. Invest.: R NAJJAR
Tech. Officer: GSFC/J A MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6399 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8141
 THE GAS AND THE STARS OF INTERMEDIATE REDSHIFT GALAXIES (LTSA)
 10/10/1997 - 10/14/2002 FY02: \$0 Total: \$283,394
Prin. Invest.: J CHARLTON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6451 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8142
 EVALUATION AND INTERCOMPARISON OF THREE-DIMENSIONAL MARINE
 CARBON CYCLE MODELS
 10/24/1997 - 12/31/2001 FY02: \$0 Total: \$201,866
Prin. Invest.: R NAJJAR
Tech. Officer: GSFC/J CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6656 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8143
 SPACE-TIME SCALING OF WATER TRANSFERS BETWEEN THE LAND
 SURFACE AND THE LOWER ATMOSPHERE
 12/04/1997 - 10/31/2000 FY02: -\$48 Total: \$163,907
Prin. Invest.: A P BARROS
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6737 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8144
 THE STATISTICAL CONSULTING CENTER FOR ASTRONOMY (SCCA)
 12/17/1997 - 12/31/2001 FY02: \$0 Total: \$97,886
Prin. Invest.: M AKRITAS
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7017 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8145
 NEUTRON STAR ATMOSPHERES - ATP
 02/17/1998 - 02/14/2002 FY02: \$0 Total: \$288,142
Prin. Invest.: G G PAVLOV
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 7547 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8146
 SATELLITE TRACKING AND RAINFALL ESTIMATION FOR SHORT-TERM,
 HEAVILY PRECIPITATING STORM EVENTS
 06/22/1998 - 06/30/2002 FY02: \$0 Total: \$235,764
Prin. Invest.: J L EVANS
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICALSCIENCE

NAG 5 7776 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8147
 REMOTE SENSING OF WEST ANTARCTIC ICE SHEET SURFACE MELTING:
 RECOGNITION, CONTROLS, AND SIGNIFICANCE
 10/27/1998 - 12/31/2002 FY02: \$0 Total: \$31,220
Prin. Invest.: R ALLEY
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8107 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8148
 AXAF, XMM AND ASTRO-E INVESTIGATIONS OF SEYFERT/QUASAR CEN-
 TRAL ENGINES: EXPLORING THE ENVIRONMENTS
 02/05/1999 - 02/14/2004 FY02: \$66,700 Total: \$255,200
Prin. Invest.: W N BRANDT
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NAG 5 8422 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8149**
 2-RAY STUDIES OF YOUNG STELLAR OBJECTS_(LTSA 98)
 04/01/1999 - 04/30/2001 FY02: -\$1,655 Total: \$51,462
Prin. Invest.: E D FEIGELSON
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8710 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8150**
 METHANE & HYDROGEN IN EARTH'S PRIMITIVE ATMOSPHERE
 08/02/1999 - 09/30/2003 FY02: \$76,508 Total: \$235,087
Prin. Invest.: J F KASTING
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 8735 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8151**
 MERGING MODELS AND OBSERVATIONS OF THE ATMOSPHERIC BOUND-
 ARY LAYER'S MESOSCALE STRUCTURE DURING SGP-9
 08/17/1999 - 08/14/2002 FY02: \$0 Total: \$117,240
Prin. Invest.: D R STAUFFER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8738 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8152**
 SPACE-TIME DYNAMICS OF SOIL MOISTURE & TEMPERATURE -SCALE
 ISSUES
 08/17/1999 - 08/14/2003 FY02: \$30,000 Total: \$101,000
Prin. Invest.: D MILLER
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9039 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8153**
 TECTONIC-CLIMATE INTERACTIONS IN ACTION OROGENIC BELTS: QUAN-
 TIFICATION OF DYNAMIC TOPOGRAPHY WITH S
 02/10/2000 - 12/31/2000 FY02: -\$841 Total: \$81,191
Prin. Invest.: D W BURBANK
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9089 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8154**
 SEARCH FOR NEW EVIDENCE IN PRE-2.0 GA PALEOSOLS & SHALES FOR
 THE EARLY EVOLUTION OF ATMOSPHERIC OXYG
 02/17/2000 - 01/31/2003 FY02: \$60,000 Total: \$180,000
Prin. Invest.: H OHMOTO
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 9153 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8155**
 THEORETICAL STUDIES OF GAMMA-RAY BURSTS WITH SWIFT
 03/02/2000 - 06/30/2003 FY02: \$28,000 Total: \$88,989
Prin. Invest.: P I MESZAROS
Tech. Officer: GSFC/N GEHRELS
CASE Category: 11 – ASTRONOMY

NAG 5 9192 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8156**
 PHYSICS OF GAMMA RAY BURST SOURCES
 03/08/2000 - 03/14/2003 FY02: \$106,429 Total: \$317,329
Prin. Invest.: P MESZAROS
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9377 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8157**
 THE ORIGINS AND PROPERTIES OF INTRACLUSTER STARS (LTSA 99)
 04/05/2000 - 03/31/2005 FY02: \$103,045 Total: \$315,848
Prin. Invest.: R CIARDULLO
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9586 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8158**
 A RADICAL-VELOCITY ASSESSMENT OF CANDIDATE SIM GRID STARS FOR
 ASTROMETIC STABILITY, USING
 05/10/2000 - 05/14/2003 FY02: \$0 Total: \$70,000
Prin. Invest.: R A WADE
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9587 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8159**
 "THIN FILM TRANSISTOR ADDRESSING ARRAYS FOR MICRO- WELL GAMMA
 RAY DETECTORS"
 05/12/2000 - 05/14/2001 FY02: -\$899 Total: \$99,101
Prin. Invest.: T JACKSON
Tech. Officer: GSFC/S D HUNTER
CASE Category: 11 – ASTRONOMY

NAG 5 9918 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8160**
 AN X-RAY STUDY OF THE MOST DISTANT QUASARS FROM THE SLOAN
 DIGITAL SKY SURVEY
 09/05/2000 - 09/14/2002 FY02: \$0 Total: \$28,100
Prin. Invest.: W N BRANDT
Tech. Officer: GSFC/R F MUSKOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9924 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8161**
 A DETAILED STUDY OF TWO NLS1
 09/05/2000 - 09/14/2003 FY02: \$0 Total: \$6,964
Prin. Invest.: W N BRANDT
Tech. Officer: GSFC/P M ATKINS
CASE Category: 11 – ASTRONOMY

NAG 5 9932 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8162**
 XMM SPECTROSCOPY OF THE X-RAY DETECTED BROAD ABSORPTION
 LINE QSO CSO 755
 09/07/2000 - 09/14/2003 FY02: \$0 Total: \$32,700
Prin. Invest.: W N BRANDT
Tech. Officer: GSFC/D F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9933 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8163**
 XMM STUDY OF THE BRIGHT ULTRASOFT NARROW-LINE QUASAR NAB
 0205+024
 09/07/2000 - 09/14/2003 FY02: \$0 Total: \$5,945
Prin. Invest.: W N BRANDT
Tech. Officer: GSFC/D F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9934 **PENNSYLVANIA STATE UNIV. - UNIV. PARK** **8164**
 CONSTRAINTS ON HO FROM TIME-DELAY MEASUREMENTS OF PG1115+080
 09/06/2000 - 09/14/2003 FY02: \$0 Total: \$36,600
Prin. Invest.: G CHARTAS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9938 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8165
SPECTRUM AND PULSATIONS OF THE NEUTRON STAR CANDID ATE RX
J0002+6246
09/06/2000 - 09/14/2002 FY02: \$0 Total: \$5,991
Prin. Invest.: G PAVLOV
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9939 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8166
AN XMM STUDY OF THE BRIGHT NARROW-LINE SEYFERT 1 GALAXY
ARAKELIAN 564
09/06/2000 - 09/14/2003 FY02: \$0 Total: \$28,800
Prin. Invest.: W BRANDT
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9940 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8167
XMM SPECTROSCOPY OF MARKARIAN 6: INTRINSIC ABSORPT ION AND
BLACK HOLE REGION
09/06/2000 - 09/14/2003 FY02: \$0 Total: \$30,300
Prin. Invest.: W N BRANDT
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9949 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8168
THROUGH BAL QUASARS BRIGHTLY
09/07/2000 - 08/31/2003 FY02: \$0 Total: \$33,900
Prin. Invest.: G CHARTAS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9970 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8169
PROBING CLASS O PROTOSTARS WITH HARD X-RAYS --OMC2 -3 REGION--
09/13/2000 - 09/14/2002 FY02: \$0 Total: \$38,300
Prin. Invest.: Y TSUBOI
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9976 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8170
RGS ABUNDANCE MEASUREMENT OF WOLF-RAYET STELLAR WIND
09/12/2000 - 01/31/2003 FY02: \$16,180 Total: \$33,180
Prin. Invest.: Y MAEDA
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9982 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8171
STRUCTURE OF THE ACCRETION FLOWS IN BROAD-LINE RADIO GALAXIES
09/13/2000 - 09/14/2002 FY02: \$0 Total: \$37,444
Prin. Invest.: M ERACLEOUS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10050 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8172
MERGING MODELS AND OBSERVATIONS OF THE ATMOSPHERIC BOUND-
ARY LAYER'S MESOSCALE STRUCTURE DURING S
09/28/2000 - 05/31/2002 FY02: \$0 Total: \$41,578
Prin. Invest.: K DAVIS
Tech. Officer: GSFC/E ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10079 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8173
MAPPING SPECTRAL LINES FROM THE DIFFUSE X-RAY BACK GROUND
10/27/2000 - 10/31/2002 FY02: \$0 Total: \$9,500
Prin. Invest.: D N BURROWS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10080 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8174
SHADOWING OF THE EXTRAGALACTIC SOFT X-RAY BACK- GROUND
10/27/2000 - 10/31/2002 FY02: \$0 Total: \$8,900
Prin. Invest.: D N BURROWS
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10089 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8175
THE X-RAY PROPERTIES OF LOCAL GALAXIES: BRIDGING THE GAP TO
HIGH-Z
11/20/2000 - 11/30/2002 FY02: \$25,250 Total: \$31,953
Prin. Invest.: N BRANDT
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10541 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8176
PATTERN-BASED MONITORING OF CHANGE AT MULTIPLE SCALES
THROUGH REMOTE SENSING& GIS IN FOREST
03/20/2001 - 03/14/2003 FY02: \$0 Total: \$50,000
Prin. Invest.: W L MYERS
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10542 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8177
STATISTICAL CHALLENGES IN MODERN ASTRONOMY III
03/13/2001 - 03/14/2002 FY02: -\$5,919 Total: \$14,081
Prin. Invest.: G BABU
Tech. Officer: GSFC/D GOLOMBEK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10617 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8178
PENN STATE ACTIVITIES IN THE NASA GSFC TRANSMISSIV E MICROSHUT-
TER ARRAY TECHNOLOGY DEVELOPMENT PROGR
03/19/2001 - 03/31/2002 FY02: \$0 Total: \$64,156
Prin. Invest.: D GE
Tech. Officer: GSFC/S H MOSELY
CASE Category: 11 – ASTRONOMY

NAG 5 10706 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8179
SOFT X-RAY BACKGROUND IN THE GALACTIC ANTI-CENTER (ADP - 2000)
04/19/2001 - 04/30/2003 FY02: \$4,662 Total: \$9,871
Prin. Invest.: S PARK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10817 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8180
A COMPREHENSIVE STUDY OF THE NARROW ABSORPTION- LINE GAS
INTRINSIC TO QUASARS
04/24/2001 - 04/30/2006 FY02: \$86,070 Total: \$172,891
Prin. Invest.: M ERACLEOUS
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NAG 5 10865 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8181
 X-RAY RADIATION FROM NEUTRON STARS (LTSA 2000)
 05/08/2001 - 05/14/2006 FY02: \$91,628 Total: \$180,628
Prin. Invest.: G PAVLOV
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 12330 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8189
 TRACE ELEMENT MOBILITY
 06/28/2002 - 06/30/2005 FY02: \$94,206 Total: \$94,206
Prin. Invest.: S BRANTLEY
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11427 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8182
 INFRARED SILICON IMMERSION GRATING TECHNOLOGY DEVELOPMENT
 12/03/2001 - 11/30/2004 FY02: \$210,000 Total: \$210,000
Prin. Invest.: J GE
Tech. Officer: GSFC/P CRANE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12338 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8190
 THE LATE ORDOVICIAN MASS EXTINCTION AND RECOVERY: DIVERSITY
 DYNAMICS AND GEOGRAPHIC VARIABILITY
 07/15/2002 - 06/30/2005 FY02: \$50,694 Total: \$50,694
Prin. Invest.: M E PATZKOWSKY
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11472 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8183
 COMBINED OBSERVATIONAL AND MODELING OF CIRRUS GENERATED BY
 DEEP CONVECTION
 12/19/2001 - 12/31/2003 FY02: \$76,255 Total: \$76,255
Prin. Invest.: J VERLINDE
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12352 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8191
 PHOTOCHEMICAL MODELING OF EARTH'S EARLY ATMOSPHERE
 07/03/2002 - 06/30/2005 FY02: \$92,300 Total: \$92,300
Prin. Invest.: J F KASTING
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11832 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8184
 MESOSPHERIC AND LOWER IONOSPHERIC EFFECTS OF SPRING
 03/11/2002 - 02/28/2005 FY02: \$63,510 Total: \$63,510
Prin. Invest.: V PASKO
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12426 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8192
 CHEMICAL MODELING FOR STUDIES OF GEOTHERMAL CAPABILITIES
 08/13/2002 - 08/14/2003 FY02: \$70,000 Total: \$70,000
Prin. Invest.: W BRUNE
Tech. Officer: GSFC/J GLEASON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12115 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8185
 COMPACT HIGH-RESOLUTION 3-D IMAGING SPECTROMETER FOR DISCOVERING
 OASES ON MARS
 04/26/2002 - 04/30/2003 FY02: \$297,777 Total: \$297,777
Prin. Invest.: J GE
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1272 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8193
 GRAVITATIONAL EFFECT ON THE DEVELOPMENT OF LASER WELDPool
 AND SOLIDIFICATION MICROSTRUCTURE
 05/09/1996 - 06/15/2003 FY02: \$0 Total: \$600,000
Prin. Invest.: J SINGH
Tech. Officer: MSFC/P DOTY, MSFC/R POWER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12181 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8186
 PLANETS AROUND NEUTRON STARS
 05/20/2002 - 05/31/2003 FY02: \$55,000 Total: \$55,000
Prin. Invest.: A WOLSKZCZAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 8 1452 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8194
 R/S GRAVITATIONAL EFFECTS ON DISTORTION IN SINTERING
 02/01/1998 - 01/31/2004 FY02: \$150,000 Total: \$715,000
Prin. Invest.: R M GERMAN
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 12242 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8187
 "A WEB MAP-BASED TOOL FOR NEAR-REAL TIME MOSQUITO MANAGEMENT
 IN PENNSYLVANIA"
 05/28/2002 - 06/30/2005 FY02: \$60,000 Total: \$60,000
Prin. Invest.: D A MILLER
Tech. Officer: GSFC/N MAYNARD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1761 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8195
 CRITICAL CASIMIR FORCES
 05/01/2001 - 04/30/2005 FY02: \$125,000 Total: \$240,000
Prin. Invest.: M CHAN
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 5 12257 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8188
 "OPTICALLY THIN PIXEL DETECTORS FOR A BROADBAND X- RAY POLARIMETER"
 06/27/2002 - 06/30/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: T N JACKSON
Tech. Officer: GSFC/P V DEINS-JONES
CASE Category: 45 – ELECTRICAL ENGR

NAG 8 1792 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8196
 RESEARCH ENTITLED, "VALIDATION DATA FOR FULL FLOW STAGED COMBUSTION
 INJECTORS"
 03/13/2001 - 03/31/2005 FY02: \$120,000 Total: \$487,650
Prin. Invest.: R J SANTORO
Tech. Officer: MSFC/K TUCKER
CASE Category: 43 – CHEMICAL ENGR

NAG 8 1844 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8197
 FOCUSED ROCKET-EJECTOR ROCKET-BASED COMBINED-CYCLE EXPERI-
 MENTS (RBCC)
 07/16/2001 - 06/30/2002 FY02: \$40,684 Total: \$100,684
Prin. Invest.: R J SANTORO, S PAL
Tech. Officer: MSFC/J H RUFF
CASE Category: 42 - ASTRONAUTICAL ENGR

NAG 8 1854 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8198
 NOVATION OF NAG8-1449 FROM YATLE TO PENN STATE
 12/18/2001 - 03/01/2003 FY02: \$410,598 Total: \$410,598
Prin. Invest.: K GIBBLE
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 - PHYSICS

NAG 8 1873 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8199
 THE STUDY OF ADVANCED LASER IGNITION CONCEPTS
 08/16/2002 - 01/31/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: D SANTAVICCA
Tech. Officer: MSFC/H TRINH
CASE Category: 46 - MECHANICAL ENGR

NAG 8 1877 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8200
 RESEARCH ENTITLED MODELING OF DETONATION INITIATION AND
 PROPAGATION IN COMBUSTION WAVE IGNITION
 07/24/2002 - 03/31/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: V YANG
Tech. Officer: MSFC/B BULLARD
CASE Category: 43 - CHEMICAL ENGR

NAG 9 1173 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8201
 FACILITATED BLOOD PRESSURE CONTROL
 09/22/1999 - 09/30/2002 FY02: \$148,891 Total: \$430,340
Prin. Invest.: J A PAWELCZYK
Tech. Officer: JSC/C LLOYD
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 9 1264 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8202
 BONE STRAIN DURING OG EXERCISE
 11/28/2000 - 10/31/2003 FY02: \$198,949 Total: \$446,780
Prin. Invest.: P CAVANAGH
Tech. Officer: JSC/C W LLOYD
CASE Category: 56 - MEDICL

NAG 9 1372 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8203
 MICROFABRICATED OPTICAL BIOSENSOR ARRAYS FOR AIR QUALITY MONI-
 TORING
 08/01/2001 - 09/03/2004 FY02: \$90,477 Total: \$191,874
Prin. Invest.: M V PISHKO
Tech. Officer: JSC/D RUSSO
CASE Category: 54 - ENVIRONMENTAL BIOLOGY

NAG10 326 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8204
 NASA INTERNSHIP DEVELOPMENT PROGRAM NASA INTERNSHIP DEVEL-
 OPMENT PROGRAM
 09/06/2002 - 09/08/2003 FY02: \$99,109 Total: \$99,109
Prin. Invest.: A FREEMAN
Tech. Officer: KSC/G BUCKINGHA
CASE Category: 49 - ENGINEERING, OTHER

NAS 3 01082 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8205
 REDUCED THERMAL CONDUCTIVITY ZIRCONIA BASED THERMAL BARRIER
 COATINGS TBC APPLIED ON ALUMINIDE BON
 03/08/2001 - 08/30/2002 FY02: \$90,467 Total: \$190,467
Prin. Invest.: NOT AVAILABLE
Tech. Officer: GRC/R DRAPER
CASE Category: 47 - METAL & MATERIALS ENGR

NAS 3 02111 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8206
 NRA FOR OPTIMIZED DESIGNS OF ULTRA-HIGH POWER DENSITY MA-
 CHINES
 04/12/2002 - 01/12/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: H HOFMANN
Tech. Officer: GRC/J J TRUDELL, GRC/D ERCEGOVIC
CASE Category: 41 - AERONAUTICAL ENGR

NAS 5 00136 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8207
 SWIFT ULTRAVIOLET & OPTICAL TELESCOPES X-RAY TELESCOPE,
 GROUND STATION SYSTEM
 04/27/2000 - 12/31/2006 FY02: \$7,788,448 Total: \$18,570,448
Prin. Invest.: J A NOUSEK
Tech. Officer: GSFC/R BORELLI
CASE Category: 11 - ASTRONOMY

NAS 8 01128 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8208
 CHANDRA PROGRAM (SCIENCE INSTRUMENT) - ADVANCED CHARGE
 COUPLED IMAGING DEVICE SPECTROMETER (ACIS)
 03/01/2002 - 09/30/2004 FY02: \$1,551,261 Total: \$1,551,261
Prin. Invest.: G GARMIRE
Tech. Officer: MSFC/M C SMITH, MSFC/M S OSBORNE
CASE Category: 41 - AERONAUTICAL ENGR

NAS 8 38252 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8209
 AXAF CCD IMAGING SPECTROMETER
 06/27/1990 - 03/01/2002 FY02: \$903,572 Total: \$12,345,572
Prin. Invest.: G P GARMIRE
Tech. Officer: MSFC/M E ROSENTHAL
CASE Category: 49 - ENGINEERING, OTHER

NAS 8 40890 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8210
 R/S "EXPERIMENTAL & ANALYTICAL MODELING OF THE ROCKET EJECTOR
 MODE"
 09/04/1996 - 07/01/2001 FY02: \$0 Total: \$1,136,163
Prin. Invest.: S PAL, R J SANTORO
Tech. Officer: MSFC/J C MCARTHUR, MSFC/R L MOORE
CASE Category: 41 - AERONAUTICAL ENGR

NAS 9 99095 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8211
 FOOT REACTION FORCES DURING SPACE FLIGHT
 05/01/1999 - 09/30/2002 FY02: \$226,842 Total: \$784,857
Prin. Invest.: P CAVANAGH
Tech. Officer: JSC/M KAMMAN
CASE Category: 56 - MEDICL

NCC 1 300 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8212
 HOX MEASUREMENTS IN PEM TROPOSPHERIC B WITH THE AIRBORNE
 TROPOSPHERIC HYDROGEN OXIDES SENSOR
 07/07/1998 - 07/30/2001 FY02: -\$1 Total: \$720,140
Prin. Invest.: W H BRUNE
Tech. Officer: LARC/J M HOELL, JR., LARC/R J BENDURA
CASE Category: 31 - ATMOSPHERIC SCIENCE

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NCC 1 382 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8213
 NASTRAN DMAP FUZZY STRUCTURES PROGRAMMING
 03/15/2000 - 12/31/2001 FY02: -\$461 Total: \$103,567
Prin. Invest.: V W SPARROW
Tech. Officer: LARC/R D BUEHRLE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 406 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8214
 MODELING THE NOISE OF ARBITRARY, MANEUVERING ROTORS
 09/07/2000 - 12/21/2001 FY02: -\$1 Total: \$62,130
Prin. Invest.: K S BRENTNER
Tech. Officer: LARC/H E JONES
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 414 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8215
 TRACE-P OH & HO₂ MEAS'S W/AIRBORNE TROPOSPHERIC HYDROGEN
 OXIDES (ATHOS) ON THE NASA DC-8
 09/25/2000 - 03/31/2003 FY02: \$458,387 Total: \$931,334
Prin. Invest.: W H BRUNE
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 943 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8216
 PENN STATE ROTORCRAFT CENTER OF EXCELLENCE
 02/26/1996 - 12/31/2000 FY02: -\$644 Total: \$1,961,848
Prin. Invest.: F C SMITH, L N LONG
Tech. Officer: ARC/Y H YU, ARC/J M DAVIS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1057 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8217
 CREATING THE PENN STATE ASTROBIOLOGY RESEARCH CENT ER
 09/17/1998 - 06/30/2003 FY02: \$1,356,909 Total: \$4,798,052
Prin. Invest.: H OHMOTO
Tech. Officer: ARC/R A GRYMES, ARC/W W DOLCI
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 2 1122 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8218
 A NOVEL OXIDATION-RESISTANT THERMAL PROTECTION MAT ERIAL
 06/07/1999 - 08/31/2001 FY02: \$0 Total: \$71,820
Prin. Invest.: L R RADOVIC
Tech. Officer: ARC/C E JOHNSON, ARC/M D REZIN
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1211 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8219
 NEW TECHNIQUES FOR DATA FUSION VISUALIZATION & CON DITION
 MONITORING OF COMPLEX SYSTEMS
 01/12/2001 - 09/30/2002 FY02: \$166,747 Total: \$401,747
Prin. Invest.: J L WISE
Tech. Officer: ARC/J E PALLIX
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 1331 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8220
 ALGORITHMS FOR OBSTACLE DETECTION FOR COLLISION AV OIDANCE
 USING INFRARED IMAGES
 04/03/2002 - 04/30/2003 FY02: \$29,975 Total: \$29,975
Prin. Invest.: O I CAMPS
Tech. Officer: ARC/A AHUMADA, ARC/J B MULLIGAN
CASE Category: 45 – ELECTRICAL ENGR

NCC 2 5410 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8221
 GREENHOUSE MECHANISMS FOR WARMING EARLY MARS
 11/22/2000 - 11/30/2002 FY02: \$45,253 Total: \$90,513
Prin. Invest.: J F KASTINGS
Tech. Officer: ARC/R E YOUNG, ARC/D DESMARAIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5511 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8222
 IDENTIFYING THE STRUCTURAL BUILDING BLOCKS OF OF T HE PROTEIN
 UNIVERSE
 08/06/2002 - 07/31/2003 FY02: \$13,771 Total: \$13,771
Prin. Invest.: H ZHA
Tech. Officer: ARC/S LIANG
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 597 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8223
 MULTIAXIAL DEFORMATION STUDY OF HIGH TEMPERATURE M ETALLIC
 MATERIALS
 01/28/1998 - 11/30/2001 FY02: \$0 Total: \$238,796
Prin. Invest.: C J LISSENOEN
Tech. Officer: GRC/B A LERCH, GRC/J R ELLIS
CASE Category: 46 – MECHANICAL ENGR

NCC 3 718 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8224
 COMPUTATIONAL AND EXPERIMENTAL STUDY OF ENERGETIC MATERIALS
 IN A COUNTERLOW MICROGRAVITY ENVIRONMENT
 06/28/1999 - 06/09/2003 FY02: \$18,337 Total: \$80,317
Prin. Invest.: R A YETTER
Tech. Officer: GRC/D L UBRAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 3 767 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8225
 LOW CONDUCTIVE THERMAL BARRIER COATINGS PRODUCED B Y ION
 BEAM ASSISTED EB-PVD WITH CONTROLLED POROSI
 02/01/2000 - 01/31/2003 FY02: \$0 Total: \$150,000
Prin. Invest.: D SINGH
Tech. Officer: GRC/J ELDRIDGE
CASE Category: 41 – AERONAUTICALENGR

NCC 3 848 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8226
 DEFORMATON RESPONSE AND LIFE OF METALLIC COMPOSITI ES
 01/12/2001 - 12/17/2002 FY02: \$104,000 Total: \$204,764
Prin. Invest.: D J LISSENDEN
Tech. Officer: GRC/S M ARNOLD
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 920 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8227
 MULTISCALE COMPUTATIONAL TOOLS FOR PREDICTING THER MODYNAM-
 ICS, MOISTURE EVOLUTION AND MECHANICAL PRO
 10/23/2001 - 10/21/2005 FY02: \$360,000 Total: \$360,000
Prin. Invest.: D CHEN
Tech. Officer: GRC/M V NATHAL
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 3 973 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8228
 A PRELIMINARY STUDY: IDENTIFICATION OF THE MECHANI SMS THROUGH
 WHICH RECOMBINATION CENTERS ARE CREAT
 07/11/2002 - 02/10/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: P M LENAHAN
Tech. Officer: GRC/R S OKOJIE
CASE Category: 13 – PHYSICS

NCC 5 432 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8229
 LUAAU II: LEARNING USING ERAST AIRCRAFT MISSIONS FOR UNDERSTAND-
 ING REMOTE SENSING, ATMOSPHERIC SAMP
 09/20/1999 - 06/30/2003 FY02: \$61,363 Total: \$600,000
Prin. Invest.: D L GRABOWSKI
Tech. Officer: GSFC/R E GABRYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 508 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8230
 NASA/GSFC COOPERATIVE ENTERPRISE, PROP # 3552
 08/15/2000 - 12/31/2002 FY02: \$60,000 Total: \$110,000
Prin. Invest.: J E FREDLEY
Tech. Officer: GSFC/M HAGOPIAN
CASE Category: 46 – MECHANICAL ENGR

NGT 1 01018 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8231
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) PREVIOUS
 GRANT NO. NGT-1-52249
 05/25/2001 - 06/30/2003 FY02: \$10,000 Total: \$22,000
Prin. Invest.: S T KIEMARA
Tech. Officer: LARC/M G BALLEEN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52191 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8232
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/20/1998 - 06/30/2002 FY02: \$9,999 Total: \$88,000
Prin. Invest.: P K MCLAUGHLIN
Tech. Officer: LARC/T NORUM, LARC/B J JANSEN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 2 52275 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8233
 NATIONAL ROTORCRAFT TECHNOLOGY CENTER (NRTC) ROTOR CRAFT
 CENTER OF EXCELLENCE (RCOE)
 02/14/2001 - 01/31/2003 FY02: \$663,932 Total: \$1,287,927
Prin. Invest.: E C SMITH
Tech. Officer: GSFC/AWKERR
CASE Category: 41 – AERONAUTICAL ENGR

NGT 3 52359 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8234
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT
 RESEARCHERS PROGRAM
 07/15/1999 - 08/14/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: K W WANG
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 49 – ENGINEERING, OTHER

NGT 3 52368 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8235
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT
 RESEARCHERS PROGRAM
 06/19/2000 - 08/14/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: D A SANTAVICCA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 46 – MECHANICAL ENGR

NGT 5 118 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8236
 MODELING OF THE WEST ANTARCTIC ICE SHEET TO ASSESS DIVIDE
 STABILITY & ICE STREAM EVOLUTION/STUDENT
 05/31/2001 - 08/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R B ALLEY
Tech. Officer: GSFC/M S BURRELL
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 5 119 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8237
 CHARTING THE COURSE OF CIRCUMSTELLAR MATERIAL STUDENT: JOHN
 DEBES
 05/31/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: JIAN GE
Tech. Officer: GSFC/M S BURRELL
CASE Category: 11 – ASTRONOMY

NGT 5 127 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8238
 TESTING BINARY BLACK HOLE CODES IN STRONG FIELD REGIMES
 (STUDENT: DAVID GARRISON)
 06/12/2001 - 06/30/2003 FY02: \$12,000 Total: \$34,000
Prin. Invest.: P LAGUNA
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 30171 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8239
 INTEGRATED SATELLITE, MODEL, AND FIELD-BASED STUDIES OF CON-
 TROLSON THE EXTENT OF SURFACE MELTING I
 09/04/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R B ALLEY, B DAS
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30193 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8240
 EDDY CORRELATION MEASUREMENT OF CO2 FLUX IN VOLCAN IC-
 HYDROTHERMAL ENVIRONMENTS SYS/STUDENT J. LEWIC
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$60,668
Prin. Invest.: S BRANTLEY
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30208 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8241
 UNDERSTANDING HIGH TROPICAL CIRRUS/STUDENT: MATTHEW T. BOEHM
 08/18/1999 - 08/31/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: J VERLINDE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30224 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8242
 A UNIFIED DATABASE MODEL FOR THE EXPLORATION AND ANALYSIS OF
 SPATIOTEMPORAL ENVIRONMENTAL
 08/14/2000 - 08/31/2001 FY02: -\$1,960 Total: \$20,040
Prin. Invest.: D PEUQUET
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30420 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8243
 PREDICTIVE SIGNATURES ASSOCIATED WITH THE DEVELOPM ENT OF
 TROPICAL WEATHER SYSTEMS IN THE EAST
 09/07/2001 - 08/31/2004 FY02: \$0 Total: \$22,000
Prin. Invest.: G JENKINS
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40064 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8244
 SUPPORT TO PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM.
 02/25/1997 - 01/31/2001 FY02: -\$101,797 Total: \$1,763,203
Prin. Invest.: R DEVON
Tech. Officer: HQ/J DASCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40090 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8245
 PENNSYLVANIA SPACE GRANT COLL AND FELLOWSHIP PR OGRAM
 02/22/2001 - 01/31/2005 FY02: \$482,500 Total: \$965,000
Prin. Invest.: R DEVON
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NGT 5 50236 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8246
 GALAXY DISK EVOLUTION_(STUDENT: DAVID ANDERSEN)
 05/27/1999 - 06/30/2002 FY02: \$1,281 Total: \$56,281
Prin. Invest.: M BERSHADY
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50247 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8247
 DEEP OBSERVATIONS WITH NASA'S CHANDRA X-RAY OBSERVATORY:
 RESOLVING THE DISCRETE SOURCES OF THE COS
 06/02/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: N BRANDT
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50277 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8248
 PEERING THROUGH THE CLOUDS: ABSORPTION STUDIES OF LUMINOUS
 ACTIVE GALAXIES WITH THE NEW GENERATION
 06/20/2000 - 07/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: W BRANDT
Tech. Officer: GSFC/L K SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50296 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8249
 COSMIC RAY ENERGISTICS AND MASS BALLOON EXPERIMENT STUDENT:
 ROBERT KILLOREN
 06/26/2000 - 07/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S COUTU
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50399 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8250
 ORIGINS AND EVOLUTION OF HOT SUBDWARFS
 06/13/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R WADE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52876 PENNSYLVANIA STATE UNIV. - UNIV. PARK 8251
 ADVANCED SPACE PROPULSION USING ANTIMATTER, (GSRP)
 08/13/1999 - 08/14/2002 FY02: -\$10,281 Total: \$55,719
Prin. Invest.: G A SMITH
Tech. Officer: MSFC/J DOWDY
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2424 PHIL COLL OF PHARMACY & SCIENCE 8252
 IN VIVO EVALUATION OF A NOVEL AND IMPROVED INSTRUMENT FOR
 OBJECTIVE EVALUATION OF OPHTHALMIC LENSES
 05/15/2000 - 12/15/2001 FY02: -\$3,569 Total: \$46,303
Prin. Invest.: D DUBLIN
Tech. Officer: GRC/B S SINGH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10094 SWARTHMORE COLL 8253
 HIGH RESOLUTION SPECTROSCOPIC DIAGNOSTICS OF HOT PLASMA IN
 THE STELLAR WIND OF EPSILON CANIS MAJORIS
 11/21/2000 - 11/30/2001 FY02: \$0 Total: \$23,396
Prin. Invest.: D H COHEN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 8649 TEMPLE UNIV 8254
 TO DEVELOP A PROTOTYPE AUTOMATED NETWORK FAULT DIAGNOSIS
 SYSTEM FOR A MULTI-CAST BASED IP NETWORK
 07/28/1999 - 01/31/2001 FY02: -\$3,425 Total: \$56,542
Prin. Invest.: S K BISWAS
Tech. Officer: GSFC/B C DRAKE
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 9 1023 THOMAS JEFFERSON UNIV 8255
 FACTORS MODULATING RADIATION INDUCED G2-DELAYS
 06/15/1998 - 03/01/2003 FY02: \$0 Total: \$599,124
Prin. Invest.: C ILIAKIS
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1342 THOMAS JEFFERSON UNIV 8256
 GENETICALLY ENGINEERED COLLAGEN II FOR SMALL BIOMATERIALS
 08/22/2001 - 09/30/2004 FY02: \$196,000 Total: \$250,000
Prin. Invest.: A FERTALA
Tech. Officer: JSC/D RISEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1400 THOMAS JEFFERSON UNIV 8257
 MICROGRAVITY ON HUMAN OSTEOBLAST LIFE HISTORY: EXPERIMENTAL
 INVESTIGATION AND NUMERICAL STUDY
 07/02/2002 - 09/30/2004 FY02: \$227,917 Total: \$227,917
Prin. Invest.: I M SHAPIRO
Tech. Officer: JSC/D RISIN
CASE Category: 56 – MEDICAL

NAG 3 2172 UNIV OF PENNSYLVANIA 8258
 COLLOIDAL ASSEMBLY IN ENTROPICALLY DRIVEN LOW-VOLUME
 FRACTION BINARY PARTICLE SUSPENSION
 06/08/1998 - 02/28/2003 FY02: \$165,001 Total: \$794,242
Prin. Invest.: A G YODH
Tech. Officer: GRC/R A WILKINSEN
CASE Category: 13 – PHYSICS

NAG 3 2417 UNIV OF PENNSYLVANIA 8259
 ENGINEERING NOVEL BIOCOLLOID SUSPENSIONS ENGINEERING NOVEL
 BIOCOLLOID SUSPENSIONS
 05/08/2000 - 11/30/2003 FY02: \$66,500 Total: \$208,000
Prin. Invest.: D A HAMMER
Tech. Officer: GRC/D W GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8767 UNIV OF PENNSYLVANIA 8260
 COUPLING COMPUTER VISION AND ASTRONAUT PERFORMANCE FOR
 MULTI-PERSON MODELING AND ANALYSIS
 08/25/1999 - 08/31/2002 FY02: \$205,000 Total: \$604,750
Prin. Invest.: D N METAXAS
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9194 UNIV OF PENNSYLVANIA 8261
 MICROWAVE FOREGROUNDS AND THEIR POLARIZATION (PI TRANSFER
 STUDIES NAG5-6034)
 03/08/2000 - 09/30/2002 FY02: \$0 Total: \$249,941
Prin. Invest.: M TEGMARK
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9229 **UNIV OF PENNSYLVANIA** **8262**
 BLAST: A BALLOON-BORNE LARGE-APERTURE SUB-MILLIMETER TELESCOPE - A COMPREHENSIVE PLAN FOR GALAC
 03/20/2000 - 03/30/2003 FY02: \$383,785 Total: \$1,004,785
Prin. Invest.: M DEVLIN
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 - ASTRONOMY

NAG 5 10731 **UNIV OF PENNSYLVANIA** **8263**
 A VERY WIDE AREA SURVEY FOR TRANS-NEPTUNIAN OBJECTS
 04/11/2001 - 04/14/2004 FY02: \$35,000 Total: \$70,000
Prin. Invest.: C ALCOCK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 - ASTRONOMY

NAG 5 10923 **UNIV OF PENNSYLVANIA** **8264**
 MAPPING LARGE-SCALE STRUCTURE IN THE UNIVERSE
 05/22/2001 - 03/14/2005 FY02: \$112,095 Total: \$241,542
Prin. Invest.: B JAIN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 - ASTRONOMY

NAG 5 10924 **UNIV OF PENNSYLVANIA** **8265**
 THE CLUSTERING OF GALAXIES AND DARK MATTER AT INTERMEDIATE REDSHIFTS (ATP 99)
 05/22/2001 - 03/14/2003 FY02: \$56,163 Total: \$123,925
Prin. Invest.: B JAIN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 - ASTRONOMY

NAG 5 11099 **UNIV OF PENNSYLVANIA** **8266**
 CMB POLARIZATION ANALYSIS (LTA 2000)
 07/24/2001 - 10/31/2002 FY02: \$0 Total: \$91,884
Prin. Invest.: M TEGMARK
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 - ASTRONOMY

NAG 5 12033 **UNIV OF PENNSYLVANIA** **8267**
 THE FORMATION AND EVOLUTION OF DARK MATTER HALOS
 04/12/2002 - 04/15/2002 FY02: \$0 Total: \$0
Prin. Invest.: C M MA
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 - ASTRONOMY

NAG 8 1350 **UNIV OF PENNSYLVANIA** **8268**
 FOR RESEARCH ENTITLED: "QUANTITATIVE ANALYSIS OF INTERACTIONS DURING MEMBRANE PROTEIN CRYSTALLIZATION"
 06/19/1997 - 10/31/2001 FY02: \$0 Total: \$847,373
Prin. Invest.: P LOLL
Tech. Officer: MSFC/R CROMISE, MSFC/C R TALLEY
CASE Category: 19 - PHYSICAL SCIENCE, OTHER

NAG 8 1483 **UNIV OF PENNSYLVANIA** **8269**
 SURFACE TRANSFORMATION OF REACTIVE GLASS IN A MICROGRAVITY ENVIRONMENT
 02/03/1998 - 01/31/2002 FY02: \$17,500 Total: \$397,750
Prin. Invest.: P DUCHEYNE
Tech. Officer: MSFC/P M DOTY
CASE Category: 19 - PHYSICAL SCIENCE, OTHER

NAG 8 1683 **UNIV OF PENNSYLVANIA** **8270**
 RESEARCH POLYOMESOMES: TOUGH, GRANT VESICLES FROM BLOCK COPOLYMERS
 05/26/2000 - 11/30/2003 FY02: \$120,000 Total: \$284,000
Prin. Invest.: D A
Tech. Officer: MSFC/P DOTY
CASE Category: 51 - BIOLOGY (EXCLUDING ENVIR)

NAG 9 1161 **UNIV OF PENNSYLVANIA** **8271**
 PREDICTING VULNERABILITY OF PERFORMANCE IMPAIRMENT FROM SLEEP LOSS
 09/21/1999 - 09/20/2002 FY02: \$125,000 Total: \$442,500
Prin. Invest.: H VAN D
Tech. Officer: JSC/C W LLOYD
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 9 1265 **UNIV OF PENNSYLVANIA** **8272**
 ENVIRONMENTAL BIOMEDICAL STRESS DATA
 12/14/2000 - 10/31/2001 FY02: \$0 Total: \$70,000
Prin. Invest.: C J LAMBERTSEN
Tech. Officer: JSC/J STANFORD
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 9 1279 **UNIV OF PENNSYLVANIA** **8273**
 CREW TASK SIMULATION FOR MAINTENANCE, TRAINING AND SAFETY
 02/22/2001 - 09/30/2003 FY02: \$150,000 Total: \$292,500
Prin. Invest.: N BADLER
Tech. Officer: JSC/B WOOLFORD
CASE Category: 56 - MEDICL

NAG 9 1357 **UNIV OF PENNSYLVANIA** **8274**
 IMPACT OF MICROGRAVITY ON HUMAN OSTEOBLAST LIFE HISTORY: EXPERIMENTAL INVESTIGATION & NUMERICAL STUDY
 08/22/2001 - 11/01/2001 FY02: -\$9,917 Total: \$58,083
Prin. Invest.: L M SHAPIRO
Tech. Officer: JSC/D RISEN
CASE Category: 59 - LIFE SCIENCE, OTHER

NGT 5 30165 **UNIV OF PENNSYLVANIA** **8275**
 DEVELOPMENT OF A TIME RESOLVED VISIBLE AND ULTRAVIOLET SPECTROSCOPIC TECHNIQUE FOR MEASURING RESONANCE
 08/31/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: H DAI, L LETENDRE
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NGT 5 30460 **UNIV OF PENNSYLVANIA** **8276**
 THE ANOMALOUS ISOTOPIC ENRICHMENT IN STRATOSPHERIC OZONE--A KEY TO UNDERSTANDING ATMOSPHERIC PHOTOCHEMISTRY
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D HAI-LUNG
Tech. Officer: GSFC/M WEI
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NGT 5 50267 **UNIV OF PENNSYLVANIA** **8277**
 ENGINEERING BIOADHESIVE COLLOIDAL SUSPENSIONS
 07/07/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: D A HAMMER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NGT 5 50415 **UNIV OF PENNSYLVANIA** **8278**
 ENGINEERING BIODEGRADABLE, ARTIFICIAL LEUKOCYTES FOR TARGETED DELIVERY OF THERAPEUTICS IN HUMAN
 08/06/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D HAMMER
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7930 **UNIV OF PITTSBURGH** **8286**
 THE NATURE AND EVOLUTION OF THE GASEOUS AND STELLAR COMPONENTS OF THE GALAXY POPULATION ASSOCIATE
 12/14/1998 - 12/14/2003 FY02: \$113,386 Total: \$424,367
Prin. Invest.: D A TURNSHEK
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 2 1186 **UNIV OF PITTSBURGH** **8279**
 VESTIBULO-AUTONOMIC CIRCUITS
 03/17/1998 - 03/31/2003 FY02: \$0 Total: \$542,675
Prin. Invest.: C D BALABAN, C A SCUDDER
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 8211 **UNIV OF PITTSBURGH** **8287**
 QUANTITATIVE SPECTROSCOPIC ANALYSES OF MASSIVE STARS (LTS98)
 02/26/1999 - 02/29/2004 FY02: \$79,333 Total: \$306,986
Prin. Invest.: J D HILLIER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 3 2396 **UNIV OF PITTSBURGH** **8280**
 FORCED TWO-DIMENSIONAL TURBULENCE IN FREELY SUSPENDED FILMS
 04/14/2000 - 11/30/2003 FY02: \$70,000 Total: \$240,000
Prin. Invest.: D WI
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 8531 **UNIV OF PITTSBURGH** **8288**
 MINIATURE IN SITU GEOCHRONOLOGY INSTRUMENT FOR PLANETARY SURFACE DEPLOYMENT: BREADBOARD DEVELOPMENT
 06/15/1999 - 06/30/2001 FY02: \$0 Total: \$121,128
Prin. Invest.: B W STEWART
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 3 2538 **UNIV OF PITTSBURGH** **8281**
 FUNDING
 02/06/2001 - 04/08/2003 FY02: \$60,000 Total: \$120,015
Prin. Invest.: W J CHOYKE
Tech. Officer: GRC/D J LARKIN
CASE Category: 13 – PHYSICS

NAG 5 8546 **UNIV OF PITTSBURGH** **8289**
 UNRAVELING THE EVOLUTION OF GALAXIES (LTS98)
 05/21/1999 - 03/31/2003 FY02: \$0 Total: \$279,861
Prin. Invest.: A CONNOLLY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 3 2730 **UNIV OF PITTSBURGH** **8282**
 FULL-FIELD INTERFEROMETRIC MEASUREMENTS OF THICKNESS OF FREELY SUSPENDED LIQUID FILMS
 03/29/2002 - 02/19/2006 FY02: \$66,797 Total: \$66,797
Prin. Invest.: D L WU
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 9051 **UNIV OF PITTSBURGH** **8290**
 AN INTERDISCIPLINARY TEACHER TRAINING PROGRAM ON EARTH SYSTEM SCIENCE USING INFORMATION TECHNOLOGY
 02/14/2000 - 02/14/2003 FY02: \$10,728 Total: \$87,420
Prin. Invest.: A I PANAH
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 3723 **UNIV OF PITTSBURGH** **8283**
 PHOTOMETRIC ANALYSIS OF SPACECRAFT PLANETARY IMAGE
 02/12/1997 - 10/31/2000 FY02: -\$19,795 Total: \$285,647
Prin. Invest.: S W HAPKE
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9399 **UNIV OF PITTSBURGH** **8291**
 MULTIFREQUENCY, MULTIREOLUTION IMAGE DETECTION
 04/12/2000 - 03/31/2003 FY02: \$80,000 Total: \$157,300
Prin. Invest.: A CONNOLLY
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 11 – ASTRONOMY

NAG 5 4116 **UNIV OF PITTSBURGH** **8284**
 ELECTRON-ION RECOMBINATION PROCESSES RELATING TO P
 03/03/1997 - 12/31/2002 FY02: \$0 Total: \$399,775
Prin. Invest.: D JOHNSON
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9438 **UNIV OF PITTSBURGH** **8292**
 MULTI-SPECTRAL REMOTE SENSING OF BRUSH FIRE SCARS IN ARID URBAN REGIONS: ANALYSIS OF FUTURE FIRE AND
 04/14/2000 - 04/30/2003 FY02: \$56,883 Total: \$162,586
Prin. Invest.: M S RAMSEY
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 5267 **UNIV OF PITTSBURGH** **8285**
 LABORATORY SUPPORT FOR THE CRYOGENIC WHOLE AIR SAMPLING OF CARBON DIOXIDE IN THE UPPER MESOSPHERE
 06/01/2000 - 05/24/2003 FY02: \$64,482 Total: \$196,352
Prin. Invest.: E ZIPF
Tech. Officer: GSFC/J C BINTON
CASE Category: 13 – PHYSICS

NAG 5 9439 **UNIV OF PITTSBURGH** **8293**
 MONITORING THE HAZARDS OF SILICI VOLCANOES WITH REMOTE SENSING
 04/14/2000 - 04/30/2003 FY02: \$64,712 Total: \$189,427
Prin. Invest.: M S RAMSEY
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9466 **UNIV OF PITTSBURGH** **8294**
 EMPLACEMENT OF TERRESTRIAL & PLANETARY LAVA FLOWS
 04/18/2000 - 04/14/2003 FY02: \$0 Total: \$58,200
Prin. Invest.: D A CROWN
Tech. Officer: GSFC/J A GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9836 **UNIV OF PITTSBURGH** **8295**
 MULTI-DIMENSIONAL RADIATIVE TRANSFER IN THE CIRCUM STELLAR
 MEDIUM
 10/05/2000 - 10/14/2001 FY02: \$0 Total: \$11,736
Prin. Invest.: D HILLIER
Tech. Officer: GSFC/S HEAP
CASE Category: 11 – ASTRONOMY

NAG 5 10222 **UNIV OF PITTSBURGH** **8296**
 REMOTE SENSING OF PLANETARY SURFACES: MODELING & APPLICATI-
 ONS
 01/11/2001 - 01/14/2004 FY02: \$75,300 Total: \$149,500
Prin. Invest.: B W HAPKE
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10377 **UNIV OF PITTSBURGH** **8297**
 TOWARDS UNDERSTANDING STARBURST GALAXIES AT LOW & HIGH
 REDSHIFT (FUSE-00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$17,000
Prin. Invest.: J D HILLIER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10378 **UNIV OF PITTSBURGH** **8298**
 JUST WHAT IS ETA CARINAE (FUSE 00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$30,500
Prin. Invest.: J D HILLIER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10628 **UNIV OF PITTSBURGH** **8299**
 ASTROMETRIC OBSERVATION OF PLANETARY SYSTEMS DISCOVERED BY
 RADIAL VELOCITY TECHNIQUES
 03/17/2001 - 03/14/2003 FY02: \$24,800 Total: \$49,600
Prin. Invest.: G GATEWOOD
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11959 **UNIV OF PITTSBURGH** **8300**
 ELECTRON-ION RECOMBINATION PROCESSES
 04/03/2002 - 04/14/2005 FY02: \$114,933 Total: \$114,933
Prin. Invest.: R JOHNSEN
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12521 **UNIV OF PITTSBURGH** **8301**
 SUPPORT FOR SYMPOSIUM ON SOLAR SYSTEM REMOTE SENSING
 08/22/2002 - 08/31/2003 FY02: \$8,250 Total: \$8,250
Prin. Invest.: B HAPKE
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1587 **UNIV OF PITTSBURGH** **8302**
 R/S FREELY SUSPENDED LIQUID FILMS AND THEIR APPLICATIONS IN
 BIOLOGICAL RESEARCH
 01/28/1999 - 11/30/2002 FY02: \$103,000 Total: \$386,050
Prin. Invest.: X L WU
Tech. Officer: MSFC/B GUYNES
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NAG 9 1036 **UNIV OF PITTSBURGH** **8303**
 SLEEPING SHORT
 06/22/1998 - 07/26/2002 FY02: \$0 Total: \$695,951
Prin. Invest.: T H MONK
Tech. Officer: JSC/C W LLOYD
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1234 **UNIV OF PITTSBURGH** **8304**
 SLEEP STUDY
 10/18/2000 - 09/30/2003 FY02: \$283,382 Total: \$550,905
Prin. Invest.: T H MONK
Tech. Officer: JSC/C W LLOYD
CASE Category: 56 – MEDICAL

NAS 2 02058 **UNIV OF PITTSBURGH** **8305**
 FUNDAMENTAL TECHNOLOGIES FOR DEVELOPMENT OF BIOMOLECULAR
 SENSORS
 12/20/2001 - 12/10/2004 FY02: \$612,944 Total: \$612,944
Prin. Invest.: S ASHER, R GETZENBERG, D FINGOLD
Tech. Officer: ARC/J HINES, ARC/P FUNG
CASE Category: 56 – MEDICAL

NAS 8 97111 **UNIV OF PITTSBURGH** **8306**
 OPERATION AND MANAGEMENT OF THE NASA MID-ATLANTIC TECHNOL-
 OGY CENTER
 01/29/1997 - 02/23/2001 FY02: \$0 Total: \$5,354,999
Prin. Invest.: L HUMMEL
Tech. Officer: LARC/P I CARAWAY
CASE Category: 42 – ASTRONAUTICAL ENGR

NGT 5 125 **UNIV OF PITTSBURGH** **8307**
 EVOLUTION OF THE MARTIAN HIGHLANDS: IMPLICATIONS FROM DRAIN-
 AGE BASIN CHARACTERISTICS AND VALLEY
 06/11/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D A CROWN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 5 50252 **UNIV OF PITTSBURGH** **8308**
 AUTOMATED LEARNING WITH PROBABILISTIC NETWORKS FOR STUDY &
 EXPLORATION OF THE UNIVERSE/STUDENT: DENV
 06/08/1999 - 01/31/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: M DRUZDZEL
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50256 **UNIV OF PITTSBURGH** **8309**
 THE ROLE OF THE CEREBELLUM IN CARDIOVASCULAR RESPONSES TO
 CHANGES IN GRAVITY STUDENT: MICHAEL HOLME
 07/07/1999 - 06/30/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: B J YATES
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

PENNSYLVANIA

NASA'S UNIVERSITY PROGRAM

NGT 5 50292 **UNIV OF PITTSBURGH** **8310**
 MULTISENSORY INTEGRATION IN THE VESTIBULAR NUCLEI: IMPLICATIONS
 FOR RECOVERY OF FUNCTION FOLLOWING
 07/06/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: B J YATES
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50318 **UNIV OF PITTSBURGH** **8311**
 CORTICAL REPRESENTATION OF SPACE IN HUMANS/STUDENT ELISHA
 MERRIAM
 07/11/2000 - 07/14/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: C L COLBY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50408 **UNIV OF PITTSBURGH** **8312**
 ROLE OF THE VESTIBULAR NUCLEI IN RECOVERY OF ORTHO STATIC
 TOLERANCE FOLLOWING VESIBULAR LESIONS
 07/31/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: B YATES
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7113 **VILLANOVA UNIV** **8313**
 DETERMINING THE PHYSICAL PROPERTIES OF THE MAIN SEQUENCE B
 STARS
 03/25/1998 - 03/31/2003 FY02: \$0 Total: \$44,393
Prin. Invest.: E FITZPATRICK
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8388 **VILLANOVA UNIV** **8314**
 NEW INSIGHTS INTO THE STRUCTURE & EVOLUTION OF CV WHITE
 DWARFS USING THE IUE NEWSIPS FINAL ARCHIVE
 03/05/1999 - 03/14/2002 FY02: \$0 Total: \$81,017
Prin. Invest.: E M SION
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8985 **VILLANOVA UNIV** **8315**
 SOLAR PHYSICS WITH FUSE: FUV STUDIES OF SOLAR ANALOGS & TWINS
 - FUSE
 01/27/2000 - 07/31/2002 FY02: \$0 Total: \$65,700
Prin. Invest.: E F GUINAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10369 **VILLANOVA UNIV** **8316**
 THE COSMIC DISTANCE SCALE: AN ACCURATE DISTANCE TO THE LMC
 USING ECLIPSING BINARIES (FUSE 00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$62,500
Prin. Invest.: E F GUINAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10385 **VILLANOVA UNIV** **8317**
 A STUDY OF THE ATMOSPHERES OF THE MAIN SEQUENCE B STARS (FUSE
 00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$42,500
Prin. Invest.: E L FITZPATRICK
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10386 **VILLANOVA UNIV** **8318**
 PHYSICS OF BOUNDARY LAYERSWHITE DWARF ACCRETION IN DWARF
 NOVAE (FUSE 00)
 02/08/2001 - 05/31/2003 FY02: \$0 Total: \$57,900
Prin. Invest.: E M SION
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10387 **VILLANOVA UNIV** **8319**
 THE FUV SUN IN TIME A STUDY OF SOLAR ANALOGS OF DIFFERENT AGES
 (FUSE 00)
 02/08/2001 - 02/14/2003 FY02: \$0 Total: \$30,400
Prin. Invest.: E F GUINAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10686 **VILLANOVA UNIV** **8320**
 CNO ABUNDANCES IN LMC BN AND BC SUPERGIANTS (FUSE 2000)
 04/04/2001 - 04/14/2003 FY02: \$0 Total: \$27,208
Prin. Invest.: E L FITPATRICK
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 11482 **VILLANOVA UNIV** **8321**
 ACCRETING WHITE DWARFS IN CATAclySMIC BINARIES (ADP 2001)
 12/21/2001 - 12/31/2003 FY02: \$33,092 Total: \$33,092
Prin. Invest.: E M SION
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 12067 **VILLANOVA UNIV** **8322**
 PROBING WHITE DWARF ACCRETORS AND INNER DISK STRUC TURE OF
 HIGH ACCRETIONRATE DWARF NOVAE
 04/26/2002 - 04/30/2003 FY02: \$35,800 Total: \$35,800
Prin. Invest.: E M SION
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12125 **VILLANOVA UNIV** **8323**
 FUSE OBSERVATIONS OF THE SUN IN TIME: TRANSITION REGION PHYSICS
 AND EVOLUTION FUV IRRADIANCES
 05/09/2002 - 05/14/2003 FY02: \$88,200 Total: \$88,200
Prin. Invest.: E F GUINAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12137 **VILLANOVA UNIV** **8324**
 HIGH-LATITUDE B STARS (FUSE 2001)
 05/01/2002 - 04/30/2003 FY02: \$36,500 Total: \$36,500
Prin. Invest.: E FITZPATRICK
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12138 **VILLANOVA UNIV** **8325**
 ECLIPSING BINARIES IN THE LMC (FUSE 02)
 05/01/2002 - 04/30/2003 FY02: \$39,800 Total: \$39,800
Prin. Invest.: E F QUINAN
Tech. Officer: GSFC/G Q SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 6080 WEST CHESTER UNIV OF PA 8326
 WEST CHESTER UNIV CONCEPTS & PEDAGOGICAL
 08/27/1997 - 07/14/2002 FY02: \$40,095 Total: \$59,720
Prin. Invest.: R M BUSCH
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 5133 BROWN UNIV 8334
 A HIGH RESOLUTION X-RAY DETECTOR USING MAGNETIC BOLOMETERS
 03/12/1997 - 09/30/2001 FY02: \$0 Total: \$400,000
Prin. Invest.: G SEIDEL
Tech. Officer: GSFC/B FLOWERS
CASE Category: 13 – PHYSICS

RHODE ISLAND

NAG 3 1929 BROWN UNIV 8327
 KINETIC AND THERMODYNAMIC STUDIES OF MELTING-FREEZ ING OF
 HELIUM MICROGRAVITY
 07/24/1996 - 05/31/2003 FY02: \$0 Total: \$403,923
Prin. Invest.: D ELBAUM, J M KOSTERLITZ
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 5 6144 BROWN UNIV 8335
 MARS OBSERVER LASER ALTIMETER (MOLA) PARTICIPATION
 08/19/1997 - 12/31/2003 FY02: \$50,000 Total: \$610,000
Prin. Invest.: J W HEAD
Tech. Officer: GSFC/D E SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2668 BROWN UNIV 8328
 PERFORMANCE OF NANOTUBE-BASED CERAMIC COMPOSITES: MODEL-
 ING AND EXPERIMENT
 11/29/2001 - 10/08/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: W A CURTIN
Tech. Officer: GRC/J B HURST
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 7082 BROWN UNIV 8336
 AN ULTRASPECTROMETER (MEMUS) FOR PLANETARY SURFACE ANALYSIS
 03/10/1998 - 03/31/2002 FY02: \$0 Total: \$455,444
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/B CAMPBELL
CASE Category: 11 – ASTRONOMY

NAG 5 3659 BROWN UNIV 8329
 PLANETARY GEOPHYSICS AND TECTONICS
 03/07/1997 - 10/31/2002 FY02: \$0 Total: \$379,644
Prin. Invest.: E PARMENTIER
Tech. Officer: GSFC/JG GRANTS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7866 BROWN UNIV 8337
 DIAPIRISM AND SOLID-STATE CONVECTION ON EUROPA
 01/12/1999 - 12/31/2001 FY02: \$0 Total: \$80,000
Prin. Invest.: D T PAPPALARDO
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 3871 BROWN UNIV 8330
 REFLECTANCE EXPERIMENT LABORATORY
 02/14/1997 - 09/30/2002 FY02: \$159,610 Total: \$680,649
Prin. Invest.: C M PIETERS
Tech. Officer: GSFC/J G GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8046 BROWN UNIV 8338
 ORIGIN, STRUCTURE, AND EVOLUTION OF GROOVED TERRAI N ON
 GANYMEDE AND COMPARISON TO EUROPA
 01/15/1999 - 01/14/2002 FY02: \$0 Total: \$126,523
Prin. Invest.: D T PAPPALARDO
Tech. Officer: GSFC/D BOGAN
CASE Category: 11 – ASTRONOMY

NAG 5 3872 BROWN UNIV 8331
 BROWN REGIONAL PLANETARY DATA CENTER
 02/14/1997 - 09/30/2001 FY02: \$0 Total: \$216,769
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8174 BROWN UNIV 8339
 KINETICS OF MELTING AND DISSOLUTION IN LUNAR MATER IALS
 02/04/1999 - 10/31/2002 FY02: \$0 Total: \$188,000
Prin. Invest.: D C HESS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 3877 BROWN UNIV 8332
 PLANETARY IMPACT PROCESSES
 02/14/1997 - 09/30/2002 FY02: \$0 Total: \$704,152
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/D G SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8181 BROWN UNIV 8340
 EXPERIMENTS AND SPECTRAL STUDIES OF MARTIAN VOLCAN IC ROCKS:
 IMPLICATIONS FOR THE ORIGIN OF PATHFINDE
 02/16/1999 - 09/30/2002 FY02: \$0 Total: \$169,300
Prin. Invest.: M J RUTHERFORD
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 3933 BROWN UNIV 8333
 GEOLOGICAL MAPPING OF VENUS: ORIGIN OF BASINS AND STRATIGRA-
 PHY
 02/13/1997 - 02/14/2002 FY02: \$0 Total: \$290,950
Prin. Invest.: D W HEAD, III
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8972 BROWN UNIV 8341
 MINERALOGY OF THE MARTIAN SURFACE: CRUSTAL COMPOSI TION TO
 SURFACE PROCESSES
 01/28/2000 - 02/28/2003 FY02: \$75,100 Total: \$219,400
Prin. Invest.: J F MUSTARD
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

RHODE ISLAND

NASA'S UNIVERSITY PROGRAM

NAG 5 9287 **BROWN UNIV** **8342**
 REMOTE SENSING INFORMATION APPLIED TO GEOLOGICAL STUDIES OF PLANETS
 03/16/2000 - 03/31/2002 FY02: \$0 Total: \$48,000
Prin. Invest.: C PIETERS
Tech. Officer: GSFC/J GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9453 **BROWN UNIV** **8343**
 BLAST: A BALLOON-BORNE LARGE-APERTURE SUB-MILLIMETER TELESCOPE - A COMPREHENSIVE PLAN FOR GALAC
 04/13/2000 - 04/14/2003 FY02: \$58,215 Total: \$273,215
Prin. Invest.: G TUCKER
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9522 **BROWN UNIV** **8344**
 EXPERIMENTAL STUDY OF LUNAR MAGMAS & MAGMATIC PROCESSES
 04/26/2000 - 04/30/2003 FY02: \$50,000 Total: \$142,000
Prin. Invest.: M J RUTHERFRD
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 9589 **BROWN UNIV** **8345**
 REFLECTANCE & THERMAL INFRARED SPECTROSCOPY OF MARS RELATIONSHIP BETWEEN ISM & TES FOR COMPOS
 05/12/2000 - 05/14/2003 FY02: \$50,000 Total: \$153,600
Prin. Invest.: J F MUSTARD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9780 **BROWN UNIV** **8346**
 MARTIAN VOLCANIC EDIFICE & DEPOSIT CHARACTERIZATION: VOLCANIC STYLE, MAGMA TRANSPORT & EDIFICE/CALD
 07/10/2000 - 06/30/2002 FY02: \$0 Total: \$146,000
Prin. Invest.: J W HEAD
Tech. Officer: GSFC/J BOYCE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10010 **BROWN UNIV** **8347**
 REGOLITH PROCESSES AND THE COMPOSITIONAL DIVERSITY OF MARE BASALTS
 09/25/2000 - 09/30/2003 FY02: \$74,000 Total: \$148,000
Prin. Invest.: C M PIETERS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10031 **BROWN UNIV** **8348**
 ANALYSIS OF LUNAR PROSPECTOR MAGNETOMETER/ELECTRON REFLECTOMETER (MAG/ER) EXPERIMENT DATA TO ASSIST
 09/28/2000 - 09/30/2003 FY02: \$68,000 Total: \$135,000
Prin. Invest.: J W HEAD III
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10188 **BROWN UNIV** **8349**
 NORTHEAST REGIONAL PLANETARY DATA CENTER
 01/03/2001 - 01/14/2004 FY02: \$51,700 Total: \$102,600
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10383 **BROWN UNIV** **8350**
 DETECTORS WITH BREAK THROUGH ENERGY RESOLUTION USING MAGNETIC SENSORS
 02/07/2001 - 02/14/2004 FY02: \$253,916 Total: \$513,946
Prin. Invest.: G SEIDEL
Tech. Officer: GSFC/C STAHL
CASE Category: 11 – ASTRONOMY

NAG 5 10401 **BROWN UNIV** **8351**
 REMOTE SENSING INFORMATION APPLIED TO GEOLOGICAL STUDIES OF PLANETS
 02/13/2001 - 01/31/2004 FY02: \$40,600 Total: \$80,600
Prin. Invest.: C M PIETERS
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10469 **BROWN UNIV** **8352**
 MINERALOGY OF LUNAR SAMPLES FROM REFLECTANCE SPECTROSCOPY
 02/27/2001 - 03/31/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: C PIETERS
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10573 **BROWN UNIV** **8353**
 TESTS FOR STANDING BODIES OF WATER IN THE NORTHERN LOWLANDS AND RELATION TO SOUTH POLAR DEPOSITS IN
 03/13/2001 - 03/14/2002 FY02: \$0 Total: \$80,000
Prin. Invest.: J HEAD
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10665 **BROWN UNIV** **8354**
 HYDROGEN ISOTOPIC COMPOSITIONS OF INDIVIDUAL ORGANIC COMPOUNDS IN CARBONACEOUS METEORITES
 03/21/2001 - 03/31/2004 FY02: \$70,000 Total: \$140,000
Prin. Invest.: Y HUANG
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10690 **BROWN UNIV** **8355**
 VOLCANIC LANDFORMS & DEPOSITS: DIVERSITY OF ERUPTION CONDITIONS & IMPLICATIONS FOR THE ASCENT
 03/30/2001 - 03/31/2003 FY02: \$36,500 Total: \$72,500
Prin. Invest.: J HEAD
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 11145 **BROWN UNIV** **8356**
 LANDSCAPE DYNAMICS AND LAND-USE/LAND-COVER CHANGE IN THE GREAT BASIN/MOJAVE DESERT REGION
 07/25/2001 - 08/14/2004 FY02: \$105,946 Total: \$167,333
Prin. Invest.: J F MUSTARD
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11538 **BROWN UNIV** **8357**
 PLANETARY IMPACT PROCESSES
 01/04/2002 - 01/14/2005 FY02: \$147,200 Total: \$147,200
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11763 **BROWN UNIV** **8358**
 MINERALOGY OF LUNAR MATERIALS FROM REFLECTANCE, SP ECTROSCOPY: MEASUREMENT, ANALYSIS, AND
 02/21/2002 - 03/31/2005 FY02: \$93,000 Total: \$93,000
Prin. Invest.: C PIETERS
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11774 **BROWN UNIV** **8359**
 GEOLOGICAL MAPPING GANYMEDE: A POST-GALILEO VIEW
 02/28/2002 - 02/28/2005 FY02: \$55,000 Total: \$55,000
Prin. Invest.: J W HEAD
Tech. Officer: GSFC/D SENSEKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11775 **BROWN UNIV** **8360**
 GEOLOGICAL MAPPING OF VENUS: ORIGINS OF MAJOR TOPOGRAPHIC
 FEATURES AND DEVELOPING CRITERIA TO TEST
 02/27/2002 - 02/28/2003 FY02: \$75,000 Total: \$75,000
Prin. Invest.: J W HEAD
Tech. Officer: GSFC/D SENSEKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11931 **BROWN UNIV** **8361**
 METROGENESIS OF MARE BASALTS, MG-RICH SUITES AND SNC PARENT
 MAGMAS
 04/03/2002 - 04/30/2003 FY02: \$59,000 Total: \$59,000
Prin. Invest.: P C HESS
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12225 **BROWN UNIV** **8362**
 EXPERIMENTS & SPECTRAL STUDIES OF MARTIAN VOLCANIC ROCKS:
 FACTORS AFFECTING MGS AND MARS PATHFINDER
 05/22/2002 - 05/14/2005 FY02: \$63,664 Total: \$63,664
Prin. Invest.: M J RUTHERFORD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12254 **BROWN UNIV** **8363**
 MARTIAN VOLCANIC EDIFICE & DEPOSIT CHARACTERIZATION: VOLCANIC
 STYLE, MAGMA TRANSPORT & EDIFICE/C
 06/05/2002 - 06/14/2005 FY02: \$65,000 Total: \$65,000
Prin. Invest.: J W HEAD
Tech. Officer: GSFC/J BOYCE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 12286 **BROWN UNIV** **8364**
 GEOLOGIC UNITS ON MARS: STATISTICAL CHARACTERIZATION OF
 TOPOGRAPHY & GEOLOGICAL ASSESSMENT OF PROP
 06/11/2002 - 06/30/2005 FY02: \$60,000 Total: \$60,000
Prin. Invest.: M KRESLAUSKY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12327 **BROWN UNIV** **8365**
 SYNTHESIS AND SURVIVAL OF ORGANICS DURING HYPER- VELOCITY
 IMPACTS
 06/27/2002 - 06/30/2005 FY02: \$95,015 Total: \$95,015
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12474 **BROWN UNIV** **8366**
 TESTS FOR STANDING BODIES OF WATER IN THE NORTHERN LOWLANDS
 AND RELATION TO SOUTH POLAR DEPOSITS IN
 08/20/2002 - 07/31/2003 FY02: \$80,000 Total: \$80,000
Prin. Invest.: J HEAD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 8 1774 **BROWN UNIV** **8367**
 COALESCENCE OF SUPERFLUID HELIUM DROPS IN A MICRO- GRAVITY
 ENVIRONMENT
 04/30/2001 - 04/29/2005 FY02: \$122,005 Total: \$201,951
Prin. Invest.: H J MARIS
Tech. Officer: MSFC/D HUBBARD
CASE Category: 13 – PHYSICS

NAG 9 1302 **BROWN UNIV** **8368**
 SNC OXYGEN FUGACITY RECORDED PYROXENES: AN EXPERIMENTAL &
 ANALYTICAL STUDY
 06/15/2001 - 06/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: M RUTHERFORD
Tech. Officer: JSC/J JONES
CASE Category: 56 – MEDICAL

NCC 1 01035 **BROWN UNIV** **8369**
 RELAXATION & PRECONDITIONING 4 HI-ORDER DISCONTINUOUS GALERKIN
 METHODS W/APPLIC AEROACOUSTICS & H/S FLOW
 03/21/2001 - 11/30/2003 FY02: \$20,129 Total: \$40,258
Prin. Invest.: C W SHU
Tech. Officer: LARC/H L ATKINS
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 2 1217 **BROWN UNIV** **8370**
 CAUSAL REASONING
 03/13/2001 - 02/28/2003 FY02: \$124,802 Total: \$239,802
Prin. Invest.: S A SLOMAN
Tech. Officer: ARC/M SHAFTO
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 487 **BROWN UNIV** **8371**
 PRECISION AND ACCURACY OF ALL DATA FOR THE DETERMINATION OF
 VEGETATION ABUNDANCE
 04/05/2000 - 09/30/2002 FY02: \$43,570 Total: \$142,470
Prin. Invest.: J F MUSTARD
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC13 98005 **BROWN UNIV** **8372**
 BROWN UNIV AFFILIATED RESEARCH CENTER FOR THE NORTHEAST
 09/15/1998 - 06/30/2002 FY02: \$125,000 Total: \$625,000
Prin. Invest.: J F MUSTARD
Tech. Officer: SSC/H CARR
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 01024 **BROWN UNIV** **8373**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/11/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: A KANESKY
Tech. Officer: LARC/M H CARPENTER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

RHODE ISLAND

NASA'S UNIVERSITY PROGRAM

NGT 1 01037 **BROWN UNIV** **8374**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/28/2001 - 06/30/2003 FY02: \$22,000 Total: \$44,000
Prin. Invest.: C SHA
Tech. Officer: LARC/H L ATKINS
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NGT 3 52369 **BROWN UNIV** **8375**
 GRADUATE STUDENT RESEARCHERS PROGRAM GRADUATE STUDENT
 RESEARCHERS PROGRAM
 06/20/2000 - 08/31/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: G P CRAWFORD
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 45 – ELECTRICAL ENGR

NGT 5 91 **BROWN UNIV** **8376**
 SWITCHABLE/TUNABLE INTERFERENCE FILTERS FOR REMOTE SENSING
 APPLICATIONS STUDENT: ADAM FONTECCHIO
 06/10/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: G CRAWFORD
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 49 – ENGINEERING, OTHER

NGT 5 40106 **BROWN UNIV** **8377**
 RHODE ISLAND SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$247,500 Total: \$591,817
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50166 **BROWN UNIV** **8378**
 EFFECTS OF HIGH STRAIN-RATE DEFORMATION ON IMPACT MELT GEN-
 ERATION
 06/04/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: P H SCHULTZ
Tech. Officer: GSFC/L SMITH
CASE Category: 11 – ASTRONOMY

NGT 5 50355 **BROWN UNIV** **8379**
 INHOMOGENEITIES IN SUPERSTRING COSMOLOGY
 05/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R BRANDENBERGER
Tech. Officer: HQ/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 53 **BROWN UNIV** **8380**
 TRAINING GRANT/REGOLITH PROCESS ON AIRLESS BODIES
 06/06/2001 - 06/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: C PIETERS
Tech. Officer: JSC/D MACKAY
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 9 63 **BROWN UNIV** **8381**
 SNC OXYGEN FUGACITY RECORDED IN THE PYROGENES
 06/07/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: M MACANTA
Tech. Officer: JSC/J JONES
CASE Category: 32 – GEOLOGICAL SCIENCE

NGT 9 66 **BROWN UNIV** **8382**
 REGOLITH PROCESSES ON AIRLESS BODIES: AN ESSENTIAL LINK BETWEEN
 SAMPLE ANALYSIS & REMOTE SENSING
 08/23/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C PIETERS
Tech. Officer: JSC/L KELLER
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 3 2208 **UNIV OF RHODE ISLAND** **8383**
 CERAMIC BASED STRAIN SENSORS FOR USE AT HIGH TEMPERATURE
 11/17/1998 - 03/30/2002 FY02: \$0 Total: \$180,000
Prin. Invest.: O GREGORY
Tech. Officer: GRC/J LEI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2229 **UNIV OF RHODE ISLAND** **8384**
 NUMERICAL SIMULATIONS FOR THE DESIGN OF TERRESTRIAL AND
 MICROGRAVITY WETTING MICROHYDRODYNAMICS EXP
 03/09/1999 - 12/31/2000 FY02: -\$1,834 Total: \$29,054
Prin. Invest.: A BOSE
Tech. Officer: GRC/D A JACQUIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2434 **UNIV OF RHODE ISLAND** **8385**
 PHASE CHANGE IN LOW AND JITTERING GRAVITY ENVIRONMENT SIMU-
 LATED VIA ELECTROMAGNETIC FIELD
 05/30/2000 - 11/30/2003 FY02: \$37,413 Total: \$109,224
Prin. Invest.: D FAGHRI
Tech. Officer: GRC/H C DEGROH
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2652 **UNIV OF RHODE ISLAND** **8386**
 FLAME SPRAY STRAIN GAGES WITH IMPROVED DURABILITY AND LIFE-
 TIMES
 12/12/2001 - 12/11/2003 FY02: \$94,403 Total: \$94,403
Prin. Invest.: O GREGORY
Tech. Officer: GRC/G C FRALICK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2655 **UNIV OF RHODE ISLAND** **8387**
 CERAMIC STRAIN GAGES FOR USE AT TEMPERATURES UP TO 1500
 DEGREES C
 12/31/2001 - 12/11/2003 FY02: \$68,109 Total: \$68,109
Prin. Invest.: D GREGORY
Tech. Officer: GRC/G C FRALICK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 6560 **UNIV OF RHODE ISLAND** **8388**
 DETERMINATION OF OCEAN COLOR PROVINCES IN THE NORTH ATLANTIC
 10/27/1997 - 10/31/2002 FY02: \$0 Total: \$440,122
Prin. Invest.: P M STEGMANN
Tech. Officer: GSFC/J YODER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6645 **UNIV OF RHODE ISLAND** **8389**
 SATELLITE STUDIES OF PHYTOPLANKTON DYNAMICS AND PRODUCTIVITY
 IN THE GLOBAL OCEAN AND IN OCEAN M
 12/01/1997 - 10/14/2001 FY02: \$0 Total: \$553,256
Prin. Invest.: J A YODER
Tech. Officer: GSFC/J CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8739 **UNIV OF RHODE ISLAND** **8390**
 INVESTIGATION OF AERODYNAMIC AND RADOMETRIC LAND SURFACE
 TEMPERATURES
 08/19/1999 - 08/14/2002 FY02: \$0 Total: \$30,998
Prin. Invest.: Y WANG
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8829 **UNIV OF RHODE ISLAND** **8391**
 MULTIPLE INNOVATIVE MODELS IN REGIONAL LAND COVER CHANGE
 STUDIES
 09/08/1999 - 09/30/2002 FY02: \$62,776 Total: \$245,260
Prin. Invest.: Y WANG
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9633 **UNIV OF RHODE ISLAND** **8392**
 EXTENSION OF THE 1KM PATHFINDER AVHRR SST ARCHIVE BOTH IN TIME
 AND SPACE
 05/26/2000 - 04/30/2003 FY02: \$142,500 Total: \$368,750
Prin. Invest.: P CORNILLON
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9724 **UNIV OF RHODE ISLAND** **8393**
 U.S. COASTAL BLENDED IN SITU AND REMOTELY-SENSED OCEAN CHLO-
 ROPHYLL DATA SETS
 06/29/2000 - 06/30/2003 FY02: \$16,833 Total: \$55,300
Prin. Invest.: J YODER
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10554 **UNIV OF RHODE ISLAND** **8394**
 WIND-INDUCED SHORT TIME-SCALE FLUCTUATIONS OF PHYTOPLANKTON
 BIOMASS
 03/12/2001 - 03/14/2004 FY02: \$54,192 Total: \$119,456
Prin. Invest.: B UZ
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10555 **UNIV OF RHODE ISLAND** **8395**
 SATELLITE STUDIES OF COUPLED BIOLOGICAL & PHYSICAL VARIABILITY IN
 OCEAN MARGIN WATERS OF THE NORTHWE
 03/12/2001 - 03/14/2004 FY02: \$147,104 Total: \$327,675
Prin. Invest.: J YODER
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12283 **UNIV OF RHODE ISLAND** **8396**
 STUDY OF THE CIRCULATIONS THAT CONNECT THE TROPICAL, SUBTROPIC-
 AL, ANDE SUBPOLAR REGIONS IN THE PAC
 06/13/2002 - 05/31/2005 FY02: \$99,512 Total: \$99,512
Prin. Invest.: L ROTHSTEIN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NCC 1 302 **UNIV OF RHODE ISLAND** **8397**
 HYDROGEN PEROXIDE, METHYDROPEROXIDE & FORMALDEHYDE --THEIR
 RELATIONSHIP TO TROPOSPHERICOXIDANT CHEM
 07/14/1998 - 06/30/2001 FY02: -\$57 Total: \$318,950
Prin. Invest.: B HEIKES
Tech. Officer: LARC/J L RAPER, LARC/R J BENDURA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 408 **UNIV OF RHODE ISLAND** **8398**
 HYDROGEN PEROXIDE,METHYLHYDROGEN PEROXIDE, & FOR- MALDE-
 HYDE TRANSPORT & CHEM EVOLUTION OVER PACIFIC
 09/07/2000 - 02/14/2003 FY02: \$130,629 Total: \$330,499
Prin. Invest.: D W O'SULLIVAN, B G HEIKES
Tech. Officer: LARC/J L RAPER, SR
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1275 **UNIV OF RHODE ISLAND** **8399**
 SUBSURFACE BIOSPHERES
 07/20/2001 - 06/30/2006 FY02: \$687,733 Total: \$980,666
Prin. Invest.: S D'HONDT, A TESKE, K HINRICH
Tech. Officer: ARC/R A GRAYMES, ARC/W DOLCI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 307 **UNIV OF RHODE ISLAND** **8400**
 THE DISTRIBUTED OCEANOGRAPHIC DATA SYSTEM (DODS):A FRAME-
 WORK FOR ACCESS TO SCIENTIFIC DATA IN THE EO
 04/27/1998 - 12/31/2002 FY02: \$420,560 Total: \$2,699,760
Prin. Invest.: P CORNILLON
Tech. Officer: GSFC/M MAIDEN
CASE Category: 33 – OCEANOGRAPHY

SOUTH CAROLINA

NAG 5 11761 **CLAFLIN COLL** **8401**
 ASTROCHEM PROJECT
 03/12/2002 - 03/31/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: A WILLIAMS
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2214 **CLEMSON UNIV - CLEMSON** **8402**
 THERMAL CONTROL AND ENHANCEMENT OF HEAT CAPACITY O F CRYO-
 GENIC CAPILLARY PUMPED LOOP AND HEAT PIPE W
 01/22/1999 - 11/01/2002 FY02: \$0 Total: \$69,658
Prin. Invest.: D M OCHTERBECK
Tech. Officer: GRC/F P CHIARAMONTE
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 5186 **CLEMSON UNIV - CLEMSON** **8403**
 COUPLING OF DYNAMICS IN AURORA FUNDING FOR FIRST YEAR OF
 GRANT
 03/30/1998 - 02/28/2003 FY02: \$22,411 Total: \$405,774
Prin. Invest.: M F LARSEN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5242 **CLEMSON UNIV - CLEMSON** **8404**
 A SOUNDING ROCKET INVESTIGATION OF THE FINE STRUCTURE IN THE
 MESOPAUSE REGION
 03/16/1999 - 08/31/2002 FY02: \$0 Total: \$244,100
Prin. Invest.: M F LARSEN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5259 **CLEMSON UNIV - CLEMSON** **8405**
 FIRST YEAR OF THREE YEAR EFFORT/ A SEQUENTIAL ROCKET INVESTI-
 GATION OF WINDS AND PLASMA LAYERS
 04/11/2000 - 03/23/2003 FY02: \$20,100 Total: \$226,800
Prin. Invest.: M F LARSEN
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

SOUTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NAG 5 5317 **CLEMSON UNIV - CLEMSON** **8406**
 MAPPING THE E-REGION AND ZONAL WINDS NEAR A STABLE AURORAL
 ARC, USING A NEAR-HORIZONTAL CHEMICAL TRA
 03/19/2001 - 02/28/2004 FY02: \$89,600 Total: \$185,700
Prin. Invest.: M F LARSEN
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5320 **CLEMSON UNIV - CLEMSON** **8407**
 MULTIPLE-SCALE STUDY OF HIGH-LATITUDE JOULE HEATING DURING A
 SUBSTORM EVENT
 04/26/2001 - 12/31/2003 FY02: \$137,800 Total: \$282,500
Prin. Invest.: M LARSON
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5325 **CLEMSON UNIV - CLEMSON** **8408**
 OBSERVING AND MEASURING EARLY OPTICAL LIGHT CURVES FROM
 GAMMA-RAY BURSTS WITH LOTIS
 03/21/2001 - 09/30/2002 FY02: \$16,000 Total: \$31,000
Prin. Invest.: D H HARTMANN
Tech. Officer: WFF/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 5372 **CLEMSON UNIV - CLEMSON** **8409**
 ELECTRODYNAMICS OF THE NIGHTTIME EQUATORIAL IONOSPHERE: THE
 EFFECTS OF WINDS AND WAVES
 06/19/2002 - 06/10/2005 FY02: \$69,700 Total: \$69,700
Prin. Invest.: M LARSEN
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5373 **CLEMSON UNIV - CLEMSON** **8410**
 ROCKET INVESTIGATION OF BOTTOMSIDE EQUATORIAL F REGION ELECTRODYNAMICS
 06/19/2002 - 06/10/2005 FY02: \$83,800 Total: \$83,800
Prin. Invest.: M LARSON
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5378 **CLEMSON UNIV - CLEMSON** **8411**
 INVESTIGATION OF DC ELECTRIC FIELDS, WINDS, AND PLASMA DENSITY
 STRUCTURE IN THE NIGHTTIME EQUATORIAL
 06/19/2002 - 06/10/2005 FY02: \$69,700 Total: \$69,700
Prin. Invest.: M LARSEN
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5379 **CLEMSON UNIV - CLEMSON** **8412**
 CAMPAIGN PROPOSAL: SOUNDING ROCKET INVESTIGATIONS OF E-AND
 F-REGION ELECTRODYNAMICS AT THE MAGNETIC
 06/25/2002 - 06/13/2005 FY02: \$7,300 Total: \$7,300
Prin. Invest.: M LARSEN
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5384 **CLEMSON UNIV - CLEMSON** **8413**
 UNSOLICITED PROPOSAL ENTITLED, FIELD MEASUREMENTS OF DROP
 SIZE DISTRIBUTIONS IN STRATIFORM
 08/08/2002 - 08/31/2005 FY02: \$21,953 Total: \$21,953
Prin. Invest.: J SAYLOR
Tech. Officer: WFF/L BLIVEN
CASE Category: 33 – OCEANOGRAPHY

NAG 5 5385 **CLEMSON UNIV - CLEMSON** **8414**
 LAYERS IN THE EQUATORIAL MESOSPHERE, MOTIONS AND AEROSOL
 (LEMMA) ROCKET & RADAR STUDY
 09/30/2002 - 09/25/2005 FY02: \$87,571 Total: \$87,571
Prin. Invest.: G LEHMACHER
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 7592 **CLEMSON UNIV - CLEMSON** **8415**
 INVESTIGATING THE FEASIBILITY OF, AND LIMITATIONS ASSOCIATED WITH,
 RECOVERING GRAVITYWAVE PARAMETER
 07/07/1998 - 06/30/2001 FY02: \$0 Total: \$158,676
Prin. Invest.: M P HICKEY
Tech. Officer: GSFC/M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 7782 **CLEMSON UNIV - CLEMSON** **8416**
 PHYSICAL VARIATIONS IN THE RAINDROP SIZE DISTRIBUTION & THEIR
 EFFECTS ON THE QUANTITATIVE ESTIMATION
 11/13/1998 - 05/14/2002 FY02: \$0 Total: \$149,730
Prin. Invest.: C W ULBRICH
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8075 **CLEMSON UNIV - CLEMSON** **8417**
 OSSE OBSERVATIONS OF 44TI IN SNR G266.2-1.2
 01/15/1999 - 01/14/2001 FY02: \$0 Total: \$11,200
Prin. Invest.: M D LEISING
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 8304 **CLEMSON UNIV - CLEMSON** **8418**
 PRESOLAR DUST GRAINS IN METEORITES: ORIGIN AND MEANING
 02/25/1999 - 10/14/2002 FY02: \$0 Total: \$167,000
Prin. Invest.: D CLAYTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8448 **CLEMSON UNIV - CLEMSON** **8419**
 RELATING SOLAR BIRTH TO THE GALAXY
 04/07/1999 - 03/31/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: D D CLAYTON
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8759 **CLEMSON UNIV - CLEMSON** **8420**
 MANIPULATION AND CONTACT SENSING VIA TRUNKS, TENTacles, AND
 WHISKERS
 08/26/1999 - 08/31/2003 FY02: \$98,946 Total: \$375,798
Prin. Invest.: I D WALKER
Tech. Officer: GSFC/S DAVISON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9267 **CLEMSON UNIV - CLEMSON** **8421**
 INVESTIGATION OF PLASMA TURBULENCE IN THE EQUATORIAL IONOSPHERE
 03/13/2000 - 02/28/2002 FY02: -\$15,239 Total: \$46,543
Prin. Invest.: D HYSELL
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9459 **CLEMSON UNIV - CLEMSON** **8422**
 SILICON - CARBON NANOTUBE HYBRID DEVICE DESIGN: A ROUTE TO
 NANOSCALE INTEGRATION
 04/13/2000 - 04/14/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: D L CARROLL
Tech. Officer: GSFC/H C SHAW
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 9702 **CLEMSON UNIV - CLEMSON** **8423**
 MEASURING THE TI44 MASS IN CAS A WITH OSSE
 06/15/2000 - 06/14/2002 FY02: \$0 Total: \$5,000
Prin. Invest.: L THE
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 9824 **CLEMSON UNIV - CLEMSON** **8424**
 EXTRACTION OF SINGLE EVENT UPSET PARAMETERS FROM CIRCUIT
 SIMULATION CODE
 07/25/2000 - 07/31/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: P MCNULTY
Tech. Officer: GSFC/J BARTH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10018 **CLEMSON UNIV - CLEMSON** **8425**
 PVFS 2000: AN OPERATIONAL PARALLEL FILE SYSTEM FOR BEOWULF
 10/02/2000 - 09/30/2003 FY02: \$0 Total: \$152,447
Prin. Invest.: D LIGON III
Tech. Officer: GSFC/J DORBAND
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 10251 **CLEMSON UNIV - CLEMSON** **8426**
 STUDIES OF WIND SHEAR INSTABILITIES & GRAVITY WAVES IN THE MLT
 REGION AIRGLOW & RELATED EFFECTS
 01/05/2001 - 01/14/2004 FY02: \$82,802 Total: \$162,700
Prin. Invest.: M HICKEY
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10367 **CLEMSON UNIV - CLEMSON** **8427**
 MINIATURE HEAT TRANSPORT SYSTEM FOR SPACECRAFT THERMAL
 CONTROL
 03/19/2001 - 03/31/2004 FY02: \$40,400 Total: \$79,700
Prin. Invest.: D M OCHTERBECK
Tech. Officer: GSFC/J KU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10454 **CLEMSON UNIV - CLEMSON** **8428**
 HISTORY OF THE NUCLEI IMPORTANT FOR COSMOCHEMISTRY
 02/21/2001 - 05/31/2004 FY02: \$37,000 Total: \$74,000
Prin. Invest.: B MEYER
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10764 **CLEMSON UNIV - CLEMSON** **8429**
 THE RADIOACTIVE MILKY WAY & SUPERNOVAE (LISA 2000)
 04/23/2001 - 04/30/2006 FY02: \$99,987 Total: \$177,525
Prin. Invest.: M D LEISING
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11293 **CLEMSON UNIV - CLEMSON** **8430**
 NANO-ELECTRONICS: CIRCUIT DESIGN FOR SILICON/CARBON NANOTUBE
 INTEGRATION
 08/22/2001 - 07/31/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: D L CARROLL
Tech. Officer: GSFC/H SHAW
CASE Category: 13 – PHYSICS

NAG 5 11329 **CLEMSON UNIV - CLEMSON** **8431**
 ALTERNATIVE COMPUTING ROADMAP PROJECT
 09/25/2001 - 09/30/2004 FY02: \$0 Total: \$33,800
Prin. Invest.: D SASS
Tech. Officer: GSFC/P CORONADO
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11808 **CLEMSON UNIV - CLEMSON** **8432**
 SPECIAL CONDITIONS FOR THE BIRTH OF THE SOLAR SYSTEM
 02/27/2002 - 03/31/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: D D CLAYTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11871 **CLEMSON UNIV - CLEMSON** **8433**
 PRESOLAR DUST GRAINS IN METEORITES AND IDPS
 03/12/2002 - 04/14/2005 FY02: \$58,000 Total: \$58,000
Prin. Invest.: D CLAYTON
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NCC 1 01036 **CLEMSON UNIV - CLEMSON** **8434**
 ADVANCED CROSS ENTERPRISE TECHNOLOGY DEVELOPMENT FOR NASA
 MISSIONS
 04/12/2001 - 04/30/2004 FY02: \$91,500 Total: \$249,623
Prin. Invest.: Y SUN
Tech. Officer: LARC/J W CONWELL
CASE Category: 12 – CHEMISTRY

NCC 2 1114 **CLEMSON UNIV - CLEMSON** **8435**
 VIRTUAL REALITY TECHNOLOGY FOR AIRCRAFT VISUAL INSPECTION:
 TRAINING & JOB AIDING
 04/23/1999 - 12/31/2001 FY02: \$16,369 Total: \$264,538
Prin. Invest.: A K GRAMOPADHYE
Tech. Officer: ARC/B G KANKI, ARC/M M CONNORS
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1288 **CLEMSON UNIV - CLEMSON** **8436**
 USING ADVANCED DISPLAYS TO SUPPORT TRAINING AND JOB AIDING:
 IMPROVING AIRCRAFT INSPECTION PERFORMANCE
 12/31/2001 - 12/31/2002 FY02: \$127,500 Total: \$127,500
Prin. Invest.: B MELLOTT, A T DUCHOWSKI
Tech. Officer: ARC/T BEARD
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 5421 **CLEMSON UNIV - CLEMSON** **8437**
 COMBINATORIAL APPROACH FOR SYNTHESIS & CHARACTERIZATION OF
 CARBON NANOTUBES - A CHARACTERIZATION LABORATORY
 02/15/2001 - 01/31/2003 FY02: \$94,523 Total: \$186,325
Prin. Invest.: A M RAO
Tech. Officer: ARC/M MEYAPPAN, ARC/H PATRIDGE
CASE Category: 13 – PHYSICS

SOUTH CAROLINA

NASA'S UNIVERSITY PROGRAM

NGT 1 01036 **CLEMSON UNIV - CLEMSON** **8438**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/28/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: Y P SUN
Tech. Officer: LARC/J W CONNELL, LARC/J G SMITH
CASE Category: 12 – CHEMISTRY

NGT 1 52238 **CLEMSON UNIV - CLEMSON** **8439**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/03/2000 - 06/30/2001 FY02: -\$3,067 Total: \$18,933
Prin. Invest.: Y P SUN
Tech. Officer: LARC/J W CONNELL, LARC/J G SMITH, JR
CASE Category: 12 – CHEMISTRY

NGT 5 85 **CLEMSON UNIV - CLEMSON** **8440**
 COTS CUSTOM HARDWARE: THE RECONFIGURABLE APPROACH TO CLUSTER BASED PARALLEL: STUDENT/KEITH UNDERWOOD
 05/20/1999 - 08/14/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: W LIGON
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 109 **CLEMSON UNIV - CLEMSON** **8441**
 ALGORITHMS & SCHEDULING FOR PARALLEL I/O (STUDENT: PHILIP CARNS)
 06/12/2000 - 08/14/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: W B LIGON
Tech. Officer: GSFC/G SOFFEN
CASE Category: 22 – COMPUTER SCIENCE

NGT 8 52858 **CLEMSON UNIV - CLEMSON** **8442**
 ROBUST SPEECH RECOGNITION SCHEME USING PARALLEL MODEL COMBINATION WITH AN ADAPTIVE HYBRID
 07/23/1998 - 08/14/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J N GOWDY
Tech. Officer: MSFC/J F DOWDY
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 7183 **COLL OF CHARLESTON** **8443**
 EXPLORING THE SOLAR SYSTEM IN THE CLASSROOM
 03/16/1998 - 03/14/2002 FY02: \$0 Total: \$48,000
Prin. Invest.: C R COOMBS
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10313 **COLL OF CHARLESTON** **8444**
 BETA PIC-LIKE CIRCUMSTELLAR GAS DISK AROUND 2 AND -- FUSE-00
 01/26/2001 - 01/31/2003 FY02: \$0 Total: \$16,000
Prin. Invest.: J E NEFF
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10625 **COLL OF CHARLESTON** **8445**
 AN ARTIFICIAL INTELLIGENCE CLASSIFICATION TOOL & ITS APPLICATION TO GAMMA-RAY BURSTS
 03/22/2001 - 01/31/2003 FY02: \$0 Total: \$104,054
Prin. Invest.: J HAKKILA
Tech. Officer: GSFC/P HUNTER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10633 **COLL OF CHARLESTON** **8446**
 EXPLORING THE SOLAR SYSTEM IN THE CLASSROOM: A DIFFERENTIATED MULTISENSORY APPROACH
 03/17/2001 - 03/14/2003 FY02: \$40,000 Total: \$80,000
Prin. Invest.: C RUNYON
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11017 **COLL OF CHARLESTON** **8447**
 EARLY BATSE GRB AFTERGLOWS (ADP 2000)
 06/12/2001 - 01/14/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: T W GIBLIN
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NCC 5 263 **COLL OF CHARLESTON** **8448**
 SOUTHEASTERN OSS-SPACE GRANT REGIONAL EDUCATION COALITION: KEYS TO IMPLEMENTING NASA'S OSS EDUCATION
 01/12/1998 - 01/14/2003 FY02: \$0 Total: \$1,030,000
Prin. Invest.: M COLGAN
Tech. Officer: GSFC/J ROSENHAL
CASE Category: 11 – ASTRONOMY

NCC 5 413 **COLL OF CHARLESTON** **8449**
 EPSCOR PREPARATION PROGRAM
 06/18/1999 - 06/14/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: M COLGAN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 575 **COLL OF CHARLESTON** **8450**
 SOUTH CAROLINA NASA EPSCOR PROGRAM
 08/23/2001 - 07/31/2004 FY02: \$0 Total: \$300,000
Prin. Invest.: M COLGAN
Tech. Officer: GSFC/DDETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 607 **COLL OF CHARLESTON** **8451**
 SOUTHEAST REGIONAL CLEARING HOUSE: A COALITION OF SPACE GRANT CONSORTIA(SERCH)
 12/17/2001 - 01/14/2007 FY02: \$330,000 Total: \$330,000
Prin. Invest.: C RUNYON
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40050 **COLL OF CHARLESTON** **8452**
 NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/03/1997 - 02/28/2002 FY02: \$0 Total: \$1,072,676
Prin. Invest.: M COLGAN
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40099 **COLL OF CHARLESTON** **8453**
 SOUTH CAROLINA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/28/2001 - 02/28/2005 FY02: \$256,250 Total: \$512,500
Prin. Invest.: M COLGAN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1085 **FURMAN UNIV** **8454**
 PROSPECTIVE REMEMBERING UNDER COMPLEX, DEMANDING & FLUID
 CONDITIONS
 01/27/1999 - 01/14/2003 FY02: \$123,833 Total: \$524,857
Prin. Invest.: G O EINSTEIN, M A MCDANIEL
Tech. Officer: ARC/R K DISMUKES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1415 **MEDICAL UNIV OF SOUTH CAROLINA** **8455**
 EMBRYONIC CELL MIGRATION & METALLOPROTEINASE ACTIVITY ARE
 AFFECTED BY RANDOMIZATION OF THE GRAVITY
 07/11/2000 - 06/30/2003 FY02: \$189,268 Total: \$455,443
Prin. Invest.: S HOFFMAN
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1385 **MEDICAL UNIV OF SOUTH CAROLINA** **8456**
 RESEARCH "GASTRIC MUCOSAL CELL CULTURE IN SIMULATED MICRO-
 GRAVITY
 06/13/1997 - 12/30/2001 FY02: -\$41,838 Total: \$530,255
Prin. Invest.: A J SMOKA
Tech. Officer: MSFC/N R PELLIS, MSFC/J MAYO
CASE Category: 56 – MEDICAL

NAG 5 8246 **SOUTH CAROLINA STATE UNIV** **8457**
 SHARE WITH A PAIR OF PEERS (SWAPOP II)
 02/19/1999 - 02/28/2002 FY02: \$0 Total: \$586,190
Prin. Invest.: J D SALLEY
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10145 **SOUTH CAROLINA STATE UNIV** **8458**
 ENHANCEMENT OF THE SPACE SCIENCE RESEARCH PROGRAM AT SOUTH
 CAROLINA STATE UNIV
 01/05/2001 - 12/31/2003 FY02: \$230,000 Total: \$457,000
Prin. Invest.: D K WALTER
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NCC 5 454 **SOUTH CAROLINA STATE UNIV** **8459**
 CURRICULUM ENHANCEMENT THROUGH SPACE SCIENCE RSCH
 02/11/2000 - 02/28/2003 FY02: \$600,000 Total: \$900,000
Prin. Invest.: D K WALTER
Tech. Officer: GSFC/M MATTHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 534 **SOUTH CAROLINA STATE UNIV** **8460**
 THE CENTER FOR NASA RESEARCH AND TECHNOLOGY (CNRT) /MUSPIN
 NRTS PROGRAM.
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$700,000
Prin. Invest.: D WALTER
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 651 **SOUTH CAROLINA STATE UNIV** **8461**
 SHARE WITH A PAIR OF PEERS II
 08/16/2002 - 08/31/2005 FY02: \$199,246 Total: \$199,246
Prin. Invest.: J SALLEY
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 02117 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8462**
 SPUN-CAST POLYMER COMPOSITE MIRRORS AND THEIR USE IN ADAPTIVE
 OPTICS
 09/30/2002 - 08/31/2005 FY02: \$93,428 Total: \$93,428
Prin. Invest.: W A SCRIVENS
Tech. Officer: LARC/G C HORNER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8837 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8463**
 STUDY OF LAND-ATMOSPHERE INTERACTIONS USING SATELLITE DATA
 ASSIMILATION
 09/22/1999 - 09/30/2001 FY02: \$0 Total: \$114,265
Prin. Invest.: V LAKSHMI
Tech. Officer: GSFC/P T HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8875 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8464**
 COUPLING SATELLITE REMOTE SENSING & UNSTEADY FLOW MODELING
 FOR DISCHARGE ESTIMATION
 11/16/1999 - 10/31/2002 FY02: \$38,686 Total: \$83,566
Prin. Invest.: V LAKSHMI
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9233 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8465**
 THE INFLUENCE OF LAND-ATMOSPHERE INTERACTIONS ON VARIABILITY
 OF THE NORTH AMERICAN MONSOON
 04/06/2000 - 04/30/2003 FY02: \$85,814 Total: \$202,662
Prin. Invest.: V LAKSHMI
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10322 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8466**
 FUNDING GRANT FOR PROPOSAL # NRA-99-055-05 TITLED HIGH PER
 ULTRAVIOLET DETECTORS BASED ON QUATERNARY
 01/31/2001 - 02/29/2004 FY02: \$435,290 Total: \$907,905
Prin. Invest.: D KHAN
Tech. Officer: GSFC/B MOTT
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11128 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8467**
 EXTENDED VALIDATION OF AMSR-E SOIL MOISTURE PRODUCTS (AQUA-
 0084-0032)
 07/27/2001 - 08/31/2004 FY02: \$56,582 Total: \$87,372
Prin. Invest.: V LAKSHMI
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11253 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8468**
 AN ASSESSMENT OF GLOBAL ORGANIC CARBON FLUX ALONG CONTINEN-
 TAL MARGINS
 08/20/2001 - 08/31/2004 FY02: \$49,996 Total: \$98,609
Prin. Invest.: R THUNELL
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11526 **UNIV OF SOUTH CAROLINA-COLUMBIA** **8469**
 STUDIES OF COMBINED PASSIVE & ACTIVE SOIL MOISTURE SENSING
 01/14/2002 - 01/30/2004 FY02: \$0 Total: \$0
Prin. Invest.: V LAKSHMI
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

SOUTH DAKOTA

NASA'S UNIVERSITY PROGRAM

NAG 5 12339 UNIV OF SOUTH CAROLINA-COLUMBIA 8470
 CHLOROPLAST CONUNDRUM
 07/15/2002 - 06/30/2004 FY02: \$162,248 Total: \$162,248
Prin. Invest.: J BERNHARD
Tech. Officer: GSFC/M MEYERS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 174 UNIV OF SOUTH CAROLINA-COLUMBIA 8471
 EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESE
 12/16/1996 - 03/31/2002 FY02: -\$960,126 Total: \$1,538,883
Prin. Invest.: J D ODOM
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC13 00003 UNIV OF SOUTH CAROLINA-COLUMBIA 8472
 PROGRAM FOR A NASA AFFILIATED RESEARCH CENTER PROGRAM AT THE
 UNIV OF SOUTH CAROLINA
 02/01/2000 - 01/31/2005 FY02: \$125,000 Total: \$490,750
Prin. Invest.: J JENSEN
Tech. Officer: SSC/N SOVIK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT13 52723 UNIV OF SOUTH CAROLINA-COLUMBIA 8473
 MACHINE LEARNING GMDH NEURO-FUZZY TECHNIQUES INHERENT OPTI-
 CAL PROPERTY ESTIMATED
 07/22/1999 - 07/31/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: J JENSEN
Tech. Officer: SSC/R TRAVIS
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9624 VOORHEES COLL 8474
 EARTH SCIENCE EDUCATION AND RESEARCH INITIATIVE
 05/23/2000 - 05/14/2003 FY02: \$0 Total: \$279,960
Prin. Invest.: C SMITH
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

SOUTH DAKOTA

NAG 5 7548 OGLALA LAKOTA COLL 8475
 OGLALA LAKOTA COLL PACE/MSET
 07/01/1998 - 09/30/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: J HAAS
Tech. Officer: GSFC/T GULL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10935 OGLALA LAKOTA COLL 8476
 NASA/OGLALA LAKOTA COLL SUMMER INST AND RESEARCH INST. NASA
 HONORS SUPPLEMENTAL SUC
 06/07/2001 - 06/14/2002 FY02: \$0 Total: \$41,500
Prin. Invest.: S PHELPS
Tech. Officer: GSFC/D MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7746 SOUTH DAKOTA SCHOOL OF MINES & TECH 8477
 PROVIDE FOR SCIENTIFIC KNOWLEDGE FOR INDIAN LEARNING AND
 LEADERSHIP FOR MISSION TO PLANET EARTH
 10/21/1998 - 08/31/2001 FY02: \$0 Total: \$300,000
Prin. Invest.: F CAMPONE
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 21 – MATHEMATICS

NAG 5 8973 SOUTH DAKOTA SCHOOL OF MINES & TECH 8478
 EARTH SYSTEMS CONNECTIONS: AN INTEGRATED K-4 SCIENCE, MATH-
 EMATICS, & TECHNOLOGY CURRICULUM
 02/15/2000 - 12/31/2002 FY02: \$162,000 Total: \$471,100
Prin. Invest.: L A VIERLING
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1447 SOUTH DAKOTA SCHOOL OF MINES & TECH 8479
 UPPER MISSOURI RIVER BASIN HYDROLOGY: PILOT PROJECT
 02/23/1998 - 09/30/2000 FY02: -\$695 Total: \$799,305
Prin. Invest.: S O FAREWELL, P L SMITH
Tech. Officer: MSFC/J ARNOLD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99021 SOUTH DAKOTA SCHOOL OF MINES & TECH 8480
 APPLICATION OF REMOTE SENSING TO FOREST RESOURCE INVENTORY
 AND HABITAT MODELING
 08/13/1999 - 10/31/2002 FY02: \$105,924 Total: \$305,964
Prin. Invest.: M PRICE
Tech. Officer: JSC/R MCKELLIP
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 402 SOUTH DAKOTA SCHOOL OF MINES & TECH 8481
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/14/1999 - 12/31/2001 FY02: \$0 Total: \$450,000
Prin. Invest.: S FARWELL
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 588 SOUTH DAKOTA SCHOOL OF MINES & TECH 8482
 THE USE OF REMOTE SENSING FOR MONITORING, PREDICTION, AND
 MANAGEMENT OF HYDROLOGIC, AGRICULTURAL, AND
 08/31/2001 - 08/31/2004 FY02: \$0 Total: \$512,100
Prin. Invest.: S O FAREWELL
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30402 SOUTH DAKOTA SCHOOL OF MINES & TECH 8483
 SEMI-ARID GRASSLAND ECOSYSTEM FORCING: REPLACING NATIVE,
 FREE-RANGING UNGULATE GRAZING WITH HUMAN-
 09/05/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P R ZIMMERMAN
Tech. Officer: GSFC/K BLANDING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40042 SOUTH DAKOTA SCHOOL OF MINES & TECH 8484
 NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRA
 01/24/1997 - 02/28/2001 FY02: \$0 Total: \$759,219
Prin. Invest.: S O FAREWELL
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40095 SOUTH DAKOTA SCHOOL OF MINES & TECH 8485
 SOUTH DAKOTA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/28/2001 - 02/28/2005 FY02: \$312,500 Total: \$573,281
Prin. Invest.: S O FAREWELL
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 3540 **SOUTH DAKOTA STATE UNIV** **8486**
 TM RADIOMETRIC CALIBRATION
 11/19/1996 - 06/30/2001 FY02: \$0 Total: \$266,146
Prin. Invest.: D HELDER
Tech. Officer: GSFC/DL WILLIAMS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11351 **SOUTH DAKOTA STATE UNIV** **8487**
 LANDSAT RADOMETRIC CALIBRATION: TOWARDS A 20 YEAR RECORD OF
 CALIBRATED THEMATIC MAPPER CLASS DAT FO
 09/14/2001 - 09/14/2004 FY02: \$30,000 Total: \$129,975
Prin. Invest.: D HELDER
Tech. Officer: GSFC/B L MARKHAM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02045 **SOUTH DAKOTA STATE UNIV** **8488**
 SDSU WORK PLAN FOR JACIE SDSU WORK PLAN FOR JACIE
 08/09/2002 - 06/30/2003 FY02: \$210,124 Total: \$210,124
Prin. Invest.: D HELDER
Tech. Officer: SSC/N ZANONI
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 5 472 **SOUTH DAKOTA STATE UNIV** **8489**
 AN INTEGRATED ASSESSMENT OF THE EARTH OBSRVER - 1 INSTRUMENT
 SUITE & THE LANDSAT 7 ENHANCED THEMATIC
 03/08/2000 - 12/31/2002 FY02: \$78,230 Total: \$266,320
Prin. Invest.: D HELDER
Tech. Officer: GSFC/S UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

TENNESSEE

NAG 3 2454 **CHRISTIAN BROTHERS COLL** **8490**
 ROBUST STRATEGY FOR ROCKET ENGINE HEALTH MONITORIN G
 06/07/2000 - 05/31/2001 FY02: \$0 Total: \$144,264
Prin. Invest.: D SANTI
Tech. Officer: GRC/E WONG
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 10344 **EAST TENNESSEE STATE UNIV** **8491**
 THE OUTER ATMOSPHERE OF MIRA VARIABLES (FUSE 00)
 01/31/2001 - 01/31/2003 FY02: \$0 Total: \$20,623
Prin. Invest.: D G LUTTERMOSER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 8 1375 **EAST TENNESSEE STATE UNIV** **8492**
 METASTABLE SOLUTION STRUCTURE AND OPTIMIZATION STRATEGIES IN
 PROTEIN CRYSTAL GROWTH
 06/18/1997 - 09/30/2003 FY02: \$53,980 Total: \$531,479
Prin. Invest.: L WILSON
Tech. Officer: MSFC/B GYNES, MSFC/J MAYO
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 3 2298 **FISK UNIV** **8493**
 SURFACE AND INTERFACIAL STRUCTURES OF METAL ULTRA- THIN FILM
 ON SIC AT ELEVATED TEMPERATURES
 10/14/1999 - 11/10/2001 FY02: \$0 Total: \$192,484
Prin. Invest.: D E COLLINS
Tech. Officer: GRC/G HUNTER
CASE Category: 43 – CHEMICAL ENGR

NAG 3 2308 **FISK UNIV** **8494**
 SIZE GRADED QUANTUM DOT SOLAR ENERGY CELLS FOR SPA CE POWER
 TECHNOLOGY
 12/10/1999 - 05/31/2002 FY02: \$0 Total: \$282,963
Prin. Invest.: D O HENDERSON
Tech. Officer: GRC/E CLARK
CASE Category: 13 – PHYSICS

NAG 8 1604 **FISK UNIV** **8495**
 OPTICAL TRAPPING AND MANIPULATION OF NANOCRYSTALS CREATED IN
 A LASER ABATION PLUME
 04/21/1999 - 04/20/2002 FY02: \$0 Total: \$300,971
Prin. Invest.: D O HENDERSON
Tech. Officer: MSFC/U
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 8 133 **FISK UNIV** **8496**
 FOR RESEARCH "FISK UNIV CENTER FOR PHOTONIC MATERIALS AND
 DEVICES"
 04/21/1997 - 12/31/2002 FY02: \$1,000,000 Total: \$6,200,000
Prin. Invest.: E SILHERMAN
Tech. Officer: MSFC/D O FRAZIER
CASE Category: 13 – PHYSICS

NCC 8 195 **FISK UNIV** **8497**
 CHARACTERIZATION OF CRYSTALLINE PERFECTION OF BINARY AND
 TERNARY GAP SEMICONDUCTORS
 09/30/1999 - 09/29/2001 FY02: -\$20,000 Total: \$179,759
Prin. Invest.: A BURGER
Tech. Officer: MSFC/C HUA SU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12093 **MEHARRY MEDICAL COLL** **8498**
 NASA/MEHARRY/VANDERBILT SUMMER RESEARCH APPRENTICE SHIP
 PROGRAM
 04/30/2002 - 04/30/2005 FY02: \$109,004 Total: \$109,004
Prin. Invest.: M F LIMA
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11692 **MIDDLE TENNESSEE STATE UNIV** **8499**
 TENNESSEE CENTER FOR THE ADVANCEMENT OF MATHEMATIC S SCI-
 ENCE AND TECHNOLOGY EDUCATION
 02/01/2002 - 01/31/2005 FY02: \$175,000 Total: \$175,000
Prin. Invest.: E R PHILLIPS
Tech. Officer: GSFC/L BILBROUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12561 **MIDDLE TENNESSEE STATE UNIV** **8500**
 NAKED-EYE OBSERVATORY
 09/17/2002 - 08/31/2003 FY02: \$329,800 Total: \$329,800
Prin. Invest.: E KLUMPE
Tech. Officer: GSFC/L BILBROUGH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1486 **MIDDLE TENNESSEE STATE UNIV** **8501**
 R/S DEVELOPMENT OF ANIONIC POLYELECTROLYTES FOR SOLID STATE
 BATTERY APPLICATION
 04/21/1998 - 08/01/2002 FY02: \$0 Total: \$164,531
Prin. Invest.: A C FRIEDLI
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

TENNESSEE

NASA'S UNIVERSITY PROGRAM

NAG 2 1419 **TENNESSEE STATE UNIV** **8502**
 QUALITY OF SERVICE COMPARISONS BETWEEN SATELLITE, MIRCOWAVE,
 & T1 COMMUNICATIONS
 07/13/2000 - 06/14/2003 FY02: \$0 Total: \$200,000
Prin. Invest.: W A SMITH
Tech. Officer: ARC/K A FREEMAN, ARC/D CHOW
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1473 **TENNESSEE STATE UNIV** **8503**
 EMBODIMENT OF INTELLIGENT BEHAVIORS ON MOBILE ROBO TS
 04/18/2001 - 10/31/2001 FY02: -\$23,057 Total: \$109,510
Prin. Invest.: M S ZEIN-SABATTO
Tech. Officer: ARC/S P COLOMBANO, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1530 **TENNESSEE STATE UNIV** **8504**
 EMBODIMENT OF INTELLIGENT BEHAVIORS ON MOBILE ROBO TS
 12/13/2001 - 12/14/2002 FY02: \$147,000 Total: \$147,000
Prin. Invest.: M S ZIEN-SABATTO
Tech. Officer: ARC/S COLOMBANO
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 6052 **TENNESSEE STATE UNIV** **8505**
 A PARTNERSHIP BETWEEN THE TENNESSEE STATE UNIV CTR OF EXCEL-
 LENCE, THE NM SUPERCOMPUTING CHALLENGE &
 09/27/2001 - 09/30/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: W A SMITH
Tech. Officer: ARC/A CARDENAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2272 **TENNESSEE STATE UNIV** **8506**
 TECHNICAL RESEARCH/MENTORSHIP SYMPOSIUM '99 INTEGR ATION OF
 EDUCATION, WORK CYCLES, ANDGRADUATE SCH
 06/23/1999 - 06/30/2001 FY02: -\$3,813 Total: \$196,187
Prin. Invest.: D B ROGERS
Tech. Officer: GRC/R F LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2441 **TENNESSEE STATE UNIV** **8507**
 COLL BOUND TO GRADUATE SCHOOL COLL BOUND TO GRADUATE
 SCHOOL
 05/24/2000 - 11/30/2000 FY02: -\$825 Total: \$48,925
Prin. Invest.: D B ROGERS
Tech. Officer: GRC/M CAWTHON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2471 **TENNESSEE STATE UNIV** **8508**
 TSU RESEARCH PROJECTS FOR INCREASING THE POOL OF M INORITY
 ENGINEERS
 07/10/2000 - 06/30/2003 FY02: \$82,400 Total: \$247,200
Prin. Invest.: D ROGERS
Tech. Officer: GRC/S MERRITT
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2577 **TENNESSEE STATE UNIV** **8509**
 THE NASA ENGINEERING AND SCIENCE COLLABORATIVE THE NASA
 ENGINEERING AND SCIENCE COLLABORATIVE
 04/18/2001 - 11/30/2002 FY02: \$1,453,975 Total: \$2,216,915
Prin. Invest.: D ROGERS
Tech. Officer: GRC/R LAWRENCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2606 **TENNESSEE STATE UNIV** **8510**
 COLL BOUND TO GRADUATE SCHOOL PROGRAM COLL BOUND TO GRADU-
 ATE SCHOOL PROGRAM
 05/23/2001 - 09/30/2001 FY02: \$0 Total: \$53,212
Prin. Invest.: D ROGERS
Tech. Officer: GRC/M BOROWSKI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2781 **TENNESSEE STATE UNIV** **8511**
 COLL BOUND COLL BOUND
 05/23/2002 - 09/01/2002 FY02: \$29,574 Total: \$29,574
Prin. Invest.: D ROGERS
Tech. Officer: GRC/M BOROWSKI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10896 **TENNESSEE STATE UNIV** **8512**
 TSU SPACE SCIENCE AND ASTROBIOLOGY INITIATIVE
 05/04/2001 - 04/30/2003 FY02: \$0 Total: \$200,000
Prin. Invest.: M BUSBY
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1855 **TENNESSEE STATE UNIV** **8513**
 INSPIRING CAREERS IN ENG, MATHEMATICS SCIENCE
 12/17/2001 - 12/16/2002 FY02: \$100,000 Total: \$100,000
Prin. Invest.: L SHARPE
Tech. Officer: MSFC/W LOVE
CASE Category: 21 – MATHEMATICS

NCC 2 1205 **TENNESSEE STATE UNIV** **8514**
 A PARTNERSHIP BETWEEN THE TSU CTR. OF EXCELLENCE & THE NM
 SUPERCOMPUTING CHALLENGE
 09/26/2000 - 09/30/2001 FY02: \$0 Total: \$70,800
Prin. Invest.: W A SMITH
Tech. Officer: ARC/M E DUENAS, ARC/K FREEMAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 96 **TENNESSEE STATE UNIV** **8515**
 NASA/TSU NETWORK RESOURCE AND TRAINING SITE
 08/15/1995 - 08/14/2001 FY02: \$0 Total: \$2,878,000
Prin. Invest.: W A SMITH
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 511 **TENNESSEE STATE UNIV** **8516**
 CENTER FOR AUTOMATED SPACE SCIENCE
 08/23/2000 - 06/30/2005 FY02: \$1,700,000 Total: \$3,200,000
Prin. Invest.: M BUSBY
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 531 **TENNESSEE STATE UNIV** **8517**
 NASA/TSU MINORITY UNIVERSITIES INFORMATION NETWORK FOR RE-
 SEARCH & EDUCATION/MUSPIN NRTSPROGRAM
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$715,321
Prin. Invest.: W A SMITH
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 657 **TENNESSEE STATE UNIV** **8518**
 MINORITY INST COLLABORATORY
 09/18/2002 - 12/14/2002 FY02: \$39,400 Total: \$39,400
Prin. Invest.: T P GARY
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1631 **TENNESSEE TECHNOLOGICAL UNIV** **8519**
ANALYSIS OF NEARLY STEADY PHOTOSPHERIC FLOWS
09/07/1999 - 09/08/2002 FY02: \$0 Total: \$87,000
Prin. Invest.: S HAN
Tech. Officer: MSFC/D HATHAWAY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1749 **TENNESSEE TECHNOLOGICAL UNIV** **8520**
ACTIVE CONTROL OF LARGE, FLEXIBLE SPACE STRUCTURES USING
SHAPE MEMORY ALLOYS
10/02/2000 - 07/31/2002 FY02: \$0 Total: \$37,813
Prin. Invest.: S CANFIELD
Tech. Officer: MSFC/C K CARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1793 **TENNESSEE TECHNOLOGICAL UNIV** **8521**
CONCEPT DEL AND EVAL OF CAPTURE DEVICES FOR RENED ZOUS WITH
TETHER-DRIVEN TRANSFER VEHICLES
03/06/2001 - 02/15/2002 FY02: \$0 Total: \$38,000
Prin. Invest.: S CANFIELD
Tech. Officer: MSFC/K WELZN
CASE Category: 46 – MECHANICAL ENGR

NAG 8 1794 **TENNESSEE TECHNOLOGICAL UNIV** **8522**
ENHANCEMENT OF EJECTOR EFFICIENCY IN ADVANCE RE- USABLE
PROPULSION ENGINE
03/13/2001 - 09/30/2003 FY02: \$45,000 Total: \$105,000
Prin. Invest.: S S HAN, J PIEDDIESON
Tech. Officer: MSFC/J J HUTT
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52883 **TENNESSEE TECHNOLOGICAL UNIV** **8523**
HYDROSTATIC EFFECTS ON YIELDING AND FATIGUE LIFE
09/10/1999 - 09/09/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C WILSON
Tech. Officer: MSFC/J DOWDY
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52911 **TENNESSEE TECHNOLOGICAL UNIV** **8524**
DEV & EVALUATION OF CAPTURE DEVICES FOR RENDEZVOUS WITH
TETHER-DRIVEN TRANSFER VEHICLES
06/26/2001 - 06/30/2002 FY02: \$0 Total: \$22,000
Prin. Invest.: S CANFIELD
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NAG 5 7617 **UNIV OF MEMPHIS** **8525**
FUNDING FOR 'LANDSIDE HAZARD IN RESPONSE TO SHORT TERM
CLIMATE CHANGE' (SENH98-0020)
07/24/1998 - 06/30/2002 FY02: \$0 Total: \$225,000
Prin. Invest.: M ELLIS
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9783 **UNIV OF MEMPHIS** **8526**
OBSERVATIONAL CONSTRAINTS FOR CORONAL HEATING MODELS
07/06/2000 - 06/30/2003 FY02: \$0 Total: \$60,429
Prin. Invest.: J T SCHMELZ
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 12096 **UNIV OF MEMPHIS** **8527**
THE IMPLICATIONS OF MULTITHERMAL LOOPS FOR CORONAL HEATING
MODELS
05/01/2002 - 06/30/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: J T SCHMELZ
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1244 **UNIV OF MEMPHIS** **8528**
SODAS: MODELS OF SELF-ORGANIZING ONTOGENETIC DEVELOPMENT
FOR AUTONOMOUS ADAPTIVE SYSTEMS
04/05/2001 - 02/28/2003 FY02: \$240,025 Total: \$390,025
Prin. Invest.: R KOZMA
Tech. Officer: ARC/T R GOVINDAN, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9031 **UNIV OF TENNESSEE - CHATTANOOGA** **8529**
PRE-SERVICE TEACHER ENHANCEMENT PROGRAM
02/04/2000 - 02/14/2003 FY02: \$94,168 Total: \$295,558
Prin. Invest.: T L PATTY
Tech. Officer: GSFC/B MEESON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4541 **UNIV OF TENNESSEE - KNOXVILLE** **8530**
METEORITE PETROGENESIS
05/06/1997 - 03/31/2002 FY02: \$0 Total: \$537,000
Prin. Invest.: D V MCSWEEN, JR.
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8405 **UNIV OF TENNESSEE - KNOXVILLE** **8531**
TOWARD THE CORE COLLAPSE SUPERNOVA MECHANISM: THE NEXT
GENERATION IN NEUTRINO TRANSPORT AND CONVECTION
03/16/1999 - 08/31/2002 FY02: \$0 Total: \$167,694
Prin. Invest.: A MEZZACAPPA
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8726 **UNIV OF TENNESSEE - KNOXVILLE** **8532**
PLANETARY PETROLOGY AND GEOCHEMISTRY
08/04/1999 - 07/31/2002 FY02: \$0 Total: \$70,500
Prin. Invest.: L A TAYLOR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8760 **UNIV OF TENNESSEE - KNOXVILLE** **8533**
TOWARDS INTELLIGENT DISTRIBUTED BIOLUMINESCENCE DETECTION OF
BIOLOGICAL CONTAMINATION AND STRESSORS
08/26/1999 - 02/28/2002 FY02: \$0 Total: \$375,057
Prin. Invest.: G S SAYLER
Tech. Officer: GSFC/R CROUCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8773 **UNIV OF TENNESSEE - KNOXVILLE** **8534**
NHSE - THE NATIONAL HPCC SOFTWARE EXCHANGE
09/07/1999 - 08/31/2002 FY02: \$95,000 Total: \$435,000
Prin. Invest.: J DONGARRA
Tech. Officer: GSFC/J R FISCHER
CASE Category: 22 – COMPUTER SCIENCE

TENNESSEE

NASA'S UNIVERSITY PROGRAM

NAG 5 8926 **UNIV OF TENNESSEE - KNOXVILLE** **8535**
 THE POROSITY OF ASTEROIDS
 01/07/2000 - 12/31/2002 FY02: \$33,500 Total: \$97,850
Prin. Invest.: D BRITT
Tech. Officer: GSFC/J GRANT
CASE Category: 11 – ASTRONOMY

NAG 5 9061 **UNIV OF TENNESSEE - KNOXVILLE** **8536**
 THE MINERALOGY OF THE INNER ASTEROID BELT
 02/15/2000 - 02/14/2003 FY02: \$40,800 Total: \$120,243
Prin. Invest.: D T BRITT
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10414 **UNIV OF TENNESSEE - KNOXVILLE** **8537**
 PETROGENESIS OF PLANETARY CRUSTS AND MANTLES AND METEORITES
 02/14/2001 - 02/14/2002 FY02: \$0 Total: \$110,000
Prin. Invest.: L A TAYLOR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10525 **UNIV OF TENNESSEE - KNOXVILLE** **8538**
 DUST AND FELDSPAR MINERALOGY ON MARS FROM THERMAL EMISSION SPECTRA
 03/06/2001 - 03/14/2004 FY02: \$60,700 Total: \$121,400
Prin. Invest.: H MCSWEEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10582 **UNIV OF TENNESSEE - KNOXVILLE** **8539**
 AN INVESTIGATION OF THE PREHISTORY, FORMATION & EVOLUTION OF THE SOLAR SYSTEM THROUGH ULTRASENSITIVE
 03/19/2001 - 04/30/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: N THONNARD
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10635 **UNIV OF TENNESSEE - KNOXVILLE** **8540**
 SPECIAL CONSIDERATIONS IN THE INTERPRETATION OF THERMAL INFRARED SPECTROSCOPY FROM LANDERS AND
 03/17/2001 - 03/14/2002 FY02: \$0 Total: \$73,000
Prin. Invest.: J MOERSCH
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10666 **UNIV OF TENNESSEE - KNOXVILLE** **8541**
 RECOGNIZING BIOTIC INFLUENCES ON PLANETARY EVOLUTION: INVESTIGATING THE BIOGEOCHEMICAL RECORD OF
 03/21/2001 - 03/31/2003 FY02: \$0 Total: \$82,200
Prin. Invest.: L KAH
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10788 **UNIV OF TENNESSEE - KNOXVILLE** **8542**
 REMOTE SENSING FOR MARTIAN EXOPALEONTOLOGY: DETECTABILITY THRESHOLDS FOR AQUEOUS MINERALS AS A BASIS
 04/23/2001 - 04/30/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: J E MOERSCH
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10794 **UNIV OF TENNESSEE - KNOXVILLE** **8543**
 MINERALOGY & SPECTRAL PROPERTIES OF LUNAR SOILS
 04/25/2001 - 04/30/2002 FY02: \$0 Total: \$24,000
Prin. Invest.: L TAYLOR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11201 **UNIV OF TENNESSEE - KNOXVILLE** **8544**
 MINERALOGICAL MAPPING OF PUTATIVE MARTIAN PALEOLAKE BASINS
 08/07/2001 - 08/14/2003 FY02: \$0 Total: \$50,000
Prin. Invest.: J E MOERSCH
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11558 **UNIV OF TENNESSEE - KNOXVILLE** **8545**
 PETROGENESIS OF LUNAR AND PLANETARY CRUSTS AND MANTLES AND METEORITES
 02/08/2002 - 02/14/2005 FY02: \$115,000 Total: \$115,000
Prin. Invest.: L A TAYLOR
Tech. Officer: GSFC/J M BOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11567 **UNIV OF TENNESSEE - KNOXVILLE** **8546**
 CONSTRAINING PLANETESIMAL ACCRETION BY THERMAL MODELING
 02/19/2002 - 02/28/2005 FY02: \$55,000 Total: \$55,000
Prin. Invest.: H MCSWEEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11744 **UNIV OF TENNESSEE - KNOXVILLE** **8547**
 METEORITE PETROGENESIS
 02/20/2002 - 03/31/2003 FY02: \$106,000 Total: \$106,000
Prin. Invest.: H Y MCSWEEN
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11978 **UNIV OF TENNESSEE - KNOXVILLE** **8548**
 CHEMICAL AND MINERALOGICAL CHARACTERIZATIONS OF LUNAR SOILS FOR SPECTRAL REFLECTANCE CALIBRATIONS
 04/08/2002 - 04/30/2005 FY02: \$33,000 Total: \$33,000
Prin. Invest.: L A TAYLOR
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12134 **UNIV OF TENNESSEE - KNOXVILLE** **8549**
 CAREER OPPORTUNITIES FOR STUDENTS WITH DISABILITIES (COSD)
 05/09/2002 - 05/31/2003 FY02: \$37,925 Total: \$37,925
Prin. Invest.: R GREENBERG
Tech. Officer: GSFC/M HARTMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12477 **UNIV OF TENNESSEE - KNOXVILLE** **8550**
 ADVANCED WARNING METHODOLOGIES FOR SOLAR PARTICLE EVENT RADIATION EXPOSURES
 08/21/2002 - 08/14/2005 FY02: \$118,031 Total: \$118,031
Prin. Invest.: L TOWNSEND
Tech. Officer: GSFC/W WAGNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1442 **UNIV OF TENNESSEE - KNOXVILLE** **8551**
 R/S PROJECT SEE (SATELITE ENERGY EXCHANGE) TEST OF EQUIVALENCE
 PRINCIPLE & MEASUREMENT OF GRAVITATION
 04/24/1998 - 01/31/2003 FY02: \$75,000 Total: \$252,000
Prin. Invest.: A J SANDERS
Tech. Officer: MSFC/J POE
CASE Category: 13 – PHYSICS

NAG 8 1568 **UNIV OF TENNESSEE - KNOXVILLE** **8552**
 REVERSIBLE CRYOGENIC STORAGE OF MACROMOLECULAR CRYSTALS
 GROWN IN MICROGRAVITY
 01/15/1999 - 11/30/2002 FY02: \$144,000 Total: \$558,300
Prin. Invest.: G J BUNICK
Tech. Officer: MSFC/B V GUYNES, MSFC/D CHAFEE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1669 **UNIV OF TENNESSEE - KNOXVILLE** **8553**
 RESEARCH ENTITLED, "DEVELOPMENT OF A MONTE CARLO RADIATION
 TRANSPORT CODE SYSTEM FOR HEDS"
 08/16/2000 - 11/30/2003 FY02: \$60,000 Total: \$167,000
Prin. Invest.: L W TOWNSEND, T A GABRIEL, T W ARMSTRONG
Tech. Officer: MSFC/P DOTY
CASE Category: 13 – PHYSICS

NAG 8 1826 **UNIV OF TENNESSEE - KNOXVILLE** **8554**
 STRUCTURAL STUDIES OF NUCLEOSOMES AND CHROMATIN
 09/06/2001 - 11/30/2004 FY02: \$331,000 Total: \$388,000
Prin. Invest.: G J BUNICK
Tech. Officer: MSFC/B GUYNES
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1080 **UNIV OF TENNESSEE - KNOXVILLE** **8555**
 BIOLUMINESCENT BIOREPORTER INEGTRATED CIRCUITS FOR MONITOR-
 ING SPACECRAFT ENVIRONMENTS
 03/15/1999 - 03/14/2002 FY02: \$183,413 Total: \$569,545
Prin. Invest.: G S SAYLER
Tech. Officer: JPL/D JAN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1123 **UNIV OF TENNESSEE - KNOXVILLE** **8556**
 MEASUREMENT OF SECONDARY NEUTRON AND CHARGES PARTICAL
 SPECTRA
 07/01/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: L W TOWNSEND
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1424 **UNIV OF TENNESSEE - KNOXVILLE** **8557**
 BIOLUMINESCENT MONITORING OF OPPORTUNISTIC PATHOGE NS IN THE
 SPACECRAFT ENVIRONMENT
 06/14/2002 - 09/30/2004 FY02: \$189,575 Total: \$189,575
Prin. Invest.: G S SAYLER
Tech. Officer: JSC/D JAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 1187 **UNIV OF TENNESSEE - KNOXVILLE** **8558**
 IN SITU & REMOTE SENSING OF MARTIAN GEOLOGY
 06/29/2000 - 06/30/2001 FY02: \$0 Total: \$29,534
Prin. Invest.: J E MOERSCH, E J HENRIKSEN
Tech. Officer: ARC/T L ROUSH, ARC
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 2 5265 **UNIV OF TENNESSEE - KNOXVILLE** **8559**
 THE STUDY OF HYBRID COMPUTATION METHODS FOR THE COMPUTATION
 OF ROTOR FLOWS AT LOW FLIGHT SPEEDS
 04/23/1998 - 10/31/2000 FY02: \$0 Total: \$40,000
Prin. Invest.: J STEINHOFF
Tech. Officer: ARC/F CARDONNA
CASE Category: 41 – AERONAUTICAL ENGNR

NCC 2 5390 **UNIV OF TENNESSEE - KNOXVILLE** **8560**
 ENABLING QUANTUM MECHANICAL SIMULATIONS OF CARBON NANO-
 TUBES
 08/15/2000 - 01/31/2001 FY02: -\$5,000 Total: \$0
Prin. Invest.: P RAGHAVAN
Tech. Officer: ARC/T R GOVINDAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 5 50206 **UNIV OF TENNESSEE - KNOXVILLE** **8561**
 EVALUATION OF CONSTRUCTED MICROBIAL COMMUNITIES AS INOCULA
 FOR BIOLOGICAL SUPPORT SYSTEMS
 07/09/1998 - 07/14/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: G SAYLER
Tech. Officer: HQ/A NURRIDIN
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NGT 5 50286 **UNIV OF TENNESSEE - KNOXVILLE** **8562**
 THE PETROLOGY & TEMPORAL & SPATIAL EVOLUTION OF MARTIAN
 VOLCANISM FROM THERMALEMISSION DATA OF
 06/22/2000 - 07/31/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: H Y MCSWEEN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52920 **UNIV OF TENNESSEE - KNOXVILLE** **8563**
 CONTINUOUS CROSS SECTION DATABASE DEVEL FOR GENERA LIZED
 THREE DIMENSION RADIATION TRANSPRT CODES
 05/29/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L TOWNSEND
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2680 **UNIV OF TENNESSEE SPACE INST-TULLAHOMA** **8564**
 PULSED DETONATION ENGINE TECHNOLOGY - IC-02-33 PULSED DETONA-
 TIONENGINE TECHNOLOGY - IC-02-33
 12/19/2001 - 09/30/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D L MERKLE
Tech. Officer: GRC/R FERNANDEZ
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 4387 **UNIV OF TENNESSEE SPACE INST-TULLAHOMA** **8565**
 CONSTRAINING ACCRETION AND DIFFERENTIATION OF PLAN MODELLING
 04/24/1997 - 02/28/2002 FY02: \$0 Total: \$244,100
Prin. Invest.: D Y MCSWEEN, JR.
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAS 8 97301 **UNIV OF TENNESSEE SPACE INST-TULLAHOMA** **8566**
 CRITICAL PHYSICAL PROCESSES, IGNITION, DDT LENGTHS AND TIME
 ACCURATE TREATMENTS
 07/30/1997 - 12/28/2001 FY02: \$0 Total: \$254,000
Prin. Invest.: J W MUELHAUSER
Tech. Officer: MSFC/J COLE
CASE Category: 13 – PHYSICS

TENNESSEE

NASA'S UNIVERSITY PROGRAM

NCC 2 5413 UNIV OF TENNESSEE SPACE INST-TULLAHOMA 8567
 ALGORITHMIC ENHANCEMENTS FOR UNSTEADY AERODYNAMICS & COM-
 BUSTION APPLICATIONS
 12/14/2000 - 09/30/2001 FY02: \$0 Total: \$40,224
Prin. Invest.: S VENKATESWARAN
Tech. Officer: ARC/M E OLSEN
CASE Category: 49 - ENGINEERING, OTHER

NCC 2 5493 UNIV OF TENNESSEE SPACE INST-TULLAHOMA 8568
 ALGORITHMIC ENHANCEMENTS FOR UNSTEADY AERODYNAMICS MUL-
 TIPHASE AND COMBUSTION APPLICATIONS
 05/24/2002 - 05/31/2003 FY02: \$76,675 Total: \$76,675
Prin. Invest.: S VENKATESWARAN
Tech. Officer: ARC/G KLOPFER, ARC/M E OLSEN
CASE Category: 29 - MATH/COMPUTER SCI, OTHER

NAG 3 2401 VANDERBILT UNIV 8569
 SEPARATION OF CARBON MONOXIDE AND CARBON DIOXIDE F OR MARS
 ISRU
 04/25/2000 - 11/30/2003 FY02: \$82,919 Total: \$221,224
Prin. Invest.: D LEVAN
Tech. Officer: GRC/R D GREEN
CASE Category: 49 - ENGINEERING, OTHER

NAG 5 8618 VANDERBILT UNIV 8570
 A STUDY OF ION OUTFLOW AS A SOURCE FOR THE MAGNETO SPHERE
 06/14/1999 - 06/30/2002 FY02: \$0 Total: \$172,044
Prin. Invest.: R CHAPPELL
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 11 - ASTRONOMY

NAG 5 8906 VANDERBILT UNIV 8571
 THE PRESSURE IONIZATION OF HYDROGEN & THE INTERIOR OF JUPITER
 & SATURN
 12/29/1999 - 01/31/2003 FY02: \$27,400 Total: \$80,050
Prin. Invest.: D SAUMON
Tech. Officer: GSFC/J GRANT
CASE Category: 13 - PHYSICS

NAG 5 9565 VANDERBILT UNIV 8572
 NEW ISTP SOLAR MAX: A MULTI-SPACECRAFT STUDY OF THE FLOW OF
 IONOSPHERIC PLASMA
 05/09/2000 - 05/14/2002 FY02: \$0 Total: \$70,000
Prin. Invest.: C CHAPPELL
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 - PHYSICAL SCIENCE, OTHER

NAG 5 9828 VANDERBILT UNIV 8573
 SINGLE EVENT EFFECTS IN COMBINATIONAL LOGIC.
 08/23/2000 - 08/31/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: L MASSENGILL
Tech. Officer: GSFC/J BARTH
CASE Category: 49 - ENGINEERING, OTHER

NAG 5 10572 VANDERBILT UNIV 8574
 THE TIMESCALE FOR THE FORMATION OF PLANETARY SYSTEMS
 03/13/2001 - 03/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: D WEINTRAVB
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 - ASTRONOMY

NAG 5 12429 VANDERBILT UNIV 8575
 IMMUNOISOLATION OF LIVING ISLETS AS A FUNCTIONAL C URE FOR
 DIABETES - LARGE ANIMAL STUDIES
 07/29/2002 - 07/31/2005 FY02: \$1,956,600 Total: \$1,956,600
Prin. Invest.: T G WANG
Tech. Officer: GSFC/L P CHAMBERS
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 8 1662 VANDERBILT UNIV 8576
 RECOVERY OF MINERALS IN MARTIAN SOILS VIA SUPERCRITICAL FLUID
 EXTRACTIONS.
 06/01/2000 - 11/30/2003 FY02: \$95,000 Total: \$230,250
Prin. Invest.: K A DEBELAK
Tech. Officer: MSFC/P DOTY
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 8 1677 VANDERBILT UNIV 8577
 INVESTIGATION OF TGHE RELATIONSHIP BETWEEN UNDERCOOLING AND
 SOLIDIFICATION VELOCITY.
 05/08/2000 - 11/30/2003 FY02: \$150,000 Total: \$372,493
Prin. Invest.: R J BAYUZICK
Tech. Officer: MSFC/P DOTY
CASE Category: 99 - MULTI INTERDISCIPL, OTHER

NAG 8 1745 VANDERBILT UNIV 8578
 FLOW VISUALIZATION STUDIES IN MOLTEN ZONES
 09/29/2000 - 07/31/2003 FY02: \$50,000 Total: \$112,500
Prin. Invest.: A V ANIKUMER
Tech. Officer: MSFC/R GRUGEL
CASE Category: 59 - LIFE SCIENCE, OTHER

NAG 9 1273 VANDERBILT UNIV 8579
 DESIGN THROUGH MANUFACTURING: SOLID MODEL-FINITE ELEMENT
 ANALYSIS INTERFACE
 01/09/2001 - 09/30/2002 FY02: \$0 Total: \$15,500
Prin. Invest.: C HACHEY
Tech. Officer: JSC/R ARONOFF
CASE Category: 22 - COMPUTER SCIENCE

NAG 9 1428 VANDERBILT UNIV 8580
 ROBOT ACQUISITION OF ACTIVE MAPS THROUGH TELEOPERATION &
 VECTOR SPACE ANALYSIS
 05/29/2002 - 06/03/2002 FY02: \$78,520 Total: \$78,520
Prin. Invest.: R A PETERS
Tech. Officer: JSC/R T SAVELY
CASE Category: 22 - COMPUTER SCIENCE

NAG 9 1446 VANDERBILT UNIV 8581
 ANTONOMOUS BEHAVIORS BY ROBOTIC ASSISTANTS
 08/01/2002 - 07/31/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: K KAWAMURA
Tech. Officer: JSC/R SAVELY
CASE Category: 22 - COMPUTER SCIENCE

NCC 1 01018 VANDERBILT UNIV 8582
 AEROELASTICITY IN ORNITHOPIC MICRO-AERIAL VEHICLES MY 1/3
 01/22/2001 - 09/30/2003 FY02: \$45,000 Total: \$78,330
Prin. Invest.: K D FRAMPTON
Tech. Officer: LARC/D L RANEY, LARC/D E COX
CASE Category: 41 - AERONAUTICAL ENGR

NCC 1 01031 **VANDERBILT UNIV** **8583**
 SYSTEMS RISK ASSESSMENT AND ALLOCATION IN CONCEPTU AL DESIGN
 03/12/2001 - 12/31/2002 FY02: \$130,000 Total: \$230,000
Prin. Invest.: S MAHADEVAN
Tech. Officer: LARC/T A ZHANG
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1127 **VANDERBILT UNIV** **8584**
 ADSORPTION EQUILIBRIUM & FIXED BED PERFORMANCE FOR REGENER-
 ABLE INCINERATOR EXHAUST PURIFICATION & T
 06/21/1999 - 05/31/2003 FY02: \$25,800 Total: \$206,204
Prin. Invest.: M D LEVAN
Tech. Officer: ARC/J E FINN
CASE Category: 43 – CHEMICAL ENGR

NCC 2 1238 **VANDERBILT UNIV** **8585**
 ROBUST METHODS FOR AUTONOMOUS FAULT ADAPTIVE CONTR OL OF
 COMPLEX SYSTEMS
 04/06/2001 - 02/28/2003 FY02: \$161,321 Total: \$251,321
Prin. Invest.: G BISWAS
Tech. Officer: ARC/R MORRIS, ARC/D J CLANCY
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5384 **VANDERBILT UNIV** **8586**
 MODELING OF HYBRID MEMBRANE/ADSORBER FOR CARBON DI OXIDE
 REMOVAL AND COMPARISON WITH FOUR-BED MOLE..
 05/30/2000 - 06/30/2001 FY02: \$26,196 Total: \$74,833
Prin. Invest.: M D LEVAN
Tech. Officer: ARC/J E FINN
CASE Category: 43 – CHEMICAL ENGR

NCC 8 255 **VANDERBILT UNIV** **8587**
 RESEARCH DEVELOPMENT NSSTC
 01/31/2002 - 02/07/2007 FY02: \$17,133 Total: \$17,133
Prin. Invest.: S H SMARTT
Tech. Officer: MSFC/S COLEMAN, MSFC/R SILVER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 52227 **VANDERBILT UNIV** **8588**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 01/20/2000 - 12/31/2001 FY02: \$10,000 Total: \$44,001
Prin. Invest.: A COX
Tech. Officer: LARC/G C HORNER
CASE Category: 46 – MECHANICAL ENGR

NGT 5 105 **VANDERBILT UNIV** **8589**
 CHARACTERIZATION OF PROTON RADIATION EFFECTS IN LI NEAR BIPO-
 LAR DEVICES & CIRCUITS/STUDENT: H BARNAB
 05/26/2000 - 06/30/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: R D SCHRIMPF
Tech. Officer: GSFC/G A SOFFEN
CASE Category: 45 – ELECTRICAL ENGR

NGT 5 40054 **VANDERBILT UNIV** **8590**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM.
 02/12/1997 - 01/31/2001 FY02: -\$27,738 Total: \$1,763,012
Prin. Invest.: A M STRAUSS
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40074 **VANDERBILT UNIV** **8591**
 TENNESSEE SPACE GRANT COLL & FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$517,738 Total: \$978,488
Prin. Invest.: A M STRAUSS
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50209 **VANDERBILT UNIV** **8592**
 INVESTIGATION OF EFFECTS OF DILUTE OXYGEN SOLUTE O N NUCLE-
 ATION OF ZIRCONIUM
 07/10/1998 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R BAYUZICK
Tech. Officer: HQ/A NURRIDIN
CASE Category: 43 – CHEMICAL ENGR

NGT 8 52859 **VANDERBILT UNIV** **8593**
 INTEGRATION OF HAPTIC FEEDBACK INTO VIRTUAL ENVIRONMENTS FOR
 MISSION OPERATION APPLICATION
 07/23/1998 - 08/14/2001 FY02: -\$3,430 Total: \$62,570
Prin. Invest.: M GOLDFARB
Tech. Officer: MSFC/J F DOWDY
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52905 **VANDERBILT UNIV** **8594**
 DESIGN AND FABRICATION OF INDIUM-TIN-OXIDE (ITO) MICRO-SCALE
 STRAIN SENSORS
 05/25/2001 - 07/01/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R A WELLER
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NGT 8 52907 **VANDERBILT UNIV** **8595**
 AEROSPACE STRUCTURAL SYSTEM RELIABILITY ASSESSMENT
 05/25/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S MAHADEVAN
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 44 – CIVIL ENGR

NGT 8 52910 **VANDERBILT UNIV** **8596**
 UV RAMAN LINESHAPES FOR TEMPERATURE DETERMINATION
 05/31/2001 - 06/30/2005 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R W PITZ
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NGT 9 52 **VANDERBILT UNIV** **8597**
 MACHINE PERCEPTION TO FACILITATE HUMAN-ROBOT INTER ACTION
 07/17/2000 - 08/31/2002 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R A PETERS II
Tech. Officer: JSC/C J CULBERT
CASE Category: 49 – ENGINEERING, OTHER

TEXAS

NAG 5 10102 **AUSTIN COLL-SHERMAN** **8598**
 FLOOD FORECASTING USING A REGIONAL SCALE ATMOSPHERE/LAND-
 SURFACE MODELING SYSTEM.
 12/11/2000 - 12/14/2003 FY02: \$16,000 Total: \$48,134
Prin. Invest.: D R BAKER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 2 1355 **BAYLOR COLL OF MEDICINE** **8599**
 ROLE OF MATH1 IN DEVELOPMENT & FUNCTION OF PROPRIO RECEPTORS
 07/22/1999 - 07/14/2003 FY02: \$98,377 Total: \$593,110
Prin. Invest.: H J BELLEN, H Y ZOGHBI
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1357 **BAYLOR COLL OF MEDICINE** **8600**
 THE INTERACTIVE COUPLING OF CYTOSKELETON & SIGNAL TRANSDUC-
 TION ELEMENTS IN GRAVITY SENSITIVITY OF T-
 07/23/1999 - 07/31/2003 FY02: \$111,660 Total: \$547,079
Prin. Invest.: B B HASHEMI
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1496 **BAYLOR COLL OF MEDICINE** **8601**
 SENSELESS AND GF11 IN SENSORY NEURON AND HAIR CELL DEVELOP-
 MENT
 07/11/2001 - 06/30/2003 FY02: \$285,171 Total: \$424,954
Prin. Invest.: H J BELLEN
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1383 **BAYLOR COLL OF MEDICINE** **8602**
 FOR RESEARCH ENTITLED "LIVER TISSUE ENGINEERING IN MICROGRAV-
 ITY ENVIRONMENT"
 06/26/1997 - 11/30/2002 FY02: \$0 Total: \$619,000
Prin. Invest.: B YOFE
Tech. Officer: MSFC/C R TALLEY
CASE Category: 56 – MEDICL

NAG 8 1583 **BAYLOR COLL OF MEDICINE** **8603**
 ISLET CELL ASSEMBLY AND FUNCTION IN A NASA MICROGRAVITY BIORE-
 ACTOR
 02/02/1999 - 11/30/2002 FY02: \$147,999 Total: \$542,747
Prin. Invest.: A S RAJAN
Tech. Officer: JSC/N R PELLIS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1052 **BAYLOR COLL OF MEDICINE** **8604**
 BIOPHYSICAL MODELS OF DNA DAMAGE, MUTATION, &...
 08/25/1998 - 09/24/2002 FY02: \$50,000 Total: \$321,674
Prin. Invest.: L E PETERSON
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1151 **BAYLOR COLL OF MEDICINE** **8605**
 NONINVASIVE MONITORING OF BONE RESORPTION AND SWEAT CALCIUM
 USING SKIN PATCHES
 09/16/1999 - 09/30/2004 FY02: \$0 Total: \$53,514
Prin. Invest.: A D LE BLANC
Tech. Officer: JSC/C W LLOYD
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1153 **BAYLOR COLL OF MEDICINE** **8606**
 PROTECTING SCIENTIFIC INTEGRITY THROUGH DISCLOSURE OF CON-
 FFLICTS OF INTERESTS
 09/13/1999 - 09/30/2003 FY02: \$197,633 Total: \$732,567
Prin. Invest.: B A BRODY
Tech. Officer: JSC/C LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1158 **BAYLOR COLL OF MEDICINE** **8607**
 ROLE OF GROWTH HORMONE SECRETOGOUS AND EXERCISE ON MUSCLE
 HOMEOSTASIS UNDER MICROGRAVITY
 10/01/1999 - 10/31/2002 FY02: \$283,795 Total: \$818,967
Prin. Invest.: B J SCHWARTZ
Tech. Officer: JSC/C LLOYD
CASE Category: 56 – MEDICL

NAG 9 1253 **BAYLOR COLL OF MEDICINE** **8608**
 EFFECTS OF ANTI-ORTHOSTATIC SUSPENSION ON INNATE IMMUNITY
 09/11/2000 - 09/30/2003 FY02: \$190,107 Total: \$372,818
Prin. Invest.: C SMITH
Tech. Officer: JSC/C LLOYD
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1361 **BAYLOR COLL OF MEDICINE** **8609**
 LIVER TISSUE ENGINEERING IN MICROGRAVITY ENVIRONMENT
 07/13/2001 - 09/30/2004 FY02: \$195,000 Total: \$242,000
Prin. Invest.: B YOFE
Tech. Officer: JSC/D RISIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 9 58 **BAYLOR COLL OF MEDICINE** **8610**
 NATIONAL SPACE BIOMEDICAL RESEARCH INST
 03/26/1997 - 11/30/2002 FY02: \$24,979,480 Total: \$93,152,543
Prin. Invest.: B R ALFORD, M.D.
Tech. Officer: JSC/C F SAWIN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 9 61 **BAYLOR COLL OF MEDICINE** **8611**
 PREVENTION OF BED REST OSTEOPOROSIS
 05/23/1997 - 01/31/2003 FY02: \$0 Total: \$2,320,039
Prin. Invest.: A D LE BLANC
Tech. Officer: JSC/L C SHACKELFORD
CASE Category: 56 – MEDICL

NCC 9 88 **BAYLOR COLL OF MEDICINE** **8612**
 COMPARISON OF STRENGTH TRAINING WITH ISS INTERIM RESISTANCE
 EXERCISE DEVISE VS FREE
 07/20/1999 - 07/31/2002 FY02: \$0 Total: \$29,760
Prin. Invest.: A BEBLANC
Tech. Officer: JSC/S SCHNEIDER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8566 **HOUSTON COMM COLL** **8613**
 NASA/HCC SCIENCE CHALLENGE PROGRAM
 05/20/1999 - 12/31/2000 FY02: \$0 Total: \$150,000
Prin. Invest.: C GARCIA
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10239 **HOUSTON COMM COLL** **8614**
 NASA HCC SCIENCE CHALLENGE PROGRAM
 01/10/2001 - 05/31/2002 FY02: \$0 Total: \$149,298
Prin. Invest.: C GARCIA
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 126 **LAMAR UNIV** **8615**
 DEVELOPMENT OF MINIATURE LASER MASS SPECTROMETER SYSTEM
 FOR PLANETARY STUDIES
 04/20/2001 - 07/14/2003 FY02: \$0 Total: \$200,000
Prin. Invest.: S L JORDAN, G M IRWIN
Tech. Officer: SSC/G A MCKAY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1274 **LE TOURNEAU UNIV** **8616**
ANALYSIS OF ARBON NAONTUBE FORMATION & EMISSION SP ECTRA IN
LASER ABLATION PROCESS
01/09/2001 - 01/30/2002 FY02: -\$150 Total: \$15,350
Prin. Invest.: G DE BOER
Tech. Officer: JSC/C SCOTT
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 9 1170 **OUR LADY OF THE LAKE UNIV** **8617**
ENGAGING EDUCATORS IN THE EARTH/SCIENCE ENTERP
09/24/1999 - 01/31/2002 FY02: -\$2,458 Total: \$196,846
Prin. Invest.: K A WARD
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11658 **PAUL QUINN COLL** **8618**
MSET INST FOR ATTRACTING STUDENTS TO THE SCIE NCES
02/12/2002 - 02/28/2003 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S JONES
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 4 148 **PRAIRIE VIEW A&M UNIV** **8619**
RADIATION EFFECTS ON ELECTRONIC MATERIAL AND DEVICES
03/03/1998 - 02/27/2003 FY02: \$0 Total: \$266,999
Prin. Invest.: R WILKINS
Tech. Officer: DFRC/E COX
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 210 **PRAIRIE VIEW A&M UNIV** **8620**
MITIGATION OF HIGH ALTITUDE AND LOW EARTH ORBIT RA DIATION
EFFECTS ON MICROELECTRONICSVIA SHIELDING
06/07/2000 - 06/06/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: D K KIRBY
Tech. Officer: DFRC/D GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 4 233 **PRAIRIE VIEW A&M UNIV** **8621**
EXPLORATORY ALGORITHM DEVELOPMENT STUDY OF A WAVELET-BASED
ADAPTIVE SMART SCHEME FOR VIBRATION DETE
08/14/2002 - 10/31/2002 FY02: \$15,000 Total: \$15,000
Prin. Invest.: D M AKUJUOBI
Tech. Officer: DFRC/K KLOESEL
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11070 **PRAIRIE VIEW A&M UNIV** **8622**
CENTER FOR APPLIED RADIATION RESEARCH PARTNERSHIP PROGRAM
06/29/2001 - 08/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: R WILKINS
Tech. Officer: GSFC/J MALONE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1338 **PRAIRIE VIEW A&M UNIV** **8623**
ESTABLISHMENT OF A SOLAR OBSERVATORY AND STUDIES ON THE
SOLAR ATMOSPHERE
03/18/1997 - 03/31/2003 FY02: \$0 Total: \$438,700
Prin. Invest.: T HUANG
Tech. Officer: MSFC/J M DAVIS
CASE Category: 11 – ASTRONOMY

NAG 8 1644 **PRAIRIE VIEW A&M UNIV** **8624**
ADVANCED FUEL INJECTOR OPTIMIZATION FOR RBCC ENGINE CONCEPT
09/30/1999 - 09/30/2002 FY02: \$100,000 Total: \$300,000
Prin. Invest.: Z HAQUE, N BUTUK
Tech. Officer: MSFC/A BEAM, MSFC/W LOVE
CASE Category: 43 – CHEMICAL ENGR

NAG 8 1874 **PRAIRIE VIEW A&M UNIV** **8625**
STUDIES OF SOLAR PROMINENCES AND FILAMENTS
06/18/2002 - 05/31/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: T HUANG
Tech. Officer: MSFC/J DAVIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 9 1136 **PRAIRIE VIEW A&M UNIV** **8626**
POWER QUALITY AND RELIABILITY
08/24/1999 - 08/23/2001 FY02: -\$1,225 Total: \$98,775
Prin. Invest.: W F TROTTY, J ATTIA
Tech. Officer: JSC/W C ROEH, JSC/L M ARMENDARIZA
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1241 **PRAIRIE VIEW A&M UNIV** **8627**
USE OF ELCTROMIGRATION TO IMMOBILIZE METAL IONS
06/22/2000 - 05/31/2003 FY02: \$0 Total: \$120,000
Prin. Invest.: R CUERO
Tech. Officer: JSC/D S MCKAY, JSC/L ARMENDARIZ
CASE Category: 55 – AGRICULTURE

NAG 9 1370 **PRAIRIE VIEW A&M UNIV** **8628**
RADIATION EXPOSURE EFFECTS & SHIELDING ANALYSIS OF CARBON
NANTUBE MATERIALS
07/30/2001 - 12/29/2001 FY02: -\$2,407 Total: \$34,593
Prin. Invest.: R WILKINS
Tech. Officer: JSC/A LEE, JSC/L M ARMENDARIZ
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 9 1405 **PRAIRIE VIEW A&M UNIV** **8629**
DEVELOP DAILY OVSERVATION & RESEARCH PROGRAM AT PRAIRIE VIEW
SOLAR OBSERVATORY
05/24/2002 - 05/23/2005 FY02: \$70,000 Total: \$70,000
Prin. Invest.: T S HWANG
Tech. Officer: JSC/K KRISHEN, JSC/L M ARMENDARIZ
CASE Category: 11 – ASTRONOMY

NAG13 46 **PRAIRIE VIEW A&M UNIV** **8630**
TEXAS GULF COAST ENVIRONMENTAL DATA CENTER SAME
10/04/1995 - 04/20/2001 FY02: -\$2,579 Total: \$267,546
Prin. Invest.: S SHAKIR
Tech. Officer: SSC/A JOYCE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 577 **PRAIRIE VIEW A&M UNIV** **8631**
RESEARCH TO SIGNIFICANTLY ENHANCE COMPOSITES SURVI ABILITY AT
550 DEGREES F IN OXIDATIVE ENVIRONMENT
09/26/1997 - 08/31/2002 FY02: \$0 Total: \$336,102
Prin. Invest.: L E CARSON-ISABELLE
Tech. Officer: GRC/M A MEADOR
CASE Category: 12 – CHEMISTRY

TEXAS

NASA'S UNIVERSITY PROGRAM

NCC 3 972 PRAIRIE VIEW A&M UNIV 8632
 EFFECTS OF SERVICE CONDITIONS ON THE MORPHOLOGY AND PROPERTIES OF ADVANCED COMPOSITES FOR CRYOGENIC
 06/25/2002 - 06/30/2005 FY02: \$99,761 Total: \$99,761
Prin. Invest.: D BINEY
Tech. Officer: GRC/M A MEADOR
CASE Category: 49 – ENGINEERING, OTHER

NCC 3 980 PRAIRIE VIEW A&M UNIV 8633
 RESEARCH TO SIGNIFICANTLY ENHANCE COMPOSITES SURVIVABILITY AT 550 DEGREES F IN OXIDATIVE ENVIRONMENT
 07/03/2002 - 09/30/2003 FY02: \$46,530 Total: \$46,530
Prin. Invest.: D CARSON-ISABELLE
Tech. Officer: GRC/M MEADOR
CASE Category: 12 – CHEMISTRY

NCC 5 115 PRAIRIE VIEW A&M UNIV 8634
 ESTABLISHMENT OF A NASA SOUTHWEST REGIONAL NETWORK RESOURCES TRAINING SITE
 08/15/1995 - 09/14/2001 FY02: \$0 Total: \$2,926,418
Prin. Invest.: J R WILLIAMS
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 22 – COMPUTER SCIENCE

NCC 5 529 PRAIRIE VIEW A&M UNIV 8635
 NASA SOUTHWEST REGIONAL NETWORK RESOURCES AND TRAINING SITE/MUSPIN NRTS PROGRAM.
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$700,000
Prin. Invest.: J WILLIAMS
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 591 PRAIRIE VIEW A&M UNIV 8636
 IMPROVEMENT OF THE SOLAR OBSERVATION FACILITIES AT PRAIRIE VIEW SOLAR OBSERVATORY
 09/14/2001 - 09/14/2002 FY02: \$0 Total: \$35,500
Prin. Invest.: D HUANG
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 11 – ASTRONOMY

NCC 5 670 PRAIRIE VIEW A&M UNIV 8637
 FURTHER IMPROVEMENT OF THE SOLAR OBSERVATION INSTRUMENT. ONE YEAR GRANT.
 09/12/2002 - 09/14/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: T HUANG
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 11 – ASTRONOMY

NCC 9 66 PRAIRIE VIEW A&M UNIV 8638
 SOFTWARE ENGINEERING INITIATIVE
 09/25/1997 - 12/31/2002 FY02: \$577,017 Total: \$2,500,136
Prin. Invest.: J D OLIVER
Tech. Officer: JSC/L MCWHORTER, JSC/K MARTINDALE
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 114 PRAIRIE VIEW A&M UNIV 8639
 CENTER APPLIED RADIATION RESEARCH
 09/27/2000 - 08/31/2005 FY02: \$1,200,000 Total: \$2,619,999
Prin. Invest.: R WILKINS
Tech. Officer: JSC/F A CUCINOTTA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 2134 RICE UNIV 8640
 NONLINEAR RECEPTIVITY AND BY-PASS TRANSITION IN THREEDIMENSIONAL BOUNDARY LAYERS NRA 98 LARC5
 02/10/1999 - 06/30/2002 FY02: \$0 Total: \$117,458
Prin. Invest.: S S COLLIS
Tech. Officer: LARC/R R ANTOLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1401 RICE UNIV 8641
 VIRTUAL PROTOTYPING FOR CARBON NANOTUBES
 04/24/2000 - 03/14/2002 FY02: \$0 Total: \$113,437
Prin. Invest.: B YAKOBSON
Tech. Officer: ARC/M MEYYAPPAN, ARC/H PARTRIDGE
CASE Category: 13 – PHYSICS

NAG 3 2534 RICE UNIV 8642
 AD HOC NETWORKS IN SPACE AND SURFACE SYSTEMS AD HOC NETWORKS IN SPACE AND SURFACE SYSTEMS
 03/07/2001 - 12/31/2003 FY02: \$145,260 Total: \$470,342
Prin. Invest.: D B JOHNSON
Tech. Officer: GRC/D FOLTZ
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 4072 RICE UNIV 8643
 NASA SPECIALIZED CENTER OF RESEARCH AND TRAINING (AL BIOLOGY)
 04/07/1997 - 10/31/2002 FY02: \$289,574 Total: \$3,599,411
Prin. Invest.: L MCINTIRE
Tech. Officer: GSFC/D LASKOWSKY
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 4726 RICE UNIV 8644
 DEVELOPMENT AND APPLICATIONS OF A MODULAR MODEL OF MAGNETOSPHERE
 06/19/1997 - 05/14/2002 FY02: \$0 Total: \$268,344
Prin. Invest.: D R TOFFOLETTO
Tech. Officer: GSFC/D EVANS
CASE Category: 13 – PHYSICS

NAG 5 4822 RICE UNIV 8645
 THE OPEN POLAR CAP: COMPARISON OF POLAR IMAGES W
 06/17/1997 - 06/14/2001 FY02: -\$24,059 Total: \$163,941
Prin. Invest.: D W HILL
Tech. Officer: GSFC/J GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 6432 RICE UNIV 8646
 MAGNETOSPHERIC CONVECTION AT JUPITER & SATURN
 10/14/1997 - 07/14/2002 FY02: \$0 Total: \$216,449
Prin. Invest.: D HILL
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7037 RICE UNIV 8647
 SOLAR WIND INTERACTION AT VENUS TO MARS, INCLUDING THE MAGNETIC EFFECTS OF THE MARTIAN CRUSTAL MAGNETIC FIELD
 02/20/1998 - 02/28/2002 FY02: \$0 Total: \$189,498
Prin. Invest.: P A CLOUTIER
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 7980 **RICE UNIV** **8648**
 MODELING BATSE GAMMA-RAY BURST CONTINUUM SPECTRA AND SPECTRAL EVOLUTION
 01/19/1999 - 01/14/2002 FY02: \$0 Total: \$32,000
Prin. Invest.: E P LIANG
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 8131 **RICE UNIV** **8649**
 NUMERICAL SIMULATION OF ROTATION-DRIVEN PLASMA TRANSPORT IN THE JOVIAN MAGNETOSPHERE
 01/28/1999 - 01/31/2003 FY02: \$0 Total: \$212,054
Prin. Invest.: D W HILL
Tech. Officer: GSFC/D EVANS
CASE Category: 11 – ASTRONOMY

NAG 5 8136 **RICE UNIV** **8650**
 "COMPREHENSIVE QUANTITATIVE MODEL OF INNER-MAGNETOSPHERE DYNAMICS."
 01/29/1999 - 04/30/2002 FY02: \$0 Total: \$711,296
Prin. Invest.: R A WOLF
Tech. Officer: GSFC/J GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 8380 **RICE UNIV** **8651**
 DATA ANALYSIS FOR POLAR MAGNETIC FIELD EXPERIMENT
 04/26/1999 - 12/31/2000 FY02: -\$8 Total: \$64,992
Prin. Invest.: P REIFF
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 9011 **RICE UNIV** **8652**
 FAR-UV OBSERVATIONS OF LOW AND HIGH-EXCITATION HERBIG-HARO SHOCKS - FUSE
 02/02/2000 - 01/31/2003 FY02: \$0 Total: \$28,200
Prin. Invest.: P HARTIGAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9077 **RICE UNIV** **8653**
 ACCELERATION & TRANSPORT OF ENERGETIC PARTICLES IN THE OUTER MAGNETOSPHERE
 02/23/2000 - 08/31/2003 FY02: \$84,670 Total: \$242,419
Prin. Invest.: R WOLF
Tech. Officer: GSFC/J SHARBER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9223 **RICE UNIV** **8654**
 NUMERICAL SIMULATION OF HIGH ENERGY EMISSIONS FROM COMPACT OBJECTS
 03/14/2000 - 03/14/2003 FY02: \$107,163 Total: \$306,265
Prin. Invest.: E LIANG
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9904 **RICE UNIV** **8655**
 STUDY OF THE SOFT GAMMA-RAY REPEATERS
 08/29/2000 - 08/31/2001 FY02: -\$3 Total: \$7,897
Prin. Invest.: E P LIANG
Tech. Officer: GSFC/J NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 10432 **RICE UNIV** **8656**
 "PRECISION MINING" OF LARGE SPECTRAL DATA VOLUMES FOR RAPID IDENTIFICATION OF PLANETARY
 02/27/2001 - 08/31/2003 FY02: \$198,613 Total: \$505,332
Prin. Invest.: E MERENYI
Tech. Officer: GSFC/P HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10816 **RICE UNIV** **8657**
 MULTI-WAVELENGTH STUDY OF LMC X-1 (ADP 2000)
 04/24/2001 - 04/30/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: E P LIANG
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10841 **RICE UNIV** **8658**
 EMISSION FROM MAGNETIZED NEUTRON STARS (ATP 2000)
 05/03/2001 - 05/14/2004 FY02: \$31,813 Total: \$62,818
Prin. Invest.: M G BARING
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11417 **RICE UNIV** **8659**
 ON THE ROLE OF CHARGE EXCHANGE IN THE FORMATION OF THE MARTIAN MAGNETIC PILEUP BOUNDARY
 11/28/2001 - 11/30/2002 FY02: \$20,000 Total: \$20,000
Prin. Invest.: P CLOUTIER
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 11418 **RICE UNIV** **8660**
 SOLAR WIND INTERACTIONS AT VENUS TO MARS, INCLUDING THE MAGNETIC EFFECTS OF THE MARTIAN CRUSTAL MAGNETIC FIELD
 11/28/2001 - 02/28/2003 FY02: \$30,000 Total: \$30,000
Prin. Invest.: P CLOUTIER
Tech. Officer: GSFC/M H ACUNA
CASE Category: 13 – PHYSICS

NAG 5 11796 **RICE UNIV** **8661**
 PROBING THE SPECTRAL EVOLUTION OF PARTICLES IN THE BLAZAR MKN 421 - ADP99
 03/01/2002 - 03/14/2003 FY02: \$35,401 Total: \$35,401
Prin. Invest.: D FOSSATI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11853 **RICE UNIV** **8662**
 THE EXTRAORDINARY CAMPAIGNS ON MKN421 OF 2000/2001 (ADP 2001)
 03/20/2002 - 03/31/2003 FY02: \$43,843 Total: \$43,843
Prin. Invest.: G FOSSATI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11881 **RICE UNIV** **8663**
 MAGNETOSPHERIC STORM DYNAMICS
 03/27/2002 - 03/31/2005 FY02: \$330,000 Total: \$330,000
Prin. Invest.: R A WOLF
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

TEXAS

NASA'S UNIVERSITY PROGRAM

NAG 5 12144 **RICE UNIV** **8664**
 INITIAL DEVELOPMENT OF AN ANALYSIS MODEL OF THE INNER MAGNETOSPHERE
 05/10/2002 - 05/14/2005 FY02: \$70,523 Total: \$70,523
Prin. Invest.: F R TOFFOLETTO
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12166 **RICE UNIV** **8665**
 EVOLUTION AND INFLUENCE OF THE MARTIAN HEMISPHERIC DICHOTOMY
 05/14/2002 - 05/31/2005 FY02: \$55,317 Total: \$55,317
Prin. Invest.: A LENARDIC
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12266 **RICE UNIV** **8666**
 WOLF-RAYET STAR HD 192163 (FUZE 2001)
 06/24/2002 - 06/30/2003 FY02: \$34,100 Total: \$34,100
Prin. Invest.: R J DUFOUR
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 8 1467 **RICE UNIV** **8667**
 INFLUENCE OF REDUCED GRAVITY CONDITIONS ON THE OPTIMIZED GROWTH AND DEPOSITION OF METAL NANOSHELL
 03/06/1998 - 01/31/2003 FY02: \$10,833 Total: \$243,750
Prin. Invest.: N J HALAS
Tech. Officer: MSFC/C L TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1766 **RICE UNIV** **8668**
 SUPERFLUID PHASE TRANSITION IN AN ULTRACOLD PERMI GAS
 04/24/2001 - 04/30/2005 FY02: \$79,555 Total: \$166,218
Prin. Invest.: R G HULET
Tech. Officer: MSFC/D S HUBBARD
CASE Category: 13 – PHYSICS

NAG 9 978 **RICE UNIV** **8669**
 DEVELOPMENT OF PLASMA INJECTOR FOR VSIPR
 10/17/1997 - 09/30/2003 FY02: \$72,947 Total: \$243,359
Prin. Invest.: A A CHAN
Tech. Officer: JSC/F CHANG-DIAZ
CASE Category: 13 – PHYSICS

NAG 9 1049 **RICE UNIV** **8670**
 LASER ABSORPTION SENSORS
 08/04/1998 - 08/05/2002 FY02: \$0 Total: \$419,720
Prin. Invest.: F K TITTLE
Tech. Officer: JPL/D L JAN
CASE Category: 45 – ELECTRICAL ENGR

NAG 9 1059 **RICE UNIV** **8671**
 COMPUTATIONAL METHODS
 12/14/1998 - 12/31/2002 FY02: \$0 Total: \$138,187
Prin. Invest.: T E TEZDUYAR
Tech. Officer: JSC/F MARTIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1249 **RICE UNIV** **8672**
 APPLICATION OF MACHINE LEARNING TO THE CONTROL OF ADVANCED LIFE SUPPORT SYSTEMS
 07/19/2000 - 12/31/2002 FY02: \$0 Total: \$20,000
Prin. Invest.: D SUBRAMANIAN
Tech. Officer: JSC/C L FARMER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1285 **RICE UNIV** **8673**
 MATRIX OF HYPERVELOCITY IMPACT TESTS
 03/02/2001 - 12/31/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: E V BARRERA
Tech. Officer: JSC/J CREWS
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1435 **RICE UNIV** **8674**
 SIMULATION & MODELING OF PARACHUT SYSTEMS
 07/01/2002 - 12/31/2005 FY02: \$50,293 Total: \$50,293
Prin. Invest.: T E TEZDUYAR
Tech. Officer: JSC/G W BOURLAND
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1219 **RICE UNIV** **8675**
 INTEGRATED MODELING OF COGNITION AND THE INFORMATION ENVIRONMENT
 03/16/2001 - 12/31/2001 FY02: \$0 Total: \$95,591
Prin. Invest.: M BYRNE, A KIRLIK
Tech. Officer: ARC/B L BEARD
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1279 **RICE UNIV** **8676**
 TECHNOLOGY DEVELOPMENT OF MINIATURIZED FAR-INFRARED SOURCES FOR BIOMOLECULAR SPECTROSCOPY
 08/23/2001 - 10/14/2003 FY02: \$50,029 Total: \$90,409
Prin. Invest.: J KONO
Tech. Officer: ARC/B BIEGEL
CASE Category: 45 – ELECTRICAL ENGR

NCC 2 1321 **RICE UNIV** **8677**
 INTEGRATED MODELING OF COGNITION AND THE INFORMATION ENVIRONMENT
 03/12/2002 - 02/28/2003 FY02: \$62,261 Total: \$62,261
Prin. Invest.: M BYRNE
Tech. Officer: ARC/D C FOYLE, ARC/R ASHFORD
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 2 1356 **RICE UNIV** **8678**
 DROSOPHILIA BEHAVIOR AND GENE EXPRESSION IN MICROGRAVITY
 07/29/2002 - 07/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: K M BECKINGHAM
Tech. Officer: ARC/D R BUBENHIEM
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5458 **RICE UNIV** **8679**
 ELECTRONIC PROPERTIES OF ANTIMONIDE-BASE SEMICONDUCTOR NANOSTRUCTURES FOR THZ GENERATION
 08/23/2001 - 08/31/2003 FY02: \$60,181 Total: \$119,801
Prin. Invest.: J KONO
Tech. Officer: ARC/T R GOVINDAN, ARC/B BIEGEL
CASE Category: 45 – ELECTRICAL ENGR

NCC 5 311 **RICE UNIV** **8680**
 MUSEUMS TEACHING PLANET EARTH (UTPE)
 04/11/1998 - 02/28/2003 FY02: \$352,500 Total: \$2,105,500
Prin. Invest.: P REIFF
Tech. Officer: GSFC/A TUYAHOV
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 77	RICE UNIV	8681	NAG 5 9142	SOUTHERN METHODIST UNIV	8690
ADVANCED NANOTECHNOLOGY MATERIALS AND APPLICATIONS			TECTONIC EVOLUTION OF PLANET SURFACES		
10/29/1998 - 10/30/2002	FY02: \$400,000	Total: \$2,706,000	02/29/2000 - 04/14/2003	FY02: \$25,400	Total: \$74,150
<i>Prin. Invest.:</i> R C SMALLEY			<i>Prin. Invest.:</i> V L HANSEN		
<i>Tech. Officer:</i> JSC/G K HORIUCHI			<i>Tech. Officer:</i> GSFC/D A SENSKE		
<i>CASE Category:</i> 12 – CHEMISTRY			<i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE		
NGT 2 52252	RICE UNIV	8682	NAG 5 10586	SOUTHERN METHODIST UNIV	8691
MULTIWAVELENGTH STUDIES OF WOLF-RAYET GALAXIES			TERRESTRIAL PLANET EVOLUTION		
09/30/1998 - 10/31/2001	FY02: -\$1,622	Total: \$64,378	03/13/2001 - 05/14/2004	FY02: \$66,000	Total: \$131,000
<i>Prin. Invest.:</i> D J DUFOUR			<i>Prin. Invest.:</i> V L HANSEN		
<i>Tech. Officer:</i> ARC/D J HOLLENBACH			<i>Tech. Officer:</i> GSFC/D SENSKE		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		
NGT 8 52899	RICE UNIV	8683	NAG 5 12289	SOUTHERN METHODIST UNIV	8692
THE BROADBAND ANALYSIS OF SPECTRAL AND TEMPORAL PROPERTIES OF GAMMA-RAY BURSTS			EVALUATE FUNDAMENTAL PROCESSES THAT SHAPE LIFE ON EARTH		
05/25/2001 - 07/01/2004	FY02: \$24,000	Total: \$46,000	06/20/2002 - 05/31/2003	FY02: \$1,000,000	Total: \$1,000,000
<i>Prin. Invest.:</i> E P LIANG			<i>Prin. Invest.:</i> J NEEL		
<i>Tech. Officer:</i> MSFC/S NASH-STEVENSON			<i>Tech. Officer:</i> GSFC/L CHAMBERS		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NGT 9 19	RICE UNIV	8684	NAS 1 01104	SOUTHERN METHODIST UNIV	8693
NOVEL LASER BASED GAS SENSORS FOR TRAVE GAS DETECTION IN A SPACECRAFT HABITAT			BROAD BAND PYROELECTRIC IR DETECTOR FOR FIRST (FAR-IRFARED SPECTROSCOPY OF THE TROPOSPHERE)		
08/23/1999 - 06/30/2002	FY02: \$0	Total: \$66,000	09/07/2001 - 09/06/2002	FY02: \$0	Total: \$50,000
<i>Prin. Invest.:</i> F K TITTEL			<i>Prin. Invest.:</i> Z CELIK-BUTLER, D BUTLER		
<i>Tech. Officer:</i> JSC/J C GRAF			<i>Tech. Officer:</i> LARC/D G JOHNSON		
<i>CASE Category:</i> 54 – ENVIRONMENTAL BIOLOGY			<i>CASE Category:</i> 41 – AERONAUTICAL ENGRN		
NGT 9 23	RICE UNIV	8685	NAG 1 02112	SOUTHWEST TEXAS JUNIOR COLL	8694
UNDERSTANDING PROPERTIES OF NANOTUBE REINFORCED ..			2002-2004 SOUTHWEST TEXAS PACE/MSET ACADEMY NRA-02 -OEO-03		
05/30/1997 - 06/30/2001	FY02: \$0	Total: \$66,000	09/03/2002 - 09/02/2005	FY02: \$100,000	Total: \$100,000
<i>Prin. Invest.:</i> E V BARRERA			<i>Prin. Invest.:</i> A HERNANDEZ		
<i>Tech. Officer:</i> JSC/B FILES			<i>Tech. Officer:</i> LARC/R A HATHAWAY		
<i>CASE Category:</i> 49 – ENGINEERING, OTHER			<i>CASE Category:</i> 21 – MATHEMATICS		
NAS 9 00106	SAN JACINTO COLL	8686	NAG 9 1019	SOUTHWEST TEXAS JUNIOR COLL	8695
COMPUTER TRAINING			PRECOLL AWARD FOR EXCELLENCE PACE/MSET		
09/29/2000 - 09/30/2002	FY02: \$200,000	Total: \$558,729	05/28/1998 - 08/31/2002	FY02: \$0	Total: \$298,420
<i>Prin. Invest.:</i> N J ANTHA			<i>Prin. Invest.:</i> A HERNANDEZ, JR.		
<i>Tech. Officer:</i> JSC/D DENTON-MISFELDT			<i>Tech. Officer:</i> JSC/L ARMENDARIZ		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NCC 9 137	SAN JACINTO COLL	8687	NCC 1 376	SOUTHWEST TEXAS STATE UNIV	8696
KC 135 STUDENT FLIGHT PROGRAM			LOW DIELECTRIC POLYMERS		
09/21/2001 - 08/31/2004	FY02: \$80,000	Total: \$176,328	03/22/2000 - 08/31/2001	FY02: \$1	Total: \$50,001
<i>Prin. Invest.:</i> M DALTON			<i>Prin. Invest.:</i> P E CASSIDY, M T BLANDA		
<i>Tech. Officer:</i> JSC/D SICKOREZ			<i>Tech. Officer:</i> LARC/D M STOAKLEY		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 12 – CHEMISTRY		
NCC 9 141	SAN JACINTO COLL	8688	NCC 1 01033	SOUTHWEST TEXAS STATE UNIV	8697
PROVIDE AREOSPACE RELATED EXPERIENCE FOR NON TRADITIONAL COMMUNITY COLL			LOW DIELECTRIC POLYMERS		
08/15/2001 - 08/31/2003	FY02: \$80,151	Total: \$95,151	05/10/2001 - 05/09/2002	FY02: \$0	Total: \$50,000
<i>Prin. Invest.:</i> N AVAILABLE			<i>Prin. Invest.:</i> P E CASSIDY, S R VENUMBAKA		
<i>Tech. Officer:</i> JSC/N AVAILABLE			<i>Tech. Officer:</i> LARC/D M STOAKLEY, LARC/C C FAY		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 12 – CHEMISTRY		
NAG 5 4562	SOUTHERN METHODIST UNIV	8689	NCC 1 02030	SOUTHWEST TEXAS STATE UNIV	8698
CORONAE AND CHASMATA:IMPLICATIONS FOR TERRRESTRIAL			HIGH PERFORMANCE POLYMERS		
05/29/1997 - 11/30/2001	FY02: \$0	Total: \$249,866	06/04/2002 - 06/02/2003	FY02: \$50,000	Total: \$50,000
<i>Prin. Invest.:</i> D L HANSEN			<i>Prin. Invest.:</i> P E CASSIDY, S R VENUMBAKA		
<i>Tech. Officer:</i> GSFC/J GRANT			<i>Tech. Officer:</i> LARC/G A MINER, LARC/D M STOAKLEY		
<i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE			<i>CASE Category:</i> 12 – CHEMISTRY		

TEXAS

NASA'S UNIVERSITY PROGRAM

NCC 9 54 **SOUTHWEST TEXAS STATE UNIV** **8699**
 ORAL HISTORY RESEARCH PROJECT
 03/01/1999 - 09/30/2001 FY02: \$0 Total: \$38,683
Prin. Invest.: K MARGERISON
Tech. Officer: JSC/W A LARSEN
CASE Category: 73 – HISTORY

NAG 3 2617 **TEXAS A&M UNIV** **8707**
 ADVANCED LITHIUM ION POLYMER BATTERIES FOR AEROSPACE APPLICATION
 05/23/2001 - 05/31/2004 FY02: \$105,375 Total: \$211,375
Prin. Invest.: D APPLEBY
Tech. Officer: GRC/R BALDWIN
CASE Category: 12 – CHEMISTRY

NAG 1 01005 **TEXAS A&M UNIV** **8700**
 UNSTEADY FLOW COMPUTATIONS OF COMPLEX TURBULENT FLOWS: MODELING & IMPLEMENTATION
 02/15/2001 - 12/31/2003 FY02: \$69,538 Total: \$137,547
Prin. Invest.: S GIRIMAJI
Tech. Officer: LARC/B A SINGER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2712 **TEXAS A&M UNIV** **8708**
 MICROSCALE INVESTIGATION OF THERMO-FLUID TRANSPORT IN THE TRANSITION FILM REGION OF AN EVAPORATING
 02/21/2002 - 11/30/2005 FY02: \$88,659 Total: \$88,659
Prin. Invest.: D D KHIM
Tech. Officer: GRC/M M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 01015 **TEXAS A&M UNIV** **8701**
 ACTIVE SKIN FOR TURBULENT DRAG REDUCTION
 02/15/2001 - 05/31/2002 FY02: \$0 Total: \$65,000
Prin. Invest.: O K REDINIOTIS, D C LAGOUDAS
Tech. Officer: LARC/M J WALSH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2721 **TEXAS A&M UNIV** **8709**
 PARTIALLY AVERAGED NAVIER-STOKES EQUATION: MODELING AND COMPUTATION #02-171.
 03/04/2002 - 02/10/2005 FY02: \$78,043 Total: \$78,043
Prin. Invest.: D GIRIMAJI
Tech. Officer: GRC/D A POVINELLI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01080 **TEXAS A&M UNIV** **8702**
 HIERARCHICAL STRATEGY FOR RAPID ANALYSIS ENVIRONMENT
 05/11/2001 - 01/31/2004 FY02: \$55,000 Total: \$115,000
Prin. Invest.: J D WHITCOMB
Tech. Officer: LARC/I S RAJU, LARC/J B RANSOM
CASE Category: 46 – MECHANICAL ENGR

NAG 5 6446 **TEXAS A&M UNIV** **8710**
 WORLD OCEAN CIRCULATION EXPERIMENT: SUPPORT FOR THE U.S. WOCE OFFICE
 11/25/1997 - 12/31/2002 FY02: \$0 Total: \$375,000
Prin. Invest.: W D NOWLIN
Tech. Officer: GSFC/J CAMPBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 1 02002 **TEXAS A&M UNIV** **8703**
 ANAL OF HISTORICAL CIRRUS IN-SITU DATA IN SUPPORT OF TERRA, AQUA & GIFTS CIRRUS RETRIEVAL EFFORTS
 11/07/2001 - 11/06/2004 FY02: \$113,977 Total: \$113,977
Prin. Invest.: P YANG
Tech. Officer: LARC/V E DELNORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7751 **TEXAS A&M UNIV** **8711**
 DOES SOUTHERN OCEAN SEA ICE AFFECT INTERANNUAL OCEAN VARIABILITY
 11/19/1998 - 12/31/2001 FY02: \$0 Total: \$178,940
Prin. Invest.: A STOESEL
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 1 02069 **TEXAS A&M UNIV** **8704**
 ACTIVE SKIN FOR TURBULENT DRAG REDUCTION
 03/20/2002 - 03/19/2003 FY02: \$65,000 Total: \$65,000
Prin. Invest.: O K REDINIOTIS, D C LAGOUDAS
Tech. Officer: LARC/M J WALSH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 8706 **TEXAS A&M UNIV** **8712**
 NOX PRODUCTION BY LIGHTNING AND ITS IMPACT ON THE CHEMISTRY OF THE UPPER TROPOSPHERE AND LOWER STRATOSPHERE
 07/19/1999 - 08/31/2003 FY02: \$0 Total: \$270,455
Prin. Invest.: R ZHANG
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 2 1340 **TEXAS A&M UNIV** **8705**
 ADAPTATIONS OF VISCERAL & CEREBRAL RESISTANCE ARTERIES TO SIMULATED MICROGRAVITY
 07/16/1999 - 06/30/2003 FY02: \$70,866 Total: \$439,127
Prin. Invest.: M D DELP
Tech. Officer: ARC/M M AVERNER, ARC/R MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 9409 **TEXAS A&M UNIV** **8713**
 MODELING TROPICAL ATLANTIC VARIABILITY
 04/06/2000 - 06/30/2003 FY02: \$140,000 Total: \$210,000
Prin. Invest.: P CHANG
Tech. Officer: GSFC/K BERGMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 3 2551 **TEXAS A&M UNIV** **8706**
 MULTI-BEAM PHASED ARRAY ANTENNAS MULTI-BEAM PHASED ARRAY ANTENNAS
 02/28/2001 - 02/28/2003 FY02: \$75,000 Total: \$175,000
Prin. Invest.: D CHANG
Tech. Officer: GRC/R LEE
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 9455 **TEXAS A&M UNIV** **8714**
 CONTINUED DEVELOPMENT OF SNOW AND SEA ICE ALBEDO ALGORITHMS FOR MODERATE RESOLUTION IMAGING
 04/12/2000 - 12/31/2000 FY02: -\$1,425 Total: \$18,424
Prin. Invest.: A KLEIN
Tech. Officer: GSFC/D K HALL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9485 **TEXAS A&M UNIV** **8715**
 DEVELOPMENT OF A LONG-RANGE SCIENCE PLAN FOR SUB-GLACIAL
 LAKE EXPLORATION
 04/25/2000 - 04/30/2001 FY02: -\$248 Total: \$27,087
Prin. Invest.: M C KENNICUT
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9649 **TEXAS A&M UNIV** **8716**
 STATISTICAL SAMPLING AND ESTIMATION PROBLEMS USING TRMM DATA
 06/26/2000 - 11/30/2003 FY02: \$100,000 Total: \$239,180
Prin. Invest.: G R NORTH
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9697 **TEXAS A&M UNIV** **8717**
 VALIDATION OF TRMM RAINFALL AND HEATING ESTIMATES
 07/26/2000 - 11/30/2002 FY02: \$65,000 Total: \$265,000
Prin. Invest.: M I BIGGERSTAFF
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9729 **TEXAS A&M UNIV** **8718**
 PHYSICAL VALIDATION OF TMI OCEANIC RAINFALL RETRIEVALS
 06/22/2000 - 11/30/2002 FY02: \$150,000 Total: \$313,600
Prin. Invest.: T WILHEIT
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10549 **TEXAS A&M UNIV** **8719**
 AIRCRAFT-BASED MEASUREMENT OF AEROSOL OPTICAL PROPERTIES
 03/09/2001 - 03/14/2004 FY02: \$95,351 Total: \$206,765
Prin. Invest.: D COLLINS
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10641 **TEXAS A&M UNIV** **8720**
 ASSIMILATING SATELLITE-DERIVED SEA-ICE CONCENTRATION IN A GLOBAL
 COUPLED SEA-ICE-OCEAN GCM
 03/17/2001 - 03/14/2004 FY02: \$59,732 Total: \$125,372
Prin. Invest.: S STOESSEL
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10829 **TEXAS A&M UNIV** **8721**
 SUPPORT FOR U.S. WOCE OFFICE AND U.S. GOOS OFFICE
 04/25/2001 - 04/30/2004 FY02: \$75,000 Total: \$150,000
Prin. Invest.: W NOWLIN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10877 **TEXAS A&M UNIV** **8722**
 CONTINUED DEVELOPMENT OF SNOW AND SEA ICE ALBEDO ALGORITHMS
 FOR THE MODERATE RESOLUTION IMAGING
 05/16/2001 - 08/31/2001 FY02: \$1,474 Total: \$13,526
Prin. Invest.: A KLEIN
Tech. Officer: GSFC/D K HALL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11013 **TEXAS A&M UNIV** **8723**
 IMPROVEMENT OF RAIN ESTIMATION IN TROPICAL CYCLONE
 07/10/2001 - 06/14/2004 FY02: \$135,000 Total: \$363,000
Prin. Invest.: M BOGGERSTAFF
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11144 **TEXAS A&M UNIV** **8724**
 EFFECTS OF URBANIZATION ON ECOLOGICAL SERVICES IN A SEMI-ARID
 REGION OF THE UNITED STATES
 07/25/2001 - 08/14/2004 FY02: \$163,205 Total: \$257,546
Prin. Invest.: R LACEY
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11349 **TEXAS A&M UNIV** **8725**
 DYNAMICS AND CONTROL OF LARGE SATELLITE FORMATIONS
 10/01/2001 - 10/14/2002 FY02: \$85,000 Total: \$85,000
Prin. Invest.: K T ALFRIEND
Tech. Officer: GSFC/J A LEITNER
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 11374 **TEXAS A&M UNIV** **8726**
 SCATTERING & ABSORPTION PROPERTIES OF NONSPHERICAL
 /INHOMOGENEOUS AEROSOLS & ICE CRYSTALS:
 11/16/2001 - 08/31/2003 FY02: \$64,991 Total: \$64,991
Prin. Invest.: P YANG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11375 **TEXAS A&M UNIV** **8727**
 SPACE-TIME DYNAMICS OF SOIL MOISTURE AND TEMPERATURE RE-SCALE
 ISSUES
 10/25/2001 - 11/30/2003 FY02: \$104,082 Total: \$104,082
Prin. Invest.: B P MOHANTY
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11681 **TEXAS A&M UNIV** **8728**
 "IMPACT OF FIELD-SCALE HETEROGENEITY IN SURFACE MOISTURE AND
 VEGETATION COVER ON REGIONAL SCALE FLUX
 01/31/2002 - 01/31/2005 FY02: \$5,000 Total: \$5,000
Prin. Invest.: A CAHILL
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11702 **TEXAS A&M UNIV** **8729**
 "EVOLUTION OF MULTI-SCALE HYDROLOGIC PROCESSES AND ITS IMPACT
 ON LAND-ATMOSPHERE INTERACTION"
 02/07/2002 - 02/14/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: B P MOHANTY
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11847 **TEXAS A&M UNIV** **8730**
 VALIDATION OF A SNOW ALBEDO ALGORITHM FOR THE MODERATE
 RESOLUTION IMAGING SPECTRORADIOMETER
 03/28/2002 - 10/31/2002 FY02: \$15,686 Total: \$15,686
Prin. Invest.: A KLEIN
Tech. Officer: GSFC/D K HALL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11935 **TEXAS A&M UNIV** **8731**
 RETRIEVE CIRRUS REFLECTANCE USING VISIBLE AND 1.38-UM WATER
 ABSORPTION BANDS
 03/27/2002 - 03/31/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: P YANG
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 – ATMOSPHERIC SCIENCE

TEXAS

NASA'S UNIVERSITY PROGRAM

NAG 5 11992 TEXAS A&M UNIV 8732
 INVESTIGATION OF TITAN'S AEROSOLS
 04/12/2002 - 04/14/2005 FY02: \$63,154 Total: \$63,154
Prin. Invest.: M T LEMMON
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12120 TEXAS A&M UNIV 8733
 ANALYSIS OF MEASUREMENT AND MODELING STUDIES FOR CRYSTAL-FACE
 04/29/2002 - 04/30/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: P YANG
Tech. Officer: GSFC/S TSAY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1618 TEXAS A&M UNIV 8734
 R&D OF HIGH GAIN, HIGH EFFICIENCY, CIRCULAR POLARIZED RECTENAS
 07/06/1999 - 01/31/2001 FY02: -\$36,057 Total: \$313,943
Prin. Invest.: K CHANG
Tech. Officer: MSFC/J HOWELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1802 TEXAS A&M UNIV 8735
 THERMOPHYSICAL ESEM & TEM CHARACTERIZATION OF CARBON FIBERS
 CTE, SPECTROSCOPY & ROUGHNESS STUDY
 04/20/2001 - 01/31/2003 FY02: \$60,542 Total: \$124,846
Prin. Invest.: O O OCHOA
Tech. Officer: MSFC/M R EFFINGER, MSFC/P VALENTINE
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1853 TEXAS A&M UNIV 8736
 COMPUTATIONAL ANALYSIS OF CRYOGENIC FLUID FILM BEARINGS SOFTWARE UPGRADE
 11/01/2001 - 11/01/2002 FY02: \$37,282 Total: \$37,282
Prin. Invest.: L S ANDRES
Tech. Officer: MSFC/T JETT
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1067 TEXAS A&M UNIV 8737
 PLANT GROWTH AND METABOLISM AT SUB-AMBIENT ATMOSPHERE PRESURES
 01/06/1999 - 12/31/2002 FY02: \$0 Total: \$465,446
Prin. Invest.: M C DREW
Tech. Officer: JSC/D BARTA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1119 TEXAS A&M UNIV 8738
 STABILITY OF RETORT PROCESSED MILK PRODUCTS
 07/01/1999 - 06/30/2001 FY02: \$0 Total: \$60,000
Prin. Invest.: R L RICHTER
Tech. Officer: JSC/C T BOURLAND
CASE Category: 55 – AGRICULTURE

NAG 9 1145 TEXAS A&M UNIV 8739
 SEPARATION OF LIQUID PHASE FROM GAS PHASE
 09/09/1999 - 01/31/2002 FY02: \$0 Total: \$150,000
Prin. Invest.: J SEYED-YAGOOBI, F R BEST
Tech. Officer: JSC/E K UNGAR
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1188 TEXAS A&M UNIV 8740
 NAVIGATION SYSTEMS & TECHNOLOGY LAB (NSR) ATTITUDE DETERMINATION
 01/28/2000 - 12/31/2002 FY02: \$25,000 Total: \$184,345
Prin. Invest.: J L CRASSIDIS
Tech. Officer: JSC/J W BELL
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1231 TEXAS A&M UNIV 8741
 SYNTHESIS AND EVALUATION OF ROBUST DYNAMIC INVERSION
 05/22/2000 - 09/30/2001 FY02: -\$11 Total: \$97,309
Prin. Invest.: J L VALASEK
Tech. Officer: JSC/S R MONDAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1239 TEXAS A&M UNIV 8742
 VARIABLE ISP ROCKET TRAJECTORY OPTIMIZATION
 06/30/2000 - 05/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: S R VADALI
Tech. Officer: JSC/E M BRADEN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1268 TEXAS A&M UNIV 8743
 FLIGHT TESTS OF AN UNMANNED POWERED PARACHUTE
 01/11/2001 - 03/29/2002 FY02: \$0 Total: \$219,534
Prin. Invest.: D T WARD, J L CRASSIDS, D W LUND
Tech. Officer: JSC/A STRAHAN, JSC/C J CERIMELE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1277 TEXAS A&M UNIV 8744
 MICROFABRICATED OPTICAL BIOSENSOR ARRAYS FOR AIR QUALITY MONITORING
 01/24/2001 - 09/30/2003 FY02: \$0 Total: \$0
Prin. Invest.: M V PISHKO
Tech. Officer: JSC/D RUSSO
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 9 1328 TEXAS A&M UNIV 8745
 IMMWPSEPARATOR KC-135 FLIGHT DIAGNOSTIC TESTING
 06/18/2001 - 08/01/2002 FY02: \$35,360 Total: \$85,360
Prin. Invest.: F R BEST
Tech. Officer: JSC/K HURLBERT
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1390 TEXAS A&M UNIV 8746
 MODELING, SIMULATION & TESTING OF COMMERCIAL AVAILABLE DC/DC CONVERTERS SUITABLE
 12/10/2001 - 07/31/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: P ENJETI
Tech. Officer: JSC/R GARCIA, JSC/S HOSSAIN
CASE Category: 45 – ELECTRICAL ENGR

NAG 9 1396 TEXAS A&M UNIV 8747
 FLT TESTS OF AN UNMANNED POWERED PARACHUTE
 03/01/2002 - 02/28/2003 FY02: \$220,000 Total: \$220,000
Prin. Invest.: D T WARD, J VALASEK, D W LUND
Tech. Officer: JSC/A L STRAHAN, JSC/C J CERIMELE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1442 TEXAS A&M UNIV 8748
 VIRTUAL VIDEO FOR REMOTE COCKPIT VAN
 07/26/2002 - 01/31/2003 FY02: \$13,623 Total: \$13,623
Prin. Invest.: A P BANERJEE
Tech. Officer: JSC/F J DELGADO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 304	TEXAS A&M UNIV	8749	NCC 2 1166	TEXAS A&M UNIV	8757
SCOPING DESIGN FOR ZERO GRAVITY ULLAGE TESTING SCOPING DESIGN FOR ZERO GRAVITY ULLAGE TESTING			ARTERIAL REMODELING AND FUNCTIONAL ADAPTATIONS INDUCED BY MICROGRAVITY		
08/08/2001 - 12/31/2001	FY02: -\$8,138	Total: \$14,362	03/22/2000 - 03/14/2003	FY02: \$268,604	Total: \$974,797
<i>Prin. Invest.:</i> F R BEST			<i>Prin. Invest.:</i> M D DELP		
<i>Tech. Officer:</i> KSC/T R REINARTS			<i>Tech. Officer:</i> ARC/M F VASQUES		
<i>CASE Category:</i> 46 – MECHANICAL ENGR			<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)		
NAG10 328	TEXAS A&M UNIV	8750	NCC 3 516	TEXAS A&M UNIV	8758
ZERO GRAVITY ULLAGE TESTING #02-174 ZERO GRAVITY ULLAGE TESTING #02-174			THE CENTER FOR SPACE POWER		
09/24/2002 - 09/12/2003	FY02: \$63,500	Total: \$63,500	11/26/1996 - 11/03/2002	FY02: \$0	Total: \$3,727,501
<i>Prin. Invest.:</i> D BEST			<i>Prin. Invest.:</i> F R BEST		
<i>Tech. Officer:</i> KSC/M GUISBERT			<i>Tech. Officer:</i> GRC/J E CALOGERAS, GRC/R L SOVIE		
<i>CASE Category:</i> 46 – MECHANICAL ENGR			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAS 5 32593	TEXAS A&M UNIV	8751	NCC 3 602	TEXAS A&M UNIV	8759
STUDY ENTITLED MIMR SCIENCE TEAM MEMBERSHIP			THERMAL CONTROL AND ENHANCEMENT OF HEAT TRANSPORT CAPACITY OF CRYOGENICS CAPILLARY PUMPED LOOPS AND		
12/15/1993 - 12/31/2002	FY02: \$180,741	Total: \$1,457,754	03/20/1998 - 08/31/2002	FY02: \$8,000	Total: \$265,963
<i>Prin. Invest.:</i> T T WILHEIT			<i>Prin. Invest.:</i> J SEYED-YAGOABI, J M OCHTERBECK, J 3 BYRAN		
<i>Tech. Officer:</i> GSFC/P HWONG			<i>Tech. Officer:</i> GRC/F P CHIARAMONTE		
<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE			<i>CASE Category:</i> 46 – MECHANICAL ENGR		
NAS 9 00100	TEXAS A&M UNIV	8752	NCC 3 762	TEXAS A&M UNIV	8760
OPERATION & MANAGEMENT OF RTTC			SMART STRUCTURAL COMPONENTS FOR INCREASED FLIGHT SPEED, SAFETY & CAPACITY USING MAGNETIC BEARINGS A		
12/22/2000 - 12/31/2002	FY02: \$1,451,772	Total: \$2,351,772	01/18/2000 - 01/31/2002	FY02: -\$346	Total: \$213,118
<i>Prin. Invest.:</i> G SERA, B CORNWELL, B NAUKE			<i>Prin. Invest.:</i> B D PALAZZOLO		
<i>Tech. Officer:</i> GRC/K W LASSMAN			<i>Tech. Officer:</i> GRC/G T MONTAGUE		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NAS 9 02063	TEXAS A&M UNIV	8753	NCC 3 793	TEXAS A&M UNIV	8761
LOW SPEED TUNNEL TESTING FOR AERODYNAMICS TECHNOLOGY STUDIES			EXPERIMENTAL STUDY OF THE EFFECTS OF WAKES ON SEPARATION IN LOW PRESSURE TURBINE FLOW		
07/21/2002 - 06/22/2005	FY02: \$25,000	Total: \$25,000	04/20/2000 - 12/31/2002	FY02: \$31,736	Total: \$163,471
<i>Prin. Invest.:</i> G L MARTINEZ			<i>Prin. Invest.:</i> I SCHOBELI		
<i>Tech. Officer:</i> JSC/D L EICHBLATT			<i>Tech. Officer:</i> GRC/D ASHPIS		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NAS 9 97002	TEXAS A&M UNIV	8754	NCC 3 836	TEXAS A&M UNIV	8762
TEXAS A & M LOW-SPEED WIND TUNNEL (LSWT) TESTING			LOW POWER LOSS, FAIL SAFE MAGNETIC SUSPENSIONS FOR ENERGY STORAGE AND ATTITUDE CONTROL FLYWHEELS		
04/02/1997 - 04/02/2001	FY02: \$15,040	Total: \$219,185	01/04/2001 - 01/01/2004	FY02: \$354,602	Total: \$692,072
<i>Prin. Invest.:</i> J L MARTINEZ			<i>Prin. Invest.:</i> D PALAZZOLO		
<i>Tech. Officer:</i> JSC/S G LABBE, JSC/C J CERIMELE			<i>Tech. Officer:</i> GRC/K P MCLALLIN		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 46 – MECHANICAL ENGR		
NCC 1 386	TEXAS A&M UNIV	8755	NCC 3 928	TEXAS A&M UNIV	8763
MICRO SPACECRAFT ATTITUDE SENSOR SYSTEM (MSAS) NASA HQS CETDP COMPETITION			SMART STRUCTURAL COMPONENTS AND SIMULATION TOOLS FOR INCREASED ENGINE EFFICIENCY, FLIGHT RANGE AND		
03/13/2000 - 04/04/2002	FY02: \$0	Total: \$360,000	12/19/2001 - 09/30/2004	FY02: \$99,889	Total: \$99,889
<i>Prin. Invest.:</i> J L JUNKINS			<i>Prin. Invest.:</i> D PALAZZOLO		
<i>Tech. Officer:</i> LARC/L G HORTA			<i>Tech. Officer:</i> GRC/A J PROVENZA		
<i>CASE Category:</i> 42 – ASTRONAUTICAL ENGR			<i>CASE Category:</i> 49 – ENGINEERING, OTHER		
NCC 1 02038	TEXAS A&M UNIV	8756	NCC 3 933	TEXAS A&M UNIV	8764
UNIV RESEARCH, ENGINEERING AND TECHNOLOGY INSTITUTE (URETI), INTELLIGENT BIO-NANO MATERIALS			MULTIAXIAL CONTINUUM DAMAGE MODEL FOR LIFE PREDICTION OF POLYMER MATRIX COMPOSITES AT ULTRA HIGH TEMPERATURE		
08/19/2002 - 08/18/2007	FY02: \$1,500,000	Total: \$1,500,000	01/02/2002 - 12/31/2002	FY02: \$80,000	Total: \$80,000
<i>Prin. Invest.:</i> D C LAGOUDAS			<i>Prin. Invest.:</i> R TAIREJA		
<i>Tech. Officer:</i> LARC/T R SUTTER			<i>Tech. Officer:</i> GRC/R ELLIS		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR		

TEXAS

NASA'S UNIVERSITY PROGRAM

NCC 4 152 TEXAS A&M UNIV 8765
 CONTINUOUS COMMISSIONING PROPOSAL CONTINUOUS COMMISSION-
 ING PROPOSAL
 06/18/2001 - 05/31/2002 FY02: \$0 Total: \$70,000
Prin. Invest.: W TURNER
Tech. Officer: DFRC/J TORRES
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 359 TEXAS A&M UNIV 8766
 MISSION GEOGRAPHY
 08/24/1998 - 07/31/2003 FY02: \$0 Total: \$900,542
Prin. Invest.: S BEDNARZ
Tech. Officer: HQ/P MOUNTJPOY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 448 TEXAS A&M UNIV 8767
 VISION-BASED NAVIGATION FOR SPACECRAFT FORMATION FLYING
 12/21/1999 - 08/31/2002 FY02: \$0 Total: \$353,730
Prin. Invest.: D L JUNKINS
Tech. Officer: GSFC/L MARKLEY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 456 TEXAS A&M UNIV 8768
 UNSOLICITED PROPOSAL FOR A COOPERATIVE AGREEMENT BETWEEN
 THE TEXAS ENGINEERING EXPERIMENT STATION
 03/03/2000 - 02/28/2002 FY02: -\$91,937 Total: \$953,063
Prin. Invest.: F R BEST
Tech. Officer: GSFC/J LANDERS
CASE Category: 11 – ASTRONOMY

NCC 5 517 TEXAS A&M UNIV 8769
 BUILDING AN INTERDISCIPLINARY RESEARCH INFRASTRUCTURE IN AP-
 PLIED COMPUTER SCIENCE, GEOGRAPHIC INFOR
 09/25/2000 - 09/30/2001 FY02: \$0 Total: \$486,604
Prin. Invest.: C STEIDLEY
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 169 TEXAS A&M UNIV 8770
 R/S INVESTIGATION OF NEURONAL PHYSIOLOGY IN SIMULATED MICRO-
 GRAVITY USING SMART FLUORESCENT ...
 03/12/1999 - 11/30/2002 FY02: \$143,000 Total: \$514,000
Prin. Invest.: G COTE
Tech. Officer: JSC/M ANDERSON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 226 TEXAS A&M UNIV 8771
 PROMOTE COMMERCIALY FUNDED ENGINEERING RESEARCH & TECH-
 NOLOGY DEVELOPMENT ON THE INT'L SPACE STATION
 05/01/2001 - 10/31/2002 FY02: \$1,012,000 Total: \$1,728,000
Prin. Invest.: D BOYLE
Tech. Officer: MSFC/S LAMBING
CASE Category: 49 – ENGINEERING, OTHER

NCC 8 236 TEXAS A&M UNIV 8772
 PROMOTE COMMERCIALY FUNDED RESCH & TECH DEVEL IN THE FIELD
 OF SPACE POWER GEN AND ENERGY STORAGE
 11/01/2001 - 10/31/2002 FY02: \$1,265,000 Total: \$1,265,000
Prin. Invest.: W F BEST
Tech. Officer: MSFC/S LAMBING
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 69 TEXAS A&M UNIV 8773
 NASA COMMERCIAL SPACE TO ADBOCATE & SUPPORT COMMERCIAL
 ENGINEERING ON ISS
 05/07/1998 - 05/06/2001 FY02: -\$2,764 Total: \$2,130,025
Prin. Invest.: D R BOYLE, M SCHULLER, F R BEST
Tech. Officer: JSC/C G PARRA, JSC/R C HAHL
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 146 TEXAS A&M UNIV 8774
 WEB DEVELOPMENT & ONLINE DELIVERY OF MIDDLE SCHOOL AERO-
 SPACE SCHOLARS PROGRAM
 11/30/2001 - 11/30/2002 FY02: \$66,444 Total: \$66,444
Prin. Invest.: J DENTON
Tech. Officer: JSC/A SANCHEZ
CASE Category: 22 – COMPUTER SCIENCE

NCC 9 150 TEXAS A&M UNIV 8775
 SUPPORT FOR THE MINORITY OUTREACH PROGRAM TEXAS A&M SPACE
 ENGINNERING INST
 07/03/2002 - 09/30/2003 FY02: \$727,500 Total: \$727,500
Prin. Invest.: D BOYLE
Tech. Officer: JSC/H W LANE
CASE Category: 41 – AERONAUTICAL ENGR

NGT 4 52432 TEXAS A&M UNIV 8776
 GRADUATE STUDENT RESEARCHERS PROGRAM - FAULT TOLERANT
 CONTROL OF AN F-15 AIRCRAFT
 06/11/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D SMITH
Tech. Officer: DFRC/K GUPTA
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30211 TEXAS A&M UNIV 8777
 HYDROLOGIC CONSEQUENCES OF SHRUB SAVANNA EXPANSION STU-
 DENT: WYLIE N. HARRIS
 08/20/1999 - 08/31/2001 FY02: -\$64 Total: \$21,936
Prin. Invest.: T BOUTTON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30408 TEXAS A&M UNIV 8778
 EVALUATION OF SHRUB ENCROACHMENT ON WATER AVAILABILITY IN
 SEMI-ARID RANGELAND OF THE SOUTHWEST
 08/15/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C MUNSTER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30417 TEXAS A&M UNIV 8779
 UNDERSTANDING AND ASSESSING POTENTIAL PREDICTABILITY OF THE
 SACZ & SPCZ USING NASA/NSIPP ANDNCAR/C
 09/06/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: P CHANG
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30467 TEXAS A&M UNIV 8780
 SIMULATING SURFACE WATER RUNOFF AND ASSESSING IMPACTS OF
 NATURAL AND HUMAN-INDUCED ENVIRONMENTAL
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: L HONGXING
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50417 **TEXAS A&M UNIV** **8781**
 A COMPARISON OF TROPICAL PRECIPITATION RATES SIMULATED BY THE
 NCAR_CCMS WITH THOSE OBSERVED BY THE
 08/12/2002 - 08/31/2005 FY02: \$22,000 Total: \$22,000
Prin. Invest.: G R NORTH
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52913 **TEXAS A&M UNIV** **8782**
 CLARIFYING AND MITIGATING THE EFFECTS OF STRESS ON MENTAL
 SIMULATION IN DECISION MAKING
 05/29/2002 - 06/30/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S SMITH
Tech. Officer: MSFC/S NASH-STEVEN
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 9 34 **TEXAS A&M UNIV** **8783**
 KINETICS OF NITRIFICATION BY ISO TOPE DILUTION IN GROWTH OF
 WHEAT USING ZEOPONICS
 06/04/1998 - 07/01/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R W WEAVER
Tech. Officer: JSC/D G SICKOREZ
CASE Category: 55 – AGRICULTURE

NGT 9 39 **TEXAS A&M UNIV** **8784**
 1999 SUMMER FACULTY FELLOWSHIP PROGRAM
 04/21/1999 - 12/31/2000 FY02: \$0 Total: \$385,000
Prin. Invest.: W A HYMAN, R BANNEROT
Tech. Officer: JSC/D SICKOREZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 54 **TEXAS A&M UNIV** **8785**
 2001 SUMMER FACULTY FELLOWSHIP PROGRAM
 06/29/2001 - 12/31/2002 FY02: \$1,200 Total: \$360,617
Prin. Invest.: W A HYMAN
Tech. Officer: JSC/D SICKOREZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT10 52628 **TEXAS A&M UNIV** **8786**
 BIOTIC FACTORS CONTROLLING CALICIVIOUS ATTACHMENT AND PERSISTENCE
 ON ROMAINE AND ICEBERG LETTUCE
 08/14/2002 - 08/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D PILLAI
Tech. Officer: KSC/C BLACK
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 9196 **TEXAS A&M UNIV-CORPUS CHRISTI** **8787**
 THE TRANSLINGUAL EARTH SYSTEM SCIENCE EDUCATION CENTER
 03/10/2000 - 09/14/2001 FY02: \$0 Total: \$154,580
Prin. Invest.: G BLOUNT
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1401 **TEXAS A&M UNIV-CORPUS CHRISTI** **8788**
 "FINDING NEAR OPTIMAL SCHEDULES FOR FUNCTIONALLY DISTRIBUTED
 TASKS ON CLUSTER & MULTIPROCESSOR ARCH
 03/05/2002 - 03/04/2005 FY02: \$99,880 Total: \$99,880
Prin. Invest.: M MOORE
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 5 7159 **TEXAS A&M UNIV-KINGSVILLE** **8789**
 SIMULATION SUPPORT FOR THE DEVELOPMENT OF GLAST
 03/16/1998 - 08/31/2001 FY02: \$0 Total: \$104,000
Prin. Invest.: D SUSON
Tech. Officer: GSFC/D THOMPSON
CASE Category: 13 – PHYSICS

NAG 8 1650 **TEXAS A&M UNIV-KINGSVILLE** **8790**
 EXPANDABLE SOFTWARE REUSE LIBRARY
 01/20/2000 - 05/31/2002 FY02: -\$165 Total: \$29,126
Prin. Invest.: B SCHREUR
Tech. Officer: MSFC/W LOVE
CASE Category: 22 – COMPUTER SCIENCE

NAG 9 1093 **TEXAS A&M UNIV-KINGSVILLE** **8791**
 DESIGN OF LOW BIT RATE SIGNAL COMPRESSOR FOR EFFICIENT RECORDING
 04/26/1999 - 04/30/2003 FY02: \$0 Total: \$263,313
Prin. Invest.: S W PARK
Tech. Officer: JSC/K L HAMES
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 7040 **TEXAS CHRISTIAN UNIV** **8792**
 CRITICAL TESTS OF STELLAR EVOLUTION_(L TSA)
 03/02/1998 - 02/28/2003 FY02: \$9,300 Total: \$43,100
Prin. Invest.: P MARCUM
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 11002 **TEXAS COLL** **8793**
 TEXAS COLL CENTER FOR EXCELLENCE IN MATHEMATICS SCIENCE &
 TECHNOLOGY & A TECHNOLOGY PLACE FOR KID
 06/01/2001 - 05/31/2002 FY02: \$0 Total: \$998,000
Prin. Invest.: M NAMBOODIRI
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1416 **TEXAS COLL** **8794**
 PRE-COLL PLACEMENT FOR ACHIEVEMENT OF EXCELLENCE IN MATH,
 SCIENCE, ENGINEERING TECHNOLOGY
 09/30/2002 - 09/30/2005 FY02: \$99,785 Total: \$99,785
Prin. Invest.: W STENGER
Tech. Officer: JSC/L M ARMENDEZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12599 **TEXAS SOUTHERN UNIV** **8795**
 NASA CENTER ON MODEL-BASED SIMULATION - STRUCTURAL AND MATERIALS
 SYSTEMS
 09/25/2002 - 09/30/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: D C DAVIS
Tech. Officer: GSFC/C PERSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1132 **TEXAS SOUTHERN UNIV** **8796**
 FIELD TESTING
 07/16/1999 - 03/31/2002 FY02: -\$2,369 Total: \$40,631
Prin. Invest.: D C DAVIS
Tech. Officer: JSC/M K EWERT
CASE Category: 46 – MECHANICAL ENGR

TEXAS

NASA'S UNIVERSITY PROGRAM

NAG 9 1194 TEXAS SOUTHERN UNIV 8797
 MOLD DEVELOPMENT IN HYDROPONICS
 04/25/2000 - 04/24/2003 FY02: \$0 Total: \$132,000
Prin. Invest.: O A JEJELOWO
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 55 – AGRICULTURE

NAG 9 1227 TEXAS SOUTHERN UNIV 8798
 SILICON UPTAKE IN HYDROPONICS BY GRAMINACEOUS CROP PLANTS
 06/22/2000 - 06/30/2003 FY02: \$0 Total: \$112,000
Prin. Invest.: G A JEJEDOWO
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 55 – AGRICULTURE

NAG 9 1414 TEXAS SOUTHERN UNIV 8799
 STUDIES IN VIVO MODEL OF SIMULATED MICROGRAVITY O CALCIUM HOMEOSTASIS
 09/11/2002 - 09/10/2005 FY02: \$64,601 Total: \$64,601
Prin. Invest.: G RAMESH
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NCC 9 80 TEXAS SOUTHERN UNIV 8800
 HIGH PRESSURE LABORATORY
 12/02/1998 - 07/31/2002 FY02: -\$34,628 Total: \$865,047
Prin. Invest.: B L WILSON
Tech. Officer: JSC/C B AGEE
CASE Category: 12 – CHEMISTRY

NAG 1 2192 TEXAS TECH UNIV 8801
 THE HEAVY OZONE PROBLEM NRA-98-OES-04
 09/28/1999 - 12/31/2002 FY02: \$53,397 Total: \$154,632
Prin. Invest.: G I GELLENE
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1560 TEXAS TECH UNIV 8802
 ACTION THEORIES AND DESIGN OF INTELLIGENT SYSTEMS
 05/17/2002 - 08/31/2003 FY02: \$42,000 Total: \$42,000
Prin. Invest.: R WATSON
Tech. Officer: ARC/J FRANK, ARC/R MORRIS
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2005 TEXAS TECH UNIV 8803
 ARCJET ELECTRODE DEGRDATION RESEARCH
 01/24/1997 - 08/31/2001 FY02: -\$384 Total: \$690,546
Prin. Invest.: E A O'HAIR, M KRISTIANSEN, J C DICKENS
Tech. Officer: GRC/L R PINERO
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 5156 TEXAS TECH UNIV 8804
 OPTIMIZATION STUDIES FOR ACCESS CALORIMETRY INCREMENTAL FUNDING FOR FIRST YEAR OF GRANT
 03/26/1998 - 06/30/2002 FY02: \$0 Total: \$251,762
Prin. Invest.: R WIGMANS
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 5 9505 TEXAS TECH UNIV 8805
 DEVELOPMENT OF A PARALLEL VERSION OF SEQUENEL WITH EXPERIMENTS ON & APPLICATION TO NEURAL NETWORK
 04/26/2000 - 08/31/2001 FY02: -\$13,105 Total: \$76,895
Prin. Invest.: D COOKE
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 962 TEXAS TECH UNIV 8806
 ON-CHIP BACKSCATTERING INTERFEROMETRY FOR SPACE BA SED BIO-SENSING AND DIAGNOSTICS
 05/02/2002 - 09/30/2004 FY02: \$22,000 Total: \$22,000
Prin. Invest.: D BORNHOP
Tech. Officer: GRC/C NIEDERHAUS
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 108 TEXAS TECH UNIV 8807
 PLANT RESEARCH IN EDU & WATER REUSE/RECYCLING
 07/07/2000 - 09/30/2001 FY02: -\$2,758 Total: \$912,242
Prin. Invest.: J L SMITH, L V URBAN, E B PEFFLEY
Tech. Officer: JSC/D L HENNINGER, JSC/K R DAUES
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 9 143 TEXAS TECH UNIV 8808
 PLANT RESEARCH IN EDU, WATER REUSE/RECYCLING
 09/28/2001 - 09/30/2002 FY02: \$0 Total: \$1,497,000
Prin. Invest.: J L SMITH
Tech. Officer: JSC/D L HENNINGER
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1278 TRINITY UNIV 8809
 KALMAN FILER BASED SENSOR FUSION FOR ESTIMATION OF MOBILE ROBOT LOCATION AND ORIENTATION
 01/12/2001 - 12/31/2002 FY02: \$0 Total: \$15,400
Prin. Invest.: K NICKELS
Tech. Officer: JSC/K BAKER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2697 UNIV HOUSTON-HOUSTON 8810
 FUNDAMENTAL STUDIES ON TWO-PHASE FLOWS THROUGH PAC KED-BEDS IN MICROGRAVITY
 01/28/2002 - 10/31/2005 FY02: \$37,000 Total: \$37,000
Prin. Invest.: D BALAKOTIAH
Tech. Officer: GRC/B J MOTIL
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4765 UNIV HOUSTON-HOUSTON 8811
 LL CHODRITES
 06/06/1997 - 05/31/2001 FY02: -\$2 Total: \$71,672
Prin. Invest.: D M REID
Tech. Officer: GSFC/D NAVA
CASE Category: 11 – ASTRONOMY

NAG 5 7840 UNIV HOUSTON-HOUSTON 8812
 WINDS, WATER BUDGETS, AND STABLE ISOTOPES IN TROPICAL CYCLONES USING TRMM AND QUICKSCAT
 01/06/1999 - 12/31/2002 FY02: \$0 Total: \$148,877
Prin. Invest.: J R LAWRENCE
Tech. Officer: GSFC/R W LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8140 UNIV HOUSTON-HOUSTON 8813
 THE ORIGINS OF TRANSLATION
 02/03/1999 - 06/30/2002 FY02: \$6,731 Total: \$242,091
Prin. Invest.: D FOX
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 10714	UNIV HOUSTON-HOUSTON	8814	NAG 9 1152	UNIV HOUSTON-HOUSTON	8823
ADVANCED ADIABATIC DEMAGNETIZATION REFRIGERATORS FOR CONTINUOUS COOLING FROM 10K TO 50MK			THERAPEUTIC EFFICACY OF GROWTH HORMONE		
04/12/2001 - 05/31/2003	FY02: \$0	Total: \$15,000	09/20/1999 - 11/08/2002	FY02: \$184,526	Total: \$568,944
<i>Prin. Invest.:</i> P W CHU			<i>Prin. Invest.:</i> D A MARTINEZ		
<i>Tech. Officer:</i> GSFC/P J SHIRRON			<i>Tech. Officer:</i> JSC/C W LLOYD		
<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER			<i>CASE Category:</i> 59 – LIFE SCIENCE, OTHER		
NAG 8 1363	UNIV HOUSTON-HOUSTON	8815	NAG 9 1223	UNIV HOUSTON-HOUSTON	8824
"EPITAXIAL GROWTH OF PROTEIN CRYSTALS ON SELF- ASSEMBLED MONOLAYERS"			TEXAS LEARNING AND COMPUTATIONAL CENTER		
06/02/1997 - 11/30/2001	FY02: \$0	Total: \$419,000	10/23/2000 - 08/16/2002	FY02: \$0	Total: \$3,661,000
<i>Prin. Invest.:</i> J M FRIEDMAN			<i>Prin. Invest.:</i> G VALIAS, B BOYCO		
<i>Tech. Officer:</i> MSFC/B GUYNES, MSFC/J MAYO			<i>Tech. Officer:</i> JSC/R P KEHOE, JSC/S P CAMPBELL		
<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER			<i>CASE Category:</i> 22 – COMPUTER SCIENCE		
NAG 8 1658	UNIV HOUSTON-HOUSTON	8816	NAG 9 1287	UNIV HOUSTON-HOUSTON	8825
DEVELOPMENT OF SPACE RADIATION MONTE-CARLO COMPUT-ER SIMULATION BASED ON FLUKA & ROOT CODE			ADVANCED CROSS ENTERPRISE TECHNOLOGY DEVELOPMENT F OR NASA MISSIONS		
05/01/2000 - 11/30/2002	FY02: \$120,000	Total: \$304,000	03/27/2001 - 03/31/2003	FY02: \$346,000	Total: \$728,000
<i>Prin. Invest.:</i> L S PINSKY			<i>Prin. Invest.:</i> A IGNATIEV		
<i>Tech. Officer:</i> MSFC/P DOTY			<i>Tech. Officer:</i> JSC/R S BAIRD		
<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER			<i>CASE Category:</i> 49 – ENGINEERING, OTHER		
NAG 8 1857	UNIV HOUSTON-HOUSTON	8817	NAG 9 1293	UNIV HOUSTON-HOUSTON	8826
EFFECTS ON VONVECTIVE TRANSPORT OF SOLUTE IMPURITIES			DEVELOPMENT OF REDUCED SURFACE WAVE ANTENNAS FOR THE NASA/JSC NAVIGATION		
01/29/2002 - 02/28/2003	FY02: \$494,529	Total: \$494,529	04/16/2001 - 04/30/2004	FY02: \$36,475	Total: \$75,869
<i>Prin. Invest.:</i> P VEKILOV			<i>Prin. Invest.:</i> J T WILLIAMS		
<i>Tech. Officer:</i> MSFC/K F ROBINSON			<i>Tech. Officer:</i> JSC/J W BELL		
<i>CASE Category:</i> 51 – BIOLOGY (EXCLUDING ENVIR)			<i>CASE Category:</i> 42 – ASTRONAUTICAL ENGR		
NAG 9 867	UNIV HOUSTON-HOUSTON	8818	NAG 9 1305	UNIV HOUSTON-HOUSTON	8827
NASA-ASEE SUMMER FACULTY FELLOWSHIPS			GRADUATE STUDENT RESERACH PROGRAM CARBON NANOTUBE POLYMER NANOCOMPOSITES		
05/09/1996 - 06/06/2002	FY02: \$0	Total: \$1,213,000	06/14/2001 - 07/31/2003	FY02: \$24,000	Total: \$46,000
<i>Prin. Invest.:</i> R B BANNEROT			<i>Prin. Invest.:</i> C A MITCHELL		
<i>Tech. Officer:</i> JSC/D SICKOREZ			<i>Tech. Officer:</i> JSC/B FILES		
<i>CASE Category:</i> 46 – MECHANICAL ENGR			<i>CASE Category:</i> 43 – CHEMICAL ENGR		
NAG 9 985	UNIV HOUSTON-HOUSTON	8819	NAG 9 1347	UNIV HOUSTON-HOUSTON	8828
INVESTIGATE & DEVLOP ADVANCED TRAINING TECHN			NOVEL TISSUE ASSEMBLIES: MODELS FOR ENTERIC PATHOGENESIS		
01/16/1998 - 08/31/2002	FY02: \$0	Total: \$1,123,078	07/07/2001 - 07/31/2002	FY02: \$0	Total: \$25,894
<i>Prin. Invest.:</i> B LOFTIN			<i>Prin. Invest.:</i> L S PINSKY		
<i>Tech. Officer:</i> JSC/R SAVELY			<i>Tech. Officer:</i> JSC/G BADHWAR		
<i>CASE Category:</i> 22 – COMPUTER SCIENCE			<i>CASE Category:</i> 13 – PHYSICS		
NAG 9 1012	UNIV HOUSTON-HOUSTON	8820	NAG 9 1363	UNIV HOUSTON-HOUSTON	8829
TWO PHASE SYSTEMS FOR MARS-G			URBAN EXPERIENCE PROGRAM		
05/20/1998 - 06/30/2001	FY02: -\$513	Total: \$69,898	07/10/2001 - 07/11/2004	FY02: \$0	Total: \$25,000
<i>Prin. Invest.:</i> L C WHITE			<i>Prin. Invest.:</i> T MINDIOLA		
<i>Tech. Officer:</i> JSC/J D CORNWELL			<i>Tech. Officer:</i> JSC/L M ARMENDARIZ		
<i>CASE Category:</i> 46 – MECHANICAL ENGR			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 9 1055	UNIV HOUSTON-HOUSTON	8821	NAG 9 1410	UNIV HOUSTON-HOUSTON	8830
URBAN EXPERIENCE PROGRAM			URBAN EXPERIENCE PROGRAM		
09/22/1998 - 08/30/2002	FY02: \$0	Total: \$105,000	08/15/2002 - 08/14/2003	FY02: \$25,000	Total: \$25,000
<i>Prin. Invest.:</i> T MINDIOLA, JR.			<i>Prin. Invest.:</i> T MINDIOLA		
<i>Tech. Officer:</i> JSC/L ARMENDARIZ			<i>Tech. Officer:</i> JSC/L M ARMENDARIZ		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 9 1103	UNIV HOUSTON-HOUSTON	8822	NAG 9 1421	UNIV HOUSTON-HOUSTON	8831
THE SEARCH FOR MICROBIAL BIOMARKERS IN TERRESTRIAL DEPOSITS			MARS RADIATION CHARACTERIZATION EXPERIMENTAL PROG		
05/04/1999 - 03/09/2004	FY02: \$20,000	Total: \$80,000	05/01/2002 - 04/30/2004	FY02: \$45,033	Total: \$45,033
<i>Prin. Invest.:</i> H S CHAFETZ			<i>Prin. Invest.:</i> L C WHITE, D K HOLLINGSWORTH		
<i>Tech. Officer:</i> JSC/E K GIBSON			<i>Tech. Officer:</i> JSC/K M HURBERT		
<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 46 – MECHANICAL ENGR		

NAG 9 1422 UNIV HOUSTON-HOUSTON 8832
 EDUCATIONAL GRANT FOR NASA ASEE SUMMER FACULTY FEL LOWSHIPS
 05/14/2002 - 05/13/2004 FY02: \$415,500 Total: \$415,500
Prin. Invest.: R B BANNEROT
Tech. Officer: JSC/D G SICHAREZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1429 UNIV HOUSTON-HOUSTON 8833
 ANALYSIS OF DATA FROM MARS ODYSSEY MARIE EXPERIMENT
 06/19/2002 - 05/31/2004 FY02: \$31,625 Total: \$31,625
Prin. Invest.: L PINSKY
Tech. Officer: JSC/G JOHNSON
CASE Category: 11 – ASTRONOMY

NAG 9 1453 UNIV HOUSTON-HOUSTON 8834
 STABILITY OF PHARMACEUTICAL FOR SPACE IN-FLIGHT TREATMENT
 08/19/2002 - 08/31/2004 FY02: \$57,250 Total: \$57,250
Prin. Invest.: D CHOW
Tech. Officer: JSC/L PUTCHA
CASE Category: 56 – MEDICAL

NCC 2 5394 UNIV HOUSTON-HOUSTON 8835
 THE SCALABILITY OF OPENMP ON LARGE-SCALE DISTRIBUTED SHARED-
 MEMORY ARCHITECTURES SUCH AS THESGI OR
 08/14/2000 - 04/30/2002 FY02: \$0 Total: \$95,000
Prin. Invest.: B CHAPMAN
Tech. Officer: ARC/J YAN
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5396 UNIV HOUSTON-HOUSTON 8836
 MINERALS & SUBMICROMETER FORMS AS BIOSIGNATURES
 08/28/2000 - 08/31/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: A D HAYMET
Tech. Officer: ARC/D F BLAKE
CASE Category: 12 – CHEMISTRY

NCC 8 127 UNIV HOUSTON-HOUSTON 8837
 FOR RESEARCH "CONTINUATION OF SUPPORT FOR THE COMMERCIAL
 SPACE CENTER, SPACE VACUUM EPITAXY CTR
 01/21/1997 - 10/14/2001 FY02: \$0 Total: \$7,500,000
Prin. Invest.: A IGNATIEV, S S PEI
Tech. Officer: MSFC/S J LAMBING
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 8 239 UNIV HOUSTON-HOUSTON 8838
 PROMOTE COMMERCIALY FUNDED RESEARCH AND TECHNOLOGY DEVELOPMENT
 IN THE FIELD OF SPACE VACUUM EPITAXY
 01/16/2002 - 10/14/2002 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: A IGNATIEV
Tech. Officer: MSFC/S LAMBING
CASE Category: 49 – ENGINEERING, OTHER

NCC 9 70 UNIV HOUSTON-HOUSTON 8839
 UH NASA TECHNOLOGY COMMERCIALIZATION
 03/24/1998 - 05/31/2002 FY02: \$0 Total: \$1,200,000
Prin. Invest.: A V VAILLAS
Tech. Officer: JSC/H L DAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 151 UNIV HOUSTON-HOUSTON 8840
 USE OF NEAR-INFRARED SPECTROSCOPY AS NON-INVASIVE MEASURE OF
 MUSCLE VASCULAR FUNCTION
 05/29/2002 - 12/31/2002 FY02: \$11,150 Total: \$11,150
Prin. Invest.: J DAVIS
Tech. Officer: JSC/D FEEBACK
CASE Category: 56 – MEDICAL

NGT 3 52356 UNIV HOUSTON-HOUSTON 8841
 GRADUATE STUDENT RESEARCH PROGRAM GRADUATE STUDENT RE-
 SEARCH PROGRAM
 07/01/1999 - 08/31/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: V BALAKOTAIAH
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50182 UNIV HOUSTON-HOUSTON 8842
 PRIMORDIAL PEPTIDE SYNTHESIS IN THE ORIGIN OF LIFE
 05/27/1998 - 06/30/2001 FY02: -\$654 Total: \$65,346
Prin. Invest.: G E FOX
Tech. Officer: HQ/A NURRIDIN
CASE Category: 12 – CHEMISTRY

NAG 9 1155 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8843
 NUTRITIONAL INTERVENTION TO IMPROVE MUSCLE PROTEIN METABOLISM
 DURING STRESS
 09/16/1999 - 11/30/2002 FY02: \$148,889 Total: \$534,981
Prin. Invest.: A A FERRANDO
Tech. Officer: JSC/C LLOYD
CASE Category: 56 – MEDICAL

NAS 2 02059 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8844
 FUNDAMENTAL TECHNOLOGIES FOR DEVELOPMENT OF BIOMOLECULAR
 SENSORS
 12/20/2001 - 12/20/2002 FY02: \$428,272 Total: \$428,272
Prin. Invest.: J F LEARY
Tech. Officer: ARC/J W HINES, ARC/P P FUNG
CASE Category: 56 – MEDICAL

NAS 9 01006 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8845
 ISS FLIGHT EXPERIMENT E129
 01/23/2001 - 12/31/2004 FY02: \$377,000 Total: \$603,059
Prin. Invest.: A D BARRET
Tech. Officer: JSC/M ANDERSON
CASE Category: 56 – MEDICAL

NAS 9 97147 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8846
 PROTEIN TURNOVER DURING SPACE FLIGHT
 02/24/1997 - 06/30/2004 FY02: \$162,361 Total: \$780,361
Prin. Invest.: A FERRANDO
Tech. Officer: JSC/A LEE
CASE Category: 56 – MEDICAL

NAS 9 98138 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8847
 SMALL PAYLOAD EXPERIMENT
 10/28/1998 - 05/31/2003 FY02: \$224,036 Total: \$523,392
Prin. Invest.: M MCGINNIS
Tech. Officer: JSC/C HAVEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 1160 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8848
 STREPTOCOCCUS PNEUMONIAE GENE EXPRESSION AND VIRUL ENCE
 POTENTIAL IN THE SPACE ENVIRONMENT
 02/11/2000 - 03/14/2003 FY02: \$115,044 Total: \$352,561
Prin. Invest.: D NIESSEL
Tech. Officer: ARC/C M WINGET, ARC/D REISS-BUBENHEIM
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 8 170 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8849
 R/S DIFFERENTIATION OF 3 DIMENSIONAL CO-CULTURES OF MYOFIBRO-
 BLASTS, PRENEOPLASTIC
 03/23/1999 - 12/30/2002 FY02: \$166,882 Total: \$607,682
Prin. Invest.: V CHOPPA
Tech. Officer: MSFC/V CHOPPA
CASE Category: 56 – MEDICL

NCC 9 81 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8850
 UTMB/NASA-JSC GRADUATE MED TRAINING IN AEROSPACE MEDICINE
 12/07/1998 - 09/30/2003 FY02: \$546,900 Total: \$1,234,434
Prin. Invest.: J R DAVIS
Tech. Officer: JSC/R BILLICA
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 9 123 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8851
 SPATIAL REORIENTATION OF SENSORIMOTOR BALANCE CONTROL IN
 ALTERED GRAVITY
 02/22/2001 - 11/30/2003 FY02: \$7,450 Total: \$14,900
Prin. Invest.: G KAUFMAN
Tech. Officer: JSC/B PALOSKI
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 9 47 UNIV OF TEXAS MEDICAL BRANCH - GALVESTON 8852
 TRAINING PROGRAM FOR TWO STUDENTS GRADUATE SCHOOL OF BIO-
 MEDICAL SCIENCES
 04/12/2000 - 05/31/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: C W COOPER
Tech. Officer: JSC/C W LLOYD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1824 UNIV OF TEXAS-GRAD SCHOOL OF BIOMED SCI. 8853
 PHYSICO-CHEMICAL TOOLS FOR RATIONAL OPTIMATIZATION OF GROWTH
 CONDITIONS OF BIOLOGICAL CRYSTALS
 10/04/2001 - 11/30/2004 FY02: \$423,000 Total: \$423,000
Prin. Invest.: P G VEKILOV
Tech. Officer: MSFC/B GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1206 UNIV OF TEXAS-HLTH SCI CTR-SAN ANTONIO 8854
 USE OF NASA BIOREACTOR TO STUDY CELL CYCLE REGULATION
 03/01/2000 - 02/28/2002 FY02: -\$155,823 Total: \$181,962
Prin. Invest.: J M JESSUP
Tech. Officer: JSC/S GONDA
CASE Category: 56 – MEDICL

NAG10 180 UNIV OF TEXAS-HLTH SCI CTR-SAN ANTONIO 8855
 FUNCT DEV IN A MODEL VESTIBULAS SYS
 01/18/1996 - 09/30/2002 FY02: \$0 Total: \$703,425
Prin. Invest.: M L WIEDERHOLD
Tech. Officer: KSC/W M KNOTT
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 11928 UNIV OF TEXAS-PAN AMERICAN 8856
 NASA BORDER INITIATIVE
 04/04/2002 - 10/31/2002 FY02: \$25,000 Total: \$25,000
Prin. Invest.: H MEDRANO
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12549 UNIV OF TEXAS-PAN AMERICAN 8857
 NASA BORDER INITIATIVE: A PARTNERSHIP FOR ENRICHIN G EDUCATION
 FOR AT- RISK STUDENTS (PEERS)
 09/05/2002 - 08/31/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: H MEDRADO
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1634 UNIV OF TEXAS-PAN AMERICAN 8858
 OPTIMAL DESIGN OF HYBRID PASSIVE VISCOELASTIC AND ACTIVE PIEZO-
 ELECTRIC DAMPING LAYERS
 09/30/1999 - 08/31/2003 FY02: \$99,638 Total: \$296,107
Prin. Invest.: A LUMSDAINE
Tech. Officer: MSFC/A BEAM, MSFC/W LOVE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1169 UNIV OF TEXAS-PAN AMERICAN 8859
 PAARTNERSHIP FOR SCIENCE AND ENGR STUDENT SUCCESS
 09/27/1999 - 09/30/2002 FY02: \$0 Total: \$195,825
Prin. Invest.: R FOWLER, J LANAGABEER
Tech. Officer: JSC/S GONZALEZ, JSC/L ARMENDARIZ
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 2 962 UNIV OF TEXAS, HEALTH SCI CTR-DALLAS 8860
 SPACE FLIGHT, STRESS & PLASTICITY
 02/07/1995 - 12/31/2000 FY02: -\$2,489 Total: \$570,887
Prin. Invest.: S T BRADY
Tech. Officer: ARC/D REISS-BUBENHEIM, ARC/W E HINDS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 4846 UNIV OF TEXAS, HEALTH SCI CTR-DALLAS 8861
 THE ROLE OF CARDIAC MECHANICS IN BLOOD PRESSURE RE TATIC
 STRESS
 06/27/1997 - 09/30/2001 FY02: \$0 Total: \$525,000
Prin. Invest.: B LEVINE
Tech. Officer: GSFC/V SCHNEIDER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1033 UNIV OF TEXAS, HEALTH SCI CTR-DALLAS 8862
 MICROCIRCULATORY ADJUSTMENT TO SIMULATED MICROGRAVITY EXPO-
 SURE IN HUMANS
 07/16/1998 - 07/14/2002 FY02: \$0 Total: \$475,700
Prin. Invest.: C G CRANDALL
Tech. Officer: JSC/C W LLOYD
CASE Category: 56 – MEDICL

NAG 2 1505 UNIV. OF TEXAS MD ANDERSON CANCER CENTER 8863
 GRAVITY AND INTERGRIN MEDIATED HUMAN LYMPHOCYTE AD HESION
 07/26/2001 - 07/14/2003 FY02: \$192,635 Total: \$311,974
Prin. Invest.: B W MCINTYRE
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1347 UNIV. OF TEXAS MD ANDERSON CANCER CENTER 8864
 USE OF NASA BIOREACTORS IN A NOVEL SCHEME FOR IMMUNIZATION
 AGAINST CANCER
 06/18/1997 - 12/31/2002 FY02: \$0 Total: \$457,338
Prin. Invest.: C A SAVARY
Tech. Officer: JSC/S R GONDAS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1348 UNIV. OF TEXAS MD ANDERSON CANCER CENTER 8865
 APPLICATION OF BIOREACTOR TECHNOLOGY ANALYSIS AND COUNTER
 MEASURE DEVELOPMENT OF MICROGRAVITY
 06/18/1997 - 11/30/2001 FY02: \$0 Total: \$404,467
Prin. Invest.: E H GRIMM
Tech. Officer: JSC/S R GONDAS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 8 1570 UNIV. OF TEXAS MD ANDERSON CANCER CENTER 8866
 APPLICATION OF BIOREACTOR TECHNOLOGY FOR A PRECLINICAL HUMAN
 MODEL OF MELANOMA
 03/19/1999 - 11/02/2002 FY02: \$140,000 Total: \$504,250
Prin. Invest.: E A GRIMM
Tech. Officer: MSFC/D RISEN
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1454 UNIV. OF TEXAS MD ANDERSON CANCER CENTER 8867
 EFFECT OF RADIATION ON HUMAN PERIPHERAL BLOOD DEDRITIC CELLS
 09/13/2002 - 09/16/2005 FY02: \$37,774 Total: \$37,774
Prin. Invest.: J REUBEN
Tech. Officer: JSC/C LLOYD
CASE Category: 56 – MEDICL

NAG 2 1261 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8868
 RELATIONSHIP OF MORPHOGENESIS & MINERALIZATION TO GRAVITY IN
 SPACEFLOWN ALGAE
 09/01/1998 - 04/30/2003 FY02: \$82,678 Total: \$319,065
Prin. Invest.: P J DUKE
Tech. Officer: ARC/O SANTOS, ARC/P D SAVAGE
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1498 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8869
 CYTOPLASMIC/GOLGI INTERACTIONS IN THE NANOFABRICAT ION OF
 BIOMINERAL COMPOSITES - A GENETIC APPROACH
 07/05/2001 - 06/30/2003 FY02: \$155,424 Total: \$248,112
Prin. Invest.: M E MARSH
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 4710 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8870
 GRAVITY AND THE REGULATION OF A CENTRAL GROWTH FAC
 06/11/1997 - 01/31/2002 FY02: \$0 Total: \$409,271
Prin. Invest.: E DURBAN
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 8 1585 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8871
 IMPACT/MICROGRAVITY ON IMMUNOGENICITY ASSOCIATED WITH BI-
 STRUCTURAL CHANGES/PANCRATIC ISLETS
 03/19/1999 - 12/31/2002 FY02: \$132,053 Total: \$465,136
Prin. Invest.: L P RUTZKY
Tech. Officer: MSFC/B V GUYNES
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 952 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8872
 EXERCISE DURING PREBREATHE: REDUCTION OF THE H-2-O PREB-
 REATHE TIME
 08/14/1997 - 02/14/2001 FY02: -\$16,973 Total: \$37,027
Prin. Invest.: C FIFE
Tech. Officer: JSC/M R POWELL
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1040 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8873
 EFFECTS OF CIRCADIAN RHYTHMS ON DEPRESSION OUTCOME
 06/22/1998 - 03/30/2003 FY02: \$0 Total: \$294,519
Prin. Invest.: B BUTLER
Tech. Officer: JSC/C SAWIN
CASE Category: 56 – MEDICL

NAG 9 1144 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8874
 DUST STIMULANTS ON LUNG INFLAMMATION AND ALVEOLAR MACROPH-
 AGE FUNCTION
 09/20/1999 - 09/19/2002 FY02: \$0 Total: \$7,006
Prin. Invest.: A HOLIAN
Tech. Officer: JSC/J T JAMES
CASE Category: 56 – MEDICL

NAG 9 1247 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8875
 DEVELOP REINFORCEMENT LEARNING TECHNIQUES FOR EFFIC IENT
 TRAINING ROBOTIC SYSTEMS
 07/18/2000 - 07/19/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: H WANG, J ZHANG, T R JOHNSON
Tech. Officer: JSC/R T SAVELY
CASE Category: 22 – COMPUTER SCIENCE

NAG 9 1353 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8876
 EFFECT OF MICROGRAVITY ON PANCREATIC ISLET XENOTRANSPLATA-
 TION,VASCULARIZATION & STEM CELL
 07/27/2001 - 09/30/2004 FY02: \$157,000 Total: \$194,000
Prin. Invest.: L P RUTZKY, S M STEPKOWSKI, S M KATZ
Tech. Officer: JSC/D RISIN
CASE Category: 56 – MEDICL

NCC 2 1234 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8877
 HUMAN CENTERED INTELLIGENT FLIGHT SURGEON CONSOLE
 03/29/2001 - 02/28/2003 FY02: \$159,000 Total: \$257,000
Prin. Invest.: J ZHANG
Tech. Officer: ARC/P M JONES, ARC/M G SHAFTO
CASE Category: 22 – COMPUTER SCIENCE

NCC 8 168 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8878
 NUTRITION IMMUNOMODULATION IN MICROGRAVITY
 03/05/1999 - 11/30/2002 FY02: \$152,000 Total: \$573,650
Prin. Invest.: A D KULKARNI
Tech. Officer: JSC/S GONDAS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 9 82 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8879
 EVA PREBREATHE REDUCTION PROTOCOL
 03/11/1999 - 03/10/2003 FY02: \$0 Total: \$275,000
Prin. Invest.: B BUTLER
Tech. Officer: JSC/M GERNHARDT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 90 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8880
 GAS PHASE FORMATION, GROWTH AND EFFECTS OF SURFACE TENSION
 02/23/2000 - 01/31/2003 FY02: \$0 Total: \$55,162
Prin. Invest.: B D BUTLER
Tech. Officer: JSC/M R POWELL
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 9 103 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8881
 CHARACTERIZATION OF AUTONOMIC FUNCTION
 02/25/2000 - 02/20/2003 FY02: \$0 Total: \$14,834
Prin. Invest.: R F LODATO
Tech. Officer: JSC/J MECK
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 9 46 UNIV. OF TEXAS-HLTH SCIENCE CTR-HOUSTON 8882
 TRAINING PROGRAM FOR TWO STUDENTS AT THE GRADUATE SCHOOL OF
 BIOMEDICAL SCIENCES
 04/07/2000 - 05/31/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: J WEINDER
Tech. Officer: JSC/C W LLOYD
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 9 1083 UNIV OF HOUSTON - CLEAR LAKE 8883
 COX REGRESSION MODELING AND ANALYSIS OF NASA/JSC EXPERIMEN-
 TAL DATA ON DECOMPRESSION SICKNESS
 02/20/1999 - 09/30/2001 FY02: -\$219 Total: \$29,781
Prin. Invest.: R S CHHIKARA
Tech. Officer: JSC/M POWELL
CASE Category: 59 – LIFE SCIENCE, OTHER

NCC 9 30 UNIV OF HOUSTON - CLEAR LAKE 8884
 RESEARCH FOR COMPUTING & INFORMATION SYSTEMS
 08/08/1994 - 06/30/2002 FY02: \$4,100,372 Total: \$36,651,370
Prin. Invest.: E T DICKERSON
Tech. Officer: JSC/R T SAVELY
CASE Category: 22 – COMPUTER SCIENCE

NCC 9 156 UNIV OF HOUSTON - CLEAR LAKE 8885
 MANAGEMENT OF JSC LIBRARY BOOKS & JOURNALS & FOR P ROVIDING
 LIBRARY SERVICES TOJSC PERSONNEL
 09/25/2002 - 09/30/2003 FY02: \$25,000 Total: \$25,000
Prin. Invest.: K WILHORSKI
Tech. Officer: JSC/K E INGRAM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 48 UNIV OF HOUSTON - CLEAR LAKE 8886
 NASA IMAGE INST FOR GEOGRAPHY & EARTH SCIENCE TEACHERS
 06/01/2000 - 12/31/2000 FY02: -\$2,531 Total: \$19,369
Prin. Invest.: J N MACIR
Tech. Officer: JSC/N G ROBERTSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10149 UNIV OF HOUSTON - DOWNTOWN 8887
 AN URBAN OUTREACH PROGRAM IN SPACE SCIENCE: A COLL ABORATIVE
 EFFORT BETWEEN NASA,HISPANIC SERVING &
 01/03/2001 - 12/31/2003 FY02: \$212,998 Total: \$425,996
Prin. Invest.: P A MORRIS-SMITH
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12366 UNIV OF HOUSTON - DOWNTOWN 8888
 THE ORIGINS OF TRANSLATION AND EARLY LIFE
 07/09/2002 - 06/30/2005 FY02: \$111,202 Total: \$111,202
Prin. Invest.: G E FOX
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12467 UNIV OF HOUSTON - DOWNTOWN 8889
 UHD PARTICIPATORY PROJECT IN MESSENGER EXPLORATION & NSIP
 DEVELOPMENT OF STUDENT SCIENTISTS - ONE YR
 09/11/2002 - 09/14/2003 FY02: \$41,600 Total: \$41,600
Prin. Invest.: D A ALO
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 9 1018 UNIV OF HOUSTON - DOWNTOWN 8890
 PRECOLL AWARD FOR EXCELLENCE PACE/MSET
 05/01/1998 - 04/30/2001 FY02: -\$2,734 Total: \$296,666
Prin. Invest.: R ALO
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1113 UNIV OF HOUSTON - DOWNTOWN 8891
 ACIENT LIFE IN ROCKS ON EARTH
 05/14/1999 - 05/13/2003 FY02: \$6,000 Total: \$36,000
Prin. Invest.: P A MORRIS-SMITH
Tech. Officer: JSC/E K GIBSON
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 9 1114 UNIV OF HOUSTON - DOWNTOWN 8892
 ACIENT LIFE IN ROCKS ON EARTH
 05/13/1999 - 05/31/2003 FY02: \$6,000 Total: \$36,000
Prin. Invest.: P A MORRIS-SMITH
Tech. Officer: JSC/E K GIBSON
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 5352 UNIV OF NORTH TEXAS 8893
 NANOSTRUCTURED POLYMER FILMS FOR IMPROVED BARRIER PROPER-
 TIES
 01/16/2002 - 12/31/2003 FY02: \$56,614 Total: \$56,614
Prin. Invest.: N D'SOUZA
Tech. Officer: GSFC/B MERRITT
CASE Category: 13 – PHYSICS

NCC 2 1316 UNIV OF NORTH TEXAS 8894
 TESTING THE NECCESITY OF STRATEGIC RETRIEVAL IN EV ENT BASED
 PROSPECTIVE MEMORY
 03/06/2002 - 03/31/2003 FY02: \$21,730 Total: \$21,730
Prin. Invest.: M BINK
Tech. Officer: ARC/R K DISMUKES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4668 U OF NORTH TEXAS HLTH SCI.CTR AT FT.WORTH 8895
 CARTOID BAROREFLEX FUNCTION DURING PROLONGED EXERC
 06/17/1997 - 05/31/2001 FY02: \$0 Total: \$301,896
Prin. Invest.: P B RAVEN
Tech. Officer: GSFC/V SCHNEIDER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 9 1262 U OF NORTH TEXAS HLTH SCI.CTR AT FT.WORTH 8896
 VESTIBULAR MODULATION OF AUTONOMIC RESPONSES TO ORTHOSTASIS
 11/16/2000 - 10/31/2003 FY02: \$158,289 Total: \$331,887
Prin. Invest.: M L SMITH, D ORR, D E WATENPAUGH
Tech. Officer: JSC/C W LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01017 UNIV OF TEXAS - ARLINGTON 8897
 NANO-FILM OF HIGH RESOLUTION PRESSURE SENSING
 03/01/2001 - 03/31/2002 FY02: -\$1,731 Total: \$21,508
Prin. Invest.: S P JOSHI
Tech. Officer: LARC/S K KAHNG
CASE Category: 43 – CHEMICAL ENGR

NAG 8 1889 UNIV OF TEXAS - ARLINGTON 8898
 DESIGN STUDY FOR A SLIT-JAW CAMERA FOR SUMI
 09/18/2002 - 12/12/2002 FY02: \$7,955 Total: \$7,955
Prin. Invest.: Z MUSIELAK
Tech. Officer: MSFC/J PORTER
CASE Category: 46 – MECHANICAL ENGR

NCC 2 5395 UNIV OF TEXAS - ARLINGTON 8899
 SCHEDULING & LOAD BALANCING ON THE INFORMATION POWER GRID
 08/15/2000 - 03/31/2003 FY02: \$40,000 Total: \$125,320
Prin. Invest.: S K DAS
Tech. Officer: ARC/R BISWAS, ARC/D KWAK
CASE Category: 22 – COMPUTER SCIENCE

NGT 5 30382 UNIV OF TEXAS - ARLINGTON 8900
 MINING OF STRUCTURAL DATA TO DISCOVER PROBABILISTIC SUBSTRUCTURES
 JOSEPH T.POTTS
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D COOK
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01109 UNIV OF TEXAS - AUSTIN 8901
 APPLICATION OF HOS AND VOLTERRA MODELS TO AEROELASTIC SYSTEM IDENTIFICATION
 07/18/2001 - 09/30/2002 FY02: \$0 Total: \$35,000
Prin. Invest.: E J POWERS
Tech. Officer: LARC/W A SILVA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1347 UNIV OF TEXAS - AUSTIN 8902
 CELLULAR BASES OF LIGHT REGULATED GRAVITY RESPONSE
 07/23/1999 - 06/30/2003 FY02: \$62,086 Total: \$367,970
Prin. Invest.: S J ROUX
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1349 UNIV OF TEXAS - AUSTIN 8903
 EVOLUTIONARY ORIGIN OF BODY AXIS SEGMENTATION IN ANNELEIDS & ARTHROPODS
 07/20/1999 - 07/14/2003 FY02: \$97,670 Total: \$495,345
Prin. Invest.: S M SHANKLAND
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 1839 UNIV OF TEXAS - AUSTIN 8904
 INSTABILITIES IN SURFACE-TENSION DRIVEN CONVECTION
 05/06/1996 - 05/05/2001 FY02: -\$2,610 Total: \$497,390
Prin. Invest.: H L SWINNEY
Tech. Officer: GRC/A T CHAI
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 3 1901 UNIV OF TEXAS - AUSTIN 8905
 PRECISION MEASUREMENTS WITH TRAPPED LASER-COOLED ATOMS IN A MICROGRAVITY ENVIRONMENT
 06/14/1996 - 01/01/2001 FY02: -\$864 Total: \$431,136
Prin. Invest.: D J HEINZEN
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2240 UNIV OF TEXAS - AUSTIN 8906
 LASER VELOCIMETER FOR STUDIES OF MICROGRAVITY COMBUSTION FLOWFIELDS
 02/26/1999 - 01/13/2003 FY02: \$22,500 Total: \$270,250
Prin. Invest.: P L VARGHESE
Tech. Officer: GRC/P S GREENBERG
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2602 UNIV OF TEXAS - AUSTIN 8907
 ADVANCED FLYWHEEL MATERIALS DEVELOPMENT PROGRAM FOR HIGH SPECIFIC ENERGY, SPACE APPLICATIONS
 05/01/2001 - 05/31/2002 FY02: \$0 Total: \$50,030
Prin. Invest.: R THOMPSON
Tech. Officer: GRC/K MCLALLIN
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2633 UNIV OF TEXAS - AUSTIN 8908
 HIGH PERFORMANCE GIGAWATT AND GIGAWATT POWER ELECTRONIC DEVICES
 06/18/2001 - 08/31/2003 FY02: \$60,914 Total: \$96,828
Prin. Invest.: D D DUPUIS
Tech. Officer: GRC/G SCHWARZE
CASE Category: 13 – PHYSICS

NAG 5 3431 UNIV OF TEXAS - AUSTIN 8909
 PARASEC-SCALE ENVIRONMENT OF LUMINOUS AGN: SPECTROSCOPIC CLUES TO WINDS, JETS, AND ACCRETION
 10/01/1996 - 09/30/2002 FY02: \$0 Total: \$712,606
Prin. Invest.: B J WILLS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3786 UNIV OF TEXAS - AUSTIN 8910
 MCDONALD OBSERVATORY SUPPORT: HARLAN SMITH POST-DOCTORAL SCIENCE
 03/19/1997 - 12/31/2002 FY02: \$0 Total: \$251,849
Prin. Invest.: D N BASH
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 11 – ASTRONOMY

NAG 5 4209 UNIV OF TEXAS - AUSTIN 8911
 MICROMACHINED DIFFRACTION GRATINGS FOR COMPACT IR
 03/14/1997 - 03/30/2001 FY02: \$0 Total: \$217,746
Prin. Invest.: D JAFFE
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

<p>NAG 5 5171 UNIV OF TEXAS - AUSTIN 8912 MEASUREMENT AND INTERPRETATION OF TEMPORAL VARIABILITY FIELD USING GPS AND SLR 07/17/1997 - 07/14/2001 FY02: -\$35,236 Total: \$126,764 <i>Prin. Invest.:</i> R R EM <i>Tech. Officer:</i> GSFC/H V FREY <i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE</p>	<p>NAG 5 7937 UNIV OF TEXAS - AUSTIN 8920 SUPERNOVAE AND COSMOLOGY 12/21/1998 - 12/31/2003 FY02: \$113,969 Total: \$428,784 <i>Prin. Invest.:</i> P HOEFLICH <i>Tech. Officer:</i> GSFC/D K WEST <i>CASE Category:</i> 11 – ASTRONOMY</p>
<p>NAG 5 6728 UNIV OF TEXAS - AUSTIN 8913 GENERAL RELATIVISTIC AND GRAVITATIONAL PHYSICS PARAMETERS FROM LUNAR LASER RANGING DATA 12/11/1997 - 12/31/2001 FY02: \$0 Total: \$198,000 <i>Prin. Invest.:</i> P J SHELUS <i>Tech. Officer:</i> GSFC/H HASAN <i>CASE Category:</i> 11 – ASTRONOMY</p>	<p>NAG 5 8143 UNIV OF TEXAS - AUSTIN 8921 IMPROVED NUMERICAL MODELING OF LOW-DENSITY ATMOSPHERIC FLOW ON IO 02/01/1999 - 12/31/2002 FY02: \$0 Total: \$152,688 <i>Prin. Invest.:</i> D GOLDSTEIN <i>Tech. Officer:</i> GSFC/D BOGAN <i>CASE Category:</i> 11 – ASTRONOMY</p>
<p>NAG 5 7203 UNIV OF TEXAS - AUSTIN 8914 TRACING THE MASS IN AN EVOLUTIONARY SEQUENCE 04/23/1998 - 04/14/2002 FY02: \$0 Total: \$165,643 <i>Prin. Invest.:</i> N J EVANS, 11 <i>Tech. Officer:</i> HQ/J BOYCE <i>CASE Category:</i> 11 – ASTRONOMY</p>	<p>NAG 5 8290 UNIV OF TEXAS - AUSTIN 8922 OPTIMAL LAND INITIALIZATION FOR SEASONAL CLIMATE PREDICTIONS 02/24/1999 - 08/31/2001 FY02: -\$131,758 Total: \$165,785 <i>Prin. Invest.:</i> J S FAMIGLIETTI <i>Tech. Officer:</i> GSFC/M RIENECKER <i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER</p>
<p>NAG 5 7582 UNIV OF TEXAS - AUSTIN 8915 "MAPPIING NEAR-SURFACE SALINIZATION USING LONG-WAVE LENGTH AIRSAR" (SENH98-0113) 08/04/1998 - 07/31/2002 FY02: \$0 Total: \$126,000 <i>Prin. Invest.:</i> J G PAINE <i>Tech. Officer:</i> GSFC/H V FREY <i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE</p>	<p>NAG 5 8301 UNIV OF TEXAS - AUSTIN 8923 PHOTOMETRIC DETECTION OF EXTRA-SOLAR PLANETS 02/24/1999 - 02/28/2003 FY02: \$0 Total: \$269,600 <i>Prin. Invest.:</i> W P COCHRAN <i>Tech. Officer:</i> GSFC/J BOYCE <i>CASE Category:</i> 11 – ASTRONOMY</p>
<p>NAG 5 7660 UNIV OF TEXAS - AUSTIN 8916 'PATTERNS OF SHORELINE CHANGE AND HURRICANE WASHOVER ON BARRIER ISLANDS' (SENH98-0094) 09/09/1998 - 08/31/2003 FY02: \$0 Total: \$600,000 <i>Prin. Invest.:</i> J C GIBEAUT <i>Tech. Officer:</i> GSFC/H V FREY <i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE</p>	<p>NAG 5 8611 UNIV OF TEXAS - AUSTIN 8924 SOIL MOISTURE VARIABILITY AND ITS ROLE IN LAND ATMOSPHERE INTERACTION DURING SGP97 06/11/1999 - 06/14/2001 FY02: -\$44,582 Total: \$80,008 <i>Prin. Invest.:</i> J S FAMIGLIETTI <i>Tech. Officer:</i> GSFC/P R HOUSER <i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER</p>
<p>NAG 5 7693 UNIV OF TEXAS - AUSTIN 8917 FUNDING FOR 'REMOTE SENSING, GIS AND THE ANCIENT TERRITORY: A PROJECT FOR THE CHORA OF CHERSONESOS 09/17/1998 - 09/30/2002 FY02: \$50,137 Total: \$300,160 <i>Prin. Invest.:</i> J C CARTER <i>Tech. Officer:</i> GSFC/H V FREY <i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE</p>	<p>NAG 5 8798 UNIV OF TEXAS - AUSTIN 8925 VARIATIONS IN SPACE GEODETIC IN TIME SERIES DUE TO WATER REDISTRIBUTION AND OTHER SOURCES. 11/02/1999 - 11/14/2003 FY02: \$100,000 Total: \$310,000 <i>Prin. Invest.:</i> C R WILSON <i>Tech. Officer:</i> GSFC/H V FREY <i>CASE Category:</i> 32 – GEOLOGICAL SCIENCE</p>
<p>NAG 5 7791 UNIV OF TEXAS - AUSTIN 8918 SPATIALLY-RESOLVED, GROUND-BASED OBSERVATIONS OF MARTIAN ATMOSPHERIC WATER VAPOR:1999-2002 APP 12/14/1998 - 08/30/2002 FY02: \$0 Total: \$203,708 <i>Prin. Invest.:</i> D S BARKER <i>Tech. Officer:</i> GSFC/T MORGAN <i>CASE Category:</i> 11 – ASTRONOMY</p>	<p>NAG 5 8858 UNIV OF TEXAS - AUSTIN 8926 HIGH INDEX GRISMS FOR MID-INFRARED SPECTROSCOPY. 09/28/1999 - 01/31/2003 FY02: \$0 Total: \$288,671 <i>Prin. Invest.:</i> D T JAFFE <i>Tech. Officer:</i> GSFC/F HERRERO <i>CASE Category:</i> 13 – PHYSICS</p>
<p>NAG 5 7910 UNIV OF TEXAS - AUSTIN 8919 CHARACTERIZING THE SIPLE COAST ICE STREAM SYSTEM USING SATELLITE IMAGES,IMPROVED TOPOGRAPHY, AND IN 12/07/1998 - 12/31/2001 FY02: \$0 Total: \$82,341 <i>Prin. Invest.:</i> D D BLANKENSHIP <i>Tech. Officer:</i> GSFC/S GOGINENI <i>CASE Category:</i> 39 – ENVIRONMENTALSCI, OTHER</p>	<p>NAG 5 9003 UNIV OF TEXAS - AUSTIN 8927 THE CHEMICAL COMPOSITION OF PRIMITIVE BODIES IN THE SOLAR SYSTEM 01/27/2000 - 01/31/2003 FY02: \$97,000 Total: \$302,886 <i>Prin. Invest.:</i> A L COCHRAN <i>Tech. Officer:</i> GSFC/T H MORGAN <i>CASE Category:</i> 11 – ASTRONOMY</p>

NAG 5 9144 **UNIV OF TEXAS - AUSTIN** **8928**
 RECONSTRUCTION OF HISTORICAL SEA LEVEL VARIATIONS USING TIDE
 GAUGE DATA AND EMPIRICAL ORTHOGONAL
 02/29/2000 - 02/28/2003 FY02: \$25,000 Total: \$75,000
Prin. Invest.: D P CHAMBERS
Tech. Officer: GSFC/H V FREY
CASE Category: 11 – ASTRONOMY

NAG 5 9163 **UNIV OF TEXAS - AUSTIN** **8929**
 IMPROVEMENT IN GEOID MODELS FOR OCEAN CIRCULATION STUDIES
 03/08/2000 - 03/14/2003 FY02: \$40,000 Total: \$120,000
Prin. Invest.: B TAPLEY
Tech. Officer: GSFC/F HERBERT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9227 **UNIV OF TEXAS - AUSTIN** **8930**
 RADIAL VELOCITY DETECTION OF EXTRA-SOLAR PLANETARY SYSTEMS
 03/13/2000 - 03/30/2003 FY02: \$170,000 Total: \$450,000
Prin. Invest.: W COCHRAN
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9230 **UNIV OF TEXAS - AUSTIN** **8931**
 IMPROVED SILICON DIFFRACTION GRATINGS FOR NEAR-IR SPECTROSCOPY FROM SPACE
 03/20/2000 - 02/28/2003 FY02: \$170,000 Total: \$414,736
Prin. Invest.: D JAFFE
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 11 – ASTRONOMY

NAG 5 9239 **UNIV OF TEXAS - AUSTIN** **8932**
 FAR-UV ABSORPTION-LINE SPECTROSCOPY OF THE NEUTRAL ENVELOPES OF PLANETARY NEBULAE - FUSE
 03/09/2000 - 03/14/2002 FY02: \$0 Total: \$73,600
Prin. Invest.: G SONNEBORN
Tech. Officer: GSFC/H DINERSTEIN
CASE Category: 11 – ASTRONOMY

NAG 5 9302 **UNIV OF TEXAS - AUSTIN** **8933**
 REQUEST FOR SUPPLEMENTAL FUNDING FOR COX POSTDOCTORAL FELLOW
 03/20/2000 - 03/31/2002 FY02: \$0 Total: \$22,500
Prin. Invest.: C WHEELER
Tech. Officer: GSFC/D GOLOMBEK
CASE Category: 11 – ASTRONOMY

NAG 5 9321 **UNIV OF TEXAS - AUSTIN** **8934**
 A PARALLEL GENETICS-ALGORITHM-BASED APPROACH TO WHITE DWARF PULSATION MODELS
 03/22/2000 - 03/31/2003 FY02: \$78,900 Total: \$231,800
Prin. Invest.: D E WINGET
Tech. Officer: GSFC/J BREDEKAMP
CASE Category: 11 – ASTRONOMY

NAG 5 9829 **UNIV OF TEXAS - AUSTIN** **8935**
 SPACECRAFT RENDEZVOUS NAVIGATION WITH INTEGRATED INS-GPS.
 08/23/2000 - 08/31/2001 FY02: \$0 Total: \$80,382
Prin. Invest.: R H BISHOP
Tech. Officer: GSFC/R CARPENTER
CASE Category: 41 – AERONAUTICAL ENGRN

NAG 5 9989 **UNIV OF TEXAS - AUSTIN** **8936**
 EARTH SYSTEM DYNAMICS: THE DETERMINATION & INTERPRETATION OF THE GLOBAL ANGULAR MOMENTUM BUDGET USING
 09/21/2000 - 03/31/2002 FY02: \$0 Total: \$1,087,000
Prin. Invest.: B D TAPLEY
Tech. Officer: GSFC/J LABRECQUE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10121 **UNIV OF TEXAS - AUSTIN** **8937**
 20TH TEXAS SYMPOSIUM ON RELATIVISTIC ASTROPHYSICS
 11/28/2000 - 01/31/2002 FY02: \$9,000 Total: \$24,000
Prin. Invest.: J C WHEELER
Tech. Officer: GSFC/L KALUZIENSKI
CASE Category: 11 – ASTRONOMY

NAG 5 10183 **UNIV OF TEXAS - AUSTIN** **8938**
 ASTROMETRY OF NEW & UNDER-OBSERVED NEAR-EARTH OBJECTS - (NEOS) AT MCDONALD OBSERVATORY
 01/22/2001 - 01/31/2003 FY02: \$99,700 Total: \$199,100
Prin. Invest.: E BARKER
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10195 **UNIV OF TEXAS - AUSTIN** **8939**
 GENERAL RELATIVISTIC & GRAVITATIONAL PHYSICS PARAMETERS FROM LUNAR LASER RANGING DATA
 12/28/2000 - 12/31/2003 FY02: \$50,000 Total: \$100,000
Prin. Invest.: P J SHELUS
Tech. Officer: GSFC/M SALOMON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10435 **UNIV OF TEXAS - AUSTIN** **8940**
 GROUND BASED STUDIES OF THE OUTER PLANETS
 02/20/2001 - 02/28/2004 FY02: \$131,082 Total: \$261,682
Prin. Invest.: L TRAFTON
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 10458 **UNIV OF TEXAS - AUSTIN** **8941**
 INFRARED SPECTRAL SURVEY OF YOUNG STELLAR/PLANETARY SYSTEMS WITH SUB-AU SPATIAL RESOLUTION
 02/26/2001 - 02/28/2003 FY02: \$345,000 Total: \$380,000
Prin. Invest.: P HARVEY
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10488 **UNIV OF TEXAS - AUSTIN** **8942**
 FROM MOLECULAR CLOUD CORE TO PROTOPLANETARY DISK: TRACING THE MASS
 02/27/2001 - 02/28/2004 FY02: \$60,000 Total: \$120,000
Prin. Invest.: N J EVANS, II
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10766 **UNIV OF TEXAS - AUSTIN** **8943**
 JETS FROM NEUTRON STARS (ATP-2000)
 04/23/2001 - 04/30/2004 FY02: \$55,250 Total: \$109,150
Prin. Invest.: J WHEELER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10767	UNIV OF TEXAS - AUSTIN	8944	NAG 5 11949	UNIV OF TEXAS - AUSTIN	8953
SUPPLEMENT FOR THEORY POSTDOC (ATP-2000)			ATTITUDE DETERMINATION USING NONALINGED GPS ATENNAS		
05/03/2001 - 04/30/2004	FY02: \$17,231	Total: \$33,231	03/28/2002 - 03/31/2003	FY02: \$45,000	Total: \$45,000
<i>Prin. Invest.:</i> J WHEELER			<i>Prin. Invest.:</i> G LIGHTSEY		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/R CARPENTER		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 41 – AERONAUTICAL ENGR		
NAG 5 10825	UNIV OF TEXAS - AUSTIN	8945	NAG 5 11991	UNIV OF TEXAS - AUSTIN	8954
REIONIZATION OF THE UNIVERSE (ATP - 2000)			MODELING PARTICULATES IN IONIAN VOLCANIC PLUMES		
05/01/2001 - 05/14/2004	FY02: \$111,390	Total: \$222,780	04/11/2002 - 04/14/2005	FY02: \$101,503	Total: \$101,503
<i>Prin. Invest.:</i> P R SHAPIRO			<i>Prin. Invest.:</i> D GOLDSTEIN		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/J HILLMAN		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 10826	UNIV OF TEXAS - AUSTIN	8946	NAG 5 12299	UNIV OF TEXAS - AUSTIN	8955
FORMATION OF STAR CLUSTERS (ATP - 2000)			P-MODES, GRAVITY WAVES, ROTATION AND THE SOLAR CYC LE		
05/01/2001 - 05/14/2003	FY02: \$0	Total: \$79,332	06/19/2002 - 06/30/2003	FY02: \$15,000	Total: \$15,000
<i>Prin. Invest.:</i> H MARTEL			<i>Prin. Invest.:</i> P KUMAR		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/W J WAGNER		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11203	UNIV OF TEXAS - AUSTIN	8947	NAG 5 12322	UNIV OF TEXAS - AUSTIN	8956
SATELLITE LASER RANGING DATA ANALYSIS AND QUALITY CONTROL			ACCRETION DISK VISCOSITY (FUSE 2001)		
08/09/2001 - 08/14/2004	FY02: \$147,838	Total: \$197,838	08/07/2002 - 08/14/2003	FY02: \$10,567	Total: \$10,567
<i>Prin. Invest.:</i> R J EANES			<i>Prin. Invest.:</i> E L ROBINSON		
<i>Tech. Officer:</i> GSFC/D L CARTER			<i>Tech. Officer:</i> GSFC/G SONNEBORN		
<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 11278	UNIV OF TEXAS - AUSTIN	8948	NAG 8 1764	UNIV OF TEXAS - AUSTIN	8957
DECENTRALIZED CONTROL FOR SATELLITES			SEARCH FOR TIME REVERALS SYMETRY VIOLATION WITH LASER-COOLED ATOMS		
08/21/2001 - 08/31/2003	FY02: \$61,509	Total: \$148,344	05/01/2001 - 04/30/2005	FY02: \$90,000	Total: \$170,000
<i>Prin. Invest.:</i> E LIGHTSEY			<i>Prin. Invest.:</i> D J HEINZMAN		
<i>Tech. Officer:</i> GSFC/J R CARPENTER			<i>Tech. Officer:</i> MSFC/D HUBBARD		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER		
NAG 5 11464	UNIV OF TEXAS - AUSTIN	8949	NAG 9 994	UNIV OF TEXAS - AUSTIN	8958
GENERAL RELATIVISTIC AND GRAVITATIONAL PHYSICS PAR AMETERS FROM LUNAR LASER RANGING DATA			1998 NASA REDUCED GRAVITY STUDENT FLIGHT OPS		
12/10/2001 - 12/31/2004	FY02: \$53,000	Total: \$53,000	02/23/1998 - 01/31/2001	FY02: \$0	Total: \$606,263
<i>Prin. Invest.:</i> P SHELUS			<i>Prin. Invest.:</i> B D TAPLEY, B O FORT		
<i>Tech. Officer:</i> GSFC/M SALAMON			<i>Tech. Officer:</i> JSC/D G SICKOREZ, JSC/N G ROBERTSON		
<i>CASE Category:</i> 13 – PHYSICS			<i>CASE Category:</i> 19 – PHYSICAL SCIENCE, OTHER		
NAG 5 11597	UNIV OF TEXAS - AUSTIN	8950	NAG 9 1060	UNIV OF TEXAS - AUSTIN	8959
NEBULAR UV ABSORPTION LINES IN PLANETARY NEBULAE - FUSE CYCLE 2.			NASA STUDENT COMPETITION		
01/17/2002 - 03/14/2003	FY02: \$80,900	Total: \$80,900	12/14/1998 - 10/31/2002	FY02: \$71,000	Total: \$232,029
<i>Prin. Invest.:</i> H L DINERSTEIN			<i>Prin. Invest.:</i> B D TAPLEY		
<i>Tech. Officer:</i> GSFC/G SONNEBORN			<i>Tech. Officer:</i> JSC/H C MANDELL		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 5 11619	UNIV OF TEXAS - AUSTIN	8951	NAG 9 1187	UNIV OF TEXAS - AUSTIN	8960
DEEP MOONQUAKES ON THE FAR HEMISPHERE OF THE MOON			INTERNATIONAL SPACE STATION GPS RECEIVER SUPPORT		
01/22/2002 - 01/31/2004	FY02: \$66,000	Total: \$66,000	02/02/2000 - 01/31/2003	FY02: \$55,000	Total: \$252,271
<i>Prin. Invest.:</i> Y NAKAMURA			<i>Prin. Invest.:</i> G E LIGHTSEY		
<i>Tech. Officer:</i> GSFC/D SENSKE			<i>Tech. Officer:</i> JSC/G C BLACKBURN, JSC/J M COX		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 42 – ASTRONAUTICAL ENGR		
NAG 5 11636	UNIV OF TEXAS - AUSTIN	8952	NAG 9 1189	UNIV OF TEXAS - AUSTIN	8961
"WATER MASS VARIABILITY IN THE EARTH SYSTEM"			NAVIGATION SYSTEMS AND TECHNOLOGY LAB		
01/18/2002 - 01/14/2005	FY02: \$100,000	Total: \$100,000	01/28/2000 - 12/31/2003	FY02: \$78,225	Total: \$276,602
<i>Prin. Invest.:</i> D P CHAMBERS			<i>Prin. Invest.:</i> G LIGHTSEY		
<i>Tech. Officer:</i> GSFC/P R HOUSER			<i>Tech. Officer:</i> JSC/J W BELL		
<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER			<i>CASE Category:</i> 42 – ASTRONAUTICAL ENGR		

TEXAS

NASA'S UNIVERSITY PROGRAM

NAG 9 1213 UNIV OF TEXAS - AUSTIN 8962
 ANALYSIS AND MEASUREMENT OF THERMAL INSULATION PROPERTIES OF
 EVAC HOLLOW FIBERS
 03/01/2000 - 05/31/2001 FY02: \$0 Total: \$37,718
Prin. Invest.: H L PAUL, K R DILLER
Tech. Officer: JSC/L A TREVINO
CASE Category: 46 – MECHANICAL ENGR

NAG 9 1225 UNIV OF TEXAS - AUSTIN 8963
 MARS PRECISION LANDING TASK
 04/13/2000 - 09/30/2002 FY02: \$208,500 Total: \$456,003
Prin. Invest.: R BISHOP
Tech. Officer: JSC/E M BRADEN
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1244 UNIV OF TEXAS - AUSTIN 8964
 HYBRID PARTICLE ELEMENT SIMULATION OF IMPACT ON COMPOSITE
 ORBITAL DEBRIS SHIELDS
 07/11/2000 - 09/30/2003 FY02: \$25,000 Total: \$148,539
Prin. Invest.: E P FAHRENTHOLD
Tech. Officer: JSC/E L CHRISTIANSEN, JSC/J H KERR
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1275 UNIV OF TEXAS - AUSTIN 8965
 CULTURAL AND PERSONALITY DETERMINANTS OF PERFORMANCE AND
 ERROR MANAGEMENT
 02/22/2001 - 01/31/2003 FY02: \$137,702 Total: \$275,250
Prin. Invest.: R L HELMREICH
Tech. Officer: JSC/C LLOYD
CASE Category: 56 – MEDICAL

NAG 9 1286 UNIV OF TEXAS - AUSTIN 8966
 NASA REDUCED GRAVITY STUDENT FLIGHT CAMPAIGN 2001
 03/05/2001 - 12/31/2001 FY02: \$0 Total: \$405,444
Prin. Invest.: B D TAPLEY
Tech. Officer: JSC/D SICKOREZ
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 9 1323 UNIV OF TEXAS - AUSTIN 8967
 LOW THRUST CAPTURE INVESTIGATION
 06/13/2001 - 10/31/2001 FY02: \$0 Total: \$20,000
Prin. Invest.: R BISHOP
Tech. Officer: JSC/T CRANE
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 9 1437 UNIV OF TEXAS - AUSTIN 8968
 SPACE LAUNCH INITIATIVE ADAPTIVE NAVIGATION ARCHITECTURE
 07/22/2002 - 10/21/2006 FY02: \$20,000 Total: \$20,000
Prin. Invest.: R H BISHOP
Tech. Officer: JSC/T CRAIG
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1441 UNIV OF TEXAS - AUSTIN 8969
 ADVANCED MULTI-BODY/MULTI-SPACECRAFT TRAJECTORY OPTIMIZATION
 SYSTEM
 07/25/2002 - 07/24/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: C OCAMPO
Tech. Officer: JSC/G L CONDON
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG10 202 UNIV OF TEXAS - AUSTIN 8970
 EARLY DEVELOPMENT OF FERN GAMETOPHYTES IN MICROSCAVITY
 10/16/1996 - 12/31/2000 FY02: \$0 Total: \$400,625
Prin. Invest.: S J POUX
Tech. Officer: KSC/W M KNOTT
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG10 288 UNIV OF TEXAS - AUSTIN 8971
 MAG-LEV LAUNCH ASSIST TECHNOLOGY DEMONSTRATOR MAG-LEV
 LAUNCH ASSIST TECHNOLOGY DEMONSTRATOR
 07/17/2000 - 03/31/2001 FY02: -\$58 Total: \$94,940
Prin. Invest.: R ZOWARKA
Tech. Officer: KSC/F ADAMS
CASE Category: 45 – ELECTRICAL ENGR

NAG10 295 UNIV OF TEXAS - AUSTIN 8972
 EARLY DEVELOPMENT OF FERN GAMETOPHYTES IN MICROGRAVITY
 02/05/2001 - 04/30/2005 FY02: \$78,500 Total: \$108,500
Prin. Invest.: D ROUX
Tech. Officer: KSC/D SCHULTZ
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG13 02049 UNIV OF TEXAS - AUSTIN 8973
 RESEARCH ENTITLED "MID-AMERICAN GEOSPATIAL INFORMATION SYS-
 TEM"
 07/25/2002 - 09/30/2003 FY02: \$2,126,240 Total: \$2,126,240
Prin. Invest.: B TAPLEY
Tech. Officer: SSC/B DAVIS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAS 3 00119 UNIV OF TEXAS - AUSTIN 8974
 FLYWHEEL ROTOR HEALTH MONITORING RESEARCH & DEVELOPMENT
 04/26/2000 - 04/25/2003 FY02: \$25,000 Total: \$140,000
Prin. Invest.: J BENO
Tech. Officer: GRC/K MCLALLIN
CASE Category: 49 – ENGINEERING, OTHER

NAS 3 00135 UNIV OF TEXAS - AUSTIN 8975
 DC-DC HIGH VOLTAGE CONVERTER TECHNOLOGY DEMONSTRATION
 05/25/2000 - 11/24/2000 FY02: \$0 Total: \$168,618
Prin. Invest.: W A WALLS
Tech. Officer: GRC/P GEORGE
CASE Category: 49 – ENGINEERING, OTHER

NAS 3 01133 UNIV OF TEXAS - AUSTIN 8976
 FLYWHEEL ARBOR DEVELOPMENT
 05/30/2001 - 05/29/2003 FY02: \$255,700 Total: \$612,700
Prin. Invest.: R H BENO, R C THOMPSON
Tech. Officer: GRC/K L MCLALLIN
CASE Category: 46 – MECHANICAL ENGR

NAS 3 99169 UNIV OF TEXAS - AUSTIN 8977
 FLYWHEEL ROTOR HUB AND RIM HARDWARE FOR THE ACESE FOR ISS
 07/08/1999 - 12/31/2002 FY02: \$228,000 Total: \$3,884,324
Prin. Invest.: J H BENO, R C THOMPSON
Tech. Officer: JSC/K KONNO
CASE Category: 46 – MECHANICAL ENGR

NAS 5 01096 UNIV OF TEXAS - AUSTIN 8978
 MCDONALD LASER RANGING STATION SUPPORT SERVICES
 03/01/2001 - 02/28/2004 FY02: \$435,000 Total: \$742,000
Prin. Invest.: P J SHELUS
Tech. Officer: GSFC/D L CARTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 32997 **UNIV OF TEXAS - AUSTIN** **8979**
 OPERATION, MAINTENANCE AND ENGINEERING DEVELOPMENT OF THE
 UNIV OF TX LASER RANGING STATION
 04/17/1996 - 02/28/2001 FY02: \$0 Total: \$2,258,846
Prin. Invest.: P J SHELUS, R RICKLETS, J WIANT
Tech. Officer: GSFC/J MCGARRY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 5 97213 **UNIV OF TEXAS - AUSTIN** **8980**
 GRAVITY RECOVERY AND CLIMATE EXPERIMENT (GRACE)
 08/12/1997 - 06/12/2006 FY02: \$2,571,000 Total: \$8,857,000
Prin. Invest.: B TAPLEY
Tech. Officer: GSFC/R FITZGERALD
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 99005 **UNIV OF TEXAS - AUSTIN** **8981**
 GLAS SCIENCE TEAM LEADER.
 11/25/1998 - 12/01/2002 FY02: \$1,155,530 Total: \$4,660,530
Prin. Invest.: R SCHUTZ
Tech. Officer: GSFC/G SMITH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5482 **UNIV OF TEXAS - AUSTIN** **8982**
 DESIGN AND CONTROL OF LARGE COLLECTIONS OF LEARNIN G AGENTS
 02/19/2002 - 02/14/2003 FY02: \$31,320 Total: \$31,320
Prin. Invest.: J GHOSH
Tech. Officer: ARC/K TUMER
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 677 **UNIV OF TEXAS - AUSTIN** **8983**
 INVESTIGATION OF STRAIN/VORTICITY AND LARGE-SCALE FLOW STRUC-
 TURE IN TURBULENT NONPREMIXED JET FLAMES
 02/26/1999 - 01/13/2003 FY02: \$62,125 Total: \$354,822
Prin. Invest.: N T CLEMENS
Tech. Officer: GRC/K SACKSTEDER
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 463 **UNIV OF TEXAS - AUSTIN** **8984**
 EVALUATION AND VALIDATION OF E0-1 AND LANDSAT 7 IMAGERY
 THROUGH AN ANALYSIS OF LAND COVER/LAND USE
 02/29/2000 - 12/31/2002 FY02: \$84,513 Total: \$290,763
Prin. Invest.: W A WHITE
Tech. Officer: GSFC/S G UNGAR
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 1 52147 **UNIV OF TEXAS - AUSTIN** **8985**
 GRADUATE STUDENT RESEARCH PROGRAM (GSRP)
 07/26/1996 - 12/31/2001 FY02: -\$1 Total: \$110,000
Prin. Invest.: W T FOWLER
Tech. Officer: LARC/T A TOLAY
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 72 **UNIV OF TEXAS - AUSTIN** **8986**
 GSRP TRAINING GRANT - PAUL THOMPSON - MASS DISTRIB UTION IN THE
 EARTH'S SYSTEMS: SPACE GEODETIC MEA
 06/04/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: B D TAPLEY
Tech. Officer: GSFC/G S SOFFEN
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 130 **UNIV OF TEXAS - AUSTIN** **8987**
 SOLVING THE INITIAL VALUE PROBLEM FOR TWO BLACK HO LES. STU-
 DENT: ERIN BONNING
 06/06/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R MATZNER
Tech. Officer: GSFC/M S BURREL
CASE Category: 13 – PHYSICS

NGT 5 136 **UNIV OF TEXAS - AUSTIN** **8988**
 SYNTHESIS OF ATTITUDE DETERMINATION ALGORITHMS ON A PIVOT GPS
 RECEIVER STUDENT: JARED MADSEN
 06/13/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: G LIGHTSEY
Tech. Officer: GSFC/M S BURRELL
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 137 **UNIV OF TEXAS - AUSTIN** **8989**
 INFRARED IMMERSION GRATINGS AND GRISMS FOR IR SPEC TROSCOPY
 AND A SPECTROSCOPIC STUDY OF PR
 06/13/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: D T JAFFE
Tech. Officer: GSFC/M S BURRELL
CASE Category: 11 – ASTRONOMY

NGT 5 139 **UNIV OF TEXAS - AUSTIN** **8990**
 PARALLEL FINITE ELEMENT COMPUTATIONAL TECHNIQUES & AMR FOR
 MICROGRAVITY FLUID FLOW SIMULATION PROBLE
 07/02/2002 - 08/14/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: G F CAREY
Tech. Officer: GSFC/M S BURRELL
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 141 **UNIV OF TEXAS - AUSTIN** **8991**
 TRAJECTORY OPTIMIZATION IN TRANSLATING, ROTATING, AND OSCILLAT-
 ING REFER-ENCE FRAMES WITH APPLICATION
 07/18/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C OCAMPO
Tech. Officer: GSFC/M S BURRELL
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30162 **UNIV OF TEXAS - AUSTIN** **8992**
 ESTIMATING CHANGES IN CONTINENTAL WATER STORAGE FR OM SATEL-
 LITE OBSERVA- TIONS OF THETIME DEPENDENT
 08/31/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: J S FAMIGLIETTI, ROD
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30447 **UNIV OF TEXAS - AUSTIN** **8993**
 ESTIMATING WATER CONTENT VARIATIONS, ERROR ANALYSI S, AND
 VALIDATION OF GRACE (STUDENT: KI-WEON SE
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C WILSON
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30468 **UNIV OF TEXAS - AUSTIN** **8994**
 THE TREATMENT OF ALIASING ERROR IN THE ESTIMATION OF THE
 EARTH'S GRAVITYFIELD - STUDENT NAME: BRIAN
 08/21/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: B TAPLEY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40083 **UNIV OF TEXAS - AUSTIN** **8995**
 TEXAS SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$475,000 Total: \$979,600
Prin. Invest.: B TAPLEY
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50239 **UNIV OF TEXAS - AUSTIN** **8996**
 IMPROVED ESTIMATION OF SURFACE TOPOGRAPHY & VEGETATION
 STRUCTURE BY COMBINING INTERFEROMETRIC SAR
 06/03/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: M CRAWFORD
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50301 **UNIV OF TEXAS - AUSTIN** **8997**
 GALAXY EVOLUTION AT REDSHIFTS OF Z=1-2
 06/29/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: G J HILL
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50361 **UNIV OF TEXAS - AUSTIN** **8998**
 AUTONOMOUS RENDEZVOUS BETWEEN MULTIPLE SPACECRAFT IN A
 CENTRAL BODY GRAVITY FIELD WITH DETAILED SENS
 05/31/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C OCAMPO
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50371 **UNIV OF TEXAS - AUSTIN** **8999**
 RNAI ANALYSIS OF GRAVITY SIGNAL TRANSDUCTION IN CERATOPERIS
 RICHARDII
 06/13/2001 - 07/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: S ROUX
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50401 **UNIV OF TEXAS - AUSTIN** **9000**
 PROBING THE PHYSICAL CONDITIONS OF STAR FORMATION
 06/13/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: N EVANS
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 20 **UNIV OF TEXAS - AUSTIN** **9001**
 TRAINING GRANT
 07/08/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R H BISHOP
Tech. Officer: JSC/D J PEARSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4465 **UNIV OF TEXAS - DALLAS** **9002**
 THE SPATIAL DISTRIBUTION OF IONOSPHERIC PLASMA AND HIGH LATI-
 TITUDES
 05/27/1997 - 04/30/2001 FY02: \$0 Total: \$282,115
Prin. Invest.: D A HEELIS
Tech. Officer: GSFC/M M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 5257 **UNIV OF TEXAS - DALLAS** **9003**
 A SEQUENTIAL ROCKET INVESTIGATION OF WINDS AND PLASMA LAYERS
 IN THE NIGHTTIME E-REGION
 02/28/2000 - 02/21/2003 FY02: \$59,966 Total: \$788,053
Prin. Invest.: G D EARLE
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 9297 **UNIV OF TEXAS - DALLAS** **9004**
 A WEB-BASED DISTRIBUTION OF IONOSPHERIC THERMAL PLASMA DATA
 FROM THE DMSP SPACECRAFT
 04/17/2000 - 04/30/2003 FY02: \$80,000 Total: \$235,000
Prin. Invest.: M HAIRSTON
Tech. Officer: GSFC/P HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9476 **UNIV OF TEXAS - DALLAS** **9005**
 TURBO CODES & THEIR APPLICATION IN MOBILE SYSTEMS
 04/24/2000 - 04/30/2002 FY02: \$0 Total: \$99,999
Prin. Invest.: J P FONSEKA
Tech. Officer: GSFC/P H YEH
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10271 **UNIV OF TEXAS - DALLAS** **9006**
 A MODEL OF IONOSPHERIC VELOCITY STRUCTURE IN THE HIGH LATI-
 TITUDE F-REGION
 01/08/2001 - 01/31/2004 FY02: \$67,435 Total: \$132,337
Prin. Invest.: R HEELIS
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10335 **UNIV OF TEXAS - DALLAS** **9007**
 DEVELOPMENT OF A RAM WIND SENSOR FOR PLANETARY THERMO-
 SPHERIC STUDIES-PROPOSAL #273
 02/06/2001 - 01/31/2004 FY02: \$352,912 Total: \$682,892
Prin. Invest.: G D EARLE
Tech. Officer: GSFC/C STAHL
CASE Category: 13 – PHYSICS

NAS 5 01068 **UNIV OF TEXAS - DALLAS** **9008**
 THE COUPLED ION-NEUTRAL DYNAMICS INVESTIGATION.
 12/13/2000 - 12/31/2005 FY02: \$3,751,859 Total: \$5,026,859
Prin. Invest.: R A HEELIS
Tech. Officer: GSFC/J BYRD
CASE Category: 11 – ASTRONOMY

NGT 5 50354 **UNIV OF TEXAS - DALLAS** **9009**
 LOW-LATITUDE IONOSPHERIC PLASMA DEPLETION: STRUCTURE AND DY-
 NAMICS
 05/11/2001 - 05/14/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R A HEELIS
Tech. Officer: GSFC/M E MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1138 **UNIV OF TEXAS - EL PASO** **9010**
 VERIFICATION OF NASA MISSION-CRITICAL SOFTWARE WITHOUT SACRI-
 FICING PERFORMANCE
 07/14/1997 - 06/30/2001 FY02: -\$1,170 Total: \$198,717
Prin. Invest.: P J TELLER
Tech. Officer: ARC/LOWRY
CASE Category: 45 – ELECTRICAL ENGR

NAG 3 2303	UNIV OF TEXAS - EL PASO	9011	NAG 8 1645	UNIV OF TEXAS - EL PASO	9019
THIN-FILM SOLAR CELLS FOR SPACE APPLICATION	THIN-FILM SOLAR CELLS FOR SPACE APPLICATION		INVESTIGATION OF FRICTION STIR WELDING		
11/23/1999 - 10/28/2002	FY02: \$0	Total: \$399,394	09/30/1999 - 09/30/2003	FY02: \$0	Total: \$200,000
<i>Prin. Invest.:</i> G B LUSH			<i>Prin. Invest.:</i> J C MCCLURE		
<i>Tech. Officer:</i> GRC/A HEPP			<i>Tech. Officer:</i> MSFC/A BEAM, MSFC/W LOVE		
<i>CASE Category:</i> 45 - ELECTRICAL ENGR			<i>CASE Category:</i> 47 - METAL & MATERIALS ENGR		
NAG 3 2773	UNIV OF TEXAS - EL PASO	9012	NAG 9 1099	UNIV OF TEXAS - EL PASO	9020
DEVELOPMENT OF CONTROL STRATEGIES FOR MICROTHRUSTER PROPELLANT FLOW			DATA FUSION METHODOLOGISTS FOR DAMAGE MONITORING OF AEROSPACE STRUCTURES		
04/24/2002 - 05/30/2003	FY02: \$10,000	Total: \$10,000	05/15/1999 - 05/08/2003	FY02: \$0	Total: \$155,189
<i>Prin. Invest.:</i> D KYPUROS			<i>Prin. Invest.:</i> C FERREGUT		
<i>Tech. Officer:</i> GRC/B REED			<i>Tech. Officer:</i> JSC/A R ROCHA		
<i>CASE Category:</i> 43 - CHEMICAL ENGR			<i>CASE Category:</i> 41 - AERONAUTICAL ENGR		
NAG 4 150	UNIV OF TEXAS - EL PASO	9013	NAG 9 1100	UNIV OF TEXAS - EL PASO	9021
(FAR) AN IMAGING FRAMEWORK FOR AERODYNAMIC, FLUID MECHANIC, AND HEAT TRANSFER SCIENTIFIC-GRADE			FUNDAMENTAL STUDIES OF CRATERING PHENOMENA		
03/03/1998 - 02/27/2001	FY02: -\$367	Total: \$293,810	05/21/1999 - 12/31/2002	FY02: \$0	Total: \$155,773
<i>Prin. Invest.:</i> R WICKER			<i>Prin. Invest.:</i> L E MURR		
<i>Tech. Officer:</i> DFRC/J BRADEN, DFRC/K K GUPTA			<i>Tech. Officer:</i> JSC/F HORZ		
<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 59 - LIFE SCIENCE, OTHER		
NAG 5 8882	UNIV OF TEXAS - EL PASO	9014	NAG 9 1171	UNIV OF TEXAS - EL PASO	9022
SCIENCE EDUCATIONAL INSTRUCTIONAL MATERIALS FOR ISTP/SOLARMAX			EXPERIMENTS FOR THE GRANTS AND COOP AGREEMENT HANDBOOKS		
11/30/1999 - 01/14/2002	FY02: \$0	Total: \$53,228	09/28/1999 - 05/31/2003	FY02: \$0	Total: \$199,339
<i>Prin. Invest.:</i> R E LOPEZ			<i>Prin. Invest.:</i> L E MURR		
<i>Tech. Officer:</i> GSFC/M H ACUNA			<i>Tech. Officer:</i> JSC/L ARMENDARIZ		
<i>CASE Category:</i> 13 - PHYSICS			<i>CASE Category:</i> 47 - METAL & MATERIALS ENGR		
NAG 5 9213	UNIV OF TEXAS - EL PASO	9015	NAG10 225	UNIV OF TEXAS - EL PASO	9023
PROBING NEUTRINO-INDUCED NUCLEOSYNTHESIS FROM THE ABUNDANCES OF FLUORINEBORON, LITHIUM, & OXYGEN			CONTINUOUS HAZARD TRACKING & FAILURE ANALYSIS METHODOLOGY		
03/23/2000 - 03/31/2004	FY02: \$89,610	Total: \$270,535	09/17/1997 - 09/30/2002	FY02: \$0	Total: \$298,983
<i>Prin. Invest.:</i> V E SMITH			<i>Prin. Invest.:</i> R QUINTANA		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> KSC/B DELIWALA		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER		
NAG 5 9542	UNIV OF TEXAS - EL PASO	9016	NAG10 287	UNIV OF TEXAS - EL PASO	9024
REMOTE SENSING SPECTRAL IDENTIFICATION OF FRESHWATER PLANKTON			NONPARAMETRIC INFERENCE UNDER ORDER CONSTRAINTS FOR COMPLETE AND CENSORED DATA: MATERIALS SCIENCE		
05/09/2000 - 05/14/2003	FY02: \$99,672	Total: \$299,521	06/28/2000 - 06/27/2003	FY02: \$92,948	Total: \$273,037
<i>Prin. Invest.:</i> D SCHULZ-MAKUCH			<i>Prin. Invest.:</i> D ROJO		
<i>Tech. Officer:</i> GSFC/D MENCHAN			<i>Tech. Officer:</i> KSC/R LEE		
<i>CASE Category:</i> 32 - GEOLOGICAL SCIENCE			<i>CASE Category:</i> 21 - MATHEMATICS		
NAG 5 10151	UNIV OF TEXAS - EL PASO	9017	NCC 2 5441	UNIV OF TEXAS - EL PASO	9025
CONNECTING SUN CITY WITH SUN-EARTH CONNECTIONS			SCIENCE OPPORTUNITY PLANNING FOR THE CASSINI SATURN MISSION		
01/03/2001 - 12/31/2003	FY02: \$223,996	Total: \$447,986	06/26/2001 - 05/31/2003	FY02: \$16,776	Total: \$24,616
<i>Prin. Invest.:</i> R LOPEZ			<i>Prin. Invest.:</i> S M ROACH		
<i>Tech. Officer:</i> GSFC/P SAKIMOTO			<i>Tech. Officer:</i> ARC/J N CUZZI		
<i>CASE Category:</i> 11 - ASTRONOMY			<i>CASE Category:</i> 11 - ASTRONOMY		
NAG 5 10507	UNIV OF TEXAS - EL PASO	9018	NCC 5 97	UNIV OF TEXAS - EL PASO	9026
STUDIES OF SOLAR WIND-MAGNETOSPHERE COUPLING THRU DETAILED COMPARISON OF OBSERVATIONS & RESULTS			THE UNIV OF TEXAS AT EL PASO NETWORK RESOURCES AND TRAINING SITES		
03/01/2001 - 02/28/2004	FY02: \$90,406	Total: \$186,322	08/15/1995 - 08/14/2001	FY02: \$0	Total: \$2,623,999
<i>Prin. Invest.:</i> R LOPEZ			<i>Prin. Invest.:</i> M KOLITSKY		
<i>Tech. Officer:</i> GSFC/J SPANN			<i>Tech. Officer:</i> GSFC/J BENNETT		
<i>CASE Category:</i> 32 - GEOLOGICAL SCIENCE			<i>CASE Category:</i> 22 - COMPUTER SCIENCE		
NCC 5 468	UNIV OF TEXAS - EL PASO	9027	NCC 5 468	UNIV OF TEXAS - EL PASO	9027
CERTIFICATION OF MATHEMATICS AND SCIENCE TEACHERS			CERTIFICATION OF MATHEMATICS AND SCIENCE TEACHERS		
03/07/2000 - 03/14/2003	FY02: \$177,312	Total: \$554,469	03/07/2000 - 03/14/2003	FY02: \$177,312	Total: \$554,469
<i>Prin. Invest.:</i> S BLAKE			<i>Prin. Invest.:</i> S BLAKE		
<i>Tech. Officer:</i> GSFC/C HOLLINGSWORTH			<i>Tech. Officer:</i> GSFC/C HOLLINGSWORTH		
<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 99 - MULTI INTERDISCIPL, OTHER		

TEXAS

NASA'S UNIVERSITY PROGRAM

NCC 5 498 UNIV OF TEXAS - EL PASO 9028
 PAN AMERICAN CENTER FOR EARTH AND ENVIRONMENTAL STUDIES
 05/01/2000 - 06/30/2005 FY02: \$2,400,000 Total: \$3,400,000
Prin. Invest.: S STARKS
Tech. Officer: GSFC/J LAMBRECQUE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 535 UNIV OF TEXAS - EL PASO 9029
 PROPELLING SCIENCE CONTENT INTO THE NEW MILLENNIUM /MUSPIN
 NRTS PROGRAM.
 02/01/2001 - 01/31/2004 FY02: \$350,000 Total: \$700,000
Prin. Invest.: H L SCHULTE
Tech. Officer: GSFC/J HARRINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 655 UNIV OF TEXAS - EL PASO 9030
 DISSEMINATION OF NASA NRTS IMPACTS AT UTEP
 09/24/2002 - 09/14/2003 FY02: \$35,000 Total: \$35,000
Prin. Invest.: H SCHULTE
Tech. Officer: GSFC/J L HARRINGTON
CASE Category: 22 – COMPUTER SCIENCE

NAG 9 1054 UNIV OF TEXAS AT BROWNSVILLE 9031
 PRE MATH, SCIENCE, ENGINEERING & TECH SPT PROGRAM
 09/18/1998 - 08/31/2001 FY02: \$0 Total: \$75,578
Prin. Invest.: O RIVAS
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1064 UNIV OF TEXAS AT BROWNSVILLE 9032
 NRA PACE/MSET BLAST-OFF TO AN ENGINEERING CAREER
 01/07/1999 - 01/01/2003 FY02: \$0 Total: \$300,000
Prin. Invest.: W WELLS
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1304 UNIV OF TEXAS AT BROWNSVILLE 9033
 PRE MATH SCIENCE ENGINEERING & TECH SPT (MSET)
 05/18/2001 - 08/26/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: A RIVAS
Tech. Officer: JSC/L ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1391 UNIV OF TEXAS AT BROWNSVILLE 9034
 HISPANIC EDUCATION PROGRAM
 12/06/2001 - 12/05/2002 FY02: \$100,000 Total: \$100,000
Prin. Invest.: L V LOF
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1406 UNIV OF TEXAS AT BROWNSVILLE 9035
 PREMATH, SCIENCE, ENGINEERING & TECH SPT PROGRAM
 06/20/2002 - 06/19/2005 FY02: \$25,000 Total: \$25,000
Prin. Invest.: H SILVA
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 438 UNIV OF TEXAS AT BROWNSVILLE 9036
 C+P=M2T: SOUTH TEXAS MASTER MATHEMATICS TEACHER PREPARATION
 PROGRAMS
 03/03/2000 - 02/28/2003 FY02: \$199,077 Total: \$430,926
Prin. Invest.: J TELESE
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1383 UNIV OF TEXAS AT SAN ANTONIO 9037
 PARALLEL AERODYNAMICS SIMULATION IN DISTRIBUTED ENVIRONMENTS
 09/14/1999 - 08/31/2002 FY02: \$0 Total: \$194,961
Prin. Invest.: A T CHRONPOULOS
Tech. Officer: ARC/B J COLLINS, ARC/G S LEE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 6040 UNIV OF TEXAS AT SAN ANTONIO 9038
 CHANGING THE PARADIGM; PREPARING STUDENTS FOR THE COMPUTING
 PROFESSION IN THE 21ST CENTURY
 12/15/1999 - 02/28/2003 FY02: \$0 Total: \$190,713
Prin. Invest.: R F SINCOVEC
Tech. Officer: ARC/M J LEON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2297 UNIV OF TEXAS AT SAN ANTONIO 9039
 PARTNERSHIP IN PROBABILISTIC STRUCTURAL ANALYSIS METHODS
 10/05/1999 - 08/31/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: R D MANTEUFEL
Tech. Officer: GRC/C CHAMIS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2671 UNIV OF TEXAS AT SAN ANTONIO 9040
 THE DEVELOPMENT OF A DISLOCATION PATTERNING BASED SET OF
 RATE-DEPENDENT EVOLUTION LAWS FOR CREEP AND
 12/06/2001 - 01/15/2005 FY02: \$30,950 Total: \$30,950
Prin. Invest.: D L BAGLEY
Tech. Officer: GRC/S RAJ
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 11741 UNIV OF TEXAS AT SAN ANTONIO 9041
 PROYECTO ACCESS
 02/13/2002 - 02/28/2003 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: M P BERRIOZABAL
Tech. Officer: GSFC/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1720 UNIV OF TEXAS AT SAN ANTONIO 9042
 LATIN HYPERCUBE SAMPLING IN RELIABILITY ANALYSIS
 06/07/2000 - 06/06/2003 FY02: \$92,488 Total: \$284,590
Prin. Invest.: R MANTUEFEL
Tech. Officer: MSFC/F SAFIE
CASE Category: 49 – ENGINEERING, OTHER

NAG 9 1301 UNIV OF TEXAS AT SAN ANTONIO 9043
 TEXAS PREFRESHMAN ENGINEERING (TEXPREP) 2001
 05/08/2001 - 08/28/2002 FY02: \$0 Total: \$198,000
Prin. Invest.: M P BERRIOZABAL
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 21 – MATHEMATICS

NAG 9 1403 UNIV OF TEXAS AT SAN ANTONIO 9044
 TEXAS PREFRESHMAN ENGINEERING PROGRAM
 05/30/2002 - 05/31/2003 FY02: \$198,000 Total: \$198,000
Prin. Invest.: M P BERRIOZABAL
Tech. Officer: JSC/L M ARMENDARIZ
CASE Category: 21 – MATHEMATICS

NAG 9 1382 UNIV OF TEXAS AT TYLER 9045
 CFD ANALYSIS OF LASER-ABLATION CARBON NANOTUBE PRODUCTION
 09/17/2001 - 08/31/2002 FY02: \$0 Total: \$15,000
Prin. Invest.: R B GREENDYKE
Tech. Officer: JSC/C D SCOTT
CASE Category: 46 – MECHANICAL ENGR

NCC 5 465 **UNIV OF THE INCARNATE WORD** **9046**
 INTEGRATING MATH AND SCIENCE FOR PRE-SERVICE & IN- SERVICE
 PARTNERSHIPS
 03/08/2000 - 02/28/2003 FY02: \$170,541 Total: \$450,721
Prin. Invest.: J BEAUFORD
Tech. Officer: GSFC/B WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

UTAH

NAG 4 215 **BRIGHAM YOUNG UNIV** **9047**
 ROBUST COMMAND LINKS FOR FLIGHT TERMINATION ROBUST COMMAND
 LINKS FOR FLIGHT TERMINATION
 10/30/2000 - 07/31/2002 FY02: \$0 Total: \$72,034
Prin. Invest.: M D RICE
Tech. Officer: DFRC/R D SAKAHARA
CASE Category: 45 – ELECTRICAL ENGR

NAG 4 220 **BRIGHAM YOUNG UNIV** **9048**
 A PERFORMANCE STUDY OF EFTS IN THE PRESENCE OF INT ERFERENCE
 02/11/2002 - 08/31/2002 FY02: \$30,000 Total: \$30,000
Prin. Invest.: M D RICE
Tech. Officer: DFRC/R D SAKAHARA
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 7711 **BRIGHAM YOUNG UNIV** **9049**
 FDG FOR 'GEOLOGIC AND ARCHAEOLOGIC APPLICATIONS OF HIGH-
 RESOLUTION SAR' PI:DAVID V. ARNOLD, SENH98
 09/28/1998 - 09/30/2002 FY02: \$0 Total: \$374,778
Prin. Invest.: D V ARNOLD
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8746 **BRIGHAM YOUNG UNIV** **9050**
 POLAR ICE SHEET MONITORING FROM LONG TERM SCATTERO METER
 AND RADIOMETER OBSERVATIONS
 08/18/1999 - 08/31/2002 FY02: \$0 Total: \$266,355
Prin. Invest.: D LONG
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9625 **BRIGHAM YOUNG UNIV** **9051**
 SCATTEROMETER CLIMATE RECORD PATHFINDER
 05/23/2000 - 04/30/2003 FY02: \$166,018 Total: \$431,018
Prin. Invest.: D LONG
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9638 **BRIGHAM YOUNG UNIV** **9052**
 SYNERGISTIC USE OF TRMM AND SEAWINDS DATA
 06/08/2000 - 11/30/2002 FY02: \$85,417 Total: \$150,000
Prin. Invest.: D G LONG
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 02005 **BRIGHAM YOUNG UNIV** **9053**
 NANOMATERIALS & STRUCTURES FOR NANO AND MICROPOWER APPLI-
 CATIONS
 01/15/2002 - 01/14/2005 FY02: \$70,300 Total: \$70,300
Prin. Invest.: J N HARB, G D WATT, R C DAVIS
Tech. Officer: LARC/G C KING
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 2048 **UNIV OF UTAH** **9054**
 CLOUD SCALE NUMERICAL MODELING OF THE ARCTIC BOUND ARY LAYER
 04/01/1998 - 06/30/2001 FY02: -\$1 Total: \$256,653
Prin. Invest.: S K KRUEGER
Tech. Officer: LARC/D S MCDUGAL, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2083 **UNIV OF UTAH** **9055**
 FACILITY FOR ATMOSPHERIC REMOTE SENSING (FARS) CIRRUS MEA-
 SUREMENTS FOR FIRE III
 06/30/1998 - 05/31/2001 FY02: -\$1,087 Total: \$169,914
Prin. Invest.: K SASSON
Tech. Officer: LARC/V E DELNORE, LARC/J L RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2250 **UNIV OF UTAH** **9056**
 USING GRIOND-BASED MEASUREMENTS AND RETRIEVALS TO VALIDATE
 SATELLITE DATA
 01/19/2000 - 10/31/2002 FY02: \$71,186 Total: \$205,214
Prin. Invest.: X DONG
Tech. Officer: LARC/P MINNIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2319 **UNIV OF UTAH** **9057**
 MOLECULAR DYNAMICS SIMULATIONS OF RANDOM IONOMERS AND
 NANOCOMPOSITES
 07/14/2000 - 06/30/2003 FY02: \$76,417 Total: \$193,855
Prin. Invest.: G D SMITH, M A GLASSER
Tech. Officer: LARC/J A HINKLEY, LARC/T S GATES
CASE Category: 12 – CHEMISTRY

NAG 2 1444 **UNIV OF UTAH** **9058**
 THE UAV CIRRUS CLOUD MEASUREMENT PROGRAM: A PROPO SAL IN
 SUPPORT THE NASA ESE UAV
 09/27/2000 - 12/31/2000 FY02: -\$500 Total: \$89,500
Prin. Invest.: G G MACE
Tech. Officer: ARC/S S WEGENER, ARC/R S HIPSKIN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2403 **UNIV OF UTAH** **9059**
 SIMULATION OF COMBUSTION SYSTEMS WITH REALISTIC G- JITTER
 04/26/2000 - 03/22/2003 FY02: \$41,310 Total: \$126,911
Prin. Invest.: D E MELL
Tech. Officer: GRC/H D ROSS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2548 **UNIV OF UTAH** **9060**
 SECONDARY FIRES: INITIATION & EXTINGUISHMENT SECONDARY FIRES:
 INITIATION & EXTINGUISHMENT
 02/23/2001 - 11/30/2004 FY02: \$41,600 Total: \$71,601
Prin. Invest.: W MELL
Tech. Officer: GRC/H D ROSS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2624 **UNIV OF UTAH** **9061**
 A JOINT SIMULATION AND EXPERIMENTAL STUDY OF NANOC OMPOSITE
 SOLID POLYMERN ELECTROLYTES
 05/25/2001 - 12/31/2003 FY02: \$82,000 Total: \$172,000
Prin. Invest.: G D SMITH
Tech. Officer: GRC/B MCKISSOCK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 5 3902 **UNIV OF UTAH** **9062**
 ORBITING ARRAY OF WIDE-ANGLE LIGHT COLLECTORS (OWL ORBITING
 "EYES" TO STUDY AIR SHOWERS INITIATED BY
 03/03/1997 - 02/28/2002 FY02: \$0 Total: \$120,646
Prin. Invest.: E C LOH
Tech. Officer: GSFC/L M BARBIER
CASE Category: 11 – ASTRONOMY

NAG 5 6458 **UNIV OF UTAH** **9063**
 CLOUD PROPERTY & SURFACE RADIATION OBSERVATIONS & DIAGNOS-
 TICS IN SUPPORT OF EOS, CERES, MODIA & MISR
 10/14/1997 - 03/31/2003 FY02: \$48,547 Total: \$1,783,941
Prin. Invest.: G MACE
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 7447 **UNIV OF UTAH** **9064**
 CONTINUED SUPPORT OF THE GCTE FOCUS 1 OFFICE (ECOS YSTEM
 PHYSIOLOGY)
 06/19/1998 - 07/31/2002 FY02: \$0 Total: \$450,420
Prin. Invest.: J R EHLERINGER
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7871 **UNIV OF UTAH** **9065**
 THE GLACIER DYNAMICS AND MASS FLUX OF ANTARCTIC IC E STREAMS
 FROM RADARSAT INSAR
 01/21/1999 - 12/31/2002 FY02: \$0 Total: \$146,060
Prin. Invest.: R FORESTER
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8277 **UNIV OF UTAH** **9066**
 ACCRETION ONTO SUPERMASSIVE BLACK HOLES: OBSERVAT IONAL
 SIGNALS FROM 3-D33-DIMENSION (ATP 98)
 03/02/1999 - 02/28/2003 FY02: \$0 Total: \$109,239
Prin. Invest.: B C BROMLEY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8339 **UNIV OF UTAH** **9067**
 GLOBAL DISTRIBUTION OF LIGHTNING FROM THE DTD AND RELATE
 GLOBAL DISTRIBUTION OF MCSS FROM TH
 04/26/1999 - 03/31/2001 FY02: \$0 Total: \$142,337
Prin. Invest.: E ZIPSER
Tech. Officer: GSFC/J C DODGE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8550 **UNIV OF UTAH** **9068**
 THE SPATIAL AND TEMPORAL CHARACTERISTICS OF HIGH LATITUDE
 SEASONAL SNOW MELT AS DETECTED BY PASSIVE
 06/02/1999 - 05/31/2002 FY02: \$0 Total: \$128,886
Prin. Invest.: K JEZEK
Tech. Officer: GSFC/J C DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9717 **UNIV OF UTAH** **9069**
 VALIDATION AND TRANSFERABILITY OF TROPICAL LATENT HEATING ESTI-
 MATES
 06/21/2000 - 11/30/2002 FY02: \$172,000 Total: \$389,924
Prin. Invest.: E J ZIPSER
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10136 **UNIV OF UTAH** **9070**
 SAR ANALYSIS OF THE WESTERN SAINT ELIAS OROGEN, ALASKA
 12/04/2000 - 11/30/2003 FY02: \$81,698 Total: \$128,695
Prin. Invest.: R L BRUHN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10682 **UNIV OF UTAH** **9071**
 REMOTE SENSING OF INTENSITY & ORGANIZATION OF CON- VECTION IN
 HURRICANES & TROPICAL CYCLONES BEFORE
 05/10/2001 - 05/14/2004 FY02: \$88,605 Total: \$178,105
Prin. Invest.: E J ZIPSER
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11478 **UNIV OF UTAH** **9072**
 CHARACTERIZATION OF THE ATMOSPHERIC PHYSICAL STATE GROUND
 SITE DATA COLLECTION, PROCESSING, & REDUCT
 12/19/2001 - 12/31/2003 FY02: \$164,718 Total: \$164,718
Prin. Invest.: G MACE
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11503 **UNIV OF UTAH** **9073**
 CRYSTAL-FACE: FIELD MEASUREMENT SUPPORT FROM THE FAR S POLAR-
 IZATION DIVERSITY LIDAR AND 95 GHZ R
 01/02/2002 - 12/31/2003 FY02: \$93,600 Total: \$93,600
Prin. Invest.: K SASSEN
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11504 **UNIV OF UTAH** **9074**
 CLOUD-SCALE AND LARGE-SCALE MODELING OF TROPICAL A NVILS AND
 CIRRUS LAYERS
 01/02/2002 - 12/31/2003 FY02: \$80,115 Total: \$80,115
Prin. Invest.: S K KRUEGER
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11505 **UNIV OF UTAH** **9075**
 DIRECT MEASUREMENT OF THE OPTICAL PROPERTIES OF TR OPICAL
 CIRRUS CLOUDS
 01/02/2002 - 12/31/2003 FY02: \$38,685 Total: \$38,685
Prin. Invest.: T J GARRETT
Tech. Officer: GSFC/D Q ANDESRON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11532 **UNIV OF UTAH** **9076**
 CONNECTING THE PROPERTIES OF ANVIL CIRRUS TO THE P ROPERTIES
 OF THE CONVECTIVE SOURCE
 01/03/2002 - 12/14/2003 FY02: \$59,055 Total: \$59,055
Prin. Invest.: E ZIPSER
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12080 **UNIV OF UTAH** **9077**
 GCTE FOCUS 1 OFFICE: ECOSYSTEM PROCESSES IN BIOGE OCHEMICAL
 CYCLES
 05/15/2002 - 05/14/2005 FY02: \$131,495 Total: \$131,495
Prin. Invest.: J EHLERINGER
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12230 **UNIV OF UTAH** **9078**
 INFRARED SPECTROSCOPY OF COMETARY MOLECULES
 05/30/2002 - 05/31/2005 FY02: \$84,639 Total: \$84,639
Prin. Invest.: J EHLERINGER
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12552 **UNIV OF UTAH** **9079**
 A MULTI-SENSOR (MULTI-SCALE) APPROACH TO SNOWMELT DETECTION
 USING ACTIVE AND PASSIVE MICROWAVE
 09/09/2002 - 09/14/2005 FY02: \$74,697 Total: \$74,697
Prin. Invest.: R FORSTER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1665 **UNIV OF UTAH** **9080**
 NOVEL MICROSTRUCTURES FOR POLYMER-LIQUID CRYSTAL CO COMPOSITE
 MATERIALS
 06/15/2000 - 11/30/2003 FY02: \$110,000 Total: \$264,500
Prin. Invest.: J J MAGDA
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1797 **UNIV OF UTAH** **9081**
 INTENSITY & ORGANIZATION OF CONVECTION IN HURRI- CANES AND
 TROPICAL CYCLONES BEFORE & AFTER LANDFAL
 03/07/2001 - 01/31/2002 FY02: \$0 Total: \$45,140
Prin. Invest.: E J ZIPSER
Tech. Officer: MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 00120 **UNIV OF UTAH** **9082**
 MEASUREMENT OF THE ATMOSPHERIC UV NIGHTGLOW FROM A HIGH
 ALTITUDE BALLON (NIGHTGLOW).
 02/01/2000 - 05/31/2002 FY02: \$0 Total: \$102,540
Prin. Invest.: E LOHBER, E LOH
Tech. Officer: GSFC/L BARBIER
CASE Category: 11 – ASTRONOMY

NCC 1 256 **UNIV OF UTAH** **9083**
 DEVELOPMENT OF PREDICTIVE CAPABILITIES FOR DAMAGE TOLERANCE
 IN STITCHED COMPOSITE MATERIALS
 05/01/1997 - 04/30/2001 FY02: -\$78 Total: \$206,943
Prin. Invest.: D O ADAMS
Tech. Officer: LARC/J R REEDERS
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 2 5516 **UNIV OF UTAH** **9084**
 SIMULATION STUDIES OF THE CONFORMATIONS AND DYNAMICS OF A
 MODEL SINGLE STRANDED DNA MOLECULE IN AEQ
 08/08/2002 - 08/14/2003 FY02: \$25,630 Total: \$25,630
Prin. Invest.: G SMITH
Tech. Officer: ARC/R JAFFE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 5 297 **UNIV OF UTAH** **9085**
 CARBON AND OXYGEN ISOTOPE RATIO CO2 FLUX ANALYSES AT THE SOIL,
 CANOPY, AND LANDSCAPE SCALES
 06/16/1998 - 12/31/2002 FY02: \$251,544 Total: \$1,107,142
Prin. Invest.: J EHLERINGER
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30184 **UNIV OF UTAH** **9086**
 IMPLICATIONS OF ARCTIC WARMING AS DETERMINED BY SNOWMELT
 ONSET DATES OBSERVED WITH REMOTELY SENSE
 08/19/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R R FORSTER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30202 **UNIV OF UTAH** **9087**
 THE O OF ATMOSPHERIC CO2: SEEING THE GRASSLAND THROUGH THE
 BLADES/STUDENT: BRENT HELLIKER
 08/19/1999 - 08/31/2001 FY02: \$0 Total: \$44,000
Prin. Invest.: J R EHLERINGER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30398 **UNIV OF UTAH** **9088**
 RETRIEVAL OF CIRRUS CLOUD MICROPHYSICAL PARAMETERS AND ANALY-
 SIS OF THE RELATIONSHIP BETWEEN PROPERT
 08/14/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: G MACE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30423 **UNIV OF UTAH** **9089**
 PRECIPITATION FEATURES ACCORDING TO TRMM: DIURNAL CYCLE AND
 EVALUATION OF RAINFALL PRODUCTS (STUDE
 09/07/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: E SIPZER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40101 **UNIV OF UTAH** **9090**
 ROCKY MOUNTAIN UTAH SPACE GRANT COLL AND FELLOW SHIP PRO-
 GRAM
 03/01/2001 - 01/31/2005 FY02: \$431,250 Total: \$862,500
Prin. Invest.: W WESTENSKOW
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50410 **UNIV OF UTAH** **9091**
 EFFECTS OF EXERCISE WITH AND WITHOUT WEIGHT BEARING G ON BONE
 STRENGTH AND ARCHITECTURE. STUDENT: SA
 07/29/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: S MILLER
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 4469 **UTAH STATE UNIV** **9092**
 SATELLITE STUDIES OF STORM TIME MID- AND LOW-LATITUDE DYNAMICS
 05/21/1997 - 09/30/2001 FY02: \$0 Total: \$309,200
Prin. Invest.: D G FEJER
Tech. Officer: GSFC/M M MELLOTT
CASE Category: 13 – PHYSICS

NAG 5 5187 **UTAH STATE UNIV** **9093**
 CODA - COUPLING OF DYNAMICS AND AURORA FUNDING FOR FIRST YEAR
 OF GRANT
 03/30/1998 - 03/31/2003 FY02: \$0 Total: \$411,231
Prin. Invest.: C M SWENSON
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5189 **UTAH STATE UNIV** **9094**
 A ROCKET INVESTIGATION OF ELECTRON DENSITY STRUCTURE, E-FIELDS
 AND AEROSOLS DURING PMSE AND N
 03/27/1998 - 09/30/2003 FY02: \$0 Total: \$419,648
Prin. Invest.: J C ULWICK
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5245 **UTAH STATE UNIV** **9095**
 FIRST YEAR OF A THREE YEAR GRANT NAG5-5245 PI DR. JAMES C. ULWICK
 03/29/1999 - 09/30/2002 FY02: \$0 Total: \$390,470
Prin. Invest.: J C ULWICK
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5258 **UTAH STATE UNIV** **9096**
 FIRST YEAR OF THREE YEAR EFFORT/ ROCKET INVESTIGATION OF WINDS
 ASSOCIATED W/E-REGION
 04/11/2000 - 03/23/2003 FY02: \$51,394 Total: \$199,294
Prin. Invest.: C M SWENSON
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5293 **UTAH STATE UNIV** **9097**
 IONOSPHERIC NANOSATELLITE FORMATION (ION-F) IONOSPHERIC NANO-
 SATELLITE FORMATION (ION-F)
 05/23/2000 - 05/17/2003 FY02: \$217,987 Total: \$535,157
Prin. Invest.: B G FEJER
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5374 **UTAH STATE UNIV** **9098**
 ROCKET INVESTIGATION OF SCATTERING LAYERS IN THE B OTTOMSIDE
 EQUATORIAL FREGION IONOSPHERE
 06/19/2002 - 06/10/2005 FY02: \$38,673 Total: \$38,673
Prin. Invest.: C SWENSON
Tech. Officer: WFF/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 7597 **UTAH STATE UNIV** **9099**
 SNOW HYDROLOGY: THE PARAMETERIZATION OF SUBGRID PR OCESSSES
 WITHIN A PHYSICALLY BASED SNOW ENERG
 07/21/1998 - 07/14/2002 FY02: \$0 Total: \$163,240
Prin. Invest.: D G TARBOTON
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 8227 **UTAH STATE UNIV** **9100**
 "THE FLOW OF PLASMA IN THE SOLAR TERRESTRIAL ENVI RONMENT".
 02/24/1999 - 03/31/2002 FY02: \$0 Total: \$838,470
Prin. Invest.: R W SCHUNK
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 11 – ASTRONOMY

NAG 5 8638 **UTAH STATE UNIV** **9101**
 PLASMAPAUSE AND ITS ENVIRONMENT: A PROPOSAL FOR COOPERATIVE
 STUDIES
 08/11/1999 - 01/31/2003 FY02: \$0 Total: \$70,500
Prin. Invest.: B G FEJER
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 9290 **UTAH STATE UNIV** **9102**
 ION-F: A SPACE-BASED TESTBED FOR DISTRIBUTED FORMA TION CON-
 TROL USING THE USUSAT NANOSATELLITE
 03/17/2000 - 03/31/2004 FY02: \$20,000 Total: \$67,000
Prin. Invest.: R FULLMER
Tech. Officer: GSFC/K LUU
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 10215 **UTAH STATE UNIV** **9103**
 SATELLITE STUDIES OF STORM-TIME THERMOSPHERIC WIND S
 01/05/2001 - 01/14/2004 FY02: \$83,500 Total: \$164,500
Prin. Invest.: B G FEJER
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10716 **UTAH STATE UNIV** **9104**
 MULTIPLIERLESS FILTERS FOR REAL-TIME PROCESSING OF HYPERSPEC-
 TRAL IMAGES
 04/10/2001 - 04/30/2004 FY02: \$63,000 Total: \$125,000
Prin. Invest.: T BOSE
Tech. Officer: GSFC/P E HUNTER
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 11282 **UTAH STATE UNIV** **9105**
 USING REMOTE SENSING & IN SITU NETWORK OBSERVATION TO EVALU-
 ATE & IMPROVE THE PERFORMANCE OF
 08/17/2001 - 08/31/2004 FY02: \$85,313 Total: \$167,657
Prin. Invest.: M WHITE
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11673 **UTAH STATE UNIV** **9106**
 IMPACT OF FIELD SCALE HETEROGENEITY IN SURFACE MOISTURE &
 VEGETATION COVER ON REGIONAL SCALE
 01/30/2002 - 01/31/2005 FY02: \$67,276 Total: \$67,276
Prin. Invest.: C NEALE
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11687 **UTAH STATE UNIV** **9107**
 "IMPACT OF FIELD-SCALE HETEROGENEITY IN SURFACE MO ISTURE AND
 VEGETATION COVER ON REGIONAL-SCALE FLU
 02/12/2002 - 01/31/2005 FY02: \$4,804 Total: \$4,804
Prin. Invest.: L HIPPS
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11880 **UTAH STATE UNIV** **9108**
 THE FLOW OF PLASMA IN THE SOLAR TERRESTRIAL ENVI RONMENT
 03/20/2002 - 03/31/2005 FY02: \$295,000 Total: \$295,000
Prin. Invest.: R W SCHUNK
Tech. Officer: GSFC/J M GREBOWSKY
CASE Category: 13 – PHYSICS

NAG 5 12117 **UTAH STATE UNIV** **9109**
 VISUALIZATION OF SPACE-TIME AMBIGUITIES TO BE EXPLORED BY NASA
 GEC MISSION WITH A CRITIQUE OF
 04/29/2002 - 04/30/2003 FY02: \$40,000 Total: \$40,000
Prin. Invest.: J J SOJKA
Tech. Officer: GSFC/P BUCHANAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12170 **UTAH STATE UNIV** **9110**
 I-M COULPING ALONG AURORAL FILED LINES: MASS AND ENERGY EX-
 CHANGE BETWEEN HOT MAGNETOSPHERIC A
 05/09/2002 - 05/14/2005 FY02: \$73,500 Total: \$73,500
Prin. Invest.: A R BARAKAT
Tech. Officer: GSFC/J SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1750 **UTAH STATE UNIV** **9111**
 EXTENSION OF ATLANTA/HOUSTON URBAN HEAT ISLAND STUDIES USING
 ASTER IMAGERY
 11/13/2000 - 11/19/2002 FY02: \$40,500 Total: \$52,073
Prin. Invest.: R GILES
Tech. Officer: MSFC/D QUATTROCHI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 9 999 **UTAH STATE UNIV** **9112**
 CROP OPTIMIZATION AND FAILURE ANALYSIS USING CO2
 04/25/1998 - 09/24/2002 FY02: \$0 Total: \$619,240
Prin. Invest.: B G BUGBEE, L R JOHNSON
Tech. Officer: KSC/R M WHEELER
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 9 1237 **UTAH STATE UNIV** **9113**
 CO2 GAS EXCHANGE TO DETERMINE THE FACTORS CONTROL LING
 RESPIRATION & CARBON USE IN CROP PLANTS
 06/16/2000 - 07/01/2003 FY02: \$24,000 Total: \$66,275
Prin. Invest.: B BUGBEE
Tech. Officer: JSC/D BARTA
CASE Category: 55 – AGRICULTURE

NAG 9 1284 **UTAH STATE UNIV** **9114**
 OPTIMIZATION OF ROOT ZONE SUNSTRATES FOR REDUCED GRAVITY
 EXPERIEMENTS
 02/22/2001 - 02/21/2005 FY02: \$370,340 Total: \$465,340
Prin. Invest.: G BINGHAM
Tech. Officer: JSC/K DAUES
CASE Category: 56 – MEDICAL

NAG 9 1397 **UTAH STATE UNIV** **9115**
 ETHYLENE SYNTHESIS & SENSITIVITY IN SALAD CROPS
 02/20/2002 - 02/19/2005 FY02: \$172,120 Total: \$172,120
Prin. Invest.: B G BUGBEE
Tech. Officer: JSC/K DAUES
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02058 **UTAH STATE UNIV** **9116**
 DEVELOPMENT OF INTERMOUNTAIN REGION DIGITAL IMAGE PROCESSING
 AND ARCHIVE CENTER FOR LANDSCAPE
 09/27/2002 - 03/26/2004 FY02: \$500,000 Total: \$500,000
Prin. Invest.: D RAMSEY
Tech. Officer: SSC/T FRISBLE
CASE Category: 55 – AGRICULTURE

NAS 1 00071 **UTAH STATE UNIV** **9117**
 SENSOR MODULE DEVELOPMENT AND SUPPORT FOR GIFTS
 06/19/2000 - 03/19/2007 FY02: \$16,688,347 Total: \$26,001,897
Prin. Invest.: G BINGHAM, W SMITH
Tech. Officer: LARC/W A ROETTKER, LARC/J B MILLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 02053 **UTAH STATE UNIV** **9118**
 FAR-INFRARED SPECTROSCOPY OF THE TROPOSPHERE (FIRST) FOURIER
 TRANSFORM SPECTROMETER
 07/22/2002 - 07/21/2005 FY02: \$1,000,000 Total: \$1,000,000
Prin. Invest.: G E BINGHAM
Tech. Officer: LARC/G JOHNSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 20467 **UTAH STATE UNIV** **9119**
 SOUNDING OF THE ATMOSPHERE USING BROADBAND EMISSION RADIOM-
 ETRY (SABER) INSTRUMENT
 03/28/1995 - 03/31/2002 FY02: \$164,930 Total: \$17,216,610
Prin. Invest.: J ULWICK, D J BAKER, R ESPLIN
Tech. Officer: LARC/M D VANEK, LARC/T C DENKINS
CASE Category: 42 – ASTRONAUTICAL ENGR

NAS 8 02031 **UTAH STATE UNIV** **9120**
 R&D SERVICES NRA 8-31; MEASUREMENT OF CHARGE STOR- AGE DECAY
 TIME AND RESISTIVITY OF SPACECRAFT INSU
 02/20/2002 - 02/19/2003 FY02: \$89,458 Total: \$89,458
Prin. Invest.: J R DENNISON, R FREDRICKSON, W HANSEN
Tech. Officer: MSFC/D HARDAGE
CASE Category: 13 – PHYSICS

NAS 8 98221 **UTAH STATE UNIV** **9121**
 ELECTRONIC PROPERTIES OF MATERIALS WITH APPLICATION TO SPACE-
 CRAFT CHARGING
 06/18/1998 - 12/31/2002 FY02: \$0 Total: \$331,736
Prin. Invest.: J R DENNISON
Tech. Officer: MSFC/S PEARSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 9 02002 **UTAH STATE UNIV** **9122**
 FLOATING POTENTIAL MEASUREMENT UNIT
 10/30/2001 - 03/31/2003 FY02: \$1,970,000 Total: \$1,970,000
Prin. Invest.: C SWANSON
Tech. Officer: JSC/M A EDEN
CASE Category: 42 – ASTRONAUTICAL ENGR

NCC 2 5466 **UTAH STATE UNIV** **9123**
 FLOUROMETRIC DETECTION OF MICROORGANISMS ON STERLI ZED SUR-
 FACES
 09/26/2001 - 09/14/2003 FY02: \$79,336 Total: \$139,906
Prin. Invest.: L S POWERS
Tech. Officer: ARC/C P MCKAY, ARC/B F SMITH
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 2 5514 **UTAH STATE UNIV** **9124**
 MEDUSA SEA FLOOR MONITORING SYSTEM II
 08/06/2002 - 09/30/2003 FY02: \$90,000 Total: \$90,000
Prin. Invest.: L POWERS
Tech. Officer: ARC/M FLYNN
CASE Category: 33 – OCEANOGRAPHY

NCC 5 219 **UTAH STATE UNIV** **9125**
 HOLOGRAPHIC LIDAR CONCEPTS AND APPLICATIONS
 08/19/1997 - 10/31/2001 FY02: \$0 Total: \$79,520
Prin. Invest.: T D WILKERSON
Tech. Officer: GSFC/G SCHWEMMER
CASE Category: 11 – ASTRONOMY

VERMONT

NASA'S UNIVERSITY PROGRAM

NCC 5 598 **UTAH STATE UNIV** **9126**
 HOLOGRAPHIC LIDAR CONCEPTS AND APPLICATIONS
 10/10/2001 - 10/14/2004 FY02: \$39,831 Total: \$39,831
Prin. Invest.: T D WILKERSON
Tech. Officer: GSFC/G SCHWEMMER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 8 162 **UTAH STATE UNIV** **9127**
 ANALYSIS OF SPATIAL AND TEMPORAL VARIABILITY OF THE WARM
 SEASON LAND SURFACE ENERGY BUDGET
 11/02/1998 - 04/30/2002 FY02: \$0 Total: \$75,115
Prin. Invest.: R R GILLIES
Tech. Officer: MSFC/W LAPENTA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC13 00005 **UTAH STATE UNIV** **9128**
 AFFILIATED RESEARCH CENTER PROGRAM SAME
 03/06/2000 - 03/05/2005 FY02: \$180,000 Total: \$545,666
Prin. Invest.: R D RAMSEY, D BAKER, C HALL
Tech. Officer: SSC/A PEEK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC13 02001 **UTAH STATE UNIV** **9129**
 VALIDATION AND APPLICATION OF GEOSPATIAL INFORMATION FOR
 EARLY DETECTION OF STRESS IN WHEAT
 01/07/2002 - 01/06/2005 FY02: \$255,510 Total: \$255,510
Prin. Invest.: T HAMMOND
Tech. Officer: SSC/D RISEN
CASE Category: 56 – MEDICAL

NGT 5 142 **UTAH STATE UNIV** **9130**
 THEORETICAL AND EXPERIMENTAL INVESTIGATION OF HIGH LATITUDE
 OUTFLOW, IONS AND NEUTRALS, GSRP TRA
 07/18/2002 - 07/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R W SCHUNK
Tech. Officer: GSFC/M S BURRELL
CASE Category: 13 – PHYSICS

NGT 5 40047 **UTAH STATE UNIV** **9131**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM
 02/11/1997 - 08/31/2002 FY02: \$50,000 Total: \$1,404,372
Prin. Invest.: D BAKER
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50398 **UTAH STATE UNIV** **9132**
 NOVEL ALGORITHMS FOR IMAGE RESTORATION
 06/13/2002 - 07/31/2005 FY02: \$23,800 Total: \$23,800
Prin. Invest.: T BOSE
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52866 **UTAH STATE UNIV** **9133**
 MONITORING OZONE CONCENTRATIONS AND INJURY IN HIGH ELEVATION
 DOUGLAS FIR NEAR SALT LAKE CITY
 07/24/1998 - 08/22/2003 FY02: \$0 Total: \$44,000
Prin. Invest.: F BAKER
Tech. Officer: MSFC/J F DOWDY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 8 52885 **UTAH STATE UNIV** **9134**
 EXPERIMENTAL STUDY OF THE SECONDARY ELECTRON EMISSION
 06/22/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J DENNISON
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 13 – PHYSICS

NGT10 52617 **UTAH STATE UNIV** **9135**
 PLANT RESIDUE DEGRADATION PRODUCTS IN REGENERATIVE LIFE SUP-
 PORT SYSTEMS
 07/14/1998 - 12/01/2001 FY02: \$0 Total: \$73,500
Prin. Invest.: P GROSSEL
Tech. Officer: KSC/R WHEELER
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT10 52631 **UTAH STATE UNIV** **9136**
 GSRP STRESS SIGNALING IN RESPONSE TO HYPOXIA
 07/30/2001 - 12/31/2002 FY02: \$34,000 Total: \$34,000
Prin. Invest.: D DEWALD
Tech. Officer: KSC/R M WHEELER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

VERMONT

NAG 5 8020 **MIDDLEBURY COLL** **9137**
 SN 1006: PROBING THE SYNCHROTRON ORIGIN OF THE X- RAYS AND
 MEASURING PROPER MOTIONS _ADP98
 01/06/1999 - 12/31/2001 FY02: \$0 Total: \$39,632
Prin. Invest.: P WINKLER
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 9733 **MIDDLEBURY COLL** **9138**
 ENERGETICS & INITIATION OF CORONAL MASS EJECTIONS
 06/30/2000 - 06/30/2003 FY02: \$30,975 Total: \$87,303
Prin. Invest.: R WOLFSON
Tech. Officer: GSFC/W J WAGNER
CASE Category: 13 – PHYSICS

NAG 5 10463 **UNIV OF VERMONT** **9139**
 CORE FORMATION UNDER DYNAMIC CONDITIONS: AN EXPERIMENTAL
 DEFORMATION INVESTIGATION
 02/27/2001 - 02/28/2004 FY02: \$40,000 Total: \$80,000
Prin. Invest.: T RUCHMER
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NCC 2 5399 **UNIV OF VERMONT** **9140**
 LAND COVER MAPPING IN NORTHERN ECOSYSTEMS USING AD
 EOS/POLDER
 09/18/2000 - 03/31/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: G P LIVINGSTON
Tech. Officer: ARC/V C VANDERBILT, ARC/E P CONDON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 394 **UNIV OF VERMONT** **9141**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/13/1999 - 11/01/2001 FY02: -\$103,955 Total: \$346,045
Prin. Invest.: W LAKIN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 581 **UNIV OF VERMONT** **9142**
 VERMONT NASA EPSCOR PROGRAM
 08/15/2001 - 07/31/2004 FY02: \$920,638 Total: \$1,045,638
Prin. Invest.: W D LAKIN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40045 **UNIV OF VERMONT** **9143**
 NATIONAL SPACE GRANT COLL AND FELLOWSHIP PROGRA
 01/24/1997 - 02/28/2001 FY02: -\$231,440 Total: \$742,310
Prin. Invest.: W D LAKIN
Tech. Officer: HQ/J DASCH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40110 **UNIV OF VERMONT** **9144**
 VERMONT SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/02/2001 - 02/28/2005 FY02: \$487,690 Total: \$743,940
Prin. Invest.: W LAKIN
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

VIRGINIA

NAG 1 2219 **CHRISTOPHER NEWPORT UNIV** **9145**
 TECHNOLOGY DEVELOPMENT IMPLEMENTATION, AND ASSESS- MENT:
 K-16 PRE-SERVICE, IN-SERVICE, AND DISTANCE
 08/20/1999 - 07/31/2002 FY02: \$335,622 Total: \$1,448,090
Prin. Invest.: R CATON
Tech. Officer: LARC/T E PINELLI, LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2284 **CHRISTOPHER NEWPORT UNIV** **9146**
 AN EXPERIMENT IN EDUCATIONAL TECHNOLOGY-EVALUATING A CYBER-
 BASED MODEL FOR LEARNING
 03/28/2000 - 12/15/2001 FY02: -\$3,777 Total: \$84,223
Prin. Invest.: L LAMBERT
Tech. Officer: LARC/D BUSHNELL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01070 **CHRISTOPHER NEWPORT UNIV** **9147**
 LOW TEMP SUPERCONDUCTING QUANTUM INTERFERENCE (SQUID) NON-
 DESTRUCTIVE EVALUATION (NDE) APPLIC'S
 06/01/2001 - 11/30/2002 FY02: \$0 Total: \$30,070
Prin. Invest.: R SELIM
Tech. Officer: LARC/M NAMKUNG
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02055 **CHRISTOPHER NEWPORT UNIV** **9148**
 LOW TEMPERATURE SQUID FOR NDE APPLICATIONS
 02/15/2002 - 02/28/2003 FY02: \$71,611 Total: \$71,611
Prin. Invest.: R SELIM
Tech. Officer: LARC/R A WINCHESKI
CASE Category: 13 – PHYSICS

NAG 5 6503 **CHRISTOPHER NEWPORT UNIV** **9149**
 VALIDATION OF MSMT. OF POLLUTION IN THE TROPOSPHER E (MOPITT)
 EXPERIMENT BY GROUND-BASED INFRARED SO
 10/29/1997 - 09/30/2002 FY02: \$0 Total: \$496,543
Prin. Invest.: N POUGATCHEV
Tech. Officer: GSFC/D STARR
CASE Category: 11 – ASTRONOMY

NCC 1 01028 **CHRISTOPHER NEWPORT UNIV** **9150**
 THEORETICAL AND COMPUTATIONAL DEVELOPMENT OF A GALACTIC COS-
 MIC RAY (GCR) BOUNDARY CONDITION MODEL
 03/08/2001 - 01/31/2004 FY02: \$75,000 Total: \$167,586
Prin. Invest.: K CHANG
Tech. Officer: LARC/R C SINGLETERRY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02018 **CHRISTOPHER NEWPORT UNIV** **9151**
 ANALYSIS OF MULTIPLATFORM CO (CARBON MONOXIDE) MEASUREMENTS
 DURING TRACE-P MISSION
 03/21/2002 - 01/31/2003 FY02: \$116,540 Total: \$116,540
Prin. Invest.: N S POUGATCHEV
Tech. Officer: LARC/G W SACHSE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 02021 **CHRISTOPHER NEWPORT UNIV** **9152**
 SYNTHESIS OF CARBON NANOTUBES USING TEMPLATING TECHNIQUE
 04/08/2002 - 04/07/2003 FY02: \$36,475 Total: \$36,475
Prin. Invest.: T M ABDEL-FATTAH
Tech. Officer: LARC/E J SIOCHI
CASE Category: 12 – CHEMISTRY

NCC 1 02039 **CHRISTOPHER NEWPORT UNIV** **9153**
 DISTANCE LEARNING TECHNOLOGY/SCIENCE MATH ENGINEERING AND
 TECHNOLOGY EDUCATION (SMET)
 07/25/2002 - 07/31/2005 FY02: \$566,989 Total: \$566,989
Prin. Invest.: R A CANTON, M SPRAGUE
Tech. Officer: LARC/T E PINELLI
CASE Category: 22 – COMPUTER SCIENCE

NCC 1 02041 **CHRISTOPHER NEWPORT UNIV** **9154**
 AEROSPACE VEHICLE SYSTEMS TECHNOLOGY OFFICE EDUCAT IONAL
 OUTREACH
 08/08/2002 - 08/07/2003 FY02: \$48,000 Total: \$48,000
Prin. Invest.: E B WARD
Tech. Officer: LARC/R R ANTCLIFF
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02042 **CHRISTOPHER NEWPORT UNIV** **9155**
 PROJECT PRIME TIME
 07/17/2002 - 08/14/2005 FY02: \$74,681 Total: \$74,681
Prin. Invest.: B H BARTELS
Tech. Officer: LARC/J M SEATON
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 435 **CHRISTOPHER NEWPORT UNIV** **9156**
 THE NASA WHY FILES, PROBLEM-BASED LEARNING INTEGRA TING BROAD-
 CAST VIDEO AND THE INTERNET.
 09/24/1999 - 09/30/2002 FY02: \$83,602 Total: \$327,998
Prin. Invest.: D B CATON
Tech. Officer: GSFC/D GABRYS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2168 **COLL OF WILLIAM AND MARY** **9157**
 AN ADVANCED HIERARCHICAL HYBRID ENVIRONMENT FOR RELIABILITY
 AND PERFORMANCE MODELING
 03/24/1999 - 02/28/2003 FY02: \$0 Total: \$302,429
Prin. Invest.: G CIARDO
Tech. Officer: LARC/P W GOODE
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 2271 **COLL OF WILLIAM AND MARY** **9158**
 A UNIFORM ONTOLOGY FOR SOFTWARE INTERFACES
 03/21/2000 - 02/28/2002 FY02: -\$6,056 Total: \$38,696
Prin. Invest.: S FEYOCK
Tech. Officer: LARC/P C SCHUTTE
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 1 2314 **COLL OF WILLIAM AND MARY** **9159**
 PREPARATION AND CHARACTERIZATION OF POLYIMIDE NANOCOMPOS-
 ITES
 06/26/2000 - 06/14/2002 FY02: -\$22 Total: \$17,473
Prin. Invest.: R A ORWOLL
Tech. Officer: LARC/J W CONNELL, LARC/J G SMITH
CASE Category: 12 – CHEMISTRY

NAG 1 2320 **COLL OF WILLIAM AND MARY** **9160**
 BELL-CURVE BASED EVOLUTIONARY STRATEGIES FOR STRUCTURAL
 OPTIMIZATION
 07/07/2000 - 07/31/2001 FY02: \$0 Total: \$42,245
Prin. Invest.: R K KINCAID
Tech. Officer: LARC/J SOBIESKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01107 **COLL OF WILLIAM AND MARY** **9161**
 PREPARATION AND CHARACTERIZATION OF POLYIMIDE NANOCOMPOS-
 ITES
 07/09/2001 - 06/14/2003 FY02: \$0 Total: \$2,920
Prin. Invest.: R A ORWOLL
Tech. Officer: LARC/J W CONNELL
CASE Category: 12 – CHEMISTRY

NAG 1 02095 **COLL OF WILLIAM AND MARY** **9162**
 FORMAL VERIFICATION OF SAFETY PROPERTIES FOR AERO- SPACE
 SYSTEMS THROUGH ALGORITHMS BASED ON
 05/09/2002 - 10/08/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: G CIARDO
Tech. Officer: LARC/B L DIVITO
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 02109 **COLL OF WILLIAM AND MARY** **9163**
 POLYIMIDE-CLAY COMPOSITE MATERIALS FOR SPACE APPLIC ATION
 08/07/2002 - 06/06/2003 FY02: \$9,932 Total: \$9,932
Prin. Invest.: R A ORWOLL
Tech. Officer: LARC/J W CONNELL, LARC/J G SMITH
CASE Category: 12 – CHEMISTRY

NAS 1 00146 **COLL OF WILLIAM AND MARY** **9164**
 SPECTROSCOPIC RESEARCH AND ANALYSES OF SAGE III DATA PROD-
 UCTS
 01/19/2001 - 01/18/2006 FY02: \$120,000 Total: \$221,000
Prin. Invest.: D BRENNER
Tech. Officer: LARC/W CHU
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 327 **COLL OF WILLIAM AND MARY** **9165**
 PREDICTION FOR RADIATION SHIELDING MATERIALS
 01/27/1999 - 12/18/2002 FY02: \$0 Total: \$294,189
Prin. Invest.: R L KIEFER
Tech. Officer: LARC/S A THIBEAULT
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NCC 1 356 **COLL OF WILLIAM AND MARY** **9166**
 CYBER SIMULATION FOR COMPOSITE MAT'LS & STRUCTURES IN AERO-
 NAUTICS AND AEROSPACE
 09/28/1999 - 09/30/2002 FY02: \$2,500 Total: \$326,560
Prin. Invest.: D M MANOS, R B PIPES
Tech. Officer: LARC/J H STARNES, JR.
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 390 **COLL OF WILLIAM AND MARY** **9167**
 HIGH RESOLUTION SPECTROSCOPY TO SUPPORT ATMOS- PHERIC MEA-
 SUREMENTS
 03/29/2000 - 03/31/2003 FY02: \$177,300 Total: \$469,400
Prin. Invest.: D C BENNER, M D VENKATARAMAN
Tech. Officer: LARC/M H SMITH
CASE Category: 13 – PHYSICS

NCC 1 01030 **COLL OF WILLIAM AND MARY** **9168**
 DEV & APPLIC NON-LINEAR IMAGE ENHANCEMENT & MULTI- SENSOR
 FUSION TECHNIQ'S HAZY/DARK IMAG'G CONDITIO
 03/06/2001 - 02/08/2004 FY02: \$96,910 Total: \$196,910
Prin. Invest.: Z RAHMAD
Tech. Officer: LARC/D J JOBSON, LARC/S D HARRAH
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01056 **COLL OF WILLIAM AND MARY** **9169**
 LARGE SCALE PRODUCTION OF CARBON NANOTUBES USING THE JEF-
 FERSON LAB FREE ELECTRON LASER
 07/25/2001 - 07/24/2003 FY02: \$0 Total: \$60,000
Prin. Invest.: B C HOLLOWAY
Tech. Officer: LARC/M W SMITH
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 02029 **COLL OF WILLIAM AND MARY** **9170**
 ROBUST TECHNIQUES FOR MULTIDISCIPLINARY DESIGN OPT IMIZATION
 PROBLEM SYNTHESIS AND SOLUTION
 05/16/2002 - 05/15/2003 FY02: \$22,350 Total: \$22,350
Prin. Invest.: R M LEWIS
Tech. Officer: LARC/N M ALEXANDROV
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02032 **COLL OF WILLIAM AND MARY** **9171**
 MATERIALS FOR RADIATION SHIELDING AND DURABILITY I N THE SPACE
 ENVIRONMENT
 06/21/2002 - 06/20/2005 FY02: \$55,499 Total: \$55,499
Prin. Invest.: R L KIEFER
Tech. Officer: LARC/S A THIBEAULT
CASE Category: 13 – PHYSICS

NGT 1 01008 **COLL OF WILLIAM AND MARY** **9172**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/04/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: N M ALEXANDROV, V TORCZON
Tech. Officer: LARC/R HATHAWAY
CASE Category: 22 – COMPUTER SCIENCE

NGT 1 01010 **COLL OF WILLIAM AND MARY** **9173**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/04/2001 - 06/30/2004 FY02: \$10,000 Total: \$22,000
Prin. Invest.: M HINDERS
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52180	COLL OF WILLIAM AND MARY	9174	NAG 5 9636	GEORGE MASON UNIV	9183
GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)			CONTINUOUS PRECIPITATION ESTIMATES FROM TRMM & MESOSCALE MODELS		
01/12/1998 - 12/31/2001	FY02: \$0	Total: \$66,000	05/25/2000 - 01/31/2002	FY02: \$0	Total: \$82,901
<i>Prin. Invest.:</i> J S BOGHOSIAN			<i>Prin. Invest.:</i> L CHIU		
<i>Tech. Officer:</i> LARC/P H JOHNSTON			<i>Tech. Officer:</i> GSFC/J A WEINMAN		
<i>CASE Category:</i> 13 – PHYSICS			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NGT 1 52200	COLL OF WILLIAM AND MARY	9175	NAG 5 9669	GEORGE MASON UNIV	9184
GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)			HYDROGEN CHEMISTRY IN THE POLAR MESOSPHERE		
07/21/1998 - 08/31/2002	FY02: \$10,000	Total: \$88,000	06/22/2000 - 06/30/2002	FY02: \$0	Total: \$193,100
<i>Prin. Invest.:</i> R A ORWOLL			<i>Prin. Invest.:</i> M E SUMMERS		
<i>Tech. Officer:</i> LARC/J W CONNELL, LARC/J A HINKLEY			<i>Tech. Officer:</i> GSFC/M MELLOTT		
<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NGT 1 52204	COLL OF WILLIAM AND MARY	9176	NAG 5 9781	GEORGE MASON UNIV	9185
GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)			PROBLEM SOLVING ON LOOSELY COUPLED SYSTEM		
09/04/1998 - 08/31/2002	FY02: \$10,000	Total: \$92,000	07/07/2000 - 07/14/2003	FY02: \$63,410	Total: \$125,693
<i>Prin. Invest.:</i> M HINDERS			<i>Prin. Invest.:</i> P Y WANG		
<i>Tech. Officer:</i> LARC/T E PINELLI			<i>Tech. Officer:</i> GSFC/J DORBAND		
<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER			<i>CASE Category:</i> 22 – COMPUTER SCIENCE		
NAG 1 2258	GEORGE MASON UNIV	9177	NAG 5 10038	GEORGE MASON UNIV	9186
INVENTIVE DESIGN: AN EVOLUTIONARY COMPUTATION APPROACH			LOW-LUMINOSITY NUCLEAR ACCRETION IN NGC 4261 & NGC 6251		
01/05/2000 - 08/31/2001	FY02: -\$42	Total: \$133,957	09/27/2000 - 09/30/2003	FY02: \$0	Total: \$38,518
<i>Prin. Invest.:</i> T ARCISZEWSKI, D A SCHUM, K DEJONG			<i>Prin. Invest.:</i> R M SAMBRUNA		
<i>Tech. Officer:</i> LARC/J J REHDER			<i>Tech. Officer:</i> GSFC/R MUSHOTZKY		
<i>CASE Category:</i> 22 – COMPUTER SCIENCE			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 1 2316	GEORGE MASON UNIV	9178	NAG 5 10073	GEORGE MASON UNIV	9187
MIDDLE ATMOSPHERIC HYDROGEN PHOTOCHEMISTRY			HIGH-ENERGY ABSORPTION IN BLAZARS: PROBING THE INNER JET ENVIRONMENT (ADP 98)		
06/23/2000 - 06/22/2001	FY02: -\$1	Total: \$32,000	10/30/2000 - 06/30/2003	FY02: \$0	Total: \$70,923
<i>Prin. Invest.:</i> M SUMMERS			<i>Prin. Invest.:</i> R M SAMBRUNA		
<i>Tech. Officer:</i> LARC/G MADDREA			<i>Tech. Officer:</i> GSFC/R J OLIVERSEN		
<i>CASE Category:</i> 31 – ATMOSPHERIC SCIENCE			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 1 01030	GEORGE MASON UNIV	9179	NAG 5 10177	GEORGE MASON UNIV	9188
INVENTIVE DESIGN: AN EVOLUTIONARY COMPUTATION APPROACH			A PROTOTYPE CLUSTERING TECHNIQUE FOR DATA MINING & KNOWLEDGE DISCOVERY BASED ON A DATA PYRAMID MODE		
03/09/2001 - 09/30/2004	FY02: \$44,209	Total: \$223,278	01/04/2001 - 06/14/2002	FY02: \$0	Total: \$132,000
<i>Prin. Invest.:</i> T ARCISZEWSKI, K D JONG			<i>Prin. Invest.:</i> D KAFATOS		
<i>Tech. Officer:</i> LARC/J J RENDER			<i>Tech. Officer:</i> GSFC/K L MOE		
<i>CASE Category:</i> 29 – MATH/COMPUTER SCI, OTHER			<i>CASE Category:</i> 22 – COMPUTER SCIENCE		
NAG 2 1289	GEORGE MASON UNIV	9180	NAG 5 10243	GEORGE MASON UNIV	9189
ABATEMENT OF AUTOMATION ERRORS BY TRAINING BASED ON COGNITIVE MODELS			CONSTRAINING THE STRUCTURE OF THE CENTRAL ENGINE OF RADIOLOUD AGN ADP99		
02/01/1999 - 09/30/2002	FY02: \$16,641	Total: \$296,445	01/17/2001 - 09/14/2002	FY02: \$0	Total: \$28,219
<i>Prin. Invest.:</i> D B DAVIS, P A IKOMI, R W HOLT			<i>Prin. Invest.:</i> R M SAMBRUNA		
<i>Tech. Officer:</i> ARC/S M CASNER			<i>Tech. Officer:</i> GSFC/R J OLIVERSEN		
<i>CASE Category:</i> 69 – PSYCHOLOGY, OTHER			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 2 1565	GEORGE MASON UNIV	9181	NAG 5 8834	GEORGE MASON UNIV	9182
AN EFFICIENT AIR TRAFFIC MANAGEMENT MODEL FOR EVALUATION OF COMPLEX BEHAVIOR AND IV & V SUPPORT OF			THE REDSHIFT DEPENDENCE OF THE INTERACTION- ACTIVITY CONNECTION AMONG ULTRALUMINOUS STARBURST		
06/10/2002 - 05/31/2003	FY02: \$250,808	Total: \$250,808	11/18/1999 - 09/30/2002	FY02: \$21,294	Total: \$80,139
<i>Prin. Invest.:</i> G DONOHUE, C H CHEN			<i>Prin. Invest.:</i> J WALLIN		
<i>Tech. Officer:</i> ARC/K ROTH, ARC/K D JAMES			<i>Tech. Officer:</i> GSFC/D K WEST		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 11 – ASTRONOMY		
NAG 5 10244	GEORGE MASON UNIV	9190	NAG 5 10244	GEORGE MASON UNIV	9190
INTENSIVE RXTE MONITORING OF THE TEV BLAZAR MRK501 (ADP 99)			INTENSIVE RXTE MONITORING OF THE TEV BLAZAR MRK501 (ADP 99)		
01/18/2001 - 01/31/2003	FY02: \$0	Total: \$23,678	01/18/2001 - 01/31/2003	FY02: \$0	Total: \$23,678
<i>Prin. Invest.:</i> R M SAMBRUNA			<i>Prin. Invest.:</i> R M SAMBRUNA		
<i>Tech. Officer:</i> GSFC/R J OLIVERSEN			<i>Tech. Officer:</i> GSFC/R J OLIVERSEN		
<i>CASE Category:</i> 11 – ASTRONOMY			<i>CASE Category:</i> 11 – ASTRONOMY		

VIRGINIA

NASA'S UNIVERSITY PROGRAM

NAG 5 10708 **GEORGE MASON UNIV** **9191**
 STRUCTURE OF THE ACCRETION FLOW IN RADIO-LOUD AGN
 04/23/2001 - 10/31/2002 FY02: \$76,550 Total: \$181,509
Prin. Invest.: R M SAMBRUNA
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10776 **GEORGE MASON UNIV** **9192**
 COBE/DIRBE DATA AND THE ZODIACAL CLOUD (ADP 2000)
 04/26/2001 - 04/30/2003 FY02: \$115,000 Total: \$236,000
Prin. Invest.: L OZNEROY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 10879 **GEORGE MASON UNIV** **9193**
 ANALYSES OF RAIN RATE PARAMETERS DERIVED FROM TMI: CONDI-
 TIONAL RAIN RATE AND RAIN FRACTIONS
 05/10/2001 - 09/14/2002 FY02: \$0 Total: \$25,162
Prin. Invest.: L CHIU
Tech. Officer: GSFC/A T CHANG
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11346 **GEORGE MASON UNIV** **9194**
 SATELLITE MICROWAVE ESTIMATES OF OCEANIC RAINFALL AND SNOW
 OVER LAND
 09/13/2001 - 09/14/2003 FY02: \$0 Total: \$110,158
Prin. Invest.: L CHIU
Tech. Officer: GSFC/A T CHANG
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11432 **GEORGE MASON UNIV** **9195**
 PROBING THE NUCLEI OF IR LUMINOUS GALAXIES: THE GENESIS, NATURE,
 & EVOLUTION OF THEIR NUCLEAR ACT
 11/30/2001 - 09/30/2005 FY02: \$100,000 Total: \$100,000
Prin. Invest.: S SATYAPAL
Tech. Officer: GSFC/H HASSAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11874 **GEORGE MASON UNIV** **9196**
 OBSERVATIONAL STUDY ON INITIATION AND ACCELERATION OF CORONAL
 MASS EJECTIONS
 03/15/2002 - 03/14/2004 FY02: \$44,273 Total: \$44,273
Prin. Invest.: J ZHANG
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 12343 **GEORGE MASON UNIV** **9197**
 EXPLORING THE PHASE SPACE AND CYCLE SPACE OF NETWORKED
 COLLECTIVE DYNAMICAL SYSTEMS.
 07/22/2002 - 08/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: D MOROWITZ
Tech. Officer: GSFC/J DORBAND
CASE Category: 41 – AERONAUTICAL ENGR

NAG13 01009 **GEORGE MASON UNIV** **9198**
 VIRGINIA ACCESS
 09/19/2001 - 09/18/2002 FY02: \$0 Total: \$997,800
Prin. Invest.: M KAFATOS
Tech. Officer: SSC/W GRAHAM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 02054 **GEORGE MASON UNIV** **9199**
 VIRGINIA ACCESS AND MIDDLE ATLANTIC GEOSPATIAL INFORMATION
 CONSORTIUM
 09/05/2002 - 09/18/2003 FY02: \$1,300,000 Total: \$1,300,000
Prin. Invest.: M KAFATOS
Tech. Officer: SSC/M GIARDINO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCA 1 01004 **GEORGE MASON UNIV** **9200**
 VIRGINIA SATSLAB
 08/31/2001 - 09/30/2002 FY02: \$2,000,000 Total: \$2,500,000
Prin. Invest.: G DONOHUE
Tech. Officer: LARC/J R BURLEY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 143 **GEORGE MASON UNIV** **9201**
 EARTH SYSTEM SCIENCE DATA SUPPORT
 07/15/1996 - 06/14/2001 FY02: \$0 Total: \$7,132,077
Prin. Invest.: M KAFATOS
Tech. Officer: GSFC/S KEMPLER
CASE Category: 11 – ASTRONOMY

NCC 5 306 **GEORGE MASON UNIV** **9202**
 SEASONAL & INTERANNUAL EARTH SCIENCE INFORMATION PARTNER
 (SIESIP)
 04/09/1998 - 12/31/2002 FY02: \$520,000 Total: \$2,870,000
Prin. Invest.: M KAFATOS
Tech. Officer: GSFC/M MAIDEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 360 **GEORGE MASON UNIV** **9203**
 CONTINUING CAREER PROGRAM (CCP)
 08/26/1998 - 08/31/2003 FY02: \$430,000 Total: \$2,162,716
Prin. Invest.: R R STOUGH
Tech. Officer: GSFC/A J MATURO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 522 **GEORGE MASON UNIV** **9204**
 DEVELOPMENT OF POSEIDON OCEAN MODEL FOR NSIPP
 12/18/2000 - 12/31/2003 FY02: \$152,440 Total: \$302,647
Prin. Invest.: P S SCHOPF
Tech. Officer: GSFC/M RIENECKER
CASE Category: 33 – OCEANOGRAPHY

NCC 5 555 **GEORGE MASON UNIV** **9205**
 JOINT INTERDISCIPLINARY EARTH SCIENCE
 05/04/2001 - 06/14/2003 FY02: \$3,298,976 Total: \$5,740,137
Prin. Invest.: M KAFATOS
Tech. Officer: GSFC/M MCCUMBER
CASE Category: 11 – ASTRONOMY

NCC 5 645 **GEORGE MASON UNIV** **9206**
 JOINT GEO-INFORMATICS LABORATORY (JGIL) CONDUCT RESEARCH &
 PROTOTYPING IN SUPPORT OF ESDISIP &
 06/12/2002 - 06/14/2005 FY02: \$550,447 Total: \$550,447
Prin. Invest.: L DI
Tech. Officer: GSFC/K MCDONALD
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 2135 **HAMPTON UNIV** **9207**
 STUDY OF CONTRAILS AND ATMOSPHERIC RADIATION MEAS (ARM) DATA
 PROJECT DEVELOPMENT
 01/19/1999 - 01/31/2002 FY02: \$0 Total: \$285,939
Prin. Invest.: M P MCCORMICK, J M RUSSELL, 111
Tech. Officer: LARC/P MINNIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2170 **HAMPTON UNIV** **9208**
 DEVELOPMENT AND COMPARISON OF GLOBAL AEROSOL, WATER VAPOR,
 AND OZONE CLIMATOLOGIES USING SAGE II
 03/25/1999 - 02/28/2002 FY02: \$0 Total: \$213,000
Prin. Invest.: M P MCCORMICK
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2206 **HAMPTON UNIV** **9209**
 TOP-OF-ATMOSPHERE CLEAR-SKY BROADBAND RADIATIVE FLUX AND
 DIRECT AEROSOL RADIATIVE FORCING FROM
 06/21/1999 - 06/30/2002 FY02: \$0 Total: \$164,555
Prin. Invest.: N G LOEB, B LIN, J HU
Tech. Officer: LARC/V E DELNORE, LARC/J L RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2223 **HAMPTON UNIV** **9210**
 EVALUATION OF THE EFFECT OF WATER VAPOR ON THE PERFORMANCE
 OF NASA'S NMRO CATALYSIT FOR CARBON
 08/31/1999 - 03/31/2002 FY02: \$0 Total: \$199,869
Prin. Invest.: A AKYURTLU
Tech. Officer: LARC/D R SCHRYER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2224 **HAMPTON UNIV** **9211**
 STUDENT FIELD TESTING OF THE HAMPTON UNIV COMPACT OZONE LIDAR
 SYSTEM CERTIFICATION OF
 08/24/1999 - 12/31/2001 FY02: \$0 Total: \$200,000
Prin. Invest.: T H CHYBA
Tech. Officer: LARC/J FISHMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2318 **HAMPTON UNIV** **9212**
 THEORET & OBSERVAT'L DETERM OF GLOBAL & REGIONAL RADIATION
 BUDG, FORC'G & FEEDBACK TOP-OF-ATMOSPHERE
 07/18/2000 - 10/31/2003 FY02: \$750,169 Total: \$1,274,321
Prin. Invest.: N G LOEB
Tech. Officer: LARC/G G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2331 **HAMPTON UNIV** **9213**
 THE AMERICAN INDIAN EDUCATIONAL OPPORTUNITIES 2000 PROGRAM
 09/29/2000 - 07/31/2002 FY02: \$0 Total: \$75,000
Prin. Invest.: R SCHWAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 79 – SOCIAL SCIENCE, OTHER

NAG 1 01075 **HAMPTON UNIV** **9214**
 STATISTICAL METHODS FOR RAPID AEROTHERMAL ANALYSIS AND DESIGN
 TECHNOLOGY
 04/27/2001 - 01/09/2002 FY02: \$1 Total: \$80,001
Prin. Invest.: D J DEPRIEST, C B MORGAN
Tech. Officer: LARC/R A THOMPSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01089 **HAMPTON UNIV** **9215**
 THE AMERICAN INDIAN EDUCATIONAL OPPORTUNITIES 2001 PROGRAM
 06/13/2001 - 06/10/2003 FY02: \$0 Total: \$100,000
Prin. Invest.: R SCHWAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01096 **HAMPTON UNIV** **9216**
 TOP-OF-ATMOSPHERE ALBEDO ESTIMATION FROM POLDER MULTI-ANGLE
 MEASUREMENTS: EVALUATION OF WATER AND
 06/20/2001 - 05/31/2004 FY02: \$54,541 Total: \$106,820
Prin. Invest.: N G LOEB, Y HU
Tech. Officer: LARC/V E DELNORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02030 **HAMPTON UNIV** **9217**
 STATISTICAL METHODS FOR RAPID AEROTHERMAL ANALYSIS AND DESIGN
 TECHNOLOGY
 01/10/2002 - 12/31/2002 FY02: \$59,999 Total: \$59,999
Prin. Invest.: D J DEPRIEST, C B MORGAN
Tech. Officer: LARC/R A THOMPSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02044 **HAMPTON UNIV** **9218**
 CONTRAIL TRACKING AND ARM (ATMOSPHERIC RADIATION MEASURE-
 MENTS) DATA PRODUCT DEVELOPMENT
 01/28/2002 - 01/31/2005 FY02: \$109,361 Total: \$109,361
Prin. Invest.: D P DUDA
Tech. Officer: LARC/P MINNIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1331 **HAMPTON UNIV** **9219**
 APPLIED CFD RESEARCH & TRAINING
 06/21/1999 - 09/14/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: H HU
Tech. Officer: ARC/R C STRAWN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2189 **HAMPTON UNIV** **9220**
 OPTICAL ELECTRONIC BRAGG REFLECTION SENSOR SYSTEM WITH HY-
 DRODYNAMIC FLOW APPLICATIONS
 08/07/1998 - 05/30/2002 FY02: \$30,000 Total: \$469,999
Prin. Invest.: D R LYONS
Tech. Officer: GRC/D GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2249 **HAMPTON UNIV** **9221**
 ADVANCED METHODS FOR AIRCRAFT ENGINE THRUST AND NOISE
 BENEFITS. NOZZLE-INLET FLOW ANALYSIS
 04/01/1999 - 12/31/2002 FY02: \$0 Total: \$300,000
Prin. Invest.: M H MORGAN
Tech. Officer: GRC/I BLANKSON
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2422 **HAMPTON UNIV** **9222**
 NUMERICAL SIMULATION OF ONE-AND TWO-PHASE FLOWS IN PROPUL-
 SION SYSTEMS
 05/31/2000 - 12/31/2002 FY02: \$100,000 Total: \$300,000
Prin. Invest.: M GILLINSKY
Tech. Officer: GRC/I M BLANKSON
CASE Category: 41 – AERONAUTICAL ENGR

VIRGINIA

NASA'S UNIVERSITY PROGRAM

NAG 3 2495 **HAMPTON UNIV** **9223**
 CORRUGATED AND COMPOSED NOZZLES APPLICATION FOR TH RUST AND
 JET NOISE BENEFITS VIA UEET PROGRAM
 10/27/2000 - 09/30/2003 FY02: \$0 Total: \$125,000
Prin. Invest.: D GILLINSKY
Tech. Officer: GRC/D W LAM
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 9171 **HAMPTON UNIV** **9231**
 STUDIES OF POLAR MESOPHERIC CLOUDS FROM OBSERVATIO NS BY THE
 STUDENT NITRIC OXIDE EXPLORER
 03/08/2000 - 02/28/2002 FY02: \$0 Total: \$149,307
Prin. Invest.: S M BAILEY
Tech. Officer: GSFC/M MELLOTT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 3 2618 **HAMPTON UNIV** **9224**
 ANALYSIS OF ANTIOXIDANT AND PHOSPHOINOSITOL SIGNAL TRANSDUC-
 TION PATHWAY (S) IN PLANTS AFTER EXPOSUR
 05/31/2001 - 04/30/2005 FY02: \$33,145 Total: \$88,145
Prin. Invest.: C M OKPODU
Tech. Officer: GRC/D W GRIFFIN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 10015 **HAMPTON UNIV** **9232**
 HAMPTON UNIV COLL OF CONTINUING EDUCATION AEROSCIENCE CEN-
 TER
 09/21/2000 - 09/30/2003 FY02: \$300,000 Total: \$600,000
Prin. Invest.: C L REAVES
Tech. Officer: GSFC/P S BOELLNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 5299 **HAMPTON UNIV** **9225**
 DYNAMICAL INTERPRETATION OF AEROSOL INFLUENCES ON DOBSON
 SPECTROPHOTOMETER
 07/18/2000 - 08/31/2001 FY02: \$0 Total: \$49,078
Prin. Invest.: D P MCCORMICK
Tech. Officer: GSFC/F SCHMIDLIN
CASE Category: 12 – CHEMISTRY

NAG 5 10063 **HAMPTON UNIV** **9233**
 ANALYSIS OF STUDENT NITRIC OXIDE EXPLORER SOLAR X-RAY PHOTOM-
 ETER MEASUREMENTS
 11/15/2000 - 11/30/2001 FY02: -\$1,522 Total: \$33,478
Prin. Invest.: S M BAILEY
Tech. Officer: GSFC/C P HOLMES
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 5360 **HAMPTON UNIV** **9226**
 GRANT TO HAMPTON UNIVESITY FOR THE STUDY OF UPPER AIR INSTRU-
 MENTATION ANOMALIES. PERIOD: 3/15/02 T
 03/14/2002 - 09/15/2002 FY02: \$11,389 Total: \$11,389
Prin. Invest.: P MCCORMICK
Tech. Officer: WFF/F J SCHMIDLIN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10163 **HAMPTON UNIV** **9234**
 A SPACE SCIENCE CURRICULUM AT HAMPTON UNIV: DEVELOPMENT OF A
 MINOR, FACULTY ENHANCEMENT,
 12/13/2000 - 12/31/2003 FY02: \$244,996 Total: \$489,993
Prin. Invest.: A OMAR
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 5 6296 **HAMPTON UNIV** **9227**
 HAMPTON UNIV - OPTICAL RADIATION IN ATMOSPHE
 09/19/1997 - 02/28/2001 FY02: -\$4,386 Total: \$220,587
Prin. Invest.: D A TEMPLE
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10796 **HAMPTON UNIV** **9235**
 CONCEPT STUDY FOR THE "AERONOMY OF ICE IN THE MESO SPHERE"
 (AIM) MISSION AO-99-OSS-05
 05/01/2001 - 04/30/2002 FY02: \$0 Total: \$347,116
Prin. Invest.: D M RUSSELL
Tech. Officer: GSFC/J R BYRD
CASE Category: 11 – ASTRONOMY

NAG 5 7001 **HAMPTON UNIV** **9228**
 STUDIES OF THE CLIMATOLOGY, LONG-TERM TRENDS, AND QUASI-
 BIENNIAL OSCILLATION OF CHEMICAL TRACERS IN
 04/07/1998 - 03/31/2001 FY02: \$0 Total: \$151,599
Prin. Invest.: D M RUSSELL,111
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11065 **HAMPTON UNIV** **9236**
 STDS OF CLIMATOLOGY & LONG-TERM CHANGES OF CHEM TRACERS IN
 THE MIDDLE ATMOS USING UARS DATA & HALO
 06/28/2001 - 09/30/2002 FY02: \$39,766 Total: \$84,258
Prin. Invest.: J M RUSSELL
Tech. Officer: GSFC/C JACKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8648 **HAMPTON UNIV** **9229**
 "PROPOSAL FOR MEMBERSHIP TO THE AEROSOL RADIATIVE FORCING
 SCIENCE TEAM"
 08/16/1999 - 01/31/2002 FY02: -\$282 Total: \$44,448
Prin. Invest.: M MCCORMICK
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11126 **HAMPTON UNIV** **9237**
 AURORA 2001)ADVANCED UNDERGRADUATE RESEARCH USING OPTICAL
 RADIATION IN THE ATMOSPHERE)
 07/18/2001 - 07/14/2002 FY02: \$0 Total: \$75,000
Prin. Invest.: J RUSSELL
Tech. Officer: GSFC/B W MEESON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9156 **HAMPTON UNIV** **9230**
 PROGRAM FOR IMPROVING SUCCESS IN SCIENCE, ENGINEER ING, AND
 MATHEMATICS (PRISEM)
 03/03/2000 - 02/28/2003 FY02: \$89,618 Total: \$273,482
Prin. Invest.: C RANKINS
Tech. Officer: GSFC/M STOUTSENBERGER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11409 **HAMPTON UNIV** **9238**
 TIMED PHASE E SABER - RUSSELL
 12/10/2001 - 12/31/2005 FY02: \$156,973 Total: \$156,973
Prin. Invest.: J M RUSSELL
Tech. Officer: GSFC/B A CAMPBELL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11477 **HAMPTON UNIV** **9239**
 REAL-TIME VERY HIGH RESOLUTION REGIONAL 4D ASSIMILATION IN
 SUPPORTING NASA CRYSTAL-FACE EXPERIMENT
 12/19/2001 - 12/31/2003 FY02: \$71,789 Total: \$71,789
Prin. Invest.: D WANG
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11818 **HAMPTON UNIV** **9240**
 HELIOSPHERIC HYDROGEN AND HELIUM
 03/12/2002 - 03/14/2005 FY02: \$53,166 Total: \$53,166
Prin. Invest.: W R PRYOR
Tech. Officer: GSFC/T KUCERA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 1 97042 **HAMPTON UNIV** **9241**
 PRINCIPAL INVESTIGATOR SERVICES TO SUPPORT SAGE II AND III, SABER,
 HALOE, LITE AND LIDAR PROGRAMS.
 09/29/1997 - 09/30/2002 FY02: \$155,090 Total: \$1,274,194
Prin. Invest.: P MCCORMICK
Tech. Officer: LARC/R L DUNCAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99108 **HAMPTON UNIV** **9242**
 PICASSO-CENA INTERNATIONAL SCIENCE ADVISORY PANEL, SCIENCE
 ACTIVITIES, ALGORITHM IMPLEMENTATION& OU
 02/01/2000 - 01/31/2003 FY02: \$1,219,400 Total: \$2,968,571
Prin. Invest.: M P MCCORMICK, A H OMAR
Tech. Officer: LARC/G G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 251 **HAMPTON UNIV** **9243**
 RESEARCH CENTER FOR OPTICAL PHYSICS MY 1/5
 03/18/1997 - 12/31/2002 FY02: \$969,000 Total: \$6,187,999
Prin. Invest.: D A TEMPLE
Tech. Officer: LARC/R HATHAWAY
CASE Category: 13 – PHYSICS

NCC 1 358 **HAMPTON UNIV** **9244**
 NASA-ASEE SUMMER FACULTY FELLOWSHIP PROGRAM 2000
 03/27/2000 - 12/31/2001 FY02: \$0 Total: \$584,055
Prin. Invest.: D DEPRIEST
Tech. Officer: LARC/R HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 366 **HAMPTON UNIV** **9245**
 DEVELOPMENT OF ADVANCED AIRCRAFT ANTENNA DESIGN AND ANALYSIS
 TECHNIQUES
 01/11/2000 - 12/31/2002 FY02: \$0 Total: \$77,034
Prin. Invest.: A O OLADIPUPO, C J REDDY
Tech. Officer: LARC/F B BECK, LARC/M C BAILEY
CASE Category: 45 – ELECTRICAL ENGR

NCC 1 01034 **HAMPTON UNIV** **9246**
 2001 LANGLEY AEROSCIENCE RESEARCH SUMMER SCHOLARS (LARSS)
 PROGRAM
 03/20/2001 - 03/02/2002 FY02: \$42,391 Total: \$927,465
Prin. Invest.: R SCHWAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 01059 **HAMPTON UNIV** **9247**
 CENTER FOR LIDAR & ATMOSPHERIC SCIENCES STUDENTS (FORMERLY
 GSFC NCC-5-348)
 08/22/2001 - 06/30/2003 FY02: \$661,969 Total: \$1,161,969
Prin. Invest.: D A TEMPLE, A OMAR
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 02015 **HAMPTON UNIV** **9248**
 2002 NASA SUMMER FACULTY FELLOWSHIP PROGRAM
 02/22/2002 - 03/02/2003 FY02: \$673,300 Total: \$673,300
Prin. Invest.: D J DEPRIEST
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02020 **HAMPTON UNIV** **9249**
 2002 LANGLEY AEROSPACE RESEARCH SUMMER SCHOLARS PROGRAM
 (LARSS)
 04/02/2002 - 03/02/2003 FY02: \$1,013,460 Total: \$1,013,460
Prin. Invest.: H DAVIS
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 348 **HAMPTON UNIV** **9250**
 CENTER FOR LIDAR AND ATMOSPHERIC SCIENCES STUDENTS
 06/29/1998 - 02/28/2002 FY02: -\$18,762 Total: \$1,476,771
Prin. Invest.: T A CHYBA
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52261 **HAMPTON UNIV** **9251**
 DEVELOPMENT OF AN ASTROBIOLOGY EDUCATION CURRICULUM AT
 HAMPTON UNIV
 12/06/1999 - 06/30/2002 FY02: \$0 Total: \$199,877
Prin. Invest.: B FAISON
Tech. Officer: ARC/D DESMARAIS
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 3 52354 **HAMPTON UNIV** **9252**
 UV INDUCED DENSIFICATION AND ABLATION DURING THE FORMATION OF
 BRAGG GRATINGS IN GE-DOPED SiO2 PREFO
 06/25/1999 - 06/30/2001 FY02: \$0 Total: \$65,850
Prin. Invest.: D R LYONS
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 13 – PHYSICS

NAG 1 2155 **JAMES MADISON UNIV** **9253**
 CHAOS AND THERMAL SCIENCES LABORATORY (CATS LAB) MY 1/3
 03/05/1999 - 12/31/2001 FY02: -\$2 Total: \$89,890
Prin. Invest.: A A TEATE
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2186 **JAMES MADISON UNIV** **9254**
 INFRARED DEVELOPMENT AND TESTING LABORATORY WITH DEVELOPMENT
 OF ATMOSPHERIC CO IMAGING INSTRUMENT
 04/29/1999 - 02/28/2003 FY02: \$0 Total: \$141,800
Prin. Invest.: J J MILES
Tech. Officer: LARC/A D LITTLE
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 01093 **JAMES MADISON UNIV** **9255**
 DETERMINATION OF MATL NEAR THE GLASS TRANSITION TEMPERATURE
 FOR AN ISOGRID BOOM
 06/25/2001 - 04/30/2002 FY02: -\$751 Total: \$14,223
Prin. Invest.: J R BLANDINO
Tech. Officer: LARC/J A WOODS-VEDELER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02033 **JAMES MADISON UNIV** **9256**
 RANS LES AND DNS TOWARD MUTUALLY CONSISTENT FORMULATIONS
 01/10/2002 - 01/09/2004 FY02: \$23,000 Total: \$23,000
Prin. Invest.: C D PRUETT
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 6166 **JAMES MADISON UNIV** **9257**
 COLL OF INTEGRATED SCIENCE & TECHNOLOGY (CISAT) CONDUCT
 PRE-SERVICE TEACHER ENHANCEMENT WORKSHOP.
 08/01/1997 - 01/31/2001 FY02: -\$11,466 Total: \$48,534
Prin. Invest.: J BARNES
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10701 **JAMES MADISON UNIV** **9258**
 DEVELOPMENT OF TEST TECHNOLOGY FOR THIN-FILM MEMEB RANE
 STRUCTURES
 04/05/2001 - 04/14/2003 FY02: \$0 Total: \$49,965
Prin. Invest.: J BLANDINO
Tech. Officer: GSFC/J JOHNSON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 394 **MARY WASHINGTON COLL** **9259**
 A PROPOSAL FOR THE ESTABLISHMENT OF A CENTER FOR EXPERIMEN-
 TAL AERODYNAMICS (CEA)
 04/24/2000 - 03/31/2005 FY02: \$215,576 Total: \$556,396
Prin. Invest.: C P BRITCHER, R L ASH, R L ASH
Tech. Officer: LARC/J C YU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2125 **NORFOLK STATE UNIV** **9260**
 TECHNICAL EDUCATION OUTREACH MATERIALS SCIENCE AND TECHNOL-
 OGY BASED ON NASAS MATERIALS RESEARCH
 01/12/1999 - 12/31/2002 FY02: \$0 Total: \$119,000
Prin. Invest.: J JACOBS, S R CHAUDHURY
Tech. Officer: LARC/E T PRIOR, LARC/R HATHAWAY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 2172 **NORFOLK STATE UNIV** **9261**
 DEVELOPMENT OF SOLID-STATE LASER MATERIALS FOR APP LICATION IN
 LASERES FOR ATMOSPHERIC OZONE & WATER
 03/30/1999 - 12/31/2001 FY02: -\$11,769 Total: \$88,231
Prin. Invest.: M NOGINOV, G LOUITS
Tech. Officer: LARC/N P BARNES, LARC/J C BARNES
CASE Category: 13 – PHYSICS

NAG 1 2226 **NORFOLK STATE UNIV** **9262**
 PORTSMOUTH ATMOSPHERIC SCIENCE SCHOOL PROJECT (PASS)
 08/24/1999 - 07/31/2002 FY02: \$0 Total: \$199,728
Prin. Invest.: C COLEMAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2228 **NORFOLK STATE UNIV** **9263**
 NONSELECTION ROOMTEMPERATURE MICROBOLOMETERS BASED ON
 CMB THIN FILMS
 08/30/1999 - 07/31/2001 FY02: -\$23,161 Total: \$173,359
Prin. Invest.: E S GILLMAN
Tech. Officer: LARC/J C BARNES
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2230 **NORFOLK STATE UNIV** **9264**
 PRE-SERVICE TEACHER CONFERENCE MY 1/2
 09/03/1999 - 07/31/2001 FY02: \$0 Total: \$204,000
Prin. Invest.: P TUCKER-HOGAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01127 **NORFOLK STATE UNIV** **9265**
 THE CHROME HONORS PROGRAM
 09/26/2001 - 09/30/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: E WILSON
Tech. Officer: LARC/R HATHAWAY
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02060 **NORFOLK STATE UNIV** **9266**
 NASA'S CENTER OF EXCELLENCE FOR STRUCTURES AND MATERIALS
 TECHNICAL EDUCATION OUTREACH
 04/01/2002 - 04/30/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: J A JACOBS
Tech. Officer: LARC/E J PRIOR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02076 **NORFOLK STATE UNIV** **9267**
 CHARACTERIZATION OF SMART OPTICAL MATERIALS USING ELLIPSO-
 METRY
 03/29/2002 - 07/31/2002 FY02: \$10,000 Total: \$10,000
Prin. Invest.: K D SONG
Tech. Officer: LARC/S H CHOI, LARC/G C KING
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2289 **NORFOLK STATE UNIV** **9268**
 NOVEL HIGH EFFICIENT ORGANIC PHOTOVOLTAIC MATERIAL S
 08/30/1999 - 07/21/2002 FY02: \$0 Total: \$299,816
Prin. Invest.: S SUN
Tech. Officer: GRC/A F HEPP
CASE Category: 12 – CHEMISTRY

NAG 4 165 **NORFOLK STATE UNIV** **9269**
 VARIATIONAL METHOD IN DESIGN OPTIMIZATION
 02/26/1999 - 02/26/2003 FY02: \$0 Total: \$293,464
Prin. Invest.: D HULBERT
Tech. Officer: DFRC/K GUPTA, DFRC/E COX
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 6298 **NORFOLK STATE UNIV** **9270**
 NORFOLK STATE UNIV RESEARCH EXPERIENCE IN EA
 09/15/1997 - 07/31/2002 FY02: \$0 Total: \$223,270
Prin. Invest.: W J RODRIGUEZ
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NASA'S UNIVERSITY PROGRAM

VIRGINIA

NAG 5 8541 NORFOLK STATE UNIV 9271
 SUMMER WORKSHOP PROGRAM TO PROVIDE EMERGING EDUCAT ORS
 W/THE FAMILIARITY & KNOWLEDGE TO UTILIZE IN C
 05/12/1999 - 05/14/2002 FY02: \$0 Total: \$40,295
Prin. Invest.: S CHAUDHURY
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8653 NORFOLK STATE UNIV 9272
 DESIGN AND PERFORMANCE TESTS OF ULTRA-COMPACT CALO RIMETERS
 FOR HIGH ENERGY ASTROPHYSICS
 08/19/1999 - 07/31/2003 FY02: \$0 Total: \$279,385
Prin. Invest.: C W SALGADO
Tech. Officer: GSFC/R E STREITMATTER
CASE Category: 13 – PHYSICS

NAG 5 9257 NORFOLK STATE UNIV 9273
 BRINGING EDUCATION & SCIENCE TOGETHER FOR SYSTEMIC TRAINING &
 EMPOWERMENT OF PRESERVICE TEACHERS
 03/15/2000 - 02/28/2003 FY02: \$196,991 Total: \$576,968
Prin. Invest.: G GOLEMBIEWSKI
Tech. Officer: GSFC/B L WHITE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9374 NORFOLK STATE UNIV 9274
 SCENARIO BASED LEARNING: INQUIRY FOR A DIGITAL EARTH
 04/05/2000 - 03/31/2003 FY02: \$81,629 Total: \$253,999
Prin. Invest.: W J RODRIQUEZ
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10140 NORFOLK STATE UNIV 9275
 A NASA-HBCU PARTNERSHIP TO ENHANCE MINORITY EDUCAT ION &
 RESEARCH PARTICIPATION IN THE SPACE SCIENCE
 12/12/2000 - 12/31/2003 FY02: \$202,662 Total: \$406,553
Prin. Invest.: C W SALGADO
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 11 – ASTRONOMY

NAG 8 1862 NORFOLK STATE UNIV 9276
 GROWTH AND CHARACTERIZATION OF ORGANIC CRYSTALS
 04/16/2002 - 04/15/2003 FY02: \$10,000 Total: \$10,000
Prin. Invest.: L SALARY
Tech. Officer: MSFC/W J LOVE
CASE Category: 12 – CHEMISTRY

NCC 1 280 NORFOLK STATE UNIV 9277
 FEASIBILITY STUDY OF PIEZOELECTRIC ACTUATORS DRIVE N BY A
 MICROWAVE
 03/06/1998 - 03/05/2002 FY02: -\$1 Total: \$299,999
Prin. Invest.: K D SONG
Tech. Officer: LARC/S H CHOI
CASE Category: 46 – MECHANICAL ENGR

NCC 1 01049 NORFOLK STATE UNIV 9278
 DEVELOPMENT OF NOVEL COMPOSITE AND RANDOM MATERIAL FOR
 NONLINEAR OPTICS AND LASERS - TRANSFER FROM
 06/06/2001 - 09/14/2004 FY02: \$940,000 Total: \$1,360,000
Prin. Invest.: L MATTIX
Tech. Officer: LARC/J C BARNES
CASE Category: 47 – METAL & MATERIALSENGR

NCC 1 01053 NORFOLK STATE UNIV 9279
 2001 PRE-SERVICE TEACHER INST
 05/10/2001 - 03/31/2002 FY02: -\$8,716 Total: \$216,284
Prin. Invest.: P TUCKER-HOGAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 01055 NORFOLK STATE UNIV 9280
 MISSION-LEVERAGED EDUCATION: NSU-NASA INNOVATIVE UNDERGRADU-
 ATE MODEL MILEN1IUM A NASA PAIR PROJECT
 06/29/2001 - 02/29/2004 FY02: \$298,274 Total: \$596,214
Prin. Invest.: W RODRIGUEZ
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 01057 NORFOLK STATE UNIV 9281
 2001 PRE-SERVICE TEACHER CONFERENCE
 08/14/2001 - 07/31/2002 FY02: \$168,771 Total: \$318,800
Prin. Invest.: P E MCNEIL, S PROCTOR
Tech. Officer: LARC/R HATHAWAY, LARC/E J PRIOR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02024 NORFOLK STATE UNIV 9282
 2002 PRE-SERVICE TEACHER PROGRAM (INST AND CONFERENCE)
 04/29/2002 - 04/28/2003 FY02: \$475,000 Total: \$475,000
Prin. Invest.: S M PROCTOR, P TUCKER-HOGAN
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 457 NORFOLK STATE UNIV 9283
 MISSION-LEVERAGED EDUCATION: NSU-NASA INNOVATIVE UNDERGRADU-
 ATE MODEL
 02/22/2000 - 03/31/2001 FY02: -\$30,163 Total: \$262,682
Prin. Invest.: L MATTIX
Tech. Officer: GSFC/M MATTHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2195 OLD DOMINION UNIV 9284
 PROCESS COST MODELING FOR MULTIDISCIPLINARY DESIGN APPLICA-
 TIONS
 05/21/1999 - 03/31/2002 FY02: -\$792 Total: \$144,208
Prin. Invest.: H P BAO
Tech. Officer: LARC/W T FREEMAN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2211 OLD DOMINION UNIV 9285
 DEVELOPMENT OF A TRANSIENT CUT-OFF GRID FOR FOCUS SCHLIEREN
 07/12/1999 - 06/14/2002 FY02: -\$929 Total: \$25,071
Prin. Invest.: G R HOY, K S SCHANZE
Tech. Officer: LARC/M A TALLEY, LARC/A W BURNER
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 1 2252 OLD DOMINION UNIV 9286
 USER ACCEPTABILITY OF PHYSIOLOGICAL AND OTHER MEASURES OF
 HAZARDOUS STATES OF AWARENESS
 11/23/1999 - 02/28/2001 FY02: -\$32 Total: \$29,148
Prin. Invest.: T L DICKINSON, F G FREEMAN, P M MIKULKA
Tech. Officer: LARC/A T POPE
CASE Category: 69 – PSYCHOLOGY, OTHER

NAG 1 2266 **OLD DOMINION UNIV** **9287**
 NUMERICAL SIMULATIONS OF MIXING AND COMBUSTION IN SCRAMJET ENGINES
 01/31/2000 - 12/31/2002 FY02: \$41,256 Total: \$119,247
Prin. Invest.: S W TIWARI, T O MOHIELDIN
Tech. Officer: LARC/D E REUBUSH, LARC/C R MCCLINTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2278 **OLD DOMINION UNIV** **9288**
 IMPLICATIONS OF AUTOMOTIVE AND TRUCKING ON-BOARD INFORMATION SYSTEMS FOR GENERAL AVIATION COCKPIT
 03/15/2000 - 03/31/2002 FY02: \$0 Total: \$45,380
Prin. Invest.: P KACHROO, P J KAUFFMAN
Tech. Officer: LARC/E J JOHNSON
CASE Category: 41 – AERONAUTICALENGR

NAG 1 2279 **OLD DOMINION UNIV** **9289**
 DESIGN & ANALYSIS OF ARCHITECTURES FOR STRUCTURAL HEALTH MONITORING SYSTEMS
 03/13/2000 - 08/31/2002 FY02: \$6,756 Total: \$99,751
Prin. Invest.: R MUKKAMALA
Tech. Officer: LARC/S L VAZQUEZ
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 2300 **OLD DOMINION UNIV** **9290**
 STRUCTURE-COMPATIBLE NONLINEAR HEAT TRANSFER ANAL.ERROR ESTIMATEDS, ORDER ADAPTIVITY & DESIGN OPTIMI
 05/26/2000 - 05/14/2003 FY02: \$55,000 Total: \$150,000
Prin. Invest.: G HOU
Tech. Officer: LARC/K S BEY
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 2303 **OLD DOMINION UNIV** **9291**
 NATIONAL CULTURE, CREW RESOURCES MANAGEMENT, AND TEAM PERFORMANCE IN A FLOGHT SIMULATION
 06/02/2000 - 12/31/2003 FY02: \$137,400 Total: \$367,352
Prin. Invest.: D D DAVIS
Tech. Officer: LARC/P C SHUTTIE, LARC/A C TRUJILLO
CASE Category: 62 – PSYCHOLOGY SOCIAL ASPECTS

NAG 1 2330 **OLD DOMINION UNIV** **9292**
 INVESTIGATION OF ERROR PATTERNS IN GEOGRAPHICAL DATABASES
 09/29/2000 - 07/31/2002 FY02: \$26,479 Total: \$106,157
Prin. Invest.: D A DRYER, P KAUFFMAN
Tech. Officer: LARC/D R JONES, LARC/P W GOODE
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 1 01012 **OLD DOMINION UNIV** **9293**
 MODELING DISTURBANCE DYNAMICS IN TRANSITIONAL AND TURBULENT BOUNDARY LAYERS
 12/20/2000 - 10/31/2001 FY02: \$0 Total: \$27,000
Prin. Invest.: C E GROSCH
Tech. Officer: LARC/T B GATSKI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01028 **OLD DOMINION UNIV** **9294**
 NONLINEAR AND FAILURE ANALYSIS OF COMPOSITE STRUCTURES
 02/05/2001 - 12/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: A K NOOR
Tech. Officer: LARC/J H STARNES, JR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01033 **OLD DOMINION UNIV** **9295**
 PARALLEL DOMAIN DECOMPOSITION FORMULATION AND SOFTWARE FOR LARGE-SCALE UNSYMMETRICAL 3D APPLICATI
 02/22/2001 - 01/14/2004 FY02: \$55,000 Total: \$85,000
Prin. Invest.: D T NGUYEN
Tech. Officer: LARC/W R WATSON, LARC/M G JONES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01043 **OLD DOMINION UNIV** **9296**
 ULTRA NANOSTRUCTURED COMPOSITE FIBERS
 03/26/2001 - 03/25/2004 FY02: \$80,000 Total: \$160,000
Prin. Invest.: R B PIPES
Tech. Officer: LARC/T S GATES
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01044 **OLD DOMINION UNIV** **9297**
 INVESTIGATION WAVE PROPAGATIONS IN DISCONTINUOUS GALERKIN METHOD
 03/26/2001 - 02/28/2004 FY02: \$19,812 Total: \$38,833
Prin. Invest.: F HU
Tech. Officer: LARC/H L ATKINS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01047 **OLD DOMINION UNIV** **9298**
 MANAGEMENT (BY VSGC) OF 2000-2001 NATIONAL GENERAL AVIATION DESIGN COMPETITION
 04/12/2001 - 09/30/2001 FY02: \$0 Total: \$25,000
Prin. Invest.: M L SANDY
Tech. Officer: LARC/H W JARRETT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01068 **OLD DOMINION UNIV** **9299**
 NOISE PREDICTION FOR ADVANCED AIRCRAFT CONFIGUR- ATIONS USING THE EQUIVALENT SOURCE METHOD
 04/23/2001 - 04/22/2003 FY02: \$213,595 Total: \$303,595
Prin. Invest.: M H DUNN
Tech. Officer: LARC/D P GARBER, LARC/R A GOLUB
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 1 01071 **OLD DOMINION UNIV** **9300**
 MODIFICATION OF EXISTING METHOD OF MOMENT CODE FOR LARGE OBJECTS USING PHYSICAL OPTICS
 04/20/2001 - 09/30/2002 FY02: \$0 Total: \$30,212
Prin. Invest.: R P JOSHI
Tech. Officer: LARC/M D DESHBANDE
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 01076 **OLD DOMINION UNIV** **9301**
 PARALLEL COMPUTATIONAL STUDIES OF THE DIRECT SIMULATION MONTE CARLO METHOD IN FLUID DYNAMICS
 05/16/2001 - 05/31/2004 FY02: \$0 Total: \$34,618
Prin. Invest.: D E KEYES, P BOGACKI
Tech. Officer: LARC/J N MOSS
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 01077 **OLD DOMINION UNIV** **9302**
 DEV NUMERICAL MODELS 4 PERF PREDICTIONS OF SINGLE PHOTON AVALANCHE PHOTODETECTORS 4 2-MICRON REGIME
 05/16/2001 - 12/31/2001 FY02: -\$2 Total: \$19,998
Prin. Invest.: R P JOSHI
Tech. Officer: GSFC/M N ABEDIN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01086	OLD DOMINION UNIV	9303	NAG 1 02110	OLD DOMINION UNIV	9312
REDUCING DESIGN RISK USING DESIGN METHODS			DEVELOPMENT OF APPROXIMATION MODELS FOR LAUNCH VEHICLE OPERATIONS ANALYSIS		
05/17/2001 - 03/17/2003	FY02: \$0	Total: \$9,988	08/16/2002 - 06/15/2003	FY02: \$16,956	Total: \$16,956
<i>Prin. Invest.:</i> R UNAL			<i>Prin. Invest.:</i> R UNAL		
<i>Tech. Officer:</i> LARC/R A LEPSCH			<i>Tech. Officer:</i> LARC/W D MORRIS, LARC/N H WHITE		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 49 – ENGINEERING, OTHER		
NAG 1 01092	OLD DOMINION UNIV	9304	NAG 2 1481	OLD DOMINION UNIV	9313
ERROR ANALYSIS FOR DISCONTINUOUS GALERKIN METHOD FOR PARABOLIC PROBLEMS			DATA-LINK AIRCRAFT COMMUNICATIONS: AN EXAMINATION OF INTERFERENCE, COHERENCE, & WORKLOAD		
06/27/2001 - 06/30/2003	FY02: \$20,000	Total: \$40,000	05/04/2001 - 04/30/2003	FY02: \$137,007	Total: \$217,007
<i>Prin. Invest.:</i> H KANEKO			<i>Prin. Invest.:</i> D S MCNAMARA, M SCERBO		
<i>Tech. Officer:</i> LARC/K S BEY			<i>Tech. Officer:</i> ARC/I BARSHI, ARC/S LOZITO		
<i>CASE Category:</i> 21 – MATHEMATICS			<i>CASE Category:</i> 69 – PSYCHOLOGY, OTHER		
NAG 1 01097	OLD DOMINION UNIV	9305	NAG 5 4515	OLD DOMINION UNIV	9314
A PROJECT DEV MODEL FOR ASSESSING THE FEAS OF AUTO MOTIVE-TRUCKING INFO SYS W/APPLCS TO GEN AVIATIO			STUDYING THE EARTH'S ENVIRONMENT IN SPACE: CLASSR ACTIVITIES WITH INSTRUCTION RESOURCES.		
06/29/2001 - 09/30/2002	FY02: \$0	Total: \$59,990	06/02/1997 - 12/31/2000	FY02: -\$3,038	Total: \$163,858
<i>Prin. Invest.:</i> P J KAUFFMANN, P KACHROO			<i>Prin. Invest.:</i> E SMITH		
<i>Tech. Officer:</i> LARC/E J JOHNSON, LARC/H P STOUGH			<i>Tech. Officer:</i> GSFC/N KHAZENIE		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 39 – ENVIRONMENTAL SCI, OTHER		
NAG 1 01121	OLD DOMINION UNIV	9306	NAG 5 10528	OLD DOMINION UNIV	9315
YOUNG PHD'S IN HUMAN SPACE FLIGHT INST			RESPONSE OF SEA ICE AND MARINE ECOSYSTEMS TO THE OBSERVED WARMING TRENDS IN THE ARTIC		
08/31/2001 - 08/31/2002	FY02: \$0	Total: \$29,852	03/19/2001 - 03/14/2004	FY02: \$90,769	Total: \$207,575
<i>Prin. Invest.:</i> E WILSON			<i>Prin. Invest.:</i> G F COTA		
<i>Tech. Officer:</i> LARC/R HATHAWAY			<i>Tech. Officer:</i> GSFC/J MARRA		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 33 – OCEANOGRAPHY		
NAG 1 02005	OLD DOMINION UNIV	9307	NAG 5 11259	OLD DOMINION UNIV	9316
STUDIES IN TRANSITION AND TIME VARYING TURBULENT FLOW			PHYSICAL BIOLOGICAL INTERACTIONS AND THE CARBON CYCLE OF THE TROPICAL PACIFIC AND ATLANTIC OCEANS		
11/16/2001 - 11/15/2003	FY02: \$35,000	Total: \$35,000	08/20/2001 - 08/31/2004	FY02: \$32,795	Total: \$125,694
<i>Prin. Invest.:</i> C E GROSSCH			<i>Prin. Invest.:</i> E HOFMANN		
<i>Tech. Officer:</i> LARC/T B GATSKI			<i>Tech. Officer:</i> GSFC/J MARRA		
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR			<i>CASE Category:</i> 99 – MULTI INTERDISCIPL, OTHER		
NAG 1 02039	OLD DOMINION UNIV	9308	NAG 8 1813	OLD DOMINION UNIV	9317
SPECIFICATION DESIGN AND ANALYSIS OF ADVANCED HUMS ARCHITURES			RESEARCH GRANT		
01/25/2002 - 01/31/2004	FY02: \$45,888	Total: \$45,888	04/30/2001 - 01/31/2003	FY02: \$0	Total: \$20,000
<i>Prin. Invest.:</i> R MUKKAMALA			<i>Prin. Invest.:</i> R PRABHAKARAN		
<i>Tech. Officer:</i> LARC/S L VAZQUEZ, LARC/E G COOPER			<i>Tech. Officer:</i> MSFC/A T NETTLES		
<i>CASE Category:</i> 22 – COMPUTER SCIENCE			<i>CASE Category:</i> 47 – METAL & MATERIALS ENGR		
NAG 1 02062	OLD DOMINION UNIV	9309	NAG 9 1270	OLD DOMINION UNIV	9318
ADAPTIVE TECHNOLOGY AS A COUNTERMEASURE FOR COMPLACENCY			VIRTUAL REALITY TRAINING		
03/05/2002 - 03/04/2003	FY02: \$91,000	Total: \$91,000	12/18/2000 - 12/18/2003	FY02: \$0	Total: \$96,246
<i>Prin. Invest.:</i> M SCERBO, F FREEMAN			<i>Prin. Invest.:</i> R LOFTIN		
<i>Tech. Officer:</i> LARC/A T POPE			<i>Tech. Officer:</i> JSC/R SAVELY, JSC/D G SICKOREZ		
<i>CASE Category:</i> 69 – PSYCHOLOGY, OTHER			<i>CASE Category:</i> 22 – COMPUTER SCIENCE		
NAG 1 02072	OLD DOMINION UNIV	9310	NAS 1 99160	OLD DOMINION UNIV	9319
NUMERICAL ANAL FOR PREDICTING ALGAASSB-INGAASSB AVALANCHE PHOTODETECTOR PERF MICRON WAVELENGTHS			TESTBED OF INTEROPERABLE MULTIDISCIPLINARY DIGITAL LIBRARIES		
03/20/2002 - 12/31/2002	FY02: \$20,000	Total: \$20,000	09/22/1999 - 09/21/2003	FY02: \$189,900	Total: \$687,870
<i>Prin. Invest.:</i> R P JOSHI			<i>Prin. Invest.:</i> K MALY		
<i>Tech. Officer:</i> LARC/M N ABEDINE			<i>Tech. Officer:</i> LARC/M M LITTLE, LARC/N R KAPLAN		
<i>CASE Category:</i> 13 – PHYSICS			<i>CASE Category:</i> 22 – COMPUTER SCIENCE		
NAG 1 02096	OLD DOMINION UNIV	9311			
COST ESTIMATION TECHNIQUES FOR MULTI-DISCIPLINARY OPTIMIZATION					
05/14/2002 - 05/13/2005	FY02: \$40,000	Total: \$40,000			
<i>Prin. Invest.:</i> H P BAO					
<i>Tech. Officer:</i> LARC/R P WESTON					
<i>CASE Category:</i> 41 – AERONAUTICAL ENGR					

NCA 1 188 **OLD DOMINION UNIV** **9320**
 VA SPACE GRANT CONSORTIUM ENVIRONMENT IMPACT
 08/04/2000 - 10/31/2001 FY02: \$0 Total: \$75,000
Prin. Invest.: M L SANDY
Tech. Officer: LARC/S A COOKE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 320 **OLD DOMINION UNIV** **9321**
 STUDY OF APPLICATION OF GREEN'S FUNCTION METHODS APPLIED TO
 SPACE RADIATION PROTECTION
 09/23/1998 - 09/30/2001 FY02: -\$579 Total: \$105,928
Prin. Invest.: J H HEINBOCKEL
Tech. Officer: LARC/R C SINGLETERRY, LARC/J W WILSON
CASE Category: 13 – PHYSICS

NCC 1 349 **OLD DOMINION UNIV** **9322**
 INST FOR SCIENTIFIC & EDUCATIONAL TECHNOLOGY (FOLLOW-ON TO
 NCC-1-232)
 06/28/1999 - 08/15/2002 FY02: \$0 Total: \$1,005,542
Prin. Invest.: S N TIWARI
Tech. Officer: LARC/S E MASSENBERG, LARC/E J PRIOR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 363 **OLD DOMINION UNIV** **9323**
 AUTOMATED, NON-AUTOClave, COMPOSITE MATERIALS FABRICATION
 (NRA 99-LARC-1)
 11/29/1999 - 11/30/2002 FY02: \$52,605 Total: \$337,930
Prin. Invest.: M C GUPTA
Tech. Officer: LARC/T H HOU
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 364 **OLD DOMINION UNIV** **9324**
 PSYCHOPHYSIOLOGICAL CONTROL OF ACOGNITIVE TASK USING ADAP-
 TIVE AUTOMATION
 12/09/1999 - 11/30/2001 FY02: -\$477 Total: \$31,053
Prin. Invest.: F G FREEMAN
Tech. Officer: LARC/A T POPE
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 1 369 **OLD DOMINION UNIV** **9325**
 DOCUMENT AND DISSEMINATE THE RESULTS OF WIND TUNNEL TESTS OF
 WRIGHT FLYER AIRCRAFT AND
 01/31/2000 - 12/31/2001 FY02: \$0 Total: \$175,000
Prin. Invest.: R L ASH
Tech. Officer: LARC/A G PRICE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 371 **OLD DOMINION UNIV** **9326**
 TWO AND THREE DIMENSIONAL ELASTIC-PLASTIC FINITE ELEMENT ANALY-
 SES OF TAPERED/COLDWORKED FASTENERS
 02/07/2000 - 12/31/2002 FY02: \$113,371 Total: \$281,441
Prin. Invest.: S A TIWARI, B R SESHADRI
Tech. Officer: LARC/J C NEWMAN, LARC/D R AMBUR
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 389 **OLD DOMINION UNIV** **9327**
 A COMPARISON OF QUASI-STATE INDENTATION & DROP-WT IMPACT
 TESTING ON CARBON/EPOXY LAMINATES
 03/14/2000 - 09/30/2001 FY02: -\$32 Total: \$44,968
Prin. Invest.: R PRABHAKARAN
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 392 **OLD DOMINION UNIV** **9328**
 STOCHASTIC DYNAMICAL MODELS FOR DIGITAL CONTROL SYSTEMS IN
 ELECTROMAGNETIC ENVIRONMENTS (EME)
 04/07/2000 - 03/31/2003 FY02: \$199,998 Total: \$504,324
Prin. Invest.: W S GRAY, O R GONZALEZ
Tech. Officer: LARC/C M BELCASTRO
CASE Category: 46 – MECHANICAL ENGR

NCC 1 396 **OLD DOMINION UNIV** **9329**
 AN ALGORITHM FOR TRANSPORT OF ANISOTROPIC NEUTRONS
 05/03/2000 - 09/30/2002 FY02: \$35,000 Total: \$114,321
Prin. Invest.: J TWEED
Tech. Officer: LARC/R C SINGLETERRY, LARC/J W WILSON
CASE Category: 13 – PHYSICS

NCC 1 404 **OLD DOMINION UNIV** **9330**
 BOLTZMANN TRANSPORT CODE UPDATE: PARALLELIZATION AND INTE-
 GRATED DESIGN METHODS
 07/11/2000 - 07/16/2003 FY02: \$138,000 Total: \$326,000
Prin. Invest.: J H HEINBOCKEL, J NEALY
Tech. Officer: LARC/R C SINGLETERRY JR, LARC/J W WILSON
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 1 01012 **OLD DOMINION UNIV** **9331**
 EVALUATING THE ABILITY OF HEART RATE AND EEG TO CONTROL
 ALERTNESS DURING PERFORMANCE
 12/29/2000 - 08/31/2002 FY02: \$0 Total: \$70,895
Prin. Invest.: F G FREEMAN, M W SCERBO, P J MIKULKA
Tech. Officer: LARC/L J PRINZEL
CASE Category: 69 – PSYCHOLOGY, OTHER

NCC 1 01014 **OLD DOMINION UNIV** **9332**
 CENTER FOR ADVANCED ENGINEERING ENVIRONMENTS
 01/24/2001 - 12/31/2003 FY02: \$1,591,341 Total: \$2,141,341
Prin. Invest.: A K NOOR
Tech. Officer: LARC/R D BRAUN, LARC/K A CANNON
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 01015 **OLD DOMINION UNIV** **9333**
 ADV'D APPLIC'S FOR ADIFOR 3.0 FOR EFFICIENT CALCULATI-
 ON OF 1ST&2ND-ORDER CFD SENSITIVITY DERIVATIVE
 02/01/2001 - 09/30/2002 FY02: \$0 Total: \$62,562
Prin. Invest.: A C TAYLOR, III
Tech. Officer: LARC/P A NEWMAN
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01032 **OLD DOMINION UNIV** **9334**
 FIELD PENETRATION STUDIES STATISTICS AND BOUNDING
 03/23/2001 - 12/31/2003 FY02: \$70,000 Total: \$131,411
Prin. Invest.: C F BUNTING, L L VAHALA
Tech. Officer: LARC/T X NGUYEN
CASE Category: 45 – ELECTRICAL ENGR

NCC 1 01040 **OLD DOMINION UNIV** **9335**
 RESEARCH ON INTELLIGENT SYNTHESIS ENVIRONMENT
 03/27/2001 - 09/30/2002 FY02: \$0 Total: \$500,000
Prin. Invest.: A K NOOR, R B LOFFIN
Tech. Officer: LARC/J J REHDER
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 1 01043 **OLD DOMINION UNIV** **9336**
 NASA - ASEE SUMMER FACULTY RESEARCH PROGRAM 2001
 04/06/2001 - 12/31/2002 FY02: -\$3,300 Total: \$590,408
Prin. Invest.: B TIWARI, D DEPRIEST
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 1 01052 **OLD DOMINION UNIV** **9337**
 AUTOMATED TOW PLACEMENT PROCESSING & CHARACTERI- ZATION OF
 COMPOSITES
 06/22/2001 - 12/31/2003 FY02: \$35,000 Total: \$64,940
Prin. Invest.: R PRABHAKARAN
Tech. Officer: LARC/T H HOU
CASE Category: 13 – PHYSICS

NCC 1 02022 **OLD DOMINION UNIV** **9338**
 NANOCOMPOSITE STRUCTURE-PROPERTY-PROCESS RELA- TIONSHIPS
 04/08/2002 - 04/07/2005 FY02: \$106,150 Total: \$106,150
Prin. Invest.: M C GUPTA
Tech. Officer: LARC/T S GATES
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 02026 **OLD DOMINION UNIV** **9339**
 PHOTONIC SENSORS FOR INTEGRATED SYSTEM HEALTH MONITORING
 05/07/2002 - 05/31/2003 FY02: \$61,758 Total: \$61,758
Prin. Invest.: S ALBIN, M BUONCRISTIANI
Tech. Officer: LARC/R S ROGOWSKI
CASE Category: 45 – ELECTRICAL ENGR

NCC 1 02027 **OLD DOMINION UNIV** **9340**
 THE WRIGHT FLYER TESTING PROGRAM
 05/06/2002 - 05/05/2003 FY02: \$41,780 Total: \$41,780
Prin. Invest.: R L ASHE
Tech. Officer: LARC/E J PRIOR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02044 **OLD DOMINION UNIV** **9341**
 DEV OF EXPERT JUDGEMENT ELICITATION & CALIBRATION METHODOL-
 OGY FOR RISK ANALYSIS CONCEPT VEHICLE DES
 08/07/2002 - 08/15/2003 FY02: \$71,500 Total: \$71,500
Prin. Invest.: R UNAL, C KEATING, R MONROE
Tech. Officer: LARC/L L GREEN, LARC/T A ZANG
CASE Category: 41 – AERONAUTICALENGR

NCC 5 258 **OLD DOMINION UNIV** **9342**
 PHYSICAL-BIOLOGICAL INTERACTIONS IN THE GLOBAL EQU ATORIAL
 SURFACE LAYER
 11/17/1997 - 10/31/2001 FY02: \$0 Total: \$376,303
Prin. Invest.: E HOFMANN
Tech. Officer: GSFC/J MARRA
CASE Category: 11 – ASTRONOMY

NCC 5 592 **OLD DOMINION UNIV** **9343**
 NASA USRP UNDERGRADUATE STUDENT RESEARCH PROGRAM, VIRGINIA
 SPACE GRANT CONSORTIUM.
 09/19/2001 - 09/14/2004 FY02: \$1,103,958 Total: \$2,103,584
Prin. Invest.: M SANDY
Tech. Officer: GSFC/J GORMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 135 **OLD DOMINION UNIV** **9344**
 VIRTUAL REALITY TRAINING/CYBERSICKNESS & EFFECTS ON SENSORMO-
 TOR FUNCTIONS
 07/20/2001 - 03/31/2003 FY02: \$0 Total: \$23,206
Prin. Invest.: R B LOFTIN
Tech. Officer: JSC/D L HARM
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 01001 **OLD DOMINION UNIV** **9345**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 11/02/2000 - 09/30/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: M D LEE
Tech. Officer: LARC/J L BURT, LARC/D B SHAFER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 01005 **OLD DOMINION UNIV** **9346**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 05/22/2001 - 06/30/2004 FY02: \$10,000 Total: \$22,000
Prin. Invest.: M SCERBO
Tech. Officer: LARC/R HATHAWAY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 1 01011 **OLD DOMINION UNIV** **9347**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/04/2001 - 06/30/2004 FY02: \$10,000 Total: \$22,000
Prin. Invest.: D A JACOBS
Tech. Officer: LARC/S D YOUNG, LARC/D L BLACKSTOCK
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NGT 1 01013 **OLD DOMINION UNIV** **9348**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/06/2001 - 12/22/2001 FY02: -\$12,057 Total: \$9,943
Prin. Invest.: L VAHALA
Tech. Officer: LARC/T X NGUYEN
CASE Category: 45 – ELECTRICAL ENGR

NGT 1 01014 **OLD DOMINION UNIV** **9349**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/06/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D H ELSAYED-ALII
Tech. Officer: LARC/R DEYOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 1 01015 **OLD DOMINION UNIV** **9350**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 05/25/2001 - 06/30/2003 FY02: \$10,000 Total: \$22,000
Prin. Invest.: F G FREEMAN
Tech. Officer: LARC/L J PRENZEL, LARC/A T POPE
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 01019 **OLD DOMINION UNIV** **9351**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 05/29/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: J P BLISS
Tech. Officer: LARC/J R COMSTOCK, JR, LARC/A T POPE
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 01020 **OLD DOMINION UNIV** **9352**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 05/30/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: J C BLISS
Tech. Officer: LARC/K A LATORELLA, LARC/V CRISP
CASE Category: 41 – AERONAUTICAL ENGR

VIRGINIA

NASA'S UNIVERSITY PROGRAM

NGT 1 01021 **OLD DOMINION UNIV** **9353**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 05/31/2001 - 06/30/2003 FY02: \$22,000 Total: \$44,000
Prin. Invest.: D D DOVES
Tech. Officer: LARC/P C SCHUTTE
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 52220 **OLD DOMINION UNIV** **9362**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/04/1999 - 06/30/2001 FY02: -\$1,865 Total: \$42,135
Prin. Invest.: G D COATES
Tech. Officer: LARC/A T POPE, LARC/L J PRINZEL, 111
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NGT 1 01027 **OLD DOMINION UNIV** **9354**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/12/2001 - 06/30/2004 FY02: \$24,000 Total: \$36,000
Prin. Invest.: J HUANG
Tech. Officer: LARC/P FERGEN
CASE Category: 46 – MECHANICAL ENGR

NGT 1 52229 **OLD DOMINION UNIV** **9363**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/21/2000 - 06/30/2001 FY02: -\$22,000 Total: \$0
Prin. Invest.: H ELSAVIDELE
Tech. Officer: LARC/R J DEYOUNG
CASE Category: 46 – MECHANICAL ENGR

NGT 1 01029 **OLD DOMINION UNIV** **9355**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/14/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: S ZOHORIOD
Tech. Officer: LARC/D B SHAFER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52230 **OLD DOMINION UNIV** **9364**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/21/2000 - 06/30/2001 FY02: -\$3,789 Total: \$18,211
Prin. Invest.: M MIHALE CZ
Tech. Officer: LARC/P C SCHUTTE
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 01030 **OLD DOMINION UNIV** **9356**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/15/2001 - 09/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: M SCERBO
Tech. Officer: LARC/J L BURT
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52231 **OLD DOMINION UNIV** **9365**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/21/2000 - 06/30/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: F G FREEMAN
Tech. Officer: LARC/L J PRINZEL
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 02020 **OLD DOMINION UNIV** **9357**
 GRADUATE STUDENT RESEARCHERS PROGRAM
 07/24/2002 - 06/30/2003 FY02: \$14,000 Total: \$14,000
Prin. Invest.: G J MCAULIFFE, A WILLIAMS
Tech. Officer: LARC/T PINELLI
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 52232 **OLD DOMINION UNIV** **9366**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/24/2000 - 06/30/2001 FY02: -\$526 Total: \$21,474
Prin. Invest.: J M STARK
Tech. Officer: LARC/J R COMSTOCK, JR, LARC/A T POPE
CASE Category: 59 – LIFE SCIENCE, OTHER

NGT 1 52171 **OLD DOMINION UNIV** **9358**
 GRADUATE STUDENT RESEARCHERS PROGRAM
 05/29/1997 - 12/31/2000 FY02: \$0 Total: \$77,000
Prin. Invest.: C P BRITCHER
Tech. Officer: LARC/N J GROOW
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52235 **OLD DOMINION UNIV** **9367**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/25/2000 - 06/30/2001 FY02: -\$1 Total: \$22,000
Prin. Invest.: P HIX, S ZAHORIAN
Tech. Officer: LARC/D B SHAFER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52210 **OLD DOMINION UNIV** **9359**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/26/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: D T NGUYEN
Tech. Officer: LARC/J SOBIESKI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52236 **OLD DOMINION UNIV** **9368**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/27/2000 - 06/30/2001 FY02: -\$26 Total: \$21,974
Prin. Invest.: M SCERBO
Tech. Officer: LARC/D B SHAFER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52211 **OLD DOMINION UNIV** **9360**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/26/1999 - 06/30/2001 FY02: -\$1 Total: \$34,933
Prin. Invest.: H SAYID ELE
Tech. Officer: LARC/R J DEYOUNG
CASE Category: 45 – ELECTRICAL ENGR

NGT 1 52241 **OLD DOMINION UNIV** **9369**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/08/2000 - 05/31/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: D LOCKWOOD
Tech. Officer: LARC/G W SACHSE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 1 52219 **OLD DOMINION UNIV** **9361**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/04/1999 - 06/30/2001 FY02: -\$1 Total: \$44,000
Prin. Invest.: F G FREEMAN
Tech. Officer: LARC/A T POPE, LARC/L J PRINZEL, 111
CASE Category: 61 – PSYCHOLOGY BIOLOGY

NGT 1 52245 **OLD DOMINION UNIV** **9370**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 07/10/2000 - 06/30/2002 FY02: -\$12,201 Total: \$31,800
Prin. Invest.: R UNAL
Tech. Officer: LARC/A A MOORE
CASE Category: 42 – ASTRONAUTICAL ENGR

NASA'S UNIVERSITY PROGRAM

VIRGINIA

NGT 5 40059 **OLD DOMINION UNIV** **9371**
 IN SUPPORT OF THE NATIONAL SPACE GRANT COLL PROGRAM
 02/21/1997 - 01/31/2001 FY02: -\$116,991 Total: \$1,616,198
Prin. Invest.: M L SANDY
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40070 **OLD DOMINION UNIV** **9372**
 GENERAL AVIATION DESIGN COMPETITION FUNDING IN SUP PORT OF THE
 VIRGINIA NATIONAL SPACE GRANT COLL
 01/03/2001 - 05/31/2002 FY02: \$30,150 Total: \$904,264
Prin. Invest.: M SANDY
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40080 **OLD DOMINION UNIV** **9373**
 VIRGINIA SPACE GRANT COLL & FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$462,420 Total: \$1,157,229
Prin. Invest.: M SANDY
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 5165 **ROANOKE COLL** **9374**
 IMPROVED MODELING FOR THE COSMIC RAY ORIGIN FUNDING FOR FIRST
 YEAR OF GRANT
 03/09/1998 - 03/31/2002 FY02: \$0 Total: \$115,750
Prin. Invest.: C H TSAO
Tech. Officer: GSFC/B A MERRITT
CASE Category: 13 – PHYSICS

NAG 1 1964 **UNIV OF VIRGINIA** **9375**
 INTELLIGENT PROCESSING OF MATERIALS FOR DESIGN AND MANUFAC-
 TURING, ETC.
 09/30/1997 - 12/31/2000 FY02: -\$14,036 Total: \$4,863,753
Prin. Invest.: H N WADLEY
Tech. Officer: LARC/C MOORE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2131 **UNIV OF VIRGINIA** **9376**
 DUAL-MODE COMBUSTION (FOLLOW-ON TO NAG-1-2085)
 01/26/1999 - 05/31/2002 FY02: \$0 Total: \$469,412
Prin. Invest.: J C MCDANIEL, E H MASLAN, H K CHELLIAH
Tech. Officer: LARC/D E REUBUSH, LARC/C R MCCLINTON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2282 **UNIV OF VIRGINIA** **9377**
 METALLURGICAL FACTORS CONTROLLING LOCALIZED CORROSION AND
 STRESS CORROSION CRACK INITIATIONIN
 03/22/2000 - 02/28/2001 FY02: -\$1 Total: \$49,500
Prin. Invest.: D A LITTLE, J R SCULLY
Tech. Officer: LARC/M S DOMACK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 2290 **UNIV OF VIRGINIA** **9378**
 PRACTICAL USE OF FORMAL TECHNIQUES IN AEROSPACE IN SOFTWARE
 SYSTEMS
 05/01/2000 - 11/30/2002 FY02: \$240,806 Total: \$608,422
Prin. Invest.: J C KNIGHT, D E EVANS
Tech. Officer: LARC/K J HAYHURST
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 2321 **UNIV OF VIRGINIA** **9379**
 DEVELOPMENT OF SENSORY ALLOYS FOR ACCOUSTIC STRAIN MONITORS
 08/14/2000 - 12/31/2002 FY02: \$0 Total: \$129,977
Prin. Invest.: G SHIFLET
Tech. Officer: LARC/R PIASCIK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01022 **UNIV OF VIRGINIA** **9380**
 END EFFECTS AND LOAD DIFFUSION IN COMPOSITE STRUCTURES
 03/21/2001 - 12/31/2001 FY02: \$1 Total: \$50,001
Prin. Invest.: C O HORGAN
Tech. Officer: LARC/M P NEMETH
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01051 **UNIV OF VIRGINIA** **9381**
 EXPERIMENTAL CHARACTERIZATION OF CONTINUUM/ RAREFIELD FLOWS
 05/18/2001 - 02/29/2004 FY02: \$16,000 Total: \$65,972
Prin. Invest.: J C MCDANIEL, JR, D E CECIL
Tech. Officer: LARC/C E GLASS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01120 **UNIV OF VIRGINIA** **9382**
 UNSTEADY AERODYNAMICS OF FLAPPING WINGS
 08/16/2001 - 08/31/2004 FY02: \$50,000 Total: \$100,000
Prin. Invest.: N NAJ-HARERI
Tech. Officer: LARC/D D MOERDER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02019 **UNIV OF VIRGINIA** **9383**
 DUAL-MODE COMBUSTION MY 1/3
 12/14/2001 - 12/31/2004 FY02: \$339,842 Total: \$339,842
Prin. Invest.: J C MACDANIEL, C P GOYNE
Tech. Officer: LARC/D E REUBUSH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02049 **UNIV OF VIRGINIA** **9384**
 DEVELOPMENT OF SENSORY ALLOYS FOR MAGNETIC AND ACOUSTIC
 STRAIN MONITORS
 02/06/2002 - 05/31/2005 FY02: \$89,205 Total: \$89,205
Prin. Invest.: G J SHIFLET
Tech. Officer: LARC/R S PIASCIK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02090 **UNIV OF VIRGINIA** **9385**
 METALS TECHNOLOGY FOR AEROSP APPLICS IN 2020: DEV OF HIGH TEMP
 ALUMINUM ALLOYS FOR AEROSPACE APPLIC
 04/29/2002 - 04/28/2003 FY02: \$34,987 Total: \$34,987
Prin. Invest.: E A STARKE
Tech. Officer: LARC/D L DICUS
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02101 **UNIV OF VIRGINIA** **9386**
 ADVANCED TOOLS AND TECHNIQUES FOR FORMAL TECHNIQUE S IN
 AEROSPACE SYSTEMS
 06/17/2002 - 09/30/2003 FY02: \$104,000 Total: \$104,000
Prin. Invest.: J C KNIGHT
Tech. Officer: LARC/B L DIVITO
CASE Category: 22 – COMPUTER SCIENCE

VIRGINIA

NASA'S UNIVERSITY PROGRAM

NAG 1 02102 UNIV OF VIRGINIA 9387
 NASA AVIATION SAFETY PROGRAM SYSTEMS ANALYSIS/PROG RAM AS-
 SESSMENT METRICS REVIEW
 06/17/2002 - 09/30/2002 FY02: \$41,724 Total: \$41,724
Prin. Invest.: G E LOUIS
Tech. Officer: LARC/S M JONES, LARC/V K CRISP
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 02103 UNIV OF VIRGINIA 9388
 EXPANDING THE USE OF FORMAL TECHNIQUES IN AEROSPAC E SYSTEMS
 SEAS PROPOSAL NO:CS-NASA/LARC-1120-02
 06/27/2002 - 09/30/2004 FY02: \$109,000 Total: \$109,000
Prin. Invest.: J C KNIGHT
Tech. Officer: LARC/C M HOLLOWAY
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 02113 UNIV OF VIRGINIA 9389
 EVALUATING MEASURES OF HUMAN-AUTOMATION INTERACTIO N IN PILOT
 SELF-SEPARATION TASKS
 09/10/2002 - 05/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: E J BASS, G L BALLARD
Tech. Officer: LARC/M T PALMER
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 1916 UNIV OF VIRGINIA 9390
 INSTABILITY MECHANISMS OF THERMALLY-DRIVEN INTERFA CIAL FLOWS
 IN LIGHT-ENCAPSULATED CRYSTALGROWTH
 07/16/1996 - 07/16/2001 FY02: \$0 Total: \$336,000
Prin. Invest.: H HAJ-HARIRI
Tech. Officer: GRC/T GLASGOW
CASE Category: 46 – MECHANICAL ENGR

NAG 3 1928 UNIV OF VIRGINIA 9391
 HETEROGENEOUS COMB OF POROUS SOLLID FUEL PART UNDE R MICRO-
 GRAV: A COMPREHENSIVE THERO & EXPSTUDIES
 07/23/1996 - 05/31/2002 FY02: \$0 Total: \$215,705
Prin. Invest.: H CHELLIAH, F MILLER
Tech. Officer: GRC/H ROSS
CASE Category: 46 – MECHANICAL ENGR

NAG 3 2359 UNIV OF VIRGINIA 9392
 RLV THRUST CELL LINER COATING ANALYSIS AND OPTIMIZ ATION
 03/16/2000 - 11/30/2002 FY02: \$35,000 Total: \$116,500
Prin. Invest.: M J PINDERA
Tech. Officer: GRC/S M ARNOLD
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2524 UNIV OF VIRGINIA 9393
 HOMOGENIZED AND SMART HOTFGM
 01/19/2001 - 11/30/2002 FY02: \$160,000 Total: \$320,057
Prin. Invest.: M PINDERA
Tech. Officer: GRC/S M ARNOLD
CASE Category: 44 – CIVIL ENGR

NAG 3 2760 UNIV OF VIRGINIA 9394
 DYNAMICS OF DROPS AND BUBBLES IN CONFINED FLOWS OF COMPLEX
 FLUIDS
 04/03/2002 - 12/31/2005 FY02: \$19,369 Total: \$19,369
Prin. Invest.: D HAJ-HARIRI
Tech. Officer: GRC/M HASAN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3633 UNIV OF VIRGINIA 9395
 CHARGED PARTICLE INDUCED ALTERATIONS OF SURFACES I
 03/13/1997 - 01/31/2002 FY02: -\$24 Total: \$144,981
Prin. Invest.: R E JOHNSON
Tech. Officer: GSFC/P G ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 3931 UNIV OF VIRGINIA 9396
 EROSIONAL PROCESSES ON MARS
 03/12/1997 - 02/28/2003 FY02: \$0 Total: \$293,763
Prin. Invest.: A D HOWARD
Tech. Officer: GSFC/J G GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4192 UNIV OF VIRGINIA 9397
 ION COLLISION PROCESSES:PLASMA INTERACTIONS WITH AN NEUTRAL
 CORONA
 04/10/1997 - 03/31/2003 FY02: \$0 Total: \$408,848
Prin. Invest.: D E JOHNSON
Tech. Officer: GSFC/J BERGSTRALH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 4283 UNIV OF VIRGINIA 9398
 EROSION AND ALTERATION OF INTERSTELLAR AND INTERPL
 04/07/1997 - 05/31/2002 FY02: \$0 Total: \$177,700
Prin. Invest.: D E JOHNSON
Tech. Officer: GSFC/D BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4332 UNIV OF VIRGINIA 9399
 SUBLIMATION AND OPTICAL PROPERTIES OF ICES AT LOW TO SOLAR
 SYSTEM OBJECTS
 04/30/1997 - 08/31/2001 FY02: -\$393 Total: \$193,578
Prin. Invest.: D A BARAGIOLA
Tech. Officer: GSFC/P ROGERS
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6384 UNIV OF VIRGINIA 9400
 THE COUPLING LAND-USE AND LAND-COVER CHANGES, AND MIOMBO
 WOODLANDS
 09/26/1997 - 10/31/2001 FY02: \$0 Total: \$570,165
Prin. Invest.: P DESANKER
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6403 UNIV OF VIRGINIA 9401
 CRITICAL TESTS OF STELLAR EVOLUTION (L TSA)
 10/10/1997 - 10/14/2002 FY02: \$0 Total: \$400,799
Prin. Invest.: R O'CONNELL
Tech. Officer: GSFC/R K OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 6828 UNIV OF VIRGINIA 9402
 GAS EVOLUTION FROM ICY SURFACES
 01/15/1998 - 07/31/2001 FY02: \$0 Total: \$130,643
Prin. Invest.: R BARAGIOLA
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7266 **UNIV OF VIRGINIA** **9403**
SOUTHERN AFRICAN VALIDATION OF EOS GROUND AND AIRB ORNE
INSTRUMENTATION AND VALIDATION ACTIVITIES
04/30/1998 - 08/30/2001 FY02: -\$272 Total: \$499,586
Prin. Invest.: R J SWAPP
Tech. Officer: GSFC/J PRIVETTE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7500 **UNIV OF VIRGINIA** **9404**
MAGNETOHYDRODYNAMICS OF THE SOLAR NEBULA
06/01/1998 - 05/31/2002 FY02: \$0 Total: \$164,000
Prin. Invest.: S BALBUS
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 7749 **UNIV OF VIRGINIA** **9405**
SPUTTERING OF THE MARTIAN ATMOSPHERE
11/04/1998 - 12/31/2002 FY02: \$0 Total: \$173,751
Prin. Invest.: R E JOHNSON
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 – ASTRONOMY

NAG 5 7862 **UNIV OF VIRGINIA** **9406**
SAFARI 2000: A SOUTHERN AFRICAN REGIONAL SCIENCE I NITIATIVE
01/08/1999 - 10/31/2002 FY02: \$0 Total: \$252,864
Prin. Invest.: C O JUSTICE
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7939 **UNIV OF VIRGINIA** **9407**
"COLLABORATIVE PARTICIPATION OF SOUTH AFRICAN AIRB ORNE VALIDA-
TION PLATFORM IN SAFARI2000"
01/04/1999 - 09/14/2001 FY02: -\$6,381 Total: \$294,323
Prin. Invest.: R J SWAP
Tech. Officer: GSFC/M KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7956 **UNIV OF VIRGINIA** **9408**
LAND SURFACE CHARACTERIZATION OF SOUTHERN AFRICAN SAVANNAS:
CARBON CYCLING AND SENSITIVITY TO E
01/07/1999 - 01/31/2003 FY02: \$0 Total: \$605,642
Prin. Invest.: H H SHUGART
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8088 **UNIV OF VIRGINIA** **9409**
SUPERNOVA-INFLUENCED STAR FORMATION
01/27/1999 - 12/31/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: D A CHEVALIER
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8130 **UNIV OF VIRGINIA** **9410**
MODELS OF PULSAR NEBULAE (ATP 98)
02/11/1999 - 02/14/2003 FY02: \$0 Total: \$185,500
Prin. Invest.: R A CHEVALIER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8162 **UNIV OF VIRGINIA** **9411**
LAND COVER AND LAND USE CHANGE PROJECT SCIENTIST S UPPORT
02/08/1999 - 08/31/2001 FY02: -\$1,954 Total: \$535,581
Prin. Invest.: C O JUSTICE
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8232 **UNIV OF VIRGINIA** **9412**
SUPERNOVA REMNANTS: INTERSTELLAR AND CIRCUMSTELLAR INTERAC-
TIONS (ATP98)
02/11/1999 - 02/14/2002 FY02: \$0 Total: \$180,000
Prin. Invest.: R A CHEVALIER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 8444 **UNIV OF VIRGINIA** **9413**
LABORATORY SIMULATIONS OF RADIATION EFFECTS ON PLA NETARY
SURFACES
04/07/1999 - 05/31/2002 FY02: \$0 Total: \$164,000
Prin. Invest.: R A BARAGIOLA
Tech. Officer: HQ/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 8663 **UNIV OF VIRGINIA** **9414**
LOW COST TERAHERTZ FREQUENCY MULTIPLIERS FOR SOFIA AND EX-
PLORER MISSIONS
07/07/1999 - 01/14/2002 FY02: \$0 Total: \$267,552
Prin. Invest.: T CROWE
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 45 – ELECTRICAL ENGR

NAG 5 8670 **UNIV OF VIRGINIA** **9415**
ESTIMATING ROOT ZONE SOIL MOISTURE AND EXPLORING SCALE AS-
PECTS OF ITS COUPLING TO THE ATMOSPHERIC
07/08/1999 - 07/14/2003 FY02: \$0 Total: \$346,695
Prin. Invest.: J D ALBERTSON
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8749 **UNIV OF VIRGINIA** **9416**
TO DEVELOPE A COMPACT, AMBIENT TEMPERATURE 500 GHZ RECEIVER
FOR USE IN PASSIVE MICROWAVE REMOTE SEN
08/25/1999 - 09/30/2001 FY02: \$0 Total: \$97,000
Prin. Invest.: J L HESLER
Tech. Officer: GSFC/J R WANG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8902 **UNIV OF VIRGINIA** **9417**
MARTIAN CRATERED HIGHLANDS FIELD CONFERENCE
12/28/1999 - 12/31/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: A HOWARD
Tech. Officer: GSFC/J GRANT
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8954 **UNIV OF VIRGINIA** **9418**
FAR-ULTRAVIOLET STUDIES OF METAL-DEFICIENT BLUE COMPACT DWARF
GALAXIES - FUSE
01/24/2000 - 01/31/2003 FY02: \$0 Total: \$54,300
Prin. Invest.: T X THUAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9266 **UNIV OF VIRGINIA** **9419**
NUMERICAL MAGNETOHYDRODYNAMIC STUDIES OF ACCRETION DISKS
(ATP 99)
03/13/2000 - 03/14/2003 FY02: \$97,126 Total: \$281,490
Prin. Invest.: J HAWLEY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

VIRGINIA

NASA'S UNIVERSITY PROGRAM

NAG 5 9289 **UNIV OF VIRGINIA** **9420**
 OPERATIONALIZING GOFC IN THE MIOMBO REGION & QUESTIONS OF
 CARBON MIOMBO REGION A SOURCE OR SINK
 03/27/2000 - 04/30/2003 FY02: \$116,715 Total: \$333,408
Prin. Invest.: P V DESANKER
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9357 **UNIV OF VIRGINIA** **9421**
 REGIONAL ANALYSIS OF LAND-ATMOSPHERE FEEDBACKS IN SOUTHERN
 AFRICAN SAVANNAS: A SYNTHESIS ACTIVITIES
 04/05/2000 - 04/30/2003 FY02: \$284,988 Total: \$748,109
Prin. Invest.: H H SHUGART
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9654 **UNIV OF VIRGINIA** **9422**
 PRODUCTION OF DIABATIC HEATING IN THE TROPICAL TROPOSPHERE
 06/05/2000 - 05/31/2003 FY02: \$111,000 Total: \$294,333
Prin. Invest.: J D FUENTES
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9747 **UNIV OF VIRGINIA** **9423**
 INTEGRATING A MANUAL THESAURUS WITH AUTOMATED TERM SUGGES-
 TION TECHNIQUES FOR CROSS-DISCIPLINARY
 07/11/2000 - 01/14/2002 FY02: -\$812 Total: \$81,526
Prin. Invest.: J FRENCH
Tech. Officer: GSFC/K MOE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 9758 **UNIV OF VIRGINIA** **9424**
 MOLECULAR ISOTOPIC COMPOSITION OF ORGANIC COMPOUNDS IN ANT-
 ARCTIC METEORITES
 06/28/2000 - 06/30/2003 FY02: \$0 Total: \$51,810
Prin. Invest.: S MACKO
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 9900 **UNIV OF VIRGINIA** **9425**
 ARE THE SCUBA DEEP SURVEY SOURCES STARBURSTS OR AGN?
 09/06/2000 - 09/14/2001 FY02: -\$1 Total: \$12,299
Prin. Invest.: T X THUAN
Tech. Officer: GSFC/R F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10074 **UNIV OF VIRGINIA** **9426**
 STELLAR MASS LOSS VERSUS EXTERNAL ACCRETION IN X-RAY BRIGHT
 ELLIPTICALS
 10/27/2000 - 10/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: C L SARAZIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10075 **UNIV OF VIRGINIA** **9427**
 MERGER SHOCKS IN CLUSTERS OF GALAXIES
 10/27/2000 - 10/31/2003 FY02: \$0 Total: \$38,700
Prin. Invest.: C L SARAZIN
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10173 **UNIV OF VIRGINIA** **9428**
 CHARGED PARTICLE ALTERATIONS OF THE SURFACES IN THE OUTER
 SOLAR SYSTEM
 12/21/2000 - 01/31/2004 FY02: \$39,600 Total: \$78,600
Prin. Invest.: R E JOHNSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10250 **UNIV OF VIRGINIA** **9429**
 OBSERVATIONS OF O VI EMISSION IN THE HOT HALO OF NGC 891 (FUSE
 00)
 02/15/2001 - 02/14/2003 FY02: \$0 Total: \$69,997
Prin. Invest.: E M MURPHY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10341 **UNIV OF VIRGINIA** **9430**
 THE INTERSTELLAR MEDIUM OF BLUE COMPACT DWARF GALAXIES (FUSE
 00)
 02/05/2001 - 02/14/2003 FY02: \$0 Total: \$77,800
Prin. Invest.: T X THUAN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10436 **UNIV OF VIRGINIA** **9431**
 STRUCTURE & REFLECTANCE OF SURFACES OF ICY BODIES: LABORA-
 TORY SIMULATIONS
 02/20/2001 - 02/28/2003 FY02: \$51,300 Total: \$101,800
Prin. Invest.: R A BARAGIOLA
Tech. Officer: GSFC/D SENSKE
CASE Category: 11 – ASTRONOMY

NAG 5 10606 **UNIV OF VIRGINIA** **9432**
 ANALYSIS OF IN-SITU OBSERVATIONS OF AEROSOLS OVER SOUTHERN
 AFRICA
 03/15/2001 - 03/14/2004 FY02: \$73,103 Total: \$145,076
Prin. Invest.: R SWAP
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10655 **UNIV OF VIRGINIA** **9433**
 MAGNETOHYDRODYNAMICS IN PROTOSTELLAR DISKS
 03/20/2001 - 05/31/2003 FY02: \$0 Total: \$30,000
Prin. Invest.: S BALBUS
Tech. Officer: GSFC/J M BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10956 **UNIV OF VIRGINIA** **9434**
 ADVANCED IMAGE PROCESSING FOR IMAGE2000 ENHANCE- MENTS
 05/30/2001 - 05/31/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: G WILLIAMS
Tech. Officer: WFF/B MERRITT
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NAG 5 10985 **UNIV OF VIRGINIA** **9435**
 SOUTHERN AFRICAN VALIDATION OF EOS GROUND AND AIR- BORNE
 INSTRUMENTATION AND VALIDATION ACTIVITIES
 05/31/2001 - 05/31/2002 FY02: \$0 Total: \$58,997
Prin. Invest.: R J SWAPP
Tech. Officer: GSFC/J PRIVETTE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11341 **UNIV OF VIRGINIA** **9436**
 CARPE GIS MAPPING ACTIVITY
 09/24/2001 - 09/30/2002 FY02: \$0 Total: \$9,004
Prin. Invest.: C O JUSTICE
Tech. Officer: GSFC/C J TUCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11647 **UNIV OF VIRGINIA** **9437**
 EROSIONAL PROCESSES ON MARS
 01/24/2002 - 02/28/2005 FY02: \$64,000 Total: \$64,000
Prin. Invest.: A D HOWARD
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11771 **UNIV OF VIRGINIA** **9438**
 MOLECULAR SYNTHESIS AND DESORPTION IN PRE-COMETARY ICY
 GRAINS: LABORATORY SIMULATIONS
 03/26/2002 - 02/28/2005 FY02: \$50,000 Total: \$50,000
Prin. Invest.: R A BARAGIOLA
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 11953 **UNIV OF VIRGINIA** **9439**
 SOFTWARE QUALITY & SAFETY ASSESSMENT USING BAYESIAN BELIEF
 NETWORKS
 04/08/2002 - 04/14/2005 FY02: \$99,684 Total: \$99,684
Prin. Invest.: D B DUGAN
Tech. Officer: GSFC/L H ROSENBERG
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12025 **UNIV OF VIRGINIA** **9440**
 THESAURUS SUPPORT FOR EARTH SCIENCE DATA SYSTEMS.
 04/22/2002 - 01/31/2003 FY02: \$92,205 Total: \$92,205
Prin. Invest.: J C FRENCH
Tech. Officer: GSFC/K MOE
CASE Category: 22 – COMPUTER SCIENCE

NAG 5 12055 **UNIV OF VIRGINIA** **9441**
 RADIATION CHEMISTRY OF PLANETARY SURFACES: SYNTHESIS AND
 DECOMPOSITION
 04/19/2002 - 04/30/2005 FY02: \$59,000 Total: \$59,000
Prin. Invest.: R A BARAGIOLA
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 12061 **UNIV OF VIRGINIA** **9442**
 ATMOSPHERIC COLLISION PROCESSES
 04/18/2002 - 04/30/2005 FY02: \$89,244 Total: \$89,244
Prin. Invest.: R E JOHNSON
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12102 **UNIV OF VIRGINIA** **9443**
 LARGE-SCALE STRUCTURE OF MAGNETOCENTRIFUGAL JETS AND WINDS
 IN STAR FORMATION
 04/24/2002 - 04/30/2005 FY02: \$62,332 Total: \$62,332
Prin. Invest.: Z LI
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12262 **UNIV OF VIRGINIA** **9444**
 THE DISK-HALO CONNECTION IN THE SPIRAL GALAXY M101
 06/04/2002 - 06/14/2003 FY02: \$39,200 Total: \$39,200
Prin. Invest.: R W O'CONNELL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12267 **UNIV OF VIRGINIA** **9445**
 ELLIPTICAL GALAXIES (FUSE 2001)
 06/24/2002 - 06/30/2003 FY02: \$16,984 Total: \$16,984
Prin. Invest.: R W O'CONNELL
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12405 **UNIV OF VIRGINIA** **9446**
 2002 COMPREHENSIVE HEDS EDUCATION PROGRAM EVALUATION TEAM
 08/01/2002 - 07/31/2003 FY02: \$98,200 Total: \$98,200
Prin. Invest.: D BALL
Tech. Officer: GSFC/D HALE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12472 **UNIV OF VIRGINIA** **9447**
 RADIATION-INDUCED EROSION AND ALTERATION OF GRAINS
 08/15/2002 - 08/14/2005 FY02: \$35,000 Total: \$35,000
Prin. Invest.: R E JOHNSON
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 12609 **UNIV OF VIRGINIA** **9448**
 OBSERVATIONS OF O VI EMISSION IN THE HALO OF NGC 4 631
 09/26/2002 - 09/30/2003 FY02: \$75,900 Total: \$75,900
Prin. Invest.: E M MURPHY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12620 **UNIV OF VIRGINIA** **9449**
 LABORATORY STUDIES IN SUPPORT OF NEAR DATA ANALYSIS
 09/30/2002 - 09/30/2005 FY02: \$79,723 Total: \$79,723
Prin. Invest.: R A BARAGIOLA
Tech. Officer: GSFC/T MORGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1567 **UNIV OF VIRGINIA** **9450**
 MEMBRANE PROTEIN CRYSTALLIZATION SCREENS BASED UPON FUNDAMENTAL
 PHENOMENOLOGY OF SOLUTIONS
 12/22/1998 - 11/30/2003 FY02: \$155,000 Total: \$614,550
Prin. Invest.: M C WIENER
Tech. Officer: MSFC/B GUYNES
CASE Category: 13 – PHYSICS

NAG 8 1832 **UNIV OF VIRGINIA** **9451**
 A DIRECTED APPROACH TO MEMBRANE PROTEIN CRYSTALLOGRAPHY
 09/05/2001 - 11/30/2004 FY02: \$261,000 Total: \$352,000
Prin. Invest.: M C WIENER
Tech. Officer: MSFC/B Q GUYNES
CASE Category: 59 – LIFE SCIENCE, OTHER

NAS 1 02076 **UNIV OF VIRGINIA** **9452**
 ASSAP/GALILEO SOFTWARE TOOL MAINTENANCE AND IMPROVEMENTS
 AND FEASIBILITY STUDY
 09/26/2002 - 09/26/2004 FY02: \$145,000 Total: \$145,000
Prin. Invest.: K J SULLIVAN, J B DUGAN
Tech. Officer: LARC/J A CARABALLO
CASE Category: 49 – ENGINEERING, OTHER

VIRGINIA

NASA'S UNIVERSITY PROGRAM

NAS 1 99098 UNIV OF VIRGINIA 9453
 ANALYTICAL AERONAUTICAL SAFETY SOFTWARE TOOL
 03/26/1999 - 10/31/2002 FY02: \$0 Total: \$700,087
Prin. Invest.: J BECHTA-DUGAN, K J SULLIZAN
Tech. Officer: LARC/H A ROELANT, LARC/D J PORTER, JR.
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 5415 UNIV OF VIRGINIA 9461
 THEORETICAL CALCULATIONS OF POLYNUCLEAR TRANSITION METAL
 CARBONYLS
 01/19/2001 - 01/31/2003 FY02: \$88,281 Total: \$148,281
Prin. Invest.: L S ANDREWS
Tech. Officer: ARC/H PARTRIDGE
CASE Category: 12 – CHEMISTRY

NCC 1 342 UNIV OF VIRGINIA 9454
 ROBUST ADAPTIVE CONTROL IN THE PRESENCE OF UNCERTAINTIES AND
 FAILURES
 06/08/1999 - 05/31/2003 FY02: \$25,000 Total: \$154,001
Prin. Invest.: G TAO
Tech. Officer: LARC/S M JOSHI, LARC/C M BELCASTRO
CASE Category: 41 – AERONAUTICAL ENGR

NCC 8 171 UNIV OF VIRGINIA 9462
 MODELING PROSTATE CANCER SKELETAL METASTASIS AND GENE
 THERAPY
 03/01/1999 - 07/31/2001 FY02: -\$195,640 Total: \$267,460
Prin. Invest.: L W CHUNG
Tech. Officer: MSFC/D R MORRISON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 1 361 UNIV OF VIRGINIA 9455
 NONLINEAR IMPEDANCE OF POROUS MATERIALS
 11/12/1999 - 11/14/2002 FY02: \$57,072 Total: \$163,545
Prin. Invest.: W E ZORUMSKI
Tech. Officer: LARC/T L PARROTT, LARC/M G JONES
CASE Category: 13 – PHYSICS

NGT 1 01016 UNIV OF VIRGINIA 9463
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/22/2001 - 06/30/2003 FY02: \$24,000 Total: \$36,000
Prin. Invest.: B W JOHNSON
Tech. Officer: LARC/P M GOODE, LARC/A T MORRIS
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 1 01009 UNIV OF VIRGINIA 9456
 DEVELOPMENT & EVALUATION OF LAP JOINT SIMULANT ENVIRONMENTS
 FOR ACCELERATED TESTING
 12/14/2000 - 12/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: R G KELLY
Tech. Officer: LARC/R S PIASCIK
CASE Category: 47 – METAL & MATERIALS ENGR

NGT 1 01031 UNIV OF VIRGINIA 9464
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/2
 06/22/2001 - 06/30/2003 FY02: \$14,000 Total: \$26,000
Prin. Invest.: J C MCDANIEL, JR
Tech. Officer: LARC/C E GLASS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02006 UNIV OF VIRGINIA 9457
 DIRECT ADAPTIVE CONTROL METHODOLOGIES FOR SYSTEMS IN THE
 PRESENCE OF UNCERTAINTIES AND FAILURES
 01/09/2002 - 05/31/2005 FY02: \$30,000 Total: \$30,000
Prin. Invest.: G TAO
Tech. Officer: LARC/S M JOSHI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 02007 UNIV OF VIRGINIA 9465
 GRADUATE STUDENT RESEARCHER PROGRAM (GSRP)
 06/07/2002 - 06/30/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: J C MCDANIEL, P D CAMPBELL
Tech. Officer: LARC/C E GLASS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 02019 UNIV OF VIRGINIA 9458
 LOAD DIFFUSION IN COMPOSITE AND SMART STRUCTURES
 03/29/2002 - 03/31/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: C O HORGAN
Tech. Officer: LARC/D R AMBUR, LARC/M P NEMETH
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 52237 UNIV OF VIRGINIA 9466
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 04/27/2000 - 06/30/2001 FY02: -\$1,971 Total: \$20,029
Prin. Invest.: C R ELKS
Tech. Officer: LARC/P W GOODE, LARC/A T MORRIS
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 2 1093 UNIV OF VIRGINIA 9459
 WHEN ARE THE IMMERSIVE DISPLAYS USEFUL: PERCEPTUAL & TASK
 CONSIDERATIONS?
 03/09/1999 - 08/31/2002 FY02: \$0 Total: \$441,768
Prin. Invest.: D R PROFFITT
Tech. Officer: ARC/M K KAISER
CASE Category: 69 – PSYCHOLOGY, OTHER

NGT 1 52244 UNIV OF VIRGINIA 9467
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 08/07/2000 - 06/30/2001 FY02: -\$4,925 Total: \$17,075
Prin. Invest.: R W KENT
Tech. Officer: LARC/L E JONES
CASE Category: 49 – ENGINEERING, OTHER

NCC 2 1192 UNIV OF VIRGINIA 9460
 THE TOPOGRAPHY & BASIN DEPOSITS OF THE EQUATORIAL HIGHLANDS
 08/28/2000 - 08/31/2003 FY02: \$25,000 Total: \$47,000
Prin. Invest.: A D HOWARD
Tech. Officer: ARC/J M MOORE
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NGT 1 52247 UNIV OF VIRGINIA 9468
 GRADUATE STUDENT RESEARCHERS PROGRAM
 08/01/2000 - 06/30/2001 FY02: -\$995 Total: \$21,005
Prin. Invest.: J C MCDANIEL JR, D E CECIL
Tech. Officer: GSFC/C E GLASS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 30365 UNIV OF VIRGINIA 9469
 NEE MODIFICATION BY AEROSOL RADIATIVE FORCING/JORDAN G. BARR
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J FUENTES
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30418 **UNIV OF VIRGINIA** **9470**
 STRUCTURAL DYNAMICS OF SOUTHERN AFRICAN SAVANNAS A LONG THE
 KALAHARI TRANSECT-STUDENT:KELLY C
 09/10/2001 - 08/31/2004 FY02: \$19,500 Total: \$41,500
Prin. Invest.: H SHUGART
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30448 **UNIV OF VIRGINIA** **9471**
 ESTIMATION OF THE CARBON BUDGET RESPONSE TO LAND USE CHANGE
 FOR THE MIOMBO ECOSYSTEM OF SOUTHERN AF
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: P DESANKER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50305 **UNIV OF VIRGINIA** **9472**
 USING NOVEL MEMBRANE PROTEIN CRYSTALLIZATION SCREENS FOR
 THE STRUCTURE DETERMINATION OF ACHLORIDE
 07/07/2000 - 06/30/2003 FY02: \$0 Total: \$42,252
Prin. Invest.: M C WIENER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50385 **UNIV OF VIRGINIA** **9473**
 MODELING OF SATURN'S NEUTRAL TORUS AND SPUTTER-PRODUCED
 SATELLITE ATMOSPHERES STUDENT: MICH
 05/23/2002 - 05/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: R JOHNSON
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT10 52620 **UNIV OF VIRGINIA** **9474**
 TRAINING GRANT UNDER A GRADUATE STUDENT RESEARCHER'S PRO-
 GRAM
 06/22/1999 - 12/31/2002 FY02: \$12,000 Total: \$78,000
Prin. Invest.: A MILLS
Tech. Officer: KSC/R WHEELER
CASE Category: 55 – AGRICULTURE

NAG 1 2106 **VA POLYTECHNIC INST & ST UNIV** **9475**
 EVALUATION AND IMPROVEMENT OF EARTH RADIATION BUDGET DATA
 SETS
 09/17/1998 - 09/30/2001 FY02: -\$101,930 Total: \$572,524
Prin. Invest.: M P HAEFFELIN
Tech. Officer: LARC/D F YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2158 **VA POLYTECHNIC INST & ST UNIV** **9476**
 HYBRID ACTIVE-PASSIVE SYSTEMS FOR CONTROL OF AIRCRAFT INTER-
 IOR NOISE
 03/09/1999 - 03/31/2002 FY02: \$36,967 Total: \$451,849
Prin. Invest.: C R FULLER
Tech. Officer: LARC/D L PALUMBO
CASE Category: 46 – MECHANICAL ENGR

NAG 1 2190 **VA POLYTECHNIC INST & ST UNIV** **9477**
 EFFICIENT HYBRID ACTUATION USING SOLID-STATE ACTUATORS
 07/06/1999 - 04/30/2002 FY02: \$0 Total: \$314,123
Prin. Invest.: D J LEO, H H CUDNEY
Tech. Officer: LARC/G C HORNER, LARC/R G REMUS
CASE Category: 46 – MECHANICAL ENGR

NAG 1 2272 **VA POLYTECHNIC INST & ST UNIV** **9478**
 AERODYNAMIC STUDIES RELATED TO THE AEROACOUSTICS OF TILTRO-
 TOR BLADES
 03/24/2000 - 02/28/2003 FY02: \$10,000 Total: \$170,000
Prin. Invest.: W J DAVENPORT
Tech. Officer: LARC/C L BURLEY, LARC/T F BROOKS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2277 **VA POLYTECHNIC INST & ST UNIV** **9479**
 FINITE ELEMENT MODEL UPDATING OF UNCERTAIN SYSTEMS
 03/08/2000 - 07/31/2002 FY02: \$35,000 Total: \$97,117
Prin. Invest.: R KAPANIA
Tech. Officer: LARC/L G HORTA, LARC/J JUANG
CASE Category: 46 – MECHANICAL ENGR

NAG 1 2298 **VA POLYTECHNIC INST & ST UNIV** **9480**
 RESIDUAL STRESS EFFECTS IN ANISOTROPIC COMPOSITE LAMINATES
 05/24/2000 - 05/15/2003 FY02: -\$4,991 Total: \$75,009
Prin. Invest.: M W HYER
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2309 **VA POLYTECHNIC INST & ST UNIV** **9481**
 ANALYSIS FOR THE PROGRESSIVE FAILURE RESPONSE OF TEXTILE
 COMPOSITE FUSELAGE FRAMES
 06/14/2000 - 06/09/2001 FY02: -\$1 Total: \$49,311
Prin. Invest.: E R JOHNSON
Tech. Officer: LARC/R L BOITNOTT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 2310 **VA POLYTECHNIC INST & ST UNIV** **9482**
 PUNCTURE-HEALING PROPERTIES OF CARBON NANOTUBE-FILLED IONO-
 MERS
 07/05/2000 - 07/31/2003 FY02: \$70,413 Total: \$173,283
Prin. Invest.: T C WARD
Tech. Officer: LARC/E J SIOCHI, LARC/T L ST. CLAIR
CASE Category: 12 – CHEMISTRY

NAG 1 2324 **VA POLYTECHNIC INST & ST UNIV** **9483**
 FORMATION OF METAL NANOPHASES IN POLYMERIC MATRICES VIA SU-
 PERCRITICAL FLUID INFUSION
 08/24/2000 - 04/30/2001 FY02: \$0 Total: \$39,053
Prin. Invest.: L T TAYLOR
Tech. Officer: LARC/T L ST. CLAIR, LARC/E J SIOCHI
CASE Category: 12 – CHEMISTRY

NAG 1 2325 **VA POLYTECHNIC INST & ST UNIV** **9484**
 FUNDAMENTAL STUDIES OF HQ TUBES WITH MODE MEASUREMENTS
 08/30/2000 - 08/15/2001 FY02: \$0 Total: \$62,316
Prin. Invest.: R A BURDISSO
Tech. Officer: LARC/C H GERHOLD, LARC/J W POSEY
CASE Category: 46 – MECHANICAL ENGR

NAG 1 01007 **VA POLYTECHNIC INST & ST UNIV** **9485**
 NONLINEAR AEROELASTICITY OF LIFTING SURFACES BY FUNCTIONAL
 SERIES TECHNIQUES: SUBCRITICAL
 11/21/2000 - 09/30/2001 FY02: \$1 Total: \$50,001
Prin. Invest.: L LEBESCU
Tech. Officer: LARC/W A SILVA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01018 **VA POLYTECHNIC INST & ST UNIV** **9486**
 OPTICAL FIBER STRAIN SENSOR INSTRUMENTATION FOR HIGH TEMPERA-
 TURE AEROSPACE STRUCTURAL MONITORING
 01/18/2001 - 12/31/2001 FY02: \$0 Total: \$66,999
Prin. Invest.: A WANG, G PICKRELL, R MAY
Tech. Officer: LARC/R S ROGOWSKI
CASE Category: 45 – ELECTRICAL ENGR

NAG 1 01072 **VA POLYTECHNIC INST & ST UNIV** **9487**
 FAILURE OF NONCIRCULAR COMPOSITE CYLINDERS MY 1/3
 04/24/2001 - 05/15/2004 FY02: \$38,200 Total: \$80,200
Prin. Invest.: M W HYER
Tech. Officer: LARC/M P NEMETH
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01100 **VA POLYTECHNIC INST & ST UNIV** **9488**
 STUDY OF REQUIREMENTS ASND CONSTRAINTS FOR FOUR PASSENGER
 PERSONAL AIR VEHICLE EXPLORATION CONCEPT
 06/16/2001 - 02/15/2002 FY02: -\$2,298 Total: \$47,702
Prin. Invest.: J MARCHMAN, W MASON
Tech. Officer: LARC/M D MOORE
CASE Category: 41 – AERONAUTICALENGR

NAG 1 01101 **VA POLYTECHNIC INST & ST UNIV** **9489**
 THIN-WALLED STRUCTURES MULTIPLE INTERACTIVE FUNCTIONS-
 FOUNDATIONS OF THE THEORY AND BEHAVIOR
 07/16/2001 - 07/15/2004 FY02: \$70,000 Total: \$105,000
Prin. Invest.: L LIBRESCU
Tech. Officer: LARC/D R AMBUR
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01104 **VA POLYTECHNIC INST & ST UNIV** **9490**
 INTEGRATION OF MACRO FIBER COMPOSITES INTO THE DYNAMICS AND
 CONTROL OF AN INFLATED TORUS
 06/16/2001 - 06/15/2002 FY02: \$1 Total: \$40,000
Prin. Invest.: D J INMAN
Tech. Officer: LARC/W K WILKIE
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 1 01105 **VA POLYTECHNIC INST & ST UNIV** **9491**
 EVOLUTIONARY STRATEGIES FOR PASSIVE/ACTIVE TAILORING OF THIN
 AND MODERATELY THICK WALLED
 06/20/2001 - 06/19/2004 FY02: \$52,670 Total: \$96,187
Prin. Invest.: Z GURDAL
Tech. Officer: LARC/D R AMBUR
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 01112 **VA POLYTECHNIC INST & ST UNIV** **9492**
 NEW MEAS & INTERPRETATION PROTOCOLS FOR SATELLITE- BASED
 EARTH RADIATION BUDGET (ERB) OBSERVATIONS
 08/15/2001 - 09/30/2004 FY02: \$29,966 Total: \$66,801
Prin. Invest.: M A HAEFFELIN
Tech. Officer: LARC/D F YOUNG
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 01123 **VA POLYTECHNIC INST & ST UNIV** **9493**
 ANALYSIS FOR THE PROGRESSIVE FAILURE RESPONSE OF TEXTILE
 COMPOSITE FUSELAGE FRAMES
 09/18/2001 - 07/31/2002 FY02: \$27,909 Total: \$46,909
Prin. Invest.: E R JOHNSON
Tech. Officer: LARC/R B OITNOTT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01125 **VA POLYTECHNIC INST & ST UNIV** **9494**
 UNCERTAINTY AND CONFIDENCE INTERVALS IN RADIOMETRIC INSTRU-
 MENT DATA PRODUCTS
 10/15/2001 - 10/14/2002 FY02: \$77,486 Total: \$77,486
Prin. Invest.: J R MAHAN
Tech. Officer: LARC/R B LEE, LARC/R L HUFFMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02011 **VA POLYTECHNIC INST & ST UNIV** **9495**
 OPEN/CLOSED LOOP NONLINEAR AEROELASTICITY OF AIRCRAFT WINGS
 11/28/2001 - 11/30/2003 FY02: \$65,195 Total: \$65,195
Prin. Invest.: LIBRESCU
Tech. Officer: LARC/W A SILVA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02024 **VA POLYTECHNIC INST & ST UNIV** **9496**
 MULTIDISCIPLINARY DESIGN OPTIMIZTN INVESTIGATION ADVANCED DE-
 SIGN CONCEPTS APPLIED BLENDED WING-BODY
 12/21/2001 - 01/14/2005 FY02: \$145,640 Total: \$145,640
Prin. Invest.: S M PROCTOR
Tech. Officer: LARC/R A HATHAWAY, LARC/M D GUYEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02025 **VA POLYTECHNIC INST & ST UNIV** **9497**
 POLYNOMIAL CHAOS IN FLUID MECHANICS
 12/19/2001 - 09/30/2002 FY02: \$75,000 Total: \$75,000
Prin. Invest.: B GROSSMAN, R W WALTERS
Tech. Officer: LARC/J H MORRISON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02053 **VA POLYTECHNIC INST & ST UNIV** **9498**
 ADVANCED DISTRIBUTED ACTIVE VIBRATION ABSORBERS DAVA'S FOR
 REDUCING AIRCRAFT INTERIOR NOISE
 02/13/2002 - 02/12/2005 FY02: \$67,000 Total: \$67,000
Prin. Invest.: C R FULLER
Tech. Officer: LARC/D L PALUMBO
CASE Category: 46 – MECHANICAL ENGR

NAG 1 02063 **VA POLYTECHNIC INST & ST UNIV** **9499**
 A PROGRAM TO DEVELOP SHAPE MEMORY ALLOYS FOR SENSING AND
 MORPHING APPLICATIONS
 03/06/2002 - 03/05/2005 FY02: \$55,000 Total: \$55,000
Prin. Invest.: W T REYNOLDS
Tech. Officer: LARC/R S PIASCIK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 1 02084 **VA POLYTECHNIC INST & ST UNIV** **9500**
 CONTROL OF LANDING GEAR NOISE
 04/22/2002 - 04/21/2006 FY02: \$72,307 Total: \$72,307
Prin. Invest.: R A BURDISSO, W NG
Tech. Officer: LARC/M R KHORRAMI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02106 **VA POLYTECHNIC INST & ST UNIV** **9501**
 DEVELOPMENT AND OPERATION OF VIRGINIA FIRST LEGO LEAGUE
 (VAFLL) (FOLLOW-ON TO NAG-1-01021)
 07/23/2002 - 03/31/2003 FY02: \$20,000 Total: \$20,000
Prin. Invest.: B DUGGINS
Tech. Officer: LARC/J M SEATON, LARC/J L EVANS
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 02108 **VA POLYTECHNIC INST & ST UNIV** **9502**
PROGRAM TO DEVELOP INTEGRATED JP-7 PLASMA-INJECTOR FLAME-
HOLDER FOR SUPERSONIC COMBUSTION
07/29/2002 - 08/09/2005 FY02: \$98,238 Total: \$98,238
Prin. Invest.: J A SCHETZ
Tech. Officer: LARC/D E REUBUSH
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 02111 **VA POLYTECHNIC INST & ST UNIV** **9503**
INVESTIGATION OF ADAPTIVE STRUCTURES FOR MORPHING AIRCRAFT
08/30/2002 - 08/31/2003 FY02: \$65,078 Total: \$65,078
Prin. Invest.: H H ROBERTSHAW, D J INMAN, C F REINHOLTZ
Tech. Officer: LARC/G C HORNER
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1486 **VA POLYTECHNIC INST & ST UNIV** **9504**
PERFORMANCE PREDICTION & VALIDATION FOR SMALL VTOL UAV'S
06/18/2001 - 02/28/2002 FY02: -\$106 Total: \$123,874
Prin. Invest.: A MYKLEBUST
Tech. Officer: ARC/T NAUMONICE, ARC/C E HANGE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1521 **VA POLYTECHNIC INST & ST UNIV** **9505**
ACCELERATING DESIGN INTEGRATED AIRCRAFT SYNTHESIS TOOLS
09/10/2001 - 08/31/2003 FY02: \$356,675 Total: \$515,695
Prin. Invest.: A MYKLEBUST, J H BOHN
Tech. Officer: ARC/D A WARDWELL
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2093 **VA POLYTECHNIC INST & ST UNIV** **9506**
AN INTEGRATED SYSTEMS APPROACH TOWARDS ACTIVE CONTROL OF
THERMO-ACOUSTIC INSTABILITIES
12/15/1997 - 10/31/2001 FY02: -\$1,465 Total: \$291,338
Prin. Invest.: U VANDSBURGER, W R SAUNDERS, B GANESHAN
Tech. Officer: GRC/J E MAY
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2100 **VA POLYTECHNIC INST & ST UNIV** **9507**
DURABILITY OF CERAMIC MATRIX COMPOSITES AT HIGH TEMPERATURES:
EXPERIMENTAL STUDIES & PREDICTIVE MODELING
01/06/1998 - 11/19/2001 FY02: -\$2,739 Total: \$197,445
Prin. Invest.: W A CURTIN
Tech. Officer: GRC/M H JASKOWIAK
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 3 2687 **VA POLYTECHNIC INST & ST UNIV** **9508**
A DESIGN METHODOLOGY FOR RAPID IMPLEMENTATION OF ACTIVE
CONTROL SYSTEMS ACROSS LEAN DIRECT INJECTION
01/10/2002 - 09/30/2004 FY02: \$100,000 Total: \$100,000
Prin. Invest.: W R SAUNDERS
Tech. Officer: GRC/J R SAUS
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2694 **VA POLYTECHNIC INST & ST UNIV** **9509**
FAN NOISE CONTROL USING HERSHEL-QUINCKE RESONATOR SYSTEMS
01/17/2002 - 09/30/2004 FY02: \$96,059 Total: \$96,059
Prin. Invest.: D A BURDISSO
Tech. Officer: GRC/L J HEIDELBERG
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2710 **VA POLYTECHNIC INST & ST UNIV** **9510**
PREDICTING MODES OF THE UNSTEADY VORTICITY FIELD NEAR THE
TRAILING EDGE OF A BLADE
02/14/2002 - 08/31/2003 FY02: \$53,556 Total: \$53,556
Prin. Invest.: W J DEVENPORT
Tech. Officer: GRC/E ENVIA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2733 **VA POLYTECHNIC INST & ST UNIV** **9511**
BASIC HIGH REYNOLDS NUMBER 3-D TURBULENT BOUNDARY LAYER
EXPERIMENTS ON LAGS TO IMPROVE SECOND-ORDER
03/08/2002 - 01/31/2005 FY02: \$106,738 Total: \$106,738
Prin. Invest.: R L SIMPSON
Tech. Officer: GRC/L A POVINELLI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 3 2796 **VA POLYTECHNIC INST & ST UNIV** **9512**
COMPUTATIONAL THERMOCHEMISTRY OF JET FUELS AND ROCKET
PROPELLANTS
08/06/2002 - 09/30/2002 FY02: \$20,000 Total: \$20,000
Prin. Invest.: T CRAWFORD
Tech. Officer: GRC/M ZEHE
CASE Category: 12 – CHEMISTRY

NAG 4 218 **VA POLYTECHNIC INST & ST UNIV** **9513**
RESEARCH AND DEVELOPMENT OF SCRAMJET SKIN FRICTION AND HEAT
FLUX INSTRUMENTATION FOR FLIGHT RESEARCH
01/31/2001 - 09/17/2002 FY02: -\$532 Total: \$74,468
Prin. Invest.: J A SCHETZ
Tech. Officer: DFRC/T T BUI
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 5295 **VA POLYTECHNIC INST & ST UNIV** **9514**
IONOSPHERIC NANOSATELLITE FORMATION (ION-F) SCIENCE
06/01/2000 - 05/25/2003 FY02: \$56,200 Total: \$155,270
Prin. Invest.: W SCALES
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 9291 **VA POLYTECHNIC INST & ST UNIV** **9515**
ION-F: A SPACE-BASED TESTBED FOR DISTRIBUTED FORMATION CONTROL
USING THE HOKIESAT NANOSATELLITE
03/17/2000 - 03/31/2003 FY02: \$20,000 Total: \$177,000
Prin. Invest.: C HALL
Tech. Officer: GSFC/K LUU
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 10548 **VA POLYTECHNIC INST & ST UNIV** **9516**
NET ECOSYSTEM PRODUCTIVITY OF MANAGED FORESTS
03/14/2001 - 03/14/2004 FY02: \$103,279 Total: \$210,938
Prin. Invest.: R WYNNE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10733 **VA POLYTECHNIC INST & ST UNIV** **9517**
FLUID AND MELT INCLUSION STUDIES OF VOLATILES IN PLANETARY
SAMPLES
04/11/2001 - 04/14/2002 FY02: \$0 Total: \$25,000
Prin. Invest.: R BODNAR
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10818 **VA POLYTECHNIC INST & ST UNIV** **9518**
 "CONTROL EFFECTIVENESS FOR LEONARDO MISSION ORBITS"
 04/24/2001 - 01/31/2002 FY02: \$0 Total: \$40,000
Prin. Invest.: C HALL
Tech. Officer: GSFC/S HUGHES
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 11315 **VA POLYTECHNIC INST & ST UNIV** **9519**
 TETHERED FORMATION FLYING STUDY-CROSS ENTERPRISE TECH. DEV. PROGRAM
 09/05/2001 - 08/31/2004 FY02: \$33,370 Total: \$65,817
Prin. Invest.: C HALL
Tech. Officer: GSFC/D QUINN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12119 **VA POLYTECHNIC INST & ST UNIV** **9520**
 TIME-OPTIMAL CONTROL FOR FORMATION ESTABLISHMENT & MANEUVERING
 04/29/2002 - 05/30/2003 FY02: \$31,697 Total: \$31,697
Prin. Invest.: D HALL
Tech. Officer: GSFC/D FOLTA
CASE Category: 41 – AERONAUTICAL ENGR

NAG 8 1846 **VA POLYTECHNIC INST & ST UNIV** **9521**
 MATERIAL CHARACTERIZATION OF ELASTOMERIC ADHESIVE
 08/09/2001 - 02/08/2003 FY02: \$0 Total: \$66,983
Prin. Invest.: D A DILLIARD
Tech. Officer: MSFC/M E PRINCE
CASE Category: 47 – METAL & MATERIALS ENGR

NCA 1 01002 **VA POLYTECHNIC INST & ST UNIV** **9522**
 VA POLYTECHNIC INST FOR NAT. DECISION SPT SIM MODEL FRAMEWORK DEV
 03/15/2001 - 10/31/2001 FY02: \$0 Total: \$94,100
Prin. Invest.: A A TRANI, H SWINGLE
Tech. Officer: LARC/S A COOKE
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 346 **VA POLYTECHNIC INST & ST UNIV** **9523**
 A UNIFIED PROGRAM FOR THE FLIGHT DYNAMICS AND AERO SERVOELASTICITY OF WHOLE AIRCRAFT
 06/17/1999 - 12/15/2002 FY02: \$36,000 Total: \$151,000
Prin. Invest.: L MEIROVITCH
Tech. Officer: LARC/M R WAZAK
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 367 **VA POLYTECHNIC INST & ST UNIV** **9524**
 LOW SPEED ROTOR/FUSELAGE INTERACTIONAL AERODYNAMICS
 01/12/2000 - 10/30/2002 FY02: \$109,412 Total: \$247,279
Prin. Invest.: D D BOYD, R W BARNWELL
Tech. Officer: LARC/H E JONES
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 398 **VA POLYTECHNIC INST & ST UNIV** **9525**
 INTERFACE FINITE ELEMENTS FOR ANALYSIS OF FRACTURE INITIATION & PROGRESSION
 05/15/2000 - 05/14/2003 FY02: \$20,721 Total: \$127,999
Prin. Invest.: E R JOHNSON
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 405 **VA POLYTECHNIC INST & ST UNIV** **9526**
 SCIENTIFIC INVESTIGATIONS WITH RADIATION BUDGET DATA
 08/10/2000 - 08/15/2003 FY02: \$101,162 Total: \$236,545
Prin. Invest.: G L SMITH
Tech. Officer: LARC/R B LEE III, LARC/R L HUFFMAN JR.
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 01029 **VA POLYTECHNIC INST & ST UNIV** **9527**
 DEVELOPMENT OF AN EFFICIENT BINAURAL SIMULATION FOR THE ANALYSIS OF STRUCTURAL ACOUSTIC DATA
 03/14/2001 - 12/31/2002 FY02: -\$2,557 Total: \$48,200
Prin. Invest.: M E JOHNSON
Tech. Officer: LARC/S A RIZZI
CASE Category: 41 – AERONAUTICAL ENGR

NCC 1 01037 **VA POLYTECHNIC INST & ST UNIV** **9528**
 VARTM MODEL DEVELOPMENT AND VERIFICATION
 04/12/2001 - 04/11/2004 FY02: \$75,000 Total: \$149,989
Prin. Invest.: A C LOOS
Tech. Officer: LARC/R J CANO, LARC/B J JENSEN
CASE Category: 47 – METAL & MATERIALS ENGR

NCC 1 01044 **VA POLYTECHNIC INST & ST UNIV** **9529**
 NEW NANO-SPHERE MATERIALS: MAGNETIC AND DIELECTRIC PROPERTIES OF THE A3N ENDOHEDRAL
 04/12/2001 - 01/12/2004 FY02: \$71,000 Total: \$141,650
Prin. Invest.: H C DORN
Tech. Officer: LARC/C C FAY
CASE Category: 12 – CHEMISTRY

NCC 1 02014 **VA POLYTECHNIC INST & ST UNIV** **9530**
 LOW SPEED ROTOR/ FUSELAGE INTERACTIONAL AERODYNAMICS
 02/20/2002 - 02/27/2002 FY02: \$0 Total: \$0
Prin. Invest.: R W BARNWELL, D S PRICHARD
Tech. Officer: LARC/H E JONES, LARC/H E JONES
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 5433 **VA POLYTECHNIC INST & ST UNIV** **9531**
 AEROELASTIC DESIGN OF WINGS USING NON-TRADITIONAL METHODS
 04/25/2001 - 09/30/2002 FY02: \$0 Total: \$47,023
Prin. Invest.: R K KAPANIA
Tech. Officer: ARC/T L HOLST, ARC/G GURASWANY
CASE Category: 22 – COMPUTER SCIENCE

NCC 3 866 **VA POLYTECHNIC INST & ST UNIV** **9532**
 HIGH TEMPERATURE PROTON EXCHANGE MEMBRANES FOR FUE L CELLS
 02/20/2001 - 03/31/2003 FY02: \$52,500 Total: \$122,315
Prin. Invest.: J E MCGRATH
Tech. Officer: GRC/M B MEADOR
CASE Category: 12 – CHEMISTRY

NGT 1 01002 **VA POLYTECHNIC INST & ST UNIV** **9533**
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 11/14/2000 - 10/31/2001 FY02: -\$1,462 Total: \$16,259
Prin. Invest.: J J KELLEY
Tech. Officer: LARC/R H THOMAS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 01003 **VA POLYTECHNIC INST & ST UNIV** **9534**
 GRADUATE STUDENT RESEARCHERS PROGRAM
 01/26/2001 - 12/31/2001 FY02: -\$1,777 Total: \$20,223
Prin. Invest.: T C WARD
Tech. Officer: LARC/E J SIOCHI, LARC/J A HINKLEY
CASE Category: 12 – CHEMISTRY

NGT 1 01033 VA POLYTECHNIC INST & ST UNIV 9535
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/22/2001 - 06/30/2004 FY02: \$16,000 Total: \$28,000
Prin. Invest.: T LONG
Tech. Officer: LARC/E J SIOCHI
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 01035 VA POLYTECHNIC INST & ST UNIV 9536
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP) MY 1/3
 06/25/2001 - 01/23/2002 FY02: -\$21,215 Total: \$785
Prin. Invest.: D P TELIONES
Tech. Officer: LARC/A E WASHBURN, LARC/W L SELLERS
CASE Category: 41 – AERONAUTICAL ENGR

NGT 1 01038 VA POLYTECHNIC INST & ST UNIV 9537
 GSRP
 09/10/2001 - 12/31/2002 FY02: \$46,031 Total: \$56,031
Prin. Invest.: M AHMADIAN
Tech. Officer: LARC/D L PALUMBO
CASE Category: 46 – MECHANICAL ENGR

NGT 1 02014 VA POLYTECHNIC INST & ST UNIV 9538
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/07/2002 - 06/30/2005 FY02: \$14,000 Total: \$14,000
Prin. Invest.: D J INMAN, R B WILLIAMS
Tech. Officer: LARC/W K WILKE
CASE Category: 46 – MECHANICAL ENGR

NGT 1 52184 VA POLYTECHNIC INST & ST UNIV 9539
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 05/12/1998 - 06/30/2001 FY02: \$1 Total: \$78,001
Prin. Invest.: J BURTON
Tech. Officer: LARC/J M SEATON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NGT 1 52224 VA POLYTECHNIC INST & ST UNIV 9540
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 09/27/1999 - 08/31/2002 FY02: \$16,500 Total: \$60,500
Prin. Invest.: G J OGLE
Tech. Officer: LARC/J M SEATON
CASE Category: 22 – COMPUTER SCIENCE

NGT 1 52246 VA POLYTECHNIC INST & ST UNIV 9541
 TRAINING GRANT - ADAPTIVE SYSTEM IDENTIFICATION AND CONTROL
 TECHNIQUES FOR STRUCTURAL NOISE REDUC-
 08/25/2000 - 06/14/2001 FY02: -\$8,397 Total: \$28,146
Prin. Invest.: M AHMODEON
Tech. Officer: LARC/D L PALUMBO
CASE Category: 49 – ENGINEERING, OTHER

NGT 1 52248 VA POLYTECHNIC INST & ST UNIV 9542
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 08/01/2000 - 06/30/2002 FY02: \$10,000 Total: \$44,001
Prin. Invest.: A M SMITH, J R MAHAN
Tech. Officer: LARC/K J PRIESTLEY, LARC/R B LEE III
CASE Category: 46 – MECHANICAL ENGR

NGT 5 30198 VA POLYTECHNIC INST & ST UNIV 9543
 ESTIMATING FOREST VEGETATION BIOMASS USING AIRBORNE LIDAR
 MEASUREMENTS STUDENT: SORIN POPESCU
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: R H WYNNE
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 50260 VA POLYTECHNIC INST & ST UNIV 9544
 A SHARED AUGMENTED REALITY SYSTEM FOR COMMUNICATION ACROSS
 ENVIRONMENTS STUDENT: WILLIAM STADERMAN
 07/07/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: B M KLEINER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50425 VA POLYTECHNIC INST & ST UNIV 9545
 NOVEL APPROACHES TO ESTABLISHING VALIDITY & RELIABILITY OF
 MECHANICAL RESPONSE TISSUE ANALYSIS: T
 08/14/2002 - 08/14/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: W G HERBERT
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52909 VA POLYTECHNIC INST & ST UNIV 9546
 DEVELOPMENT OF SELF-MONITORING AND SELF-HEALING BOLTED JOINTS
 05/25/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: D J INMAN
Tech. Officer: MSFC/S NASH-STEVENSON
CASE Category: 46 – MECHANICAL ENGR

NAG 1 2302 VIRGINIA COMMONWEALTH UNIV 9547
 ELECTRIC FIELD-MEDIATED PROCESSING OF POLYMERS
 06/07/2000 - 01/14/2002 FY02: \$0 Total: \$38,512
Prin. Invest.: G E WNEK, T W HAAS, G L BOWLIN
Tech. Officer: LARC/J S HARRISON, LARC/E J SIOCHI
CASE Category: 43 – CHEMICAL ENGR

NAG 1 01042 VIRGINIA COMMONWEALTH UNIV 9548
 A MINIATURE EMBEDDED RECONFIGURABLE COMPUTER AND LOGIC
 MODULE
 04/09/2001 - 05/22/2002 FY02: \$5,000 Total: \$44,957
Prin. Invest.: J H TUCKER
Tech. Officer: LARC/Q A SHAMS
CASE Category: 45 – ELECTRICAL ENGR

NAG 8 1484 VIRGINIA COMMONWEALTH UNIV 9549
 R/S GAS PHASE POLYMERIZATION AND NUCLEATION EXPERIMENTS IN
 MICROGRAVITY
 02/01/1998 - 01/31/2003 FY02: \$20,000 Total: \$450,000
Prin. Invest.: M S EL-SHALL
Tech. Officer: MSFC/P M DOTY
CASE Category: 12 – CHEMISTRY

NAS 9 19539 VIRGINIA COMMONWEALTH UNIV 9550
 NEUROLAB EXPERIMENT DOCUMENT FOR E-049
 02/22/1996 - 09/30/2002 FY02: \$0 Total: \$915,438
Prin. Invest.: D ECKBURG
Tech. Officer: JSC/A LEE
CASE Category: 56 – MEDICAL

NAS 9 19541 VIRGINIA COMMONWEALTH UNIV 9551
 AUTONOMIC MECHANISMS DURING PROLONGED WEIGHTLESSNESS
 03/14/1996 - 02/28/2002 FY02: \$0 Total: \$749,668
Prin. Invest.: H B CHERMSIDE
Tech. Officer: JSC/C M BUNTIN
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

WASHINGTON

NASA'S UNIVERSITY PROGRAM

NCC 1 02013 VIRGINIA COMMONWEALTH UNIV 9552
 FLEXIBLE, HIGH PERFORMANCE, HIGH STABILITY SENSORS/ ACTUATORS
 FOR AEROSPACE APPLICATIONS
 02/14/2002 - 02/13/2004 FY02: \$65,161 Total: \$65,161
Prin. Invest.: Z OUNAIES
Tech. Officer: LARC/J S HARRISON
CASE Category: 46 – MECHANICAL ENGR

NCC 3 645 VIRGINIA COMMONWEALTH UNIV 9553
 INVESTIGATION OF BOUNDARY LAYER DEVELOPMENT I LOW- PRESSURE
 TURBINE STAGES
 09/03/1998 - 10/31/2000 FY02: -\$21,687 Total: \$105,623
Prin. Invest.: D J DORNEY
Tech. Officer: GRC/D E ASHPIS
CASE Category: 41 – AERONAUTICAL ENGR

NCC 9 87 VIRGINIA COMMONWEALTH UNIV 9554
 MEDICAL INFORMANTICS AND TECH APPLICATIONS CONSORTIUM
 07/01/1999 - 10/31/2002 FY02: \$1,116 Total: \$5,773,315
Prin. Invest.: R C MERRELL
Tech. Officer: JSC/J S LOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 148 VIRGINIA COMMONWEALTH UNIV 9555
 MEDICAL INFORMATICS & TECHNOLOGY APPLICATIONS TEST BED
 01/22/2002 - 10/30/2002 FY02: \$1,000,764 Total: \$1,000,764
Prin. Invest.: R C MERRELL
Tech. Officer: JSC/J S LOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

WASHINGTON

NAG 5 7672 CENTRAL WASHINGTON UNIV 9556
 FUNDING FOR 'VARIATIONS IN SEA LEVEL CHANGE ALONG THE CASCADIA
 MARGIN..'(SENH98-0083)
 09/01/1998 - 06/30/2002 FY02: \$0 Total: \$294,208
Prin. Invest.: M MILLER
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10501 CENTRAL WASHINGTON UNIV 9557
 APPLICATIONS OF DIGITAL ELEVATION MODELS TO THE ACTIVE TECTON-
 ICS & PALEOCLIMATE OF CENTRAL ASIA
 03/02/2001 - 02/28/2003 FY02: \$0 Total: \$19,000
Prin. Invest.: C RUBIN
Tech. Officer: GSFC/H V FREY
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 6034 HERITAGE COLL 9558
 ENHANCING SCIENCE TEACHER TRAINING USING WATER RES OURCES &
 GLOBE
 06/10/1999 - 03/31/2002 FY02: \$0 Total: \$512,930
Prin. Invest.: P T ALEXANDER
Tech. Officer: ARC/A CARDENAS, ARC/G S LEE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG13 02057 HERITAGE COLL 9559
 PAIR-INCORPORATION OF SATELLITE IMAGERY ANALYSIS I N ENVIRON-
 MENT AND COMPUTER SCIENCE CIRRICULA
 09/23/2002 - 09/30/2006 FY02: \$399,208 Total: \$399,208
Prin. Invest.: D FALCO
Tech. Officer: SSC/D TRAVIS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG13 99027 HERITAGE COLL 9560
 APPLICATION OF REMOTELY SENSED INFORMATION TO EN- VIRONMENTAL
 PROBLEMS OF HISPANICS AND NATIVE AM
 09/08/1999 - 09/26/2001 FY02: \$0 Total: \$198,642
Prin. Invest.: J W FALCO
Tech. Officer: SSC/R TRAVIS
CASE Category: 62 – PSYCHOLOGY SOCIAL ASPECTS

NAG 5 11836 UNIV OF PUGET SOUND 9561
 EVOLUTION OF SEA ICE THICKNESS DISTRIBUTION DERIVE D FROM
 MODELING AND REMOTE SENSING
 03/18/2002 - 03/14/2003 FY02: \$27,946 Total: \$27,946
Prin. Invest.: A THORNDIKE
Tech. Officer: GSFC/W ABDALATI
CASE Category: 33 – OCEANOGRAPHY

NAG 5 12328 UNIV OF PUGET SOUND 9562
 BIOGEOCHEMISTRY OF IRON IN A NEAR-NEUTRAL PH IRON- DEPOSITING
 HOT SPRING WITH PHOTOTROPHIC MICROBIAL
 06/27/2002 - 06/30/2005 FY02: \$110,057 Total: \$110,057
Prin. Invest.: B PIERSON
Tech. Officer: GSFC/M MEYER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2072 UNIV OF WASHINGTON 9563
 COORD'D PARAMETERIZATION DEV & LG-EDDY SIMULATION FOR MARINE
 & ARCTIC CLOUD-TOPPED BOUNDARY LAYERS
 06/12/1998 - 03/31/2002 FY02: \$0 Total: \$236,000
Prin. Invest.: C S BRETHERTON
Tech. Officer: LARC/D S MCDUGAL, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2079 UNIV OF WASHINGTON 9564
 AIRBORNE STUDIES IN THE ARCTIC IN SUPPORT OF FIRE III
 06/12/1998 - 03/11/2003 FY02: \$0 Total: \$736,064
Prin. Invest.: P V HOBBS, D A HEGG
Tech. Officer: LARC/D S MCDUGAL, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2193 UNIV OF WASHINGTON 9565
 DYNAMICAL COUPLING OF STRATOSPHERE & TROPOSPHERE
 05/12/1999 - 09/30/2002 FY02: \$0 Total: \$354,994
Prin. Invest.: J R HOLTON
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 2296 UNIV OF WASHINGTON 9566
 PROBABILISTIC STRUCTURAL INSPECTION OPTIMIZATION WITH BAYESIAN
 UPDATING OF DAMAGE CHARACTERISTICS
 06/01/2000 - 06/30/2002 FY02: \$0 Total: \$130,000
Prin. Invest.: K Y LIN
Tech. Officer: LARC/W J STLOUD, LARC/I S RAJU
CASE Category: 49 – ENGINEERING, OTHER

NAG 1 01029 UNIV OF WASHINGTON 9567
 INTEGRATED AEROSERVOELASTIC OPTIMIZATION OF FULL- SCALE
 STRAIN-ACTUATED AIRPLANES: TOOLSDEVELOP-
 02/15/2001 - 12/31/2003 FY02: \$71,000 Total: \$124,000
Prin. Invest.: E LIVNE
Tech. Officer: LARC/C D WIESEMAN, LARC/R C SCOTT
CASE Category: 41 – AERONAUTICAL ENGR

NAG 1 01078 **UNIV OF WASHINGTON** **9568**
TOUGHENED RESIN DEVELOPMENT AND COMPOSITE SYSTEMS FOR
VARTM APPLICATIONS
05/24/2001 - 05/30/2004 FY02: \$39,497 Total: \$157,997
Prin. Invest.: J C SEFERIS
Tech. Officer: LARC/B J JENSEN, LARC/R J CANO
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 2 1450 **UNIV OF WASHINGTON** **9569**
NETWORK SERVER PARADIGMS FOR AIR TRAFFIC MANAGEMEN T AUTO-
MATION
12/14/2000 - 12/31/2002 FY02: \$28,827 Total: \$56,766
Prin. Invest.: S DEVASIA
Tech. Officer: ARC/G MEYER
CASE Category: 49 – ENGINEERING, OTHER

NAG 2 1514 **UNIV OF WASHINGTON** **9570**
THE ROLE OF THE HOMEBOX TRASCRPTION FACTOR, CPRO X1, IN
DEVELOPMENT OF THE VESTIBULAR PERIPHERY IN
08/17/2001 - 07/14/2003 FY02: \$140,529 Total: \$211,749
Prin. Invest.: J S STONE
Tech. Officer: ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1538 **UNIV OF WASHINGTON** **9571**
INTERLEAVED CONTINGENT PLANNING AND EXECUTION
02/25/2002 - 02/14/2003 FY02: \$107,321 Total: \$107,321
Prin. Invest.: D WELD
Tech. Officer: ARC/R A MORRIS, ARC/D SMITH
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 1837 **UNIV OF WASHINGTON** **9572**
PHORETIC AND RADIMEDTRIC FORCE MEASUREMENT ON MICR OPARTI-
CLS UN MICROGRAVITY CONDITIONS
04/22/1996 - 09/30/2000 FY02: \$0 Total: \$318,029
Prin. Invest.: E J DAVIS
Tech. Officer: GRC/J S LING, GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 1865 **UNIV OF WASHINGTON** **9573**
INDIUM MONO-ION OSCILLATOR II
07/23/1996 - 01/01/2001 FY02: -\$2,957 Total: \$447,043
Prin. Invest.: W NAGOURNEY, M DEHMELT
Tech. Officer: GRC/B S SINGH
CASE Category: 13 – PHYSICS

NAG 3 2379 **UNIV OF WASHINGTON** **9574**
BUOYANCY-DRIVEN INSTABILITIES IN SINGLE-BUBBLE SON OLUMINES-
CENCE (REF.# 123814)
04/04/2000 - 11/30/2003 FY02: \$95,000 Total: \$255,000
Prin. Invest.: T J MATULA
Tech. Officer: GRC/N R HALL
CASE Category: 49 – ENGINEERING, OTHER

NAG 3 2455 **UNIV OF WASHINGTON** **9575**
PRESSURE SENSITIVE (PSP) FOR TWO SENSOR LIFETIME M EASUREMENT
OF PRESSURE AND TEMPERATURE
06/07/2000 - 12/31/2002 FY02: \$40,815 Total: \$145,815
Prin. Invest.: D GOUTERMAN
Tech. Officer: GRC/T BENCIC
CASE Category: 12 – CHEMISTRY

NAG 3 2517 **UNIV OF WASHINGTON** **9576**
INVESTIGATION OF THE LIFTOFF AND BLOWOUT OF TRANSITIONAL AND
TURBULENT JET FLAMES
01/09/2001 - 11/30/2004 FY02: \$85,500 Total: \$165,500
Prin. Invest.: D RILEY
Tech. Officer: GRC/J E BROOKER
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 3023 **UNIV OF WASHINGTON** **9577**
THE EVOLUTION OF GALAXIES AND CLUSTERS OF GALAXIES
10/02/1995 - 09/30/2000 FY02: -\$19 Total: \$269,981
Prin. Invest.: G R LAKE
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3121 **UNIV OF WASHINGTON** **9578**
A STUDY OF MAGNETIC ACCRETION IN VV PUP AND BL HYI
10/18/1995 - 10/31/2000 FY02: -\$14 Total: \$20,332
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 4375 **UNIV OF WASHINGTON** **9579**
POLAR EXCHANGE AT THE SEA SURFACE
06/11/1997 - 05/31/2001 FY02: -\$5,749 Total: \$2,908,954
Prin. Invest.: D A ROTHROCK
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4540 **UNIV OF WASHINGTON** **9580**
THERMAL HISTORY OF LUNAR CRUSTAL ROCKS
05/06/1997 - 06/14/2002 FY02: \$0 Total: \$165,000
Prin. Invest.: D S MCCALLUM
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 4712 **UNIV OF WASHINGTON** **9581**
TITLE: THE REGIONAL AMAZON MODEL SYNOPTIC SCALE H BIO-
GEOCHEMICAL CYCLES FROM EOS (EOSRAM)
06/23/1997 - 06/30/2001 FY02: \$0 Total: \$1,169,956
Prin. Invest.: J RICHEY
Tech. Officer: GSFC/A C JANETOS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4739 **UNIV OF WASHINGTON** **9582**
RADIATIVE TRANSFER IN SNOW TERRAIN FOR APPLICATION REMOTE
SENSING
06/17/1997 - 03/14/2001 FY02: -\$53 Total: \$106,155
Prin. Invest.: L TSANG
Tech. Officer: GSFC/A T CHANG
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 4795 **UNIV OF WASHINGTON** **9583**
TRMM VALIDATION: INTEGRATION OF TRMM SATELLITE AN DATA TO
DETERMINE TROPICAL HEATING
09/08/1997 - 03/15/2001 FY02: -\$172 Total: \$806,007
Prin. Invest.: R A HOUZE, JR.
Tech. Officer: GSFC/R W LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

WASHINGTON

NASA'S UNIVERSITY PROGRAM

NAG 5 5183 **UNIV OF WASHINGTON** **9584**
 DROPPS: DISTRIBUTION AND ROLE OF PARTICLES IN THE POLAR SUMMER
 MESOSPHERE
 03/13/1998 - 03/31/2002 FY02: \$0 Total: \$168,353
Prin. Invest.: R H HOLZWORTH
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5190 **UNIV OF WASHINGTON** **9585**
 ATMOSPHERIC LIGHTNING ATMOSPHERIC LIGHTNING
 04/16/1998 - 04/20/2002 FY02: \$0 Total: \$201,960
Prin. Invest.: M MCCARTHY
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5294 **UNIV OF WASHINGTON** **9586**
 IONOSPHERIC NANOSATELLITE FORMATION (ION-F) SCIENCE
 06/01/2000 - 05/25/2003 FY02: \$65,691 Total: \$156,783
Prin. Invest.: J D SAHR
Tech. Officer: GSFC/J C BRINTON
CASE Category: 13 – PHYSICS

NAG 5 6067 **UNIV OF WASHINGTON** **9587**
 IMPACT OF FOREST CLEARCUTTING IN THE PACIFIC NORTH OD EVENTS
 07/28/1997 - 07/31/2001 FY02: -\$43 Total: \$254,957
Prin. Invest.: A GILLESPIE
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6101 **UNIV OF WASHINGTON** **9588**
 CLIMATE PROCESSES OVER THE OCEAN
 07/24/1997 - 07/31/2001 FY02: \$0 Total: \$1,674,000
Prin. Invest.: D HARTMANN
Tech. Officer: GSFC/J A CURRAN
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6463 **UNIV OF WASHINGTON** **9589**
 BROADBAND INFRARED THERMOMETER MEASUREMENTS FOR MO DIS
 VALIDATION
 10/14/1997 - 03/31/2003 FY02: \$99,533 Total: \$901,285
Prin. Invest.: A T JESSUP
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 6493 **UNIV OF WASHINGTON** **9590**
 VALIDATION OF RADARSAT GEOPHYSICAL PROCESSOR SYSTEMS PROD-
 UCTS
 10/27/1997 - 09/30/2001 FY02: \$0 Total: \$366,447
Prin. Invest.: R LINDSAY
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6505 **UNIV OF WASHINGTON** **9591**
 ESTIMATION OF FLOOD HAZARDS THROUGH REMOTE SENSING AND
 MODELING (SENH 06-0114, LETTENMAIR AND WOO
 10/24/1997 - 04/30/2001 FY02: \$0 Total: \$152,500
Prin. Invest.: D LETTENMAIER
Tech. Officer: GSFC/H FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 6626 **UNIV OF WASHINGTON** **9592**
 CODES TO ENABLE DIRECT SIMULATION OF SOLAR SYSTEM FORMATION.
 11/17/1997 - 11/14/2001 FY02: \$0 Total: \$451,354
Prin. Invest.: G LAKE
Tech. Officer: GSFC/J FISCHER
CASE Category: 11 – ASTRONOMY

NAG 5 6924 **UNIV OF WASHINGTON** **9593**
 GRANT
 02/04/1998 - 01/31/2001 FY02: -\$68 Total: \$478,201
Prin. Invest.: G PARKS
Tech. Officer: GSFC/M HESSE
CASE Category: 13 – PHYSICS

NAG 5 7114 **UNIV OF WASHINGTON** **9594**
 WIND DATA ANALYSIS USING THE 3-D INSTRUMENT
 03/31/1998 - 03/31/2002 FY02: \$0 Total: \$392,000
Prin. Invest.: G PARKS
Tech. Officer: GSFC/K OGILVIE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 7278 **UNIV OF WASHINGTON** **9595**
 XTE PROPOSAL - THE OUTBURST CYCLE OF V803 CEN
 04/15/1998 - 04/30/2001 FY02: \$0 Total: \$10,353
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/J SWANK
CASE Category: 11 – ASTRONOMY

NAG 5 7330 **UNIV OF WASHINGTON** **9596**
 XTE PROPOSAL - TIMING THE X-RAY SOURCE IN NCG 6652 : THE
 REMAINING LUMINOUS GLOBULAR CLUSTER
 04/24/1998 - 04/30/2002 FY02: \$0 Total: \$20,200
Prin. Invest.: B MARGON
Tech. Officer: GSFC/L KALUZIENSKI
CASE Category: 11 – ASTRONOMY

NAG 5 7495 **UNIV OF WASHINGTON** **9597**
 MAPPING THE SPATIAL DISTRIBUTION AND TIME EVOLUTION OF SNOW-
 WATER EQUIVALENT WITH PASSIVE MICROWAVE
 06/29/1998 - 09/14/2001 FY02: \$0 Total: \$350,000
Prin. Invest.: L TSANG
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7526 **UNIV OF WASHINGTON** **9598**
 EVALUATION OF OCEANIC COOL-SKIN AND WARM LAYER MODELS USING
 LONG-TERM MEASUREMENTS
 06/08/1998 - 05/31/2002 FY02: \$0 Total: \$435,721
Prin. Invest.: A T JESSUP
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7550 **UNIV OF WASHINGTON** **9599**
 AIRBORNE MICROWAVE IMAGING OF RIVER VELOCITIES
 06/30/1998 - 12/31/2001 FY02: \$0 Total: \$330,000
Prin. Invest.: W J PLANT
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7604 **UNIV OF WASHINGTON** **9600**
 CIS NET: IN SITU AND REMOTE MONITORING OF PRODUCTIVITY AND NUTRIENT CYCLES IN PUGET SOUND
 07/21/1998 - 09/30/2001 FY02: -\$33 Total: \$179,799
Prin. Invest.: B FROST
Tech. Officer: GSFC/J W MARRA
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7675 **UNIV OF WASHINGTON** **9601**
 UTILIZATION OF THE UNIV OF WASHINGTON'S AIRBORNE MEASUREMENTS FOR STUDIES OF THE RADIATIVE EFFECTS OF
 09/09/1998 - 08/31/2003 FY02: \$0 Total: \$396,062
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7732 **UNIV OF WASHINGTON** **9602**
 POLAR UVI MISSION DATA ANALYSIS EXTENDED MISSION
 09/29/1998 - 09/30/2001 FY02: \$0 Total: \$1,141,740
Prin. Invest.: G K PARKS
Tech. Officer: GSFC/R HOFFMAN
CASE Category: 13 – PHYSICS

NAG 5 7819 **UNIV OF WASHINGTON** **9603**
 EOS OBSERVATION RESOURCE
 12/14/1998 - 12/31/2001 FY02: \$0 Total: \$549,872
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7847 **UNIV OF WASHINGTON** **9604**
 VARIABILITY OF NET PRECIPITATION OVER ANTARCTIC SEA ICE AND ITS EFFECTS ON ICE-OCEAN INTERACTIONS
 11/23/1998 - 12/31/2002 FY02: \$0 Total: \$328,625
Prin. Invest.: A SCHWEIGER
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7886 **UNIV OF WASHINGTON** **9605**
 VALIDATION OF ACOUSTICAL RAINFALL MEASUREMENTS
 12/02/1998 - 09/30/2001 FY02: \$0 Total: \$201,504
Prin. Invest.: J A NYSTUEN
Tech. Officer: GSFC/O W THIELE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 7932 **UNIV OF WASHINGTON** **9606**
 THE COUNTERPARTS OF THE LUMINOUS, BURSTING X-RAY SOURCES IN GLOBULAR CLUSTERS - LTSA98
 01/04/1999 - 01/14/2004 FY02: \$50,887 Total: \$192,395
Prin. Invest.: S F ANDERSON
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8089 **UNIV OF WASHINGTON** **9607**
 SOLAR WIND/IONOSPHERIC COUPLING IN THE MASS LOADING OF THE MAGNETOSPHERE AND THE FORMATION OF THE GE
 01/28/1999 - 02/28/2003 FY02: \$0 Total: \$224,963
Prin. Invest.: R M WINGLEE
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 8109 **UNIV OF WASHINGTON** **9608**
 AIRBORNE IN SITU MEASUREMENTS FOR TRMM VALIDATION STUDIES AT KWAJALEIN
 02/08/1999 - 02/14/2003 FY02: \$0 Total: \$690,698
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/R W LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8164 **UNIV OF WASHINGTON** **9609**
 TOOLS TO PROBE THE OUTER COMETARY SYSTEM AND TO SIMULATE THE FORMATION AND EVOLUTION OF THE SOLAR
 02/08/1999 - 01/31/2003 FY02: \$0 Total: \$470,969
Prin. Invest.: G LAKE
Tech. Officer: GSFC/P HUNTER
CASE Category: 11 – ASTRONOMY

NAG 5 8296 **UNIV OF WASHINGTON** **9610**
 DYNAMICS AND THERMODYNAMICS OF THE NORTH PACIFIC OCEAN
 02/23/1999 - 08/31/2002 FY02: \$0 Total: \$456,973
Prin. Invest.: K KELLY
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8363 **UNIV OF WASHINGTON** **9611**
 VALIDATION OF THE LIDAR RETRIEVAL OF AEROSOL EXTINCTION
 03/15/1999 - 03/14/2001 FY02: -\$6 Total: \$168,052
Prin. Invest.: D S COVERT
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8374 **UNIV OF WASHINGTON** **9612**
 ANALYSIS OF ASCA AND ROSAT OBSERVATIONS OF CATAclysmic VARIABLES (ADP98
 03/03/1999 - 03/14/2001 FY02: \$0 Total: \$20,000
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 8684 **UNIV OF WASHINGTON** **9613**
 INVESTIGATION OF THE RELATIONSHIPS BETWEEN AEROSOL PHYSICAL AND CHEMICAL PROPERTIES
 07/16/1999 - 07/14/2002 FY02: \$0 Total: \$43,841
Prin. Invest.: D A HEGG
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 8784 **UNIV OF WASHINGTON** **9614**
 MOTOR PROTEINS AS SHUTTLES FOR DIRECTED TRANSPORT IN SYNTHETIC MATRICES
 09/27/1999 - 01/31/2003 FY02: \$156,015 Total: \$633,620
Prin. Invest.: V VOGEL
Tech. Officer: GSFC/S DAVISON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8801 **UNIV OF WASHINGTON** **9615**
 "AIRCRAFT SUPPORT FOR SAFARI-2000"
 12/13/1999 - 12/14/2001 FY02: \$0 Total: \$582,932
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

WASHINGTON

NASA'S UNIVERSITY PROGRAM

NAG 5 8966 UNIV OF WASHINGTON 9616
 O VI EMISSION LINES IN HYADES F STARS - FUSE
 01/24/2000 - 01/31/2003 FY02: \$0 Total: \$33,400
Prin. Invest.: E H BOHM-VITENSE
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9454 UNIV OF WASHINGTON 9624
 TERRESTRIAL HYDROLOGY & CLIMATE STUDIES USING EOS- ERA DATA
 05/17/2000 - 04/14/2003 FY02: \$122,722 Total: \$276,745
Prin. Invest.: D LETTENMAIER
Tech. Officer: GSFC/P HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8981 UNIV OF WASHINGTON 9617
 THE ORIGIN OF PECULIAR UV LINE RATIOS IN MAGNETIC CATAclySMIC
 VARIABLES - FUSE
 01/24/2000 - 01/31/2002 FY02: \$0 Total: \$14,900
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 9657 UNIV OF WASHINGTON 9625
 RELATIONSHIP BETWEEN PRECIPITATING CONVECTION AND EASTERLY
 WAVE DYNAMICS IN THE WESTERN CENTRAL PACI
 06/22/2000 - 05/31/2003 FY02: \$131,000 Total: \$278,000
Prin. Invest.: C BREHERTON
Tech. Officer: GSFC/R LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9022 UNIV OF WASHINGTON 9618
 "UNIV OF WASHINGTON PARTICIPATION IN SAFARI- 2000"
 02/08/2000 - 02/14/2003 FY02: \$199,824 Total: \$667,000
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9668 UNIV OF WASHINGTON 9626
 COMBINED USE OF TRMM SATELLITE GROUND-VALIDATION DATA TO MAP
 CONVECTIVE & STRATIFORM PRECIPITATION
 06/19/2000 - 11/30/2002 FY02: \$220,000 Total: \$510,070
Prin. Invest.: R A HOUZE
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 11 – ASTRONOMY

NAG 5 9086 UNIV OF WASHINGTON 9619
 ENHANSING THE LASER-LUNAR RANGING TEST OF THE STRONG EQUIVA-
 LENCE PRINCIPLE
 02/17/2000 - 01/31/2003 FY02: \$40,000 Total: \$117,500
Prin. Invest.: J GUNDLACH
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 9720 UNIV OF WASHINGTON 9627
 JOINT-PROBABILITY ANALYSIS OF THE NATURAL VARIABIL ITY OF TROPIC-
 AL OCEANIC PRECIPITATION
 06/21/2000 - 06/30/2003 FY02: \$280,917 Total: \$512,000
Prin. Invest.: S E YUTER
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9250 UNIV OF WASHINGTON 9620
 ION-F: A SPACE-BASED TESTBED FOR DISTRIBUTED FORMA TION CON-
 TROL USING THE DAWGSTAR NANOSAT
 03/17/2000 - 03/31/2002 FY02: \$0 Total: \$87,000
Prin. Invest.: M CAMPPELL
Tech. Officer: GSFC/K LUU
CASE Category: 41 – AERONAUTICAL ENGNR

NAG 5 9830 UNIV OF WASHINGTON 9628
 USE OF TRMM DATA TO EVALUATE BENEFITS OF POST-2002 GLOBAL
 PRECIPITATION MISSION FOR LAND SURFACE HYD
 08/23/2000 - 08/31/2003 FY02: \$0 Total: \$124,000
Prin. Invest.: D LETTENMAIER
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9324 UNIV OF WASHINGTON 9621
 NEXT GENERATION SPACE TELESCOPE (NGST) AD HOC SCIENCE WORK-
 ING GROUP (ASWG) ACTIVITY
 03/21/2000 - 03/14/2001 FY02: -\$3 Total: \$22,776
Prin. Invest.: B MARGON
Tech. Officer: GSFC/E P SMITH
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 9835 UNIV OF WASHINGTON 9629
 MICROWAVE PASSIVE REMOTE SENSING OF SNOW: SCATTER ING MOD-
 ELS
 07/26/2000 - 05/31/2003 FY02: \$0 Total: \$44,104
Prin. Invest.: L TSANG
Tech. Officer: GSFC/A T CHANG
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9334 UNIV OF WASHINGTON 9622
 ROLE OF THE POLAR OCEANS IN GLOBAL CLIMATE
 06/19/2000 - 08/31/2003 FY02: \$325,000 Total: \$810,000
Prin. Invest.: D A ROTHROCK
Tech. Officer: GSFC/K PATRINGTON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9854 UNIV OF WASHINGTON 9630
 SEA ICE KINEMATICS & THICKNESS FROM RGPS: OBSERVA TIONS &
 THEORY
 08/03/2000 - 09/30/2002 FY02: \$198,790 Total: \$396,145
Prin. Invest.: H STERN
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9416 UNIV OF WASHINGTON 9623
 UNDERSTANDING WATER, CLIMATE AND GLOBAL CHANGE: A GEWEX
 GLOBAL WATER AND ENERGY PATHFINDER DATA SET
 04/25/2000 - 04/30/2003 FY02: \$98,335 Total: \$210,000
Prin. Invest.: D LETTENMAIER
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9906 UNIV OF WASHINGTON 9631
 ESTIMATION OF WEST ANTARCTIC MASS BALANCE USING ICESAT/GLAS
 09/08/2000 - 09/14/2003 FY02: \$0 Total: \$87,101
Prin. Invest.: C F RAYMOND
Tech. Officer: GSFC/J ZWALLY
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NASA'S UNIVERSITY PROGRAM

WASHINGTON

NAG 5 10092 UNIV OF WASHINGTON 9632
 USE OF RADARSAT DATA TO PREDICT THE EFFECTS OF LAKE &
 WETLAND STORAGE ON THE FLOW OF ARTIC RIVERS
 11/20/2000 - 11/30/2002 FY02: \$74,881 Total: \$148,930
Prin. Invest.: D LETTENMAIER
Tech. Officer: GSFC/K PARTINGTON
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10114 UNIV OF WASHINGTON 9633
 SURFACE WIND SPEED & FLUXES FROM SYNTHETIC APERTURE RADAR:
 VALIDATION & APPLICATION TO THE
 11/22/2000 - 11/30/2003 FY02: \$155,387 Total: \$313,867
Prin. Invest.: P MOURAD
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10225 UNIV OF WASHINGTON 9634
 ICE SHEETS SURFACE AND BED BOUNDARY CONDITIONS FROM REMOTE
 SENSING
 01/04/2001 - 07/14/2002 FY02: \$0 Total: \$116,663
Prin. Invest.: D WINEBRENNER
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10246 UNIV OF WASHINGTON 9635
 UNDERSTANDING THE ENIGMATIC SW SEX STARS (FUSE 00)
 02/12/2001 - 02/14/2003 FY02: \$0 Total: \$46,000
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10342 UNIV OF WASHINGTON 9636
 MODELING CONTINENTAL SCALE EROSION IN MOUNTAINOUS REGIONS
 02/05/2001 - 01/31/2003 FY02: \$101,136 Total: \$200,000
Prin. Invest.: D R MONTGOMERY
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10343 UNIV OF WASHINGTON 9637
 ACCRETION ONTO MAGNETIC WHITE DWARFS (FUSE 00)
 01/31/2001 - 01/31/2003 FY02: \$0 Total: \$48,845
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10400 UNIV OF WASHINGTON 9638
 THE ORIGIN OF PECULIAR UV LINE RATIOS IN THE MAGNETIC CATA-
 CLYSMIC VARIABLE AE AQR (FUSE 2000)
 04/02/2001 - 05/31/2003 FY02: \$0 Total: \$14,440
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 10404 UNIV OF WASHINGTON 9639
 VALIDATION OF LIDAR RETRIEVAL OF AEROSOL EXTINCTION
 04/02/2001 - 03/31/2003 FY02: \$0 Total: \$85,488
Prin. Invest.: D S COVERT
Tech. Officer: GSFC/M I MISHCHENKO
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10499 UNIV OF WASHINGTON 9640
 INTERPLANETARY DUST
 03/13/2001 - 03/14/2003 FY02: \$355,000 Total: \$716,000
Prin. Invest.: D E BROWNLEE
Tech. Officer: GSFC/J M BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 10570 UNIV OF WASHINGTON 9641
 NUMERICAL CALCULATION OF THE MAGNETIC FIELDS GENERATED BY
 OCEAN TIDES & THEIR COMPARISON WITH SATEL
 03/13/2001 - 03/14/2004 FY02: \$84,000 Total: \$164,000
Prin. Invest.: R TYLER
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10621 UNIV OF WASHINGTON 9642
 LAGRANGIAN ASSIMILATION OF SATELLITE DATA FOR CLIMATE STUDIES
 03/19/2001 - 03/31/2004 FY02: \$97,501 Total: \$176,770
Prin. Invest.: R LINDSAY
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10624 UNIV OF WASHINGTON 9643
 CLIMATE PROCESSES OVER THE OCEANS
 03/20/2001 - 03/31/2004 FY02: \$624,243 Total: \$1,221,222
Prin. Invest.: D L HARTMANN
Tech. Officer: GSFC/A ANDERSON
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10745 UNIV OF WASHINGTON 9644
 "UNIV OF WASHINGTON AIRBORNE STUDIES IN SUPPORT OF THE
 CLAMS-2001 FIELD STUDY"
 04/17/2001 - 02/28/2003 FY02: \$0 Total: \$384,511
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10903 UNIV OF WASHINGTON 9645
 A KINETIC STUDY OF PARTICLE ACCELERATION IN MAGNETOSPHERIC
 CURRENT SHEETS & COMPARISON WITH OBSERVAT
 05/08/2001 - 05/14/2004 FY02: \$90,776 Total: \$178,513
Prin. Invest.: M J BRITTNACHER
Tech. Officer: GSFC/J F SPANN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10962 UNIV OF WASHINGTON 9646
 MODELING IONOSPHERIC OUTFLOW IN GEOPHYSICALLY RELEVANT CO-
 ORDINATE SYSTEMS
 05/23/2001 - 05/31/2004 FY02: \$70,507 Total: \$138,729
Prin. Invest.: R M WINGLEE
Tech. Officer: GSFC/J SPANN
CASE Category: 11 – ASTRONOMY

NAG 5 11057 UNIV OF WASHINGTON 9647
 MULTISENSOR ASSESSMENT OF ARCTIC POLYNIA VARIABILITY & ITS
 ASSOCIATION WITH LARGE-SCALE CHANGE
 06/22/2001 - 06/30/2004 FY02: \$117,187 Total: \$163,702
Prin. Invest.: S MARTIN
Tech. Officer: GSFC/W ABDALATI
CASE Category: 31 – ATMOSPHERIC SCIENCE

WASHINGTON

NASA'S UNIVERSITY PROGRAM

NAG 5 11079 **UNIV OF WASHINGTON** **9648**
 A ONE-YEAR PILOT STUDY FOR THE INCLUSION OF ACTIVE OPTICAL
 SENSORS INTO PALACE FLOATS
 08/06/2001 - 08/14/2003 FY02: \$0 Total: \$56,557
Prin. Invest.: S RISER
Tech. Officer: GSFC/J MARRA
CASE Category: 33 – OCEANOGRAPHY

NAG 5 11359 **UNIV OF WASHINGTON** **9649**
 SUPPLEMENT TO MICROWAVE PASSIVE REMOTE SENSING OF SNOW:
 SCATTERING MODELS
 10/05/2001 - 09/14/2003 FY02: \$45,000 Total: \$45,000
Prin. Invest.: L TSANG
Tech. Officer: GSFC/A T CHANG
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11372 **UNIV OF WASHINGTON** **9650**
 INVESTIGATION OF THE FEASIBILITY OF PARASITIC MICROWAVE REMOTE
 SENSING OF PRECIPITATION
 10/29/2001 - 10/31/2002 FY02: \$50,000 Total: \$50,000
Prin. Invest.: J D SAHR
Tech. Officer: GSFC/J A WEINMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11386 **UNIV OF WASHINGTON** **9651**
 WORKSHOP ON LARGE-SCALE OBSERVING SYSTEMS IN SUPPORT OF
 SEARCH
 11/05/2001 - 10/31/2002 FY02: \$14,992 Total: \$14,992
Prin. Invest.: J MORRISON
Tech. Officer: GSFC/W ABDALATI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11446 **UNIV OF WASHINGTON** **9652**
 EQUILIBRIUM SHAPES OF SOLID SOLAR SYSTEM BODIES
 12/21/2001 - 12/31/2004 FY02: \$55,000 Total: \$55,000
Prin. Invest.: K HOLSAPPLE
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11499 **UNIV OF WASHINGTON** **9653**
 AQUEOUS CHEMICAL MODELING OF SEDIMENTATION ON EARLY MARS
 WITH APPLICATION TO SURFACE-ATMOSPHERE
 12/28/2001 - 12/31/2002 FY02: \$45,700 Total: \$45,700
Prin. Invest.: D CATLING
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 11542 **UNIV OF WASHINGTON** **9654**
 EVOLUTION OF OXYGEN ATMOSPHERES
 01/04/2002 - 01/14/2004 FY02: \$53,720 Total: \$53,720
Prin. Invest.: D CATLING
Tech. Officer: GSFC/M MEYER
CASE Category: 11 – ASTRONOMY

NAG 5 11587 **UNIV OF WASHINGTON** **9655**
 THERMAL HISTORY OF LUNAR CRUSTAL ROCKS
 01/10/2002 - 01/14/2005 FY02: \$53,000 Total: \$53,000
Prin. Invest.: S MCCALLUM
Tech. Officer: GSFC/J BOYCE
CASE Category: 12 – CHEMISTRY

NAG 5 11622 **UNIV OF WASHINGTON** **9656**
 "EVALUATION OF HYDROLOGIC REMOTE SENSING OBSERVATIONS FOR
 IMPROVED WEATHER PREDICTION"
 02/01/2002 - 01/31/2005 FY02: \$54,862 Total: \$54,862
Prin. Invest.: D LETTENMAIER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11632 **UNIV OF WASHINGTON** **9657**
 TOWARD IMPROVED PROCESS-BASED PAN-ARTIC PREDICTION OF LAND
 SURFACE MOISTURE AND ENERGY FLUXES
 02/13/2002 - 02/14/2005 FY02: \$72,000 Total: \$72,000
Prin. Invest.: D P LETTENMAIER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTALSCI, OTHER

NAG 5 11665 **UNIV OF WASHINGTON** **9658**
 ARCHIVE & ANALYSIS OF DATA COLLECTED ABROAD THE UNIV WASHING-
 TON'S CONVAIR-580 RESEARCH AIRCRAFT
 02/01/2002 - 02/28/2003 FY02: \$105,965 Total: \$105,965
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11679 **UNIV OF WASHINGTON** **9659**
 OPTICAL LIGHTNING DETECTOR (OLD) FOR C/NOFS SATELLITE
 01/31/2002 - 01/31/2004 FY02: \$40,000 Total: \$40,000
Prin. Invest.: R H HOLZWORTH
Tech. Officer: GSFC/R PFAFF
CASE Category: 11 – ASTRONOMY

NAG 5 11685 **UNIV OF WASHINGTON** **9660**
 "GLOBAL ASSESSMENT OF OROGRAPHIC FLOODS AND HEAVY RAIN FROM
 TRMM SATELLITE DATA"
 02/07/2002 - 02/14/2004 FY02: \$74,000 Total: \$74,000
Prin. Invest.: R A HOUZE
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11800 **UNIV OF WASHINGTON** **9661**
 A POLAR-SPECIFIC 20-YEAR DATA SET OF CLOUD FRACTION AND HEIGHT
 DERIVED FROM SATELLITE RADIANCES
 02/28/2002 - 03/31/2004 FY02: \$70,092 Total: \$70,092
Prin. Invest.: A SCHWEIGER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11869 **UNIV OF WASHINGTON** **9662**
 SOLAR WIND AND IONOSPHERIC INFLUENCES ON GLOBAL CIRCULATION
 AND ENERGIZATION
 03/22/2002 - 03/14/2005 FY02: \$88,510 Total: \$88,510
Prin. Invest.: R M WINGLEE
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 – ASTRONOMY

NAG 5 11892 **UNIV OF WASHINGTON** **9663**
 N-CHILADA: A FRAMEWORK FOR PARALLEL DATA ANALYSIS AND VISUAL-
 IZATION.
 04/11/2002 - 05/31/2005 FY02: \$158,199 Total: \$158,199
Prin. Invest.: T R QUINN
Tech. Officer: GSFC/P E HUNTER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12203 **UNIV OF WASHINGTON** **9664**
 A STUDY OF THE INNER DISK AND HOT WHITE DWARF IN NOVALIKES ABOVE THE PERIOD GAP
 05/16/2002 - 05/14/2003 FY02: \$41,100 Total: \$41,100
Prin. Invest.: P SZKODY
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12374 **UNIV OF WASHINGTON** **9665**
 ENSEMBLE STREAMFLOW FORECASTING FOR THE WESTERN U.S. USING NSIPP EXPERIMENTAL PREDICTIONS&LAND-
 07/30/2002 - 07/31/2005 FY02: \$115,997 Total: \$115,997
Prin. Invest.: D P LETTENMAIER
Tech. Officer: GSFC/M RIENECKER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12410 **UNIV OF WASHINGTON** **9666**
 COLLABORATIVE PROJECT: THE ROLE OF UNDERGRADUATE EDUCATION IN WORKFORCEDVELOPMENT FOR APPLICATIONS
 08/01/2002 - 07/31/2003 FY02: \$53,528 Total: \$53,528
Prin. Invest.: J DECOSMO
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12539 **UNIV OF WASHINGTON** **9667**
 AIR-SEA COUPLING IN THE CALIFORNIA CURRENT REGION
 08/29/2002 - 08/31/2005 FY02: \$90,139 Total: \$90,139
Prin. Invest.: K KELLY
Tech. Officer: GSFC/E LINDSTROM
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12548 **UNIV OF WASHINGTON** **9668**
 "DEVELOPMENT OF HYDROLOGIC NOWCAST AND FORECAST PR ODUCTS USING LAND DATA ASSIMILATION SYSTEM OUTPUT
 09/05/2002 - 09/14/2003 FY02: \$65,000 Total: \$65,000
Prin. Invest.: D P LETTENMAIER
Tech. Officer: GSFC/P R HOUSER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 7 99001 **UNIV OF WASHINGTON** **9669**
 GRANT FOR PI OF THE STARDUST PROGRAM (PHASE E)
 05/21/1999 - 06/30/2004 FY02: \$174,500 Total: \$357,721
Prin. Invest.: D E BROWNLEE
Tech. Officer: HQ/M DAHL
CASE Category: 11 – ASTRONOMY

NAG 8 1512 **UNIV OF WASHINGTON** **9670**
 WATER TRANSPORT TO THE UPPER TROPOSPHERE BY CONVECTIVE SYSTEMS, AS INFERRED FROM GLOBAL
 04/06/1998 - 04/05/2002 FY02: -\$110 Total: \$126,450
Prin. Invest.: M BAKER
Tech. Officer: MSFC/J R BLOCKER
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 8 1647 **UNIV OF WASHINGTON** **9671**
 POLLUTION AND LIGHTNING
 10/15/1999 - 09/30/2002 FY02: \$0 Total: \$95,177
Prin. Invest.: M B BAKER
Tech. Officer: MSFC/D SAMUELSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1756 **UNIV OF WASHINGTON** **9672**
 FEASIBILITY STUDY FOR A SPACE-BASED TEST OF THE STRONG EQUIVALENCE PRINCIPLE USING LUNAR RANGING.
 04/23/2001 - 02/01/2006 FY02: \$170,000 Total: \$290,000
Prin. Invest.: E G ADELBERGER, K NORDVEDT, C STUBBS
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1776 **UNIV OF WASHINGTON** **9673**
 ULTRHIGH RESOLUTION OPTICAL FREQUENCY STANDARD USI NG INDIVIDUAL INDIUM IONS
 04/20/2001 - 02/01/2004 FY02: \$102,875 Total: \$182,875
Prin. Invest.: W NAGOURNEY
Tech. Officer: MSFC/D HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1849 **UNIV OF WASHINGTON** **9674**
 FRC ACCELERATION SPACE THRUSTER (FAST)
 08/30/2001 - 11/30/2001 FY02: \$0 Total: \$9,273
Prin. Invest.: J SLOUGH
Tech. Officer: MSFC/A MARTIN, MSFC/F THIO
CASE Category: 41 – AERONAUTICAL ENGR

NAG 9 1258 **UNIV OF WASHINGTON** **9675**
 VISUAL ANATOMIC GUIDANCE TO FACILITATE ULTRASOUND IMAGE ACQUISITION
 09/07/2000 - 08/31/2001 FY02: \$0 Total: \$203,932
Prin. Invest.: F H SHEEHAN
Tech. Officer: JSC/C W LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1271 **UNIV OF WASHINGTON** **9676**
 DNA MICROCHIP BASED MICROBIAL MONITORING
 12/08/2000 - 11/30/2002 FY02: \$0 Total: \$260,856
Prin. Invest.: D STAHL
Tech. Officer: JSC/D L JAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1343 **UNIV OF WASHINGTON** **9677**
 MICROARRAYS OF CELLULAR MEMBRANE PATCHES FOR INFL IGH T STUDIES OF ION CHANNEL FUNCTION
 08/01/2001 - 09/30/2004 FY02: \$110,000 Total: \$164,000
Prin. Invest.: A FOLCH
Tech. Officer: JSC/D RISIN
CASE Category: 43 – CHEMICAL ENGR

NAS 1 18940 **UNIV OF WASHINGTON** **9678**
 SAGE III SCIENCE INVESTIGATION SUPPORT, P.I. PETER V. HOBBS
 10/27/1989 - 01/31/2005 FY02: \$0 Total: \$428,027
Prin. Invest.: P V HOBBS
Tech. Officer: LARC/G MADDREA
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 1 99105 **UNIV OF WASHINGTON** **9679**
 COUPLING PICASSO-CENA TO IN SITU MEASUREMENTS FOR ESTIMATION OF DIRECT AEROSOL RADIATIVE FORCING
 05/17/1999 - 05/16/2003 FY02: \$84,969 Total: \$238,619
Prin. Invest.: R J CHARLSON
Tech. Officer: LARC/G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

WASHINGTON

NASA'S UNIVERSITY PROGRAM

NAS 5 00212 UNIV OF WASHINGTON 9680
 MATLAB-BASED ADAPTIVE COMPUTING FOR NASA IMAGE
 09/29/2000 - 09/28/2002 FY02: \$232,286 Total: \$459,559
Prin. Invest.: S HAUCK
Tech. Officer: GSFC/J STEPHENS
CASE Category: 22 – COMPUTER SCIENCE

NAS 5 00213 UNIV OF WASHINGTON 9681
 RECONFIGURABLE COMPUTING BASED COMPRESSION FOR SPACE-
 BORNE HYPERSPECTRAL IMAGES.
 09/29/2000 - 09/28/2002 FY02: \$191,273 Total: \$378,416
Prin. Invest.: S HAUCK
Tech. Officer: GSFC/J STEPHENS
CASE Category: 22 – COMPUTER SCIENCE

NAS 5 30613 UNIV OF WASHINGTON 9682
 INVESTIGATION DEFINITION PHASE FOR CLUSTER PLASMA SPECTROM-
 ETRY
 02/21/1989 - 02/09/2001 FY02: \$0 Total: \$5,175,503
Prin. Invest.: G K PARKS
Tech. Officer: GSFC/J L CHRISTENSEN
CASE Category: 13 – PHYSICS

NAS 5 31372 UNIV OF WASHINGTON 9683
 INTERMEDIATE THERMAL INFRARED RADIOMETER (EOS INVESTIGATION)
 02/19/1992 - 06/14/2003 FY02: \$416,299 Total: \$3,901,151
Prin. Invest.: A R GILLESPIE
Tech. Officer: GSFC/H BLODGET
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 402 UNIV OF WASHINGTON 9684
 REMOTE & IN-SITU MEASUREMENT OF AEROSOL OPTICAL PROPERTIES IN
 THE BOUNDARY LAYER
 07/24/2000 - 09/14/2003 FY02: \$0 Total: \$3,200
Prin. Invest.: T L COVERT, T L ANDERSON
Tech. Officer: LARC/C A HOSTETLER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 02034 UNIV OF WASHINGTON 9685
 ELECTRICALLY CONDUCTIVE STRUCTURES FOR DAMAGE DETECTION
 06/18/2002 - 10/30/2003 FY02: \$19,171 Total: \$19,171
Prin. Invest.: T A ANDERSON
Tech. Officer: LARC/D R AMBUR
CASE Category: 41 – AERONAUTICAL ENGR

NCC 2 1273 UNIV OF WASHINGTON 9686
 HABITABLE PLANETS AND EVOLUTION OF BIOLOGICAL COMPLEXITY
 07/20/2001 - 06/30/2006 FY02: \$1,002,649 Total: \$1,577,649
Prin. Invest.: P D WARD, J T STALEY, D A KRING
Tech. Officer: ARC/R A GRYMES, ARC/W W DOLCI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 5463 UNIV OF WASHINGTON 9687
 MATHEMATICAL MODELING OF METABOLIC NETWORKS AND ALGORITM-
 MIC DEVELOPMENT FOR HIGH-THROUGHPUT MULTIDI
 09/14/2001 - 09/14/2002 FY02: \$0 Total: \$29,994
Prin. Invest.: H QIAN
Tech. Officer: ARC/S LIANG, ARC/B A BIEGEL
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 3 970 UNIV OF WASHINGTON 9688
 DEVELOPING, VERIFYING AND IMPLEMENTING NATIONAL AND INTERNA-
 TIONAL STANDARDS FOR MONOLITHIC AND COMP
 06/11/2002 - 10/31/2002 FY02: \$28,000 Total: \$28,000
Prin. Invest.: M G JENKINS
Tech. Officer: GRC/J SALEM
CASE Category: 46 – MECHANICAL ENGR

NCC 5 326 UNIV OF WASHINGTON 9689
 SUPPORT OF THE UNIV OF WASHINGTON'S RESEARCH AIRCRAFT FOR
 NASA STUDIES (PROPOSAL #111017)
 03/23/1998 - 02/28/2002 FY02: \$0 Total: \$934,204
Prin. Invest.: P V HOBBS
Tech. Officer: GSFC/M D KING
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 345 UNIV OF WASHINGTON 9690
 BIOGEOCHEMICAL DYNAMICS IN RIVER CORRIDORS OF THE AMAZON
 BASIN AND THEIR RESPONSE TO ANTHROPOGENIC C
 06/25/1998 - 12/31/2002 FY02: \$156,283 Total: \$693,635
Prin. Invest.: J E RICHEY
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 550 UNIV OF WASHINGTON 9691
 SUPPORT OF THE UNIV OF WASHINGTON'S RESEARCH AIRCRAFT FOR
 NASA STUDIES
 05/11/2001 - 04/30/2003 FY02: \$0 Total: \$340,214
Prin. Invest.: P HOBBS
Tech. Officer: GSFC/C YUHAS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 584 UNIV OF WASHINGTON 9692
 MICROWAVE REMOTE SENSING OF FROZEN PRECIPITATION
 08/23/2001 - 08/31/2004 FY02: \$71,000 Total: \$107,000
Prin. Invest.: R HOUZE
Tech. Officer: GSFC/J A WEINMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 605 UNIV OF WASHINGTON 9693
 SPACE SCIENCE NETWORK NORTHWEST
 12/13/2001 - 12/31/2006 FY02: \$315,000 Total: \$315,000
Prin. Invest.: J H LUTZ
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 8 231 UNIV OF WASHINGTON 9694
 MINI-MAGNETOSPHERIC PLASMA PROPULSION-RADIATION SHIELDING
 (M2PS-S)
 09/05/2001 - 12/31/2002 FY02: \$107,000 Total: \$193,311
Prin. Invest.: R M WINGLEE
Tech. Officer: MSFC/J H ADAMS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 9 56 UNIV OF WASHINGTON 9695
 RESEARCH GRANT
 02/22/2000 - 03/31/2003 FY02: \$35,964 Total: \$84,356
Prin. Invest.: D E PARKER
Tech. Officer: JSC/D HARM, JSC/J J BLOOMBERG
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 2 52219 **UNIV OF WASHINGTON** **9696**
 INFRARED STUDY OF HERBIG AE/BE SYSTEMS
 08/19/1996 - 08/31/2002 FY02: \$0 Total: \$76,000
Prin. Invest.: D BROWNLEE
Tech. Officer: ARC/D H WOODEN, ARC/F C WITTEBORN
CASE Category: 11 – ASTRONOMY

NGT 2 52281 **UNIV OF WASHINGTON** **9697**
 A PRESSURE SENSITIVE PAINT FOR THE STUDY OF UNSTEADY FLOWS
 OVER FLEXIBLE BOUNDARIES
 07/27/2001 - 08/31/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: J B CALLIS
Tech. Officer: ARC/J H BELL, ARC/E S SCHAIRER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 2 52288 **UNIV OF WASHINGTON** **9698**
 1 KM PLANETESIMALS TO PLANETS
 06/05/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: T QUINN
Tech. Officer: ARC/J J LISSAUER
CASE Category: 11 – ASTRONOMY

NGT 5 66 **UNIV OF WASHINGTON** **9699**
 COMPUTATIONAL OPTICS YEAR 1 OF 2 YEAR COMMITMENT PERIOD OF
 PERFORMANCE SEPT. 1, 1998 TO AUG. 31, 1
 05/27/1998 - 08/31/2001 FY02: -\$5,529 Total: \$60,471
Prin. Invest.: J BURKE
Tech. Officer: GSFC/G SOFFEN
CASE Category: 21 – MATHEMATICS

NGT 5 98 **UNIV OF WASHINGTON** **9700**
 A NEW MECHANISM FOR DEGASSING AT HIGH-SULFUR VOLCANOES
 08/23/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: C NEWHALL
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 126 **UNIV OF WASHINGTON** **9701**
 SIMULATING GALAXY GROUPS. STUDENT: DARREN S. REED
 06/11/2001 - 06/30/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: T QUINN
Tech. Officer: GSFC/M S BURRELL
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NGT 5 30121 **UNIV OF WASHINGTON** **9702**
 ASSESSING THE GLOBAL CHARACTERISTICS OF AEROSOLS: WHAT IS THE
 INFLUENCE OF HUMIDITY IN COLUMNAR AERO
 10/01/1997 - 03/31/2001 FY02: -\$19 Total: \$65,981
Prin. Invest.: D HEGG
Tech. Officer: GSFC/G ASRAR
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30149 **UNIV OF WASHINGTON** **9703**
 COMBINED USE OF REMOTE SENSING AND BIOGEOCHEMICAL MODELING
 TO ESTIMATE PRIMARY PRODUCTION AND CARBO
 08/28/1998 - 08/31/2001 FY02: \$0 Total: \$55,000
Prin. Invest.: J E RICHEY, WILHELM
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30157 **UNIV OF WASHINGTON** **9704**
 MODELING THE FLAMMABILITY OF BRAZILIAN AMAZON FORESTS AT THE
 FOREST- SAVANNA ECOTONE
 08/28/1998 - 02/28/2002 FY02: \$0 Total: \$44,000
Prin. Invest.: T M HINCKLEY
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30161 **UNIV OF WASHINGTON** **9705**
 COUPLING LAND-SURFACE AND RIVERINE WATER AND CARBON CYCLES
 IN THE AMAZONBASIN: DEVELOPMENT OF A MODEL
 08/31/1998 - 02/28/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J E RICHEY, MAYORGA
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30213 **UNIV OF WASHINGTON** **9706**
 IMPROVING MODEL PARAMETERIZATIONS OF GAS EXCHANGE: QUANTIFI-
 CATION OF BUBBLE DYNAMICS BY MEASUREMENT
 08/20/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: S R EMERSON
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30220 **UNIV OF WASHINGTON** **9707**
 OPPORTUNITIES FOR IMPROVING WESTERN WATER MANAGEMENT
 THROUGH REMOTE SENSING & HYDROLOGIC MODEL
 08/24/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: D P LETTENMAIER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30343 **UNIV OF WASHINGTON** **9708**
 TROPICAL FOREST PHENOLOGY ACROSS ENVIRONMENTAL GRADIENTS
 IN PANAMA: A MULTISCALE STUDY USING RE
 08/21/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: T HINCKLEY
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30378 **UNIV OF WASHINGTON** **9709**
 TRMM-OBSERVED STARTIFORM PRECIPITATION FRACTION RELATED TO
 LARGE-SCALE TROPICAL CIRCULATION/COURTIN
 08/13/2001 - 08/31/2004 FY02: \$24,000 Total: \$46,000
Prin. Invest.: R HOUZE, JR
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30427 **UNIV OF WASHINGTON** **9710**
 COMBINED USE OF REMOTE SENSING AND BIOGEOCHEMICAL MODELING
 TO ESTIMATE PRIMARY PRODUCTION AND CARBO
 10/22/2001 - 09/30/2002 FY02: \$11,000 Total: \$11,000
Prin. Invest.: J RICHEY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30445 **UNIV OF WASHINGTON** **9711**
 ESTIMATION OF WEST ANTARCTIC ICE SHEET STABILITY THROUGH INVER-
 SION OF REMOTELY SENSED DATA (STUDENT
 08/23/2002 - 08/31/2005 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C RAYMOND
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

WASHINGTON

NASA'S UNIVERSITY PROGRAM

NGT 5 40017 **UNIV OF WASHINGTON** **9712**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND FELLOWSHIP PROGRAM.
 12/19/1996 - 01/31/2001 FY02: -\$108,697 Total: \$1,555,919
Prin. Invest.: J K DECOSMO
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40084 **UNIV OF WASHINGTON** **9713**
 WASHINGTON SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/09/2001 - 01/31/2005 FY02: \$539,947 Total: \$986,997
Prin. Invest.: J DECOSMO
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50285 **UNIV OF WASHINGTON** **9714**
 THREE DIMENTIONAL SIMULATIONS OF THE SOLAR WIND INTERACTION WITH MAGNETIC ANOMALIES ON THE SURFACE
 06/23/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: R WINGLEE
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50298 **UNIV OF WASHINGTON** **9715**
 CALCULATION OF THE MERGER PHASE OF BINARY BLACK HOLES USING NUMERICAL RELATIVITY/STUDENT LUISA BU
 06/28/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J BARDEEN
Tech. Officer: GSFC/K BLANDING
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50299 **UNIV OF WASHINGTON** **9716**
 AN EMPIRICAL MEASURE OF GALAXY EVOLUTION IN CLUSTERS
 06/28/2000 - 06/30/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: J DALCANTON
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50334 **UNIV OF WASHINGTON** **9717**
 DETERMINING THE EFFECTS OF CLOUDS & SEA ICE ON THE EARTH RADIATION BUDGET IN THE SOUTHERNOCEAN
 08/17/2000 - 08/31/2003 FY02: \$24,000 Total: \$68,000
Prin. Invest.: S WARREN
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 2 1198 **WASHINGTON STATE UNIV** **9718**
 LIGNIFICATION: A NEW PARADIGM
 04/02/1998 - 05/31/2002 FY02: \$0 Total: \$375,000
Prin. Invest.: N G LEWIS
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 2 1513 **WASHINGTON STATE UNIV** **9719**
 DETERMINING THE COMPLEX ORGAIZATIONAL NATURE OF PH ENOLIC RADICAL-RADICAL COUPLING IN VASCULAR PLANT
 08/17/2001 - 07/14/2003 FY02: \$125,000 Total: \$189,999
Prin. Invest.: N G LEWIS
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 3 2378 **WASHINGTON STATE UNIV** **9720**
 PASSIVE AND ACTIVE STABILIZATION OF LIQUID BRIDGES IN LOW GRAVITY
 04/04/2000 - 03/09/2004 FY02: \$100,638 Total: \$356,250
Prin. Invest.: D MARSTON
Tech. Officer: GRC/C NIEDERHAUS
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 4035 **WASHINGTON STATE UNIV** **9721**
 RECONSTRUCTION OF THREE-DIMENSIONAL SHAPE AND SPIN FROM RADAR DATA
 02/27/1997 - 03/31/2001 FY02: -\$36,380 Total: \$137,595
Prin. Invest.: D HUDSON
Tech. Officer: GSFC/J G GRANT
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 4841 **WASHINGTON STATE UNIV** **9722**
 CALCIUM/CALMODULIN-MEDIATED GRAVITROPIC RESPONSE I
 06/19/1997 - 09/15/2001 FY02: \$0 Total: \$497,400
Prin. Invest.: B POOVAIAH
Tech. Officer: GSFC/M AVERNER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 5 9345 **WASHINGTON STATE UNIV** **9723**
 ACCRETION OF INTERPLANETARY DUST: A NEW RECORD FROM 3-HE IN POLAR ICE CORES
 03/30/2000 - 08/31/2002 FY02: \$0 Total: \$60,000
Prin. Invest.: E BROOK
Tech. Officer: GSFC/J BOYCE
CASE Category: 11 – ASTRONOMY

NAG 5 10462 **WASHINGTON STATE UNIV** **9724**
 PHYSICAL MODELING OF ASTEROIDS USING RADAR & OPICAL DATA
 02/26/2001 - 03/31/2004 FY02: \$44,500 Total: \$89,500
Prin. Invest.: D HUDSON
Tech. Officer: GSFC/D SENSKE
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 10637 **WASHINGTON STATE UNIV** **9725**
 USING SATELLITE OBSERVATIONS TO QUANTIFY BIOMASS BURNING EMISSIONS OF NOX & HYDROCARBONS IN THE
 03/19/2001 - 03/14/2004 FY02: \$83,688 Total: \$166,855
Prin. Invest.: L JAEGLE
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11364 **WASHINGTON STATE UNIV** **9726**
 CALCIUM/CALMODULIN MEDIATED GRAVITROPIC RESPONSE IN PLANTS
 09/27/2001 - 09/30/2002 FY02: \$0 Total: \$163,806
Prin. Invest.: B W POOVAIAH
Tech. Officer: GSFC/M AVERNER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1477 **WASHINGTON STATE UNIV** **9727**
 R/S A COMPARATIVE MODELING STUDY OF MAGNETIC AND ELECTROSTATIC LEVITATION IN MICROGRAVITY
 03/26/1998 - 01/31/2003 FY02: \$65,000 Total: \$319,167
Prin. Invest.: B Q LI
Tech. Officer: MSFC/C TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1693 **WASHINGTON STATE UNIV** **9728**
 R/S "STUDY OF MAGNETIC FIELD EFFECTS ON CONVECTION AND SOLIDIFICATION IN NORMAL AND MICROGRAVITY"
 06/02/2000 - 11/30/2003 FY02: \$0 Total: \$45,000
Prin. Invest.: B Q LI
Tech. Officer: MSFC/P M DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAS 5 00177 **WASHINGTON STATE UNIV** **9729**
 PARTICIPATION IN THE OZONE MONITORING INSTRUMENT SCIENCE TEAM
 06/09/2000 - 10/31/2004 FY02: \$69,538 Total: \$187,755
Prin. Invest.: G MOUNT
Tech. Officer: GSFC/J C RIVERA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5346 **WASHINGTON STATE UNIV** **9730**
 LOW-POWER FAST SOI ELECTRONICS FOR SPACE APPLICATIONS
 08/22/1999 - 07/31/2001 FY02: -\$354 Total: \$48,746
Prin. Invest.: M A OSMAN
Tech. Officer: ARC/B A BIEGEL, ARC/T R GOVINDAN
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 2 5407 **WASHINGTON STATE UNIV** **9731**
 TRANSPORT IN MOLECULAR STRUCTURES
 10/30/2000 - 12/31/2002 FY02: \$66,000 Total: \$126,910
Prin. Invest.: M A OSMAN
Tech. Officer: ARC/N HALL
CASE Category: 13 – PHYSICS

NCC 8 92 **WASHINGTON STATE UNIV** **9732**
 "STUDY OF MAGNETIC DUMPING EFFECT ON CONVECTION & SOLIDIFICATION UNDER G-JITTER CONDITIONS"
 04/19/1996 - 04/21/2001 FY02: -\$4,017 Total: \$355,983
Prin. Invest.: B Q LI
Tech. Officer: MSFC/C R TALLEY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 8248 **WHITMAN COLL** **9733**
 ORFEUS IMAPS MISSION SUPPORT
 03/09/1999 - 09/30/2000 FY02: -\$473 Total: \$30,826
Prin. Invest.: U J SOFIA
Tech. Officer: GSFC/R POLIDAN
CASE Category: 11 – ASTRONOMY

NAG 5 9249 **WHITMAN COLL** **9734**
 FUV EXTINCTION: UNIQUE INSIGHTS INTO THE NATURE & ROLE OF SMALL DUST GRAINS - FUSE
 03/16/2000 - 03/14/2003 FY02: \$0 Total: \$21,954
Prin. Invest.: U SOFIA
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 3 2510 **WHITWORTH COLL** **9735**
 DEVELOPMENT OF A METHOD TO SPECTROSCOPICALLY ANALYZE CARBON GRID EROSION IN ION THRUSTERS
 12/07/2000 - 12/31/2002 FY02: \$28,085 Total: \$44,009
Prin. Invest.: D STEVENS
Tech. Officer: GRC/D DOMOMKOS
CASE Category: 13 – PHYSICS

WEST VIRGINIA

NAG 5 11072 **BLUEFIELD STATE COLL** **9736**
 EMERGIN LEADER'S INST
 07/06/2001 - 07/14/2002 FY02: \$0 Total: \$100,000
Prin. Invest.: F WOOTEN BLANKS
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1194 **MARSHALL UNIV** **9737**
 CALBINDINS & APOPTOSIS AFTERSHORT TERM SPACE FLIGHT
 03/25/1998 - 05/31/2001 FY02: \$0 Total: \$103,026
Prin. Invest.: W B RHOTEN, I N SERGEEV
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 5 542 **MARSHALL UNIV** **9738**
 RCBI ADVANCED COMPOSITES TECHNOLOGY INITIATIVE
 03/20/2001 - 06/30/2002 FY02: \$0 Total: \$2,300,000
Prin. Invest.: M R JULIAN
Tech. Officer: GSFC/M KIENLEN
CASE Category: 49 – ENGINEERING, OTHER

NCC 5 646 **MARSHALL UNIV** **9739**
 ADVANCED COMPOSITES TECHNOLOGY INITIATIVES
 06/17/2002 - 06/30/2003 FY02: \$2,500,000 Total: \$2,500,000
Prin. Invest.: M R JULIAN
Tech. Officer: GSFC/M E KIELEN
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11088 **WEST VIRGINIA STATE COLL** **9740**
 APPLICATION OF NASA'S REMOTE SENSING SATELLITES TO ENVIRONMENTAL RESEARCH AND EARTH SCIENCE EDUCATION
 07/25/2001 - 09/30/2002 FY02: \$0 Total: \$70,000
Prin. Invest.: J MAYHUGH
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11103 **WEST VIRGINIA STATE COLL** **9741**
 NASA SCIENCE AND TECHNOLOGY SCHOLAR PROGRAM
 07/31/2001 - 07/31/2002 FY02: \$0 Total: \$30,000
Prin. Invest.: E V GRIFFIN, SR
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12269 **WEST VIRGINIA STATE COLL** **9742**
 REVIEW OF BUSINESS PRACTICES OF THE NASA IV&V FACILITY
 06/26/2002 - 05/31/2003 FY02: \$15,000 Total: \$15,000
Prin. Invest.: C W SCHAFFER
Tech. Officer: GSFC/K MCGILL
CASE Category: 22 – COMPUTER SCIENCE

NAG 1 2096 **WEST VIRGINIA UNIV** **9743**
 ROLE OF TURBULENCE IN CHEMICAL AND DYNAMICAL PROCESSES IN THE NEAR-FIELD WAKE OF SUBSONIC AIRCRAFT
 09/14/1998 - 12/15/2001 FY02: \$1 Total: \$299,189
Prin. Invest.: R F TURCO, W S LEWELLEN
Tech. Officer: LARC/W L GROSE, LARC/B E ANDERSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

WEST VIRGINIA

NASA'S UNIVERSITY PROGRAM

NAG 2 1158 **WEST VIRGINIA UNIV** **9744**
 AIRNET REMOTELY CONTROLLED B747 SCAL MODEL; TRANS FR AMES
 10/2000; GSFC STARTS SUPP 2
 08/25/1997 - 01/31/2001 FY02: \$0 Total: \$150,000
Prin. Invest.: M R NAPOLITANO
Tech. Officer: ARC/W F BROOKS
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 5364 **WEST VIRGINIA UNIV** **9745**
 A STUDY ON CONVERGENCE OF THE HILBERT-HUANG TRANSFORM
 04/24/2002 - 04/14/2003 FY02: \$50,000 Total: \$50,000
Prin. Invest.: Y XU
Tech. Officer: WFF/B R LONG
CASE Category: 33 – OCEANOGRAPHY

NAG 5 10218 **WEST VIRGINIA UNIV** **9746**
 LABORATORY MEASUREMENTS OF BROADBAND EXTREMELY-LOW
 -FREQUENCY(BB-ELF) WAVE EXCITATION THRESHOLDS &
 01/05/2001 - 01/14/2004 FY02: \$100,022 Total: \$198,791
Prin. Invest.: M KOEPKE
Tech. Officer: GSFC/M MELLOTT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11915 **WEST VIRGINIA UNIV** **9747**
 SOLAR WIND ELECTRONS DURING SOLAR MAXIMUM
 03/22/2002 - 04/30/2004 FY02: \$52,122 Total: \$52,122
Prin. Invest.: J E LITTLETON
Tech. Officer: GSFC/W WAGNER
CASE Category: 13 – PHYSICS

NAG 5 12608 **WEST VIRGINIA UNIV** **9748**
 NASA IV&V FACILITY EDUCATIONAL OUTREACH PROPOSAL
 09/27/2002 - 09/30/2005 FY02: \$196,041 Total: \$196,041
Prin. Invest.: E J PYLE
Tech. Officer: GSFC/G BLANEY
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1494 **WEST VIRGINIA UNIV** **9749**
 MARS ENVIRONMENTAL COMPATIBILITY ASSESSMENT
 06/11/1998 - 05/31/2002 FY02: -\$17,759 Total: \$225,782
Prin. Invest.: T MELOY
Tech. Officer: MSFC/J POE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 2 979 **WEST VIRGINIA UNIV** **9750**
 APPLIED RESEARCH IN SOFTWARE VERIF & VALIDATION TRANS. FROM
 ARC 10/1/00 START MOD 21 HERE
 02/27/1997 - 12/31/2002 FY02: \$3,592,525 Total: \$15,436,199
Prin. Invest.: A C COGLEY, J SHAUB, S M EASTERBROOK
Tech. Officer: ARC/D S OSBURN
CASE Category: 29 – MATH/COMPUTER SCI, OTHER

NCC 2 6043 **WEST VIRGINIA UNIV** **9751**
 NASA AMES FACILITY EDUCATION OUTREACH PROGRAM (TRANSFER TO
 GSFC 9/2000)
 05/10/2000 - 10/31/2000 FY02: \$133,459 Total: \$360,513
Prin. Invest.: K DAVIS, E PULE
Tech. Officer: ARC/D OZBURN, ARC/S YASSINI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 406 **WEST VIRGINIA UNIV** **9752**
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/17/1999 - 06/30/2001 FY02: \$0 Total: \$450,000
Prin. Invest.: M JARAIEDI
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 570 **WEST VIRGINIA UNIV** **9753**
 WEST VIRGINIA NASA EPSCOR PROGRAM
 07/13/2001 - 07/31/2005 FY02: \$180,157 Total: \$471,757
Prin. Invest.: M JARAIEDI
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 4 52431 **WEST VIRGINIA UNIV** **9754**
 VOLTERRA SYSTEMS FOR NONLINEAR ESTIMATION OF AEROSPACE
 SYSTEMS
 06/19/2002 - 06/30/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: Y XU
Tech. Officer: DFRC/M BRENNER
CASE Category: 41 – AERONAUTICAL ENGR

NGT 5 40055 **WEST VIRGINIA UNIV** **9755**
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND
 FELLOWSHIP PROGRAM.
 02/12/1997 - 02/28/2001 FY02: -\$90 Total: \$972,076
Prin. Invest.: M JARAIEDI
Tech. Officer: GSFC/L KEFFER
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 40120 **WEST VIRGINIA UNIV** **9756**
 WEST VIRGINIA SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/14/2001 - 02/28/2005 FY02: \$256,250 Total: \$514,084
Prin. Invest.: M JARAIEDI
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8628 **WHEELING JESUIT UNIV** **9757**
 EARTH SYSTEM SCIENCE EDUCATION ALLIANCE
 06/24/1999 - 06/30/2004 FY02: \$171,234 Total: \$759,732
Prin. Invest.: R J MEYERS
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12489 **WHEELING JESUIT UNIV** **9758**
 CHALLENGER LEARNING CENTER AT WHEELING JESUIT UNIVERSITY
 08/28/2002 - 08/31/2003 FY02: \$460,735 Total: \$460,735
Prin. Invest.: N STRUM
Tech. Officer: GSFC/P STEFFEN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 3 858 **WHEELING JESUIT UNIV** **9759**
 THE SYNTHESIS OF INDIUM, GALLIUM AND COPPER DITHIO CARBAMATE
 COMPLEXES FOR DEPOSITION FOR SPACE AND
 02/01/2001 - 05/31/2002 FY02: \$0 Total: \$9,020
Prin. Invest.: N N DUFFY
Tech. Officer: GRC/A F HEPP
CASE Category: 12 – CHEMISTRY

NASA'S UNIVERSITY PROGRAM

WISCONSIN

NCC 5 440 **WHEELING JESUIT UNIV** **9760**
 NATIONAL TECHNOLOGY TRANSFER CENTER: NASA TECHN. TRANSFER &
 COMMERCIALIZATION PROGRAM
 11/09/1999 - 10/31/2004 FY02: \$7,800,000 Total: \$22,257,000
Prin. Invest.: J P ALLEN
Tech. Officer: GSFC/N CHEEKS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 451 **WHEELING JESUIT UNIV** **9761**
 CLASSROOM OF THE FUTURE PROGRAM
 01/28/2000 - 12/31/2004 FY02: \$2,204,622 Total: \$6,044,622
Prin. Invest.: N NAIK
Tech. Officer: GSFC/S CANRIGHT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 604 **WHEELING JESUIT UNIV** **9762**
 THE CENTER FOR EDUCATIONAL TECHNOLOGIES BROKER/FAC ILITATOR
 PROGRAM: SPACE SCIENCE EDUCATION INT
 12/17/2001 - 12/31/2006 FY02: \$295,000 Total: \$295,000
Prin. Invest.: N NAIK
Tech. Officer: GSFC/P SAKIMOTO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

WISCONSIN

NAG 9 1156 **MARQUETTE UNIV** **9763**
 LIMB MUSCLE FUNCTION WITH UNLOADING AND COUNTERMEASURES
 09/15/1999 - 09/30/2003 FY02: \$150,873 Total: \$555,360
Prin. Invest.: R H FITTS
Tech. Officer: JSC/C W LLOYD
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 9 116 **MARQUETTE UNIV** **9764**
 LIFE SCIENCE EXPERIMENT EFFECT OF PROLONGED SPACEFLIGHT ON
 HUMAN SKELETAL MUSCLE
 01/05/2001 - 01/04/2004 FY02: \$280,000 Total: \$580,000
Prin. Invest.: D L COSTILL, D R RILEY, R H FITTS
Tech. Officer: JSC/D BAUMANN
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 2 956 **MEDICAL COLL OF WISCONSIN** **9765**
 THE EFFECTS OF MICROGRAVITY ON NEUROMUSCULAR DEVELOPMENT
 01/20/1995 - 10/31/2001 FY02: \$0 Total: \$871,961
Prin. Invest.: D A RILEY
Tech. Officer: ARC/W E HINDS, ARC/D M WINGET
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1422 **MEDICAL COLL OF WISCONSIN** **9766**
 EVALUATION OF THE QUALITY OF PRESERVATION OF ARCHIVED FIXED
 TISSUE SAMPLES FOR ULTRASTRUCTURAL STUDY
 07/18/2000 - 07/31/2002 FY02: \$0 Total: \$42,000
Prin. Invest.: D A RILEY
Tech. Officer: ARC/R D MACELROY, ARC/M M AVERNER
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 5 40097 **UNIV OF WISCONSIN - GREEN BAY** **9767**
 WISCONSIN SPACE GRANT COLL & FELLOWSHIP PROGRAM
 03/06/2001 - 02/28/2005 FY02: \$256,250 Total: \$729,500
Prin. Invest.: R A YINGST
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 2 1163 **UNIV OF WISCONSIN - LA CROSSE** **9768**
 A WORKBENCH FOR VOLUMETRIC DATA FILTERING AND SEGMENTATION
 ALGORITHMS
 03/16/2000 - 12/31/2001 FY02: -\$3,322 Total: \$28,579
Prin. Invest.: S O SENER
Tech. Officer: ARC/J D SMITH
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG 1 2073 **UNIV OF WISCONSIN - MADISON** **9769**
 THE COLLECTION AND ANALYSIS OF HIGH SPECTRAL- RESOLUTION
 INFRARED RADIANCES AS PART OF FIRE
 05/26/1998 - 11/30/2001 FY02: \$0 Total: \$354,000
Prin. Invest.: S A ACKERMAN, H RECEROMB
Tech. Officer: LARC/V E DELNORE, LARC/J RAPER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2162 **UNIV OF WISCONSIN - MADISON** **9770**
 MODELING AND ANALYSIS OF SAGE CONSTITUENT MIXING IN THE LOWER
 STRATOSPHERE AND UPPER TROPOSPHERE
 03/16/1999 - 12/31/2002 FY02: \$27,481 Total: \$337,481
Prin. Invest.: M H HITCHMAN
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 2322 **UNIV OF WISCONSIN - MADISON** **9771**
 OVERLAPPING CLOUD INVESTIGATIONS USING MODIS, CERES AND ARM
 CART SITE DATA
 08/18/2000 - 12/31/2001 FY02: \$0 Total: \$139,891
Prin. Invest.: S ACKERMAN
Tech. Officer: LARC/J A GREEN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02020 **UNIV OF WISCONSIN - MADISON** **9772**
 ANALYSIS OF HISTORICAL CIRRUS IN SITU IN SUPPORT OF TERRA AQUA
 AND GIFTS CIRRUS RETRIEVAL EFFORTS
 12/13/2001 - 12/14/2004 FY02: \$99,981 Total: \$99,981
Prin. Invest.: S A ACKERMAN
Tech. Officer: LARC/V E DELNORE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 1 02057 **UNIV OF WISCONSIN - MADISON** **9773**
 SUPPORT FOR THE SCANNING HIS INSTRUMENT TO PARTICIPATE IN THE
 INTERNATIONAL H2O PROJECT
 03/08/2002 - 03/07/2003 FY02: \$150,000 Total: \$150,000
Prin. Invest.: H E REVERCOMB
Tech. Officer: LARC/E V BROWELL, LARC/S ISMAIL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 2 1189 **UNIV OF WISCONSIN - MADISON** **9774**
 MOLECULAR GENETICS OF ROOT THIGMOPRESPONSIVENESS IN ARABI-
 DOPSIS THALIANA
 03/19/1998 - 03/31/2001 FY02: \$0 Total: \$451,867
Prin. Invest.: P H MASSON
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1220 **UNIV OF WISCONSIN - MADISON** **9775**
 SKELETAL MUSCLE GROWTH OF REPAIR DURING MICROGRAVITY
 05/20/1998 - 06/30/2002 FY02: \$0 Total: \$347,962
Prin. Invest.: E SCHULTZ
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1336 **UNIV OF WISCONSIN - MADISON** **9776**
 MOLECULAR CLONING & CHARACTERIZATION OF THE AGR1 GENE OF
 ARABIDOPSIS THALIANA
 07/15/1999 - 06/30/2003 FY02: \$84,005 Total: \$476,495
Prin. Invest.: P MASSON
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1492 **UNIV OF WISCONSIN - MADISON** **9777**
 MOLECULAR GENETICS OF ROOT THIGMOPRESPONSIVENESS IN ARABIDO-
 PIS
 07/05/2001 - 08/31/2003 FY02: \$185,589 Total: \$246,638
Prin. Invest.: P H MASSON
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 2 1510 **UNIV OF WISCONSIN - MADISON** **9778**
 SKELETAL MUSCLE GROWTH AND REPAIR DURING MICROGRAVITY
 07/24/2001 - 11/30/2002 FY02: \$100,452 Total: \$172,204
Prin. Invest.: E SCHULTZ
Tech. Officer: ARC/M M AVERNER, ARC/R D MACELROY
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NAG 5 674 **UNIV OF WISCONSIN - MADISON** **9779**
 SPATIAL HETERODYNE SPECTROMETER FOR INVESTIGATION OF INTER-
 STELLAR FAR ULTRAVIOLET EMISSION LINES
 11/30/1990 - 01/31/2002 FY02: \$0 Total: \$2,125,999
Prin. Invest.: R J REYNOLDS
Tech. Officer: GSFC/L J EARLY, GSFC/R H PLESS
CASE Category: 13 – PHYSICS

NAG 5 679 **UNIV OF WISCONSIN - MADISON** **9780**
 COSMIC X-RAY PHYSICS
 03/25/1991 - 04/30/2001 FY02: \$0 Total: \$3,194,189
Prin. Invest.: D MCCAMMON
Tech. Officer: GSFC/L J EARLY, GSFC/R H PLESS
CASE Category: 13 – PHYSICS

NAG 5 3524 **UNIV OF WISCONSIN - MADISON** **9781**
 STUDIES OF THE HOT INTERSTELLAR MEDIUM AND HALO OF STRUCTURE
 & SPECTRAL CHARACTERISTICS OF THE LOW E
 11/13/1996 - 05/14/2002 FY02: \$0 Total: \$575,390
Prin. Invest.: W T SANDERS
Tech. Officer: GSFC/D K WEST
CASE Category: 11 – ASTRONOMY

NAG 5 3769 **UNIV OF WISCONSIN - MADISON** **9782**
 NEW MATHEMATICAL METHODS FOR VARIATIONAL OBJECTIVE ESTIMA-
 TION
 02/13/1997 - 09/30/2002 FY02: \$0 Total: \$360,000
Prin. Invest.: G WAHBA
Tech. Officer: GSFC/K H BERGMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 5252 **UNIV OF WISCONSIN - MADISON** **9783**
 FLIGHT OF FAR-ULTRAVIOLET SPECTROPOLARIMETER (FUSP) AND DEVEL-
 OPMENT AND FLIGHT OF CUPID PI NORDSIECK
 02/04/2000 - 02/03/2003 FY02: \$420,000 Total: \$1,235,640
Prin. Invest.: K H NORDSIECK
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5253 **UNIV OF WISCONSIN - MADISON** **9784**
 UV POLARIMETRIC OBSERVATIONS OF RESONANCE LINE AND DUST
 SCATTERING
 02/18/2000 - 02/03/2003 FY02: \$300,000 Total: \$436,000
Prin. Invest.: W HARIS
Tech. Officer: GSFC/W B JOHNSON
CASE Category: 13 – PHYSICS

NAG 5 5270 **UNIV OF WISCONSIN - MADISON** **9785**
 STUDIES OF THE COSMIC X-RAY BACKGROUND FIRST YEAR FUNDING
 04/11/2000 - 04/06/2003 FY02: \$340,000 Total: \$1,007,000
Prin. Invest.: D MCCAMMON
Tech. Officer: GSFC/J BRINTON
CASE Category: 13 – PHYSICS

NAG 5 5272 **UNIV OF WISCONSIN - MADISON** **9786**
 FIRST FUNDING FOR PHASE 1 OF CIRRUS PROJECT FIRST FUNDING FOR
 PHASE 1 OF CIRRUS PROJECT
 04/17/2000 - 04/13/2006 FY02: \$0 Total: \$299,808
Prin. Invest.: S ACKERMAN
Tech. Officer: GSFC/D L PIERCE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 6032 **UNIV OF WISCONSIN - MADISON** **9787**
 THE EVOLUTION OF GALAXY IMAGE STRUCTURE TO Z=3
 10/08/1997 - 10/14/2001 FY02: \$0 Total: \$270,000
Prin. Invest.: M BERSHADY
Tech. Officer: GSFC/D WEST
CASE Category: 11 – ASTRONOMY

NAG 5 6457 **UNIV OF WISCONSIN - MADISON** **9788**
 VALIDATION OF ASTER AND MODIS SURFACE-TEMPERATURE AND VEG-
 ETATION PRODUCTS WITH SURFACE-FLUX APPLICAT
 10/15/1997 - 09/30/2002 FY02: \$125,064 Total: \$974,815
Prin. Invest.: S T GOWER
Tech. Officer: GSFC/D O STARR
CASE Category: 19 – PHYSICALSCIENCE, OTHER

NAG 5 6788 **UNIV OF WISCONSIN - MADISON** **9789**
 CLOUDS ON NEPTUNE: MOTIONS, EVOLUTION, STRUCTURE
 02/06/1998 - 03/31/2001 FY02: \$0 Total: \$230,780
Prin. Invest.: L A SROMOVSKY
Tech. Officer: GSFC/T MORGAN
CASE Category: 11 – ASTRONOMY

NAG 5 7026 **UNIV OF WISCONSIN - MADISON** **9790**
 AN ULTRA-LOW BANDWIDTH DIGITAL IMAGING SYSTEM FOR SPACECRAFT
 02/26/1998 - 06/30/2001 FY02: -\$1,452 Total: \$136,548
Prin. Invest.: J W PERCIVAL
Tech. Officer: GSFC/R SPAGNUOLO
CASE Category: 42 – ASTRONAUTICAL ENGR

NAG 5 7214 **UNIV OF WISCONSIN - MADISON** **9791**
 PRESIDENTIAL EARLY CAREER AWARD FOR SCIENTISTS AND ENGINEERS
 04/06/1998 - 04/30/2003 FY02: \$133,322 Total: \$499,988
Prin. Invest.: J FOLEY
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 7605 UNIV OF WISCONSIN - MADISON 9792
 CRITICAL REVIEW OF CHINESE RESEARCH ON THE SOLAR INFLUENCES ON CLIMATE
 07/22/1998 - 07/31/2002 FY02: \$0 Total: \$218,976
Prin. Invest.: P WANG
Tech. Officer: GSFC/J SHARBER
CASE Category: 11 - ASTRONOMY

NAG 5 7661 UNIV OF WISCONSIN - MADISON 9793
 A STUDY OF UNCERTAINTIES FOR MODIS CLOUD RETRIEVALS OF OPTICAL THICKNESS AND EFFECTIVE RADIUS
 09/02/1998 - 03/31/2001 FY02: -\$394 Total: \$109,875
Prin. Invest.: D PINCUS
Tech. Officer: GSFC/D STARR
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 7931 UNIV OF WISCONSIN - MADISON 9794
 PHYSICS OF AN UNSTABLE WIND FROM THE UNSTABLE STAR P CYGNI ADP-98
 12/14/1998 - 06/14/2002 FY02: \$0 Total: \$121,000
Prin. Invest.: K H NORDSIECK
Tech. Officer: GSFC/D K WEST
CASE Category: 11 - ASTRONOMY

NAG 5 7952 UNIV OF WISCONSIN - MADISON 9795
 INTEGRATED STUDIES OF COMET C/199501 (HALE-BOPP) USING THE RESULTS OF THE UNIV W/GSFC OBSERVATION CAMPAIN
 12/17/1998 - 12/31/2002 FY02: \$0 Total: \$276,256
Prin. Invest.: D M HARRIS
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 - ASTRONOMY

NAG 5 8057 UNIV OF WISCONSIN - MADISON 9796
 INTERPRETATION OF RADIATIVE ENERGY FLUXES IN JUPITER'S ATMOSPHERE
 01/15/1999 - 07/31/2002 FY02: \$0 Total: \$128,085
Prin. Invest.: L A SROMOVSKY
Tech. Officer: GSFC/R BEEBE
CASE Category: 11 - ASTRONOMY

NAG 5 8069 UNIV OF WISCONSIN - MADISON 9797
 BIGFOOT--CHARACTERIZING LAND COVER, LAI AND NPP AT THE LANDSCAPE SCALE FOR EOS/MODIS VALIDATION
 01/28/1999 - 06/30/2002 FY02: \$0 Total: \$575,038
Prin. Invest.: S T GOWER
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 8280 UNIV OF WISCONSIN - MADISON 9798
 THE HISTORY AND INITIAL MASS FUNCTION OF THE LAMBDA ORIONIS STAR FORMING REGION (ADP 98)
 04/15/1999 - 02/28/2002 FY02: \$0 Total: \$56,505
Prin. Invest.: R D MATHIEU
Tech. Officer: GSFC/D K WEST
CASE Category: 11 - ASTRONOMY

NAG 5 8417 UNIV OF WISCONSIN - MADISON 9799
 THEORETICAL STUDIES OF THE DIFFUSE INTERSTELLAR MEDIUM (ATP 98)
 03/25/1999 - 03/31/2003 FY02: \$0 Total: \$290,025
Prin. Invest.: D P COX
Tech. Officer: GSFC/D K WEST
CASE Category: 11 - ASTRONOMY

NAG 5 8537 UNIV OF WISCONSIN - MADISON 9800
 X-RAY DETECTORS FOR SPECTROSCOPY OF 0.1-0.3 KEV EXTENDED SOURCES WITH SUB-EV RESOLUTION.
 07/09/1999 - 07/14/2002 FY02: \$0 Total: \$284,116
Prin. Invest.: D MCCAMMON
Tech. Officer: GSFC/G MUCKLOW
CASE Category: 13 - PHYSICS

NAG 5 8554 UNIV OF WISCONSIN - MADISON 9801
 LONG-TERM WATER FLUX CHANGES FROM CONVERTING OLD-GROWTH PINE FOREST TO HARDWOOD FORESTS IN NORTH
 06/17/1999 - 06/30/2003 FY02: \$40,049 Total: \$359,177
Prin. Invest.: D MACKAY
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 8597 UNIV OF WISCONSIN - MADISON 9802
 THE ROLE OF LAND USE AND LAND COVER CHANGE ON THE TERRESTRIAL WATER BALANCE OF THE MISSISSIPPI BASIN
 06/11/1999 - 06/30/2003 FY02: \$37,349 Total: \$331,970
Prin. Invest.: J A FOLEY
Tech. Officer: GSFC/E T ENGMAN
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 8625 UNIV OF WISCONSIN - MADISON 9803
 DOCUMENTING, UNDERSTANDING, AND PREDICTING THE AGGREGATE SURFACE RADIATION FLUXES FOR SHEBA
 08/31/1999 - 06/14/2001 FY02: -\$751 Total: \$56,408
Prin. Invest.: J R KEY
Tech. Officer: GSFC/S GOGINENI
CASE Category: 39 - ENVIRONMENTAL SCI, OTHER

NAG 5 8639 UNIV OF WISCONSIN - MADISON 9804
 SIMPLE MODELS OF THE SPATIAL DISTRIBUTION OF CLOUD RADIATIVE PROPERTIES FOR REMOTE SENSING STUDIES
 06/29/1999 - 09/30/2001 FY02: -\$20 Total: \$47,867
Prin. Invest.: R PINCUS
Tech. Officer: GSFC/W WISCOMBE
CASE Category: 31 - ATMOSPHERIC SCIENCE

NAG 5 8652 UNIV OF WISCONSIN - MADISON 9805
 CONTINUING INVESTIGATION OF SINGLE-PHOTON CALORIMETERS FOR X-RAY SPECTROSCOPY
 08/19/1999 - 09/30/2001 FY02: \$0 Total: \$100,000
Prin. Invest.: D MCCAMMON
Tech. Officer: GSFC/R L KELLEY
CASE Category: 11 - ASTRONOMY

NAG 5 8967 UNIV OF WISCONSIN - MADISON 9806
 OBSERVATIONAL CONSTRAINTS FOR THE GALACTIC FOUNDATION - FUSE
 01/24/2000 - 01/31/2003 FY02: \$0 Total: \$56,200
Prin. Invest.: R BENJAMIN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

NAG 5 9024 UNIV OF WISCONSIN - MADISON 9807
 OBSERVATIONAL CONSTRAINTS FOR THE GALACTIC FOUNTAIN-FUSE HIGH VELOCITY CLOUDS: ORIGIN
 02/28/2000 - 02/28/2003 FY02: \$0 Total: \$70,459
Prin. Invest.: B P WAKKER
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 - ASTRONOMY

NAG 5 9028 **UNIV OF WISCONSIN - MADISON** **9808**
 EARTH SCIENCE COMPONENT FOR ACADEMIC PROFESSIONAL ENHANCEMENT (ESCAPE)
 02/04/2000 - 02/14/2003 FY02: \$44,591 Total: \$131,566
Prin. Invest.: S S LIMAYE
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9084 **UNIV OF WISCONSIN - MADISON** **9809**
 STATISTICAL ANALYSIS OF ATMOSPHERIC OZONE DATA FOR TREND FEATURES & STUDIES ON STATISTICAL METHODOLOGY
 02/16/2000 - 08/31/2001 FY02: -\$71 Total: \$29,929
Prin. Invest.: G C REINSEL
Tech. Officer: GSFC/P K BHARTIA
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9179 **UNIV OF WISCONSIN - MADISON** **9810**
 THE ORIGINS OF GALACTIC HALO GAS: ACCRETION AND FOUNTAIN FLOWS (LTSa 99)
 03/07/2000 - 03/14/2005 FY02: \$103,032 Total: \$304,669
Prin. Invest.: B P WAKKER
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9226 **UNIV OF WISCONSIN - MADISON** **9811**
 SPECTRAL DIAGNOSTICS FOR EARLY-TYPE STARS IN SUPPORT OF HIGH-RESOLUTION SATELLITE OBSERVATIONS (LTS)
 03/09/2000 - 03/14/2005 FY02: \$21,092 Total: \$60,152
Prin. Invest.: J CASSINELLI
Tech. Officer: GSFC/R OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 9295 **UNIV OF WISCONSIN - MADISON** **9812**
 DIAGNOSTIC & PREDICTIVE STUDIES OF THE EARTH'S HYDROLOGIC CYCLE USING MODEL-ASSIMILATED & REMOTE
 04/13/2000 - 12/31/2002 FY02: \$118,800 Total: \$423,800
Prin. Invest.: D R JOHNSON
Tech. Officer: GSFC/R ATLAS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9389 **UNIV OF WISCONSIN - MADISON** **9813**
 INTERNATIONAL MODIS/AIRS PROCESSING PACKAGE (IMAPP) FOR EOS DIRECT BROADCAST DATA
 04/04/2000 - 04/14/2003 FY02: \$250,000 Total: \$750,000
Prin. Invest.: A HUANG
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9436 **UNIV OF WISCONSIN - MADISON** **9814**
 MONITORING AND MODELING OF LAND-SURFACE ENERGY AND WATER FLUXES USING AN ENHANCED PATHFINDER DATABASE
 04/13/2000 - 04/30/2003 FY02: \$189,482 Total: \$533,192
Prin. Invest.: G DIAK
Tech. Officer: GSFC/J DODGE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9452 **UNIV OF WISCONSIN - MADISON** **9815**
 HUMAN ACTIVITY AND A CHANGING BIOSPHERE
 04/13/2000 - 04/30/2003 FY02: \$299,225 Total: \$794,906
Prin. Invest.: J FOLEY
Tech. Officer: GSFC/D WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 9673 **UNIV OF WISCONSIN - MADISON** **9816**
 DETERMINATION OF MOMENTUM TRANSPORT, ORGANIZATION, & TEMPORAL INTENSITY OF DEEP TROPICAL CONVECTION
 06/01/2000 - 05/31/2003 FY02: \$54,528 Total: \$114,867
Prin. Invest.: J R MECIKALSKI
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9688 **UNIV OF WISCONSIN - MADISON** **9817**
 APPLICATION OF REMOTE SENSING TO ASSESS THE IMPACT OF SHORT TERM CLIMATE VARIABILITY ON COASTAL SEDIMENT
 06/14/2000 - 06/14/2003 FY02: \$100,000 Total: \$300,000
Prin. Invest.: P MENZEL
Tech. Officer: GSFC/H V FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 9712 **UNIV OF WISCONSIN - MADISON** **9818**
 GLAST: A GEV ALL-SKY MONITOR OF TRANSIENT PHENOMENA
 06/15/2000 - 06/14/2003 FY02: \$99,999 Total: \$154,988
Prin. Invest.: P DINGUS
Tech. Officer: GSFC/S LAMBROS
CASE Category: 13 – PHYSICS

NAG 5 9894 **UNIV OF WISCONSIN - MADISON** **9819**
 IMPROVED TRMM RAINFALL ESTIMATES FROM A COMBINATION OF SATELLITE & SURFACE HYDROLOGICAL OBSERVATIONS
 08/25/2000 - 11/30/2002 FY02: \$105,000 Total: \$268,020
Prin. Invest.: G W PETTY
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 9931 **UNIV OF WISCONSIN - MADISON** **9820**
 THE NEARBY STARBURST DWARF GALAXY NGC 625
 09/07/2000 - 09/14/2001 FY02: \$0 Total: \$6,400
Prin. Invest.: H A KOBULNICKY
Tech. Officer: GSFC/D F MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 9999 **UNIV OF WISCONSIN - MADISON** **9821**
 OPTIMIZATION OF THE GODDARD PROFILING (GPROF) ALGORITHM FOR SUBTROPICAL AND EXTRATROPICAL RAINFALL
 11/17/2000 - 12/31/2001 FY02: \$0 Total: \$34,641
Prin. Invest.: G W PETTY
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 10196 **UNIV OF WISCONSIN - MADISON** **9822**
 THE MEASUREMENT OF ATOMIC TRANSITION PROBABILITIES FOR SPECTRAL LINES IN THE FUSE BAND
 01/04/2001 - 12/31/2001 FY02: \$0 Total: \$60,000
Prin. Invest.: J E LAWLER
Tech. Officer: GSFC/P CRANE
CASE Category: 11 – ASTRONOMY

NAG 5 10204 **UNIV OF WISCONSIN - MADISON** **9823**
 MINIATURE ADIABATIC DEMAGNETIZATION REFRIGERATOR
 12/28/2000 - 12/31/2003 FY02: \$158,000 Total: \$318,000
Prin. Invest.: P TIMBIE
Tech. Officer: GSFC/G STRINGFELLOW
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10258 UNIV OF WISCONSIN - MADISON 9824
 ANTENNA COUPLED TRANSITION EDGE MICROBOLOMETERS WITH ON-CHIP FILTERING & DUAL POLARIZATION SENSITIVE
 01/31/2001 - 01/31/2004 FY02: \$222,818 Total: \$445,923
Prin. Invest.: P TIMBIE
Tech. Officer: GSFC/J CHERVENAK
CASE Category: 13 – PHYSICS

NAG 5 10273 UNIV OF WISCONSIN - MADISON 9825
 SOME NEW MATHEMATICAL METHODS FOR VARIATIONAL OBJECTIVE ANALYSIS & ACCURACY ESTIMATION, WITH EM
 01/16/2001 - 01/14/2004 FY02: \$65,000 Total: \$130,000
Prin. Invest.: G WAHBA
Tech. Officer: GSFC/T LEE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10415 UNIV OF WISCONSIN - MADISON 9826
 LMC 1995, THE THIRD SUPERSOFT X-RAY NOVA
 02/21/2001 - 02/28/2003 FY02: \$0 Total: \$21,667
Prin. Invest.: M ORIO
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 5 10729 UNIV OF WISCONSIN - MADISON 9827
 CONTINUED DEVELOPMENT OF A PLANETARY IMAGING FOURIER TRANSFORM SPECTROMETER (PIFTS)
 04/10/2001 - 04/14/2002 FY02: \$0 Total: \$50,000
Prin. Invest.: L SROMOVSKY
Tech. Officer: GSFC/B BETTS
CASE Category: 11 – ASTRONOMY

NAG 5 10770 UNIV OF WISCONSIN - MADISON 9828
 STAR FORMATION FEEDBACK ON GALAXY EVOLUTION (LTSA 2000)
 04/26/2001 - 04/30/2006 FY02: \$109,728 Total: \$224,272
Prin. Invest.: H A KOBULNICKY
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11085 UNIV OF WISCONSIN - MADISON 9829
 CLIMATE AND HUMAN IMPACTS ON WATER RESOURCES IN AFRICA
 07/20/2001 - 08/14/2004 FY02: \$139,869 Total: \$220,372
Prin. Invest.: M COE
Tech. Officer: GSFC/G GUTMAN
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11155 UNIV OF WISCONSIN - MADISON 9830
 VALIDATION OF THE ATMOSPHERIC INFRARED SOUNDER (AIRS) OVER THE ANTARCTIC PLATEAU (AQUA-0080-033) NRA
 08/08/2001 - 08/31/2004 FY02: \$10,419 Total: \$31,794
Prin. Invest.: D C TOBIN
Tech. Officer: GSFC/D STARR
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11221 UNIV OF WISCONSIN - MADISON 9831
 MAGNETIC FIELDS ON OB STARS (ATP 2000)
 08/09/2001 - 08/14/2004 FY02: \$5,023 Total: \$10,046
Prin. Invest.: J P CASSINELLI
Tech. Officer: GSFC/R J OLIVERSEN
CASE Category: 11 – ASTRONOMY

NAG 5 11242 UNIV OF WISCONSIN - MADISON 9832
 LINKING IN-SITU MEASUREMENTS, REMOTE SENSING, AND MODELS TO VALIDATE MODIS PRODUCTS RELATED TO TH
 08/17/2001 - 08/31/2004 FY02: \$130,483 Total: \$223,686
Prin. Invest.: S T GOWER
Tech. Officer: GSFC/D WICKLAND
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11245 UNIV OF WISCONSIN - MADISON 9833
 INTERANNUAL TO DECADE AIR-SEA CARBON FLUXES: ANALYSIS OF MARINE PRODUCTIVITY AND NUTRIENT D
 08/16/2001 - 08/31/2004 FY02: \$37,727 Total: \$154,931
Prin. Invest.: A WINGUTH
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11303 UNIV OF WISCONSIN - MADISON 9834
 ANALYSIS OF DYNAMICAL PROCESSES IMPORTANT TO CLIMATE CHANGE
 08/31/2001 - 08/31/2003 FY02: \$0 Total: \$100,002
Prin. Invest.: M HITCHMAN
Tech. Officer: GSFC/P DECOLA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11322 UNIV OF WISCONSIN - MADISON 9835
 HIGH PERFORMANCE IMAGING ARRAYS OF X-RAY CALORIMETERS USING IMPLANTED SILICON.
 11/05/2001 - 11/14/2002 FY02: \$18,000 Total: \$18,000
Prin. Invest.: D MCCAMMON
Tech. Officer: GSFC/C K STAHL
CASE Category: 13 – PHYSICS

NAG 5 11436 UNIV OF WISCONSIN - MADISON 9836
 PRECISION MEASUREMENTS OF OSCILLATOR STRENGTHS FOR NEUTRAL OXYGEN AND NITROGEN IN THE FUSE BAND
 12/03/2001 - 12/31/2002 FY02: \$40,000 Total: \$40,000
Prin. Invest.: J E LAWLER
Tech. Officer: GSFC/H HASAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11449 UNIV OF WISCONSIN - MADISON 9837
 VALIDATION OF GLAS LIDAR DATA AND THE INVESTIGATION OF LIDAR MULTIPLE SCATTERING
 12/17/2001 - 12/31/2002 FY02: \$104,814 Total: \$104,814
Prin. Invest.: E W ELORANTA
Tech. Officer: GSFC/J D SPINHIRNE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 11529 UNIV OF WISCONSIN - MADISON 9838
 CLOUD MICROPHYSICS AND ABSORPTION VALIDATION
 01/03/2002 - 12/14/2003 FY02: \$40,000 Total: \$40,000
Prin. Invest.: S A ACKERMAN
Tech. Officer: GSFC/D ANDERSON
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 11849 UNIV OF WISCONSIN - MADISON 9839
 OVI EMISSION FROM HVCS
 04/02/2002 - 04/14/2003 FY02: \$86,300 Total: \$86,300
Prin. Invest.: R BENJAMIN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12012 **UNIV OF WISCONSIN - MADISON** **9840**
 NEPTUNE'S CLOUD STRUCTURE
 04/22/2002 - 04/30/2005 FY02: \$102,601 Total: \$102,601
Prin. Invest.: L A SROMOVSKY
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12057 **UNIV OF WISCONSIN - MADISON** **9841**
 GAS AND DUST STRUCTURE IN ACTIVE COMETS
 04/19/2002 - 04/30/2005 FY02: \$94,119 Total: \$94,119
Prin. Invest.: W M HARRIS
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12128 **UNIV OF WISCONSIN - MADISON** **9842**
 THEORETICAL STUDIES OF THE DIFFUSE INTERSTELLAR MATTER IN THE
 LOCAL BUBBLE, BULGE, DISK, & HALO
 04/30/2002 - 04/30/2005 FY02: \$92,569 Total: \$92,569
Prin. Invest.: D P COX
Tech. Officer: GSFC/M SALAMON
CASE Category: 11 – ASTRONOMY

NAG 5 12196 **UNIV OF WISCONSIN - MADISON** **9843**
 MOLECULAR GAS IN THE DISK-HALO INTERFACE
 05/14/2002 - 05/14/2003 FY02: \$28,700 Total: \$28,700
Prin. Invest.: R BENJAMIN
Tech. Officer: GSFC/G SONNEBORN
CASE Category: 11 – ASTRONOMY

NAG 5 12206 **UNIV OF WISCONSIN - MADISON** **9844**
 ADAPTIVE OPTICS IMAGING AND SPECTROSCOPY OF NEPTUN E
 06/03/2002 - 05/31/2005 FY02: \$108,610 Total: \$108,610
Prin. Invest.: L A SROMOVSKY
Tech. Officer: GSFC/J HILLMAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 12258 **UNIV OF WISCONSIN - MADISON** **9845**
 GRADUATE RESEARCH ASSISTANTSHIPS AT THE UNIV WISCONSIN IN
 COOPERATION WITH THE EARTH SCIENCES
 07/02/2002 - 07/14/2005 FY02: \$49,527 Total: \$49,527
Prin. Invest.: S A ACKERMAN
Tech. Officer: GSFC/V V SALOMONSON
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 12270 **UNIV OF WISCONSIN - MADISON** **9846**
 CLOUD RADIATION MODELING FOR GLOBAL PRECIPITATION MISSION
 06/27/2002 - 06/30/2003 FY02: \$70,000 Total: \$70,000
Prin. Invest.: G J TRIPOLI
Tech. Officer: GSFC/R J LAWRENCE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 5 12422 **UNIV OF WISCONSIN - MADISON** **9847**
 PRECISION BALLOON-BORNE MEASUREMENTS OF THE ANISOTROPY IN
 THE COSMIC MICROWAVE BACKGROUND RADIATION
 08/01/2002 - 07/31/2003 FY02: \$16,000 Total: \$16,000
Prin. Invest.: P TIMBIE
Tech. Officer: GSFC/E S CHENG
CASE Category: 13 – PHYSICS

NAG 5 12536 **UNIV OF WISCONSIN - MADISON** **9848**
 PROCESSING METEOROLOGICAL SATELLITE INFORMATION TO NOWCAST
 CONVECTIVE INITIATION AND CONVECTIVE CH
 09/26/2002 - 09/14/2005 FY02: \$108,359 Total: \$108,359
Prin. Invest.: J MECIKALSKI
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 12557 **UNIV OF WISCONSIN - MADISON** **9849**
 X-RAY EMISSION FROM SINGLE WOLF-RAYET STARS
 09/23/2002 - 09/30/2002 FY02: \$22,557 Total: \$22,557
Prin. Invest.: R IGNACE
Tech. Officer: GSFC/R MUSHOTZKY
CASE Category: 11 – ASTRONOMY

NAG 8 1320 **UNIV OF WISCONSIN - MADISON** **9850**
 RESEARCH DEVELOPMENT OF ATMOSPHERIC PHYSICAL RETRIEVAL
 METHODOLOGIES USING SATELLITE DATA
 01/31/1997 - 04/30/2002 FY02: \$0 Total: \$200,000
Prin. Invest.: G DIAK
Tech. Officer: MSFC/F R ROBERTSON, MSFC/J ARNOLD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 8 1459 **UNIV OF WISCONSIN - MADISON** **9851**
 R/S PHYSICAL SIMULATION OF MARANGONI CONVECTION IN WELD POOLS
 02/01/1998 - 07/31/2002 FY02: \$15,833 Total: \$356,250
Prin. Invest.: S KOU
Tech. Officer: MSFC/P M DOTY
CASE Category: 47 – METAL & MATERIALS ENGR

NAG 8 1460 **UNIV OF WISCONSIN - MADISON** **9852**
 R/S DYNAMIC REDUCTION AND THE CREATION OF FINE GRAINED CERAM-
 ICS FROM INVISCID MELTS
 02/01/1998 - 01/31/2003 FY02: \$14,283 Total: \$320,750
Prin. Invest.: R F COOPER
Tech. Officer: MSFC/C TALLEY
CASE Category: 13 – PHYSICS

NAG 8 1672 **UNIV OF WISCONSIN - MADISON** **9853**
 ANALYSIS OF CONTAINERLESS SOLIDIFICATION MICRO- STRUCTURES IN
 UNDERCOOLED MELTS AND COMPOSITE SYS
 05/26/2000 - 11/30/2003 FY02: \$90,000 Total: \$215,500
Prin. Invest.: J N PEREPEZKO
Tech. Officer: MSFC/P DOTY
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 8 1719 **UNIV OF WISCONSIN - MADISON** **9854**
 FILED REVERSED CONFIGURATION FUSION PROPULSION
 05/04/2000 - 09/30/2003 FY02: \$50,000 Total: \$109,000
Prin. Invest.: J SANTARIUS
Tech. Officer: MSFC/F THEO
CASE Category: 22 – COMPUTER SCIENCE

NAG 8 1783 **UNIV OF WISCONSIN - MADISON** **9855**
 ALL-OPTICAL HIGH DENSITY COLD ATOM SOURCES
 05/04/2001 - 03/30/2005 FY02: \$62,000 Total: \$122,000
Prin. Invest.: T G WALKER
Tech. Officer: MSFC/D S HUBBARD
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NASA'S UNIVERSITY PROGRAM

WISCONSIN

NAG 8 1820 **UNIV OF WISCONSIN - MADISON** **9856**
 INVESTIGATION OF TECHNIQUES FOR SENSOR PLACEMENT, ACTUATOR
 PLACEMENT, AND TARGETMODE SELECTION...
 05/15/2001 - 05/15/2003 FY02: \$0 Total: \$39,940
Prin. Invest.: D C KAMMER
Tech. Officer: MSFC/M L TINKER
CASE Category: 46 – MECHANICAL ENGR

NAG13 99008 **UNIV OF WISCONSIN - MADISON** **9857**
 MIDWEST CENTER FOR NATURAL RESOURCE MGMT SAME
 03/03/1999 - 03/02/2003 FY02: \$0 Total: \$1,500,000
Prin. Invest.: G DIAK
Tech. Officer: SSC/C HILL
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAS 1 00070 **UNIV OF WISCONSIN - MADISON** **9858**
 ENG. & SCIENTIFIC SUPPORT FOR NAST-I
 09/15/2000 - 10/30/2001 FY02: -\$681 Total: \$1,099,804
Prin. Invest.: F A BEST
Tech. Officer: LARC/A ROYAL
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 00072 **UNIV OF WISCONSIN - MADISON** **9859**
 ALGORITHM DEVELOPMENT, MEASUREMENT CONCEPT VALIDATION, DATA
 PROCESSING AND ED./PUBLIC OUTREACH
 11/06/2000 - 01/31/2006 FY02: \$736,453 Total: \$2,434,453
Prin. Invest.: H REVERCOMB
Tech. Officer: LARC/V PARSONS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 96004 **UNIV OF WISCONSIN - MADISON** **9860**
 IDIQ FOR SATELLITE DATA/SITE LICENSE
 05/01/1996 - 04/29/2001 FY02: \$0 Total: \$317,171
Prin. Invest.: N APPLICABLE
Tech. Officer: LARC/R C HUFFMAN, JR., LARC/P MINNIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 1 99106 **UNIV OF WISCONSIN - MADISON** **9861**
 ANALYSIS OF COMBINED PICASSO-CENA AND MODIS DATA
 05/17/1999 - 05/16/2003 FY02: \$34,751 Total: \$184,505
Prin. Invest.: S A ACKERMAN
Tech. Officer: LARC/G GIBSON
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 02089 **UNIV OF WISCONSIN - MADISON** **9862**
 XRS-Z SALTPIILL
 06/25/2002 - 12/20/2002 FY02: \$119,835 Total: \$119,835
Prin. Invest.: R PAULOS
Tech. Officer: GSFC/J PANEK
CASE Category: 45 – ELECTRICAL ENGR

NAS 5 30131 **UNIV OF WISCONSIN - MADISON** **9863**
 SPACE TELESCOPE IMAGINE SPECTROGRAPH SUPPORT
 09/22/1987 - 04/30/2002 FY02: \$0 Total: \$1,290,954
Prin. Invest.: F ROESLER
Tech. Officer: GSFC/H D VITAGLIANO
CASE Category: 11 – ASTRONOMY

NAS 5 31367 **UNIV OF WISCONSIN - MADISON** **9864**
 EOS STUDY
 12/30/1991 - 06/14/2003 FY02: \$873,905 Total: \$6,450,000
Prin. Invest.: P MENZEL
Tech. Officer: GSFC/D TOLL, GSFC/B CONBOY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 31375 **UNIV OF WISCONSIN - MADISON** **9865**
 EOS AIRS INVESTIGATION
 01/13/1992 - 12/14/2002 FY02: \$380,000 Total: \$3,032,889
Prin. Invest.: H REVERCOMB
Tech. Officer: GSFC/E KREINS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAS 5 31377 **UNIV OF WISCONSIN - MADISON** **9866**
 EOS INVESTIGATION: ALGORITHM DEVELOPMENT WITH HIS/ AIRS
 01/08/1992 - 12/14/2002 FY02: \$99,000 Total: \$2,097,640
Prin. Invest.: W L SMITH
Tech. Officer: GSFC/E KREINS
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAS 5 99004 **UNIV OF WISCONSIN - MADISON** **9867**
 GLAS SCIENCE TEAM LEADER.
 11/25/1998 - 12/01/2002 FY02: \$27,000 Total: \$300,000
Prin. Invest.: C BENTLEY
Tech. Officer: GSFC/G SMITH
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 01011 **UNIV OF WISCONSIN - MADISON** **9868**
 TROPOSPHERIC MODEL STUDIES OF TRACE P FIELD DATA: REGIONAL
 ASSEMT OF STRATOSPHERIC-TROPOSPHERIC EXCHANGE
 01/19/2001 - 01/31/2003 FY02: \$41,471 Total: \$83,695
Prin. Invest.: M H HITCHMAN, G J TRIPOLI
Tech. Officer: LARC/J H CRAWFORD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 1 02017 **UNIV OF WISCONSIN - MADISON** **9869**
 DEVELOPMENT WITHIN THE REGIONAL AIR QUALITY MODELING SYSTEM
 (RAQMS)
 03/19/2002 - 03/31/2005 FY02: \$214,912 Total: \$214,912
Prin. Invest.: D R JOHNSON
Tech. Officer: LARC/R B PIERCE
CASE Category: 12 – CHEMISTRY

NCC 2 5323 **UNIV OF WISCONSIN - MADISON** **9870**
 TOWARDS A COMMON SERVICE SPECIFICATION & MATCHMAKING FRAME-
 WORK FOR GRID APPLICATIONS
 05/07/1999 - 04/30/2001 FY02: \$0 Total: \$40,000
Prin. Invest.: M LIVNY
Tech. Officer: ARC/W E JOHNSTON, ARC/G F MORELLO
CASE Category: 22 – COMPUTER SCIENCE

NCC 2 5449 **UNIV OF WISCONSIN - MADISON** **9871**
 FE ISOTOPE STUDIES OF MICROBIAL ECOLOGY
 07/27/2001 - 07/31/2003 FY02: \$47,146 Total: \$140,664
Prin. Invest.: C M JOHNSON, B L BEARD
Tech. Officer: ARC/W W DOLCI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 294 **UNIV OF WISCONSIN - MADISON** **9872**
 HIGH RESOLUTION CARBON EXCHANGE OVER LARGE-SCALE AMAZONIA
 BASED ON MODELING AND GOES SATELLITE
 06/10/1998 - 12/31/2001 FY02: \$0 Total: \$149,659
Prin. Invest.: J M NORMAN
Tech. Officer: GSFC/D W DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 335 **UNIV OF WISCONSIN - MADISON** **9873**
 THE EFFECTS OF TROPICAL FOREST CONVERSION: ECOLOGICAL RESEARCH IN THE LARGE-SCALE BIOSPHERE-ATMOSPHERE
 06/16/1998 - 12/31/2002 FY02: \$145,463 Total: \$238,042
Prin. Invest.: J FOLEY
Tech. Officer: GSFC/D DEERING
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NCC 5 354 **UNIV OF WISCONSIN - MADISON** **9874**
 "GSFC COOPERATIVE GRADUATE RESEARCH ASSISTANTSHIPS"
 08/04/1998 - 08/31/2001 FY02: \$0 Total: \$124,644
Prin. Invest.: M H HITCHMAN
Tech. Officer: GSFC/A J NEGRI
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 365 **UNIV OF WISCONSIN - MADISON** **9875**
 MODELING WETLANDS AND THEIR ROLE IN HYDROLOGICAL AND BIOGEOCHEMICAL CYCLES
 09/24/1998 - 09/30/2001 FY02: \$0 Total: \$50,033
Prin. Invest.: J A FOLEY
Tech. Officer: HQ/L TRAVIS
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 8 129 **UNIV OF WISCONSIN - MADISON** **9876**
 R/S "CONTINUATION SUPPORT FOR WISCONSIN CENTER FOR SPACE AUTHORIZATION & ROBOTICS"
 01/30/1997 - 10/31/2001 FY02: -\$594,685 Total: \$9,553,801
Prin. Invest.: W L ZHOU, J R BULA
Tech. Officer: MSFC/A L MATISAK
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NCC 8 241 **UNIV OF WISCONSIN - MADISON** **9877**
 PROMOTE COMMERCIALY FUNDED RESEARCH AND TECH DEV. IN THE FIELD OF SPACE POWER AUTOMATION AND ROBOTICS
 01/29/2002 - 10/31/2002 FY02: \$2,210,000 Total: \$2,210,000
Prin. Invest.: W ZHOU
Tech. Officer: MSFC/A MATISAK
CASE Category: 49 – ENGINEERING, OTHER

NCC13 00004 **UNIV OF WISCONSIN - MADISON** **9878**
 MAXIMIZING MUTUAL OPPORTUNITIES: PARTNERSHIP AMONG NASA, UW-MAD AND PRIVATE INDUSTRY
 03/06/2000 - 03/05/2005 FY02: \$100,000 Total: \$445,000
Prin. Invest.: T LILLESAND
Tech. Officer: SSC/A PEEK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 46 **UNIV OF WISCONSIN - MADISON** **9879**
 PRECISE MEASUREMENT OF COSMOLOGICAL PARAMETERS VIA COSMIC MICROWAVE BACKGROUND ANISOTROPY
 06/23/1997 - 06/30/2001 FY02: -\$103 Total: \$87,897
Prin. Invest.: P TIMBIE
Tech. Officer: GSFC/M S BURRELL
CASE Category: 11 – ASTRONOMY

NGT 5 115 **UNIV OF WISCONSIN - MADISON** **9880**
 THREE-DIMENSIONAL MULTIWAVELENGTH MODELING TECHNIQUES FOR ANALYSIS OF ASPHERICAL STELLAR
 06/04/2001 - 06/30/2003 FY02: \$0 Total: \$21,383
Prin. Invest.: K H NORDSIECK
Tech. Officer: GSFC/M S BURRELL
CASE Category: 11 – ASTRONOMY

NGT 5 30146 **UNIV OF WISCONSIN - MADISON** **9881**
 POROELASTIC ANALYSIS OF COSEISMIC AND POSTSEISMIC DEFORMATION ASSOCIATED WITH THE 1992 LANDERS, CALIF
 08/31/1998 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: H F WANG
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30160 **UNIV OF WISCONSIN - MADISON** **9882**
 SCALE-DEPENDENT CLIMATE CHANGE DUE TO DEFORESTATION IN AMAZONIA
 08/31/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: W BRINKMANN
Tech. Officer: GSFC/M Y WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 30176 **UNIV OF WISCONSIN - MADISON** **9883**
 EFFECTS OF LOGGING ACTIVITY ON BIOPHYSICAL PROCESSES AND CARBON CYCLING WITHIN CANADIAN BOREAL FOREST
 08/12/1999 - 08/31/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: J FOLEY
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30396 **UNIV OF WISCONSIN - MADISON** **9884**
 THE IMPACT OF CLIMATE AND AGRICULTURE ACTIVITY ON NITRATE EXPORT TO THE OCEAN
 08/14/2001 - 08/31/2004 FY02: \$21,000 Total: \$43,000
Prin. Invest.: J FOLEY
Tech. Officer: GSFC/M WEI
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 50185 **UNIV OF WISCONSIN - MADISON** **9885**
 PRECISION MEASUREMENTS OF THE POLARIZATION OF THE COSMIC MICROWAVE BACKGROUND RADIATION
 05/27/1998 - 08/31/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: P TIMBIE
Tech. Officer: HQ/A NURRIDIN
CASE Category: 13 – PHYSICS

NGT 5 50295 **UNIV OF WISCONSIN - MADISON** **9886**
 DWARF ELLIPTICALS IN CLUSTERS: THE FIRST GALAXIES STUDENT: CHRISTOPHER CONSELICE
 06/26/2000 - 12/31/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: J S GALLAGHER
Tech. Officer: GSFC/L SMITH
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 8 52865 **UNIV OF WISCONSIN - MADISON** **9887**
 PARAMETERIZATION AND SCALE ISSUES ASSOCIATED WITH MACROSCALE WATERSHED MODELING
 07/27/1998 - 05/13/2003 FY02: \$0 Total: \$66,000
Prin. Invest.: J F CRUISE
Tech. Officer: MSFC/J F DOWDY
CASE Category: 49 – ENGINEERING, OTHER

NCC 1 354 **UNIV OF WISCONSIN - MILWAUKEE** **9888**
 PION PRODUCTION CROSS SECTIONS
 08/02/1999 - 12/31/2002 FY02: \$30,000 Total: \$158,671
Prin. Invest.: J W NORBURY
Tech. Officer: LARC/R C SINGLETERRY, JR., LARC/J W WILSON
CASE Category: 13 – PHYSICS

NASA'S UNIVERSITY PROGRAM

WYOMING

NCC 8 173 UNIV OF WISCONSIN - MILWAUKEE 9889
 PC12 PHEOCHROMOCYTOMA CELLS: A PROVEN MODEL SYSTEM FOR
 OPTIMIZING 3-D CELL CULTURE
 03/01/1999 - 11/30/2002 FY02: \$0 Total: \$151,876
Prin. Invest.: P I LELKES
Tech. Officer: JSC/D R MORRISON
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NGT 1 52217 UNIV OF WISCONSIN - MILWAUKEE 9890
 GRADUATE STUDENT RESEARCHERS PROGRAM (GSRP)
 06/01/1999 - 06/30/2002 FY02: \$0 Total: \$66,000
Prin. Invest.: S R BLATTNING, J W NORBURY
Tech. Officer: LARC/R C SINGLETERRY, JR., LARC/J W WILSON
CASE Category: 13 – PHYSICS

WYOMING

NAG 1 2164 UNIV OF WYOMING 9891
 EVALUATION OF SAGE II AND BALLOON-BARNE STRATO- SPHERIC AEROSOL
 MEASUREMENTS
 03/18/1999 - 12/31/2001 FY02: \$0 Total: \$138,058
Prin. Invest.: T DESHLER
Tech. Officer: LARC/G L MADDREA, LARC/L R POOLE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 01063 UNIV OF WYOMING 9892
 SYNTHETIC JET INTERACTION WITH A TURBULENT BOUNDARY LAYER
 FLOW
 04/11/2001 - 04/10/2002 FY02: \$0 Total: \$32,885
Prin. Invest.: D R SMITH
Tech. Officer: LARC/F J CHEN
CASE Category: 41 – AERONAUTICAL ENGR

NAG 2 1570 UNIV OF WYOMING 9893
 MECHANICAL VERIFICATION OF SYNTHESIZED CODE
 07/12/2002 - 10/14/2003 FY02: \$26,387 Total: \$26,387
Prin. Invest.: J R COWLES
Tech. Officer: ARC/M LOWRY, ARC/S LAU
CASE Category: 22 – COMPUTER SCIENCE

NAG 2 1576 UNIV OF WYOMING 9894
 IN SITU AEROSOL PROFILE MEASUREMENTS AND COMPARI SO NS WITH
 SAGE III AEROSOL EXTINCTION AND SURFACE A
 08/06/2002 - 11/30/2003 FY02: \$179,513 Total: \$179,513
Prin. Invest.: T DESHLER
Tech. Officer: ARC/C P SCOFIELD
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 4 208 UNIV OF WYOMING 9895
 REDUCTION OF BASE DRUG ON LAUNCH VEHICLES REDUCTION OF BASE
 DRUG ON LAUNCH VEHICLES
 05/22/2000 - 03/31/2002 FY02: \$0 Total: \$74,384
Prin. Invest.: D W NAUGHTON
Tech. Officer: DFRC/S A WHITMORE
CASE Category: 41 – AERONAUTICAL ENGR

NAG 5 3861 UNIV OF WYOMING 9896
 ASSESSMENT OF CLIMATIC AND ANTHROPOGENIC IMPACTS O CYCLE
 CONSTRAINED BY ATMOSPHERIC MEASUREMENTS AND
 02/03/1997 - 01/14/2002 FY02: \$0 Total: \$129,885
Prin. Invest.: E HUNT, JR.
Tech. Officer: GSFC/D E WICKLAND
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 8904 UNIV OF WYOMING 9897
 THERMAL EMISSION FROM LAVA FLOWS
 12/28/1999 - 12/31/2002 FY02: \$0 Total: \$14,400
Prin. Invest.: R HOWELL
Tech. Officer: GSFC/J GRANT
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 8917 UNIV OF WYOMING 9898
 MULTI-WAVELENGTH MODELING OF HOT SPOTS ON LO
 01/18/2000 - 12/31/2002 FY02: \$0 Total: \$20,100
Prin. Invest.: R N HOWELL
Tech. Officer: GSFC/D BOGAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 11191 UNIV OF WYOMING 9899
 TO ENHANCE GROUND-BASED OBSERVATIONAL SUPPORT FOR TRAN-
 SIENT ASTRONOMY RESEARCH
 09/07/2001 - 09/14/2002 FY02: \$0 Total: \$18,160
Prin. Invest.: R CANTERNA
Tech. Officer: GSFC/J P NORRIS
CASE Category: 11 – ASTRONOMY

NAG 5 11730 UNIV OF WYOMING 9900
 INTERPRETATION OF X-RAY AND INFRARED EMISSION FROM IO AND
 OTHER PLANETARY BODIES
 02/14/2002 - 02/14/2003 FY02: \$14,000 Total: \$14,000
Prin. Invest.: R R HOWELL
Tech. Officer: GSFC/D SENSKE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 9 1176 UNIV OF WYOMING 9901
 DEVELOP SECURE INTERNET BASED DATA TRANSFER SYSTEM FOR
 COUNTERMEASURES EVALUATION & VALIDATION PROJ
 11/15/1999 - 11/14/2001 FY02: \$0 Total: \$70,931
Prin. Invest.: R E GANTENBEIN
Tech. Officer: GSFC/C LUNDQUIST
CASE Category: 59 – LIFE SCIENCE, OTHER

NAS 1 18945 UNIV OF WYOMING 9902
 SAGE III SCIENCE INVESTIGATION SUPPORT P.I. - DR. GABOR VALI
 01/17/1990 - 01/31/2005 FY02: \$20,000 Total: \$458,300
Prin. Invest.: G VALI
Tech. Officer: LARC/G L MADDREA, LARC/L R MCMASTER
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 2 5315 UNIV OF WYOMING 9903
 AUTOMATIC FRINGE DETECTION FOR OIL FILM INTERFEROM ETRY SKIN-
 FRICTION MEASUREMENT
 04/12/1999 - 06/30/2001 FY02: \$0 Total: \$40,108
Prin. Invest.: J W NAUGHTON
Tech. Officer: ARC/D M DRIVER, ARC/G ZILLIAC
CASE Category: 41 – AERONAUTICAL ENGR

NCC 5 414 UNIV OF WYOMING 9904
 EPSCOR PREPARATION PROGRAM
 06/18/1999 - 08/31/2002 FY02: \$0 Total: \$428,236
Prin. Invest.: P JOHNSON
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

PUERTO RICO

NASA'S UNIVERSITY PROGRAM

NCC 5 578 UNIV OF WYOMING 9905
 WYOMING NASA EPSCOR PROGRAM
 10/31/2001 - 09/30/2004 FY02: \$494,053 Total: \$494,053
Prin. Invest.: P E JOHNSON
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30350 UNIV OF WYOMING 9906
 EFFECTS OF WIND ON SNOWPACK DISTRIBUTION & SUBSEQUENT
 MELT WATER ROUTING ON ECOSYSTEM PROPERTIES/STU
 08/24/2000 - 08/31/2003 FY02: \$0 Total: \$43,992
Prin. Invest.: W REINER
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40102 UNIV OF WYOMING 9907
 WYOMING SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 03/01/2001 - 02/28/2005 FY02: \$212,500 Total: \$461,504
Prin. Invest.: P E JOHNSON
Tech. Officer: GSFC/D D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 9 36 UNIV OF WYOMING 9908
 TRAINING GRANT
 06/04/1998 - 11/01/2001 FY02: \$0 Total: \$66,000
Prin. Invest.: R 3 GANTENBEIN
Tech. Officer: JSC/D G SICKOREZ
CASE Category: 22 – COMPUTER SCIENCE

PUERTO RICO

NAG 5 11711 POLYTECHNIC UNIV PUERTO RICO 9909
 LIVING WITH A STAR, FUTURE ON SPACE RESEARCH & EXP LORATION
 02/20/2002 - 02/28/2003 FY02: \$47,500 Total: \$47,500
Prin. Invest.: E LEAL-QUIROS
Tech. Officer: GSFC/G MOAK
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 2 1176 PONCE SCHOOL OF MEDICINE 9910
 MECHANISMS OF UV-B INDUCED FREE RADICAL OXIDATIVE DAMAGE IN
 BOVINE LENSES & HUMAN FIBROBLASTS
 02/11/1998 - 08/28/2002 FY02: -\$2,221 Total: \$297,779
Prin. Invest.: J L MATTA
Tech. Officer: ARC/H L D'ANTONI
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NAG 2 1385 PONCE SCHOOL OF MEDICINE 9911
 DNA REPAIR & SUSCEPTIBILITY TO UV-INDUCED BASAL CELL CARCINOMA
 IN PUERTO RICAN POPULATIONS
 10/26/1999 - 10/31/2001 FY02: -\$278 Total: \$199,722
Prin. Invest.: J L MATTA
Tech. Officer: ARC/H L D'ANTONI
CASE Category: 56 – MEDICAL

NCC 5 652 UNIV DEL ESTE 9912
 A MODEL: THE INST FOR ENHANCING KNOWLEDGE AND IMPROVING
 INSTRUCTION IN EARTH SCIENC
 09/04/2002 - 08/31/2005 FY02: \$197,602 Total: \$197,602
Prin. Invest.: M HUERTAS
Tech. Officer: HQ/M MATEU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 1 02074 UNIV OF PUERTO RICO - MAYAGUEZ 9913
 MICROWAVE REMOTE SENSING OF THE MICROPHYSICAL PROPERTIES OF
 CLOUDS
 03/25/2002 - 03/31/2005 FY02: \$99,989 Total: \$99,989
Prin. Invest.: S CRUZPOL
Tech. Officer: LARC/R A HATHAWAY
CASE Category: 31 – ATMOSPHERIC SCIENCE

NAG 3 2707 UNIV OF PUERTO RICO - MAYAGUEZ 9914
 MATHEMATICS, SCIENCE & TECHNOLOGY CIRCLES: A PILOT MATHEMATICS,
 SCIENCE & TECHNOLOGY CIRCLES: A PILO
 03/19/2002 - 01/31/2003 FY02: \$99,894 Total: \$99,894
Prin. Invest.: B RAMIREZ
Tech. Officer: GRC/R ROMERO
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 5302 UNIV OF PUERTO RICO - MAYAGUEZ 9915
 CORAL REEF MONITORING BY REMOTE SENSING OF CORAL SPAWN
 09/05/2000 - 12/31/2002 FY02: \$0 Total: \$17,000
Prin. Invest.: E WEIL, J LOPEZ, R ARMSTRONG
Tech. Officer: WFF/C W WRIGHT
CASE Category: 33 – OCEANOGRAPHY

NAG 5 6031 UNIV OF PUERTO RICO - MAYAGUEZ 9916
 DYNAMIC TOPOGRAPHY, GRAVITY, & SURFACE DEFORMATION : APPLICATION
 TO HAZARD ASSESSMENT OF ERUPTING IS
 10/02/1997 - 09/30/2002 FY02: \$0 Total: \$194,327
Prin. Invest.: G MATTIOLI
Tech. Officer: GSFC/H FREY
CASE Category: 32 – GEOLOGICAL SCIENCE

NAG 5 7198 UNIV OF PUERTO RICO - MAYAGUEZ 9917
 CATS-CARIBBEAN TIME SERIES: A SERIAL OBSERVING STATION IN THE
 NORTHEASTERN CARIBBEAN SEA
 05/04/1998 - 06/30/2001 FY02: \$0 Total: \$126,000
Prin. Invest.: J CORREDOR
Tech. Officer: GSFC/J W CABBELL
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NAG 5 10255 UNIV OF PUERTO RICO - MAYAGUEZ 9918
 CURRICULUM INTEGRATION THROUGH SOLAR EDUCATION PROGRAM
 (CITSEP)
 01/12/2001 - 01/14/2006 FY02: \$53,964 Total: \$109,070
Prin. Invest.: J G GONZALEZ LAGOA
Tech. Officer: GSFC/G COLON
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11296 UNIV OF PUERTO RICO - MAYAGUEZ 9919
 CATS CARIBBEAN TIME SERIES: A SERIAL OBSERVING STATION IN THE
 NORTHEASTERN CARIBBEAN SEA
 08/29/2001 - 09/30/2002 FY02: \$0 Total: \$65,200
Prin. Invest.: J CORREDOR
Tech. Officer: GSFC/J MARRA
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1389 UNIV OF PUERTO RICO - MAYAGUEZ 9920
 RES: THERMAL PROPERTIES OF MELT-GLASS TRANSITIONS OF ORGANIC
 COMPOUNDS FOR NONLINEAR OPTICAL APPLICATIONS
 07/09/1997 - 08/15/2001 FY02: \$0 Total: \$433,378
Prin. Invest.: A BARRIENTOS
Tech. Officer: MSFC/M VLASSE
CASE Category: 13 – PHYSICS

NAG10 243 UNIV OF PUERTO RICO - MAYAGUEZ 9921
 MASTAP - TEACHER ENHANCEMENT PROJECT
 04/15/1998 - 10/18/2001 FY02: \$0 Total: \$574,328
Prin. Invest.: B RAMIREZ
Tech. Officer: KSC/J DIGGS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG10 257 UNIV OF PUERTO RICO - MAYAGUEZ 9922
 SODIUM CHLORIDE AND NITRATE SEPARATION/RECOVERY FROM CELSS WASTES
 04/20/1999 - 04/19/2003 FY02: \$0 Total: \$264,146
Prin. Invest.: G COLON
Tech. Officer: KSC/J SAYER
CASE Category: 59 – LIFE SCIENCE, OTHER

NAG13 02031 UNIV OF PUERTO RICO - MAYAGUEZ 9923
 INVESTIGATION OF FLOW-INDUCED VIBRATION AT THE E2 FACILITY
 01/23/2002 - 12/31/2003 FY02: \$102,207 Total: \$102,207
Prin. Invest.: Y JIA
Tech. Officer: SSC/R TRAVIS
CASE Category: 47 – METAL & MATERIALS ENGR

NAG13 99029 UNIV OF PUERTO RICO - MAYAGUEZ 9924
 DEVELOPMENT AND VALIDATION OF BIO-OPTICAL ALGORITHMS IN COASTAL WATER
 09/15/1999 - 09/25/2002 FY02: \$0 Total: \$199,980
Prin. Invest.: F GILBES
Tech. Officer: SSC/R TRAVIS
CASE Category: 51 – BIOLOGY (EXCLUDING ENVIR)

NCC 5 215 UNIV OF PUERTO RICO - MAYAGUEZ 9925
 "TROPICAL ATMOSPHERIC SCIENCES CENTER" / THE NASA/PUERTO RICO EPSCOR PROGRAM.
 07/07/1997 - 06/30/2002 FY02: \$0 Total: \$1,800,000
Prin. Invest.: B G WEINER
Tech. Officer: GSFC/D DETROYE
CASE Category: 31 – ATMOSPHERIC SCIENCE

NCC 5 340 UNIV OF PUERTO RICO - MAYAGUEZ 9926
 PARTNERSHIP FOR SPATIAL AND COMPUTATIONAL RESEARCH
 06/22/1998 - 05/31/2003 FY02: \$553,095 Total: \$2,391,287
Prin. Invest.: L MORELL
Tech. Officer: GSFC/M MATHEWS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 518 UNIV OF PUERTO RICO - MAYAGUEZ 9927
 TROPICAL CENTER FOR EARTH AND SPACE STUDIES
 10/05/2000 - 09/30/2005 FY02: \$2,120,278 Total: \$3,311,259
Prin. Invest.: R FERNANDEZ-SEIN
Tech. Officer: GSFC/D L WILLIAMS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 5 30364 UNIV OF PUERTO RICO - MAYAGUEZ 9928
 THEORETICAL QUANTUM STUDY OF THE DISSOCIATION & ADSORPTION DYNAMICS OF HC1 ON STRATOSPHERIC AEROSOL
 08/24/2000 - 08/31/2001 FY02: \$0 Total: \$22,000
Prin. Invest.: A J CRUZ
Tech. Officer: GSFC/M WEI
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

NGT 5 40012 UNIV OF PUERTO RICO - MAYAGUEZ 9929
 TO SUPPORT PROGRAMS AND FELLOWSHIPS UNDER THE NATI COLL AND FELLOWSHIP PROGRAM.
 01/30/1997 - 08/31/2001 FY02: \$0 Total: \$1,150,000
Prin. Invest.: D G WEINER
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT13 52746 UNIV OF PUERTO RICO - MAYAGUEZ 9930
 VERTICAL VARIABILITY IN BIO-OPTICAL PROPERTIES OF COASTAL WATERS -ROLE IN DEV OF NEW REMOTE SENSING
 09/25/2000 - 01/31/2004 FY02: \$24,000 Total: \$57,000
Prin. Invest.: M ROSADO
Tech. Officer: SSC/R TRAVIS
CASE Category: 22 – COMPUTER SCIENCE

NAG 3 2636 UNIV OF PUERTO RICO HUMACAO UNIV COLL 9931
 RF PROPAGATION EFFECTS IN TROPICAL RAIN ZONE RF PROPAGATION EFFECTS IN TROPICAL RAIN ZONE
 09/24/2001 - 09/14/2002 FY02: \$40,988 Total: \$50,988
Prin. Invest.: J C CERSOSIMO
Tech. Officer: GRC/R ACOSTA
CASE Category: 45 – ELECTRICAL ENGR

NCC 3 963 UNIV OF PUERTO RICO HUMACAO UNIV COLL 9932
 POLYMER NANOFIBERS FOR NANOELECTRONIC FIELD EFFECT TRANSISTORS
 05/06/2002 - 12/01/2002 FY02: \$19,623 Total: \$19,623
Prin. Invest.: N J PINTO
Tech. Officer: GRC/F MIRANDA
CASE Category: 13 – PHYSICS

NAG 3 2676 UNIV OF PUERTO RICO-RIO PIEDRAS 9933
 NANO-CRYSTALLINE LITHIUM ION INTERCALATED TRANSITION METAL OSIDE THIN FILMS FOR RECHARGEABLE BATTERY
 01/25/2002 - 12/11/2004 FY02: \$99,729 Total: \$99,729
Prin. Invest.: R S KATIYAR
Tech. Officer: GRC/T B MILLER
CASE Category: 12 – CHEMISTRY

NAG 3 2749 UNIV OF PUERTO RICO-RIO PIEDRAS 9934
 TRAINING FOR EXCELLENCE ON NANOTECHNOLOGY EDUCATION AND RESEARCH (TENER)
 03/27/2002 - 02/28/2003 FY02: \$99,811 Total: \$99,811
Prin. Invest.: C R CABRERA
Tech. Officer: GRC/M E PEREZ-DAVIS
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 3 2769 UNIV OF PUERTO RICO-RIO PIEDRAS 9935
 SELF-ASSEMBLY OF CARBON NANOTUBES ON Pt AND Si ELECTRODES
 04/15/2002 - 04/14/2003 FY02: \$24,947 Total: \$24,947
Prin. Invest.: C CABRERA
Tech. Officer: GRC/T B MILLER
CASE Category: 12 – CHEMISTRY

NAG 5 9050 UNIV OF PUERTO RICO-RIO PIEDRAS 9936
 INTERACTIONS AND DIVERSITY: EARTH SYSTEM SCIENCE & BEYOND
 03/01/2000 - 02/14/2003 FY02: \$69,890 Total: \$119,890
Prin. Invest.: I L APONTE-AVELLANE
Tech. Officer: GSFC/N KHAZENIE
CASE Category: 39 – ENVIRONMENTAL SCI, OTHER

CANADA

NASA'S UNIVERSITY PROGRAM

NAG 5 10321 UNIV OF PUERTO RICO-RIO PIEDRAS 9937
 FUNDING FOR GRANT FOR PROPOSAL NUMBER NRA-99-05-05 5-1085
 TITLED "DIAMOND ULTRAVIOLET SENSORS
 01/31/2001 - 01/31/2004 FY02: \$155,737 Total: \$416,620
Prin. Invest.: D MORELL
Tech. Officer: GSFC/B MOTT
CASE Category: 19 – PHYSICAL SCIENCE, OTHER

NAG 5 11814 UNIV OF PUERTO RICO-RIO PIEDRAS 9938
 UPR-RIO PIEDRAS BUSINESS ADMINISTRATION INTERNSHIP PROGRAM
 03/05/2002 - 03/14/2003 FY02: \$42,449 Total: \$42,449
Prin. Invest.: J AYALA
Tech. Officer: GSFC/M MENCHAN
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 8 1709 UNIV OF PUERTO RICO-RIO PIEDRAS 9939
 LAND MANAGEMENT IN THE TROPIC AND ITS EFFECTS ON THE GLOBAL
 ENVIRONMENT
 03/20/2000 - 03/19/2003 FY02: \$500,000 Total: \$1,500,000
Prin. Invest.: B R WEINER
Tech. Officer: MSFC/W J LOVE
CASE Category: 54 – ENVIRONMENTAL BIOLOGY

NCC 5 407 UNIV OF PUERTO RICO-RIO PIEDRAS 9940
 NASA EPSCOR: PREPARATORY GRANT PROPOSAL
 05/17/1999 - 07/31/2002 FY02: \$0 Total: \$450,000
Prin. Invest.: B R WEINER
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NCC 5 595 UNIV OF PUERTO RICO-RIO PIEDRAS 9941
 PUERTO RICO NASA EPSCOR PROGRAM
 09/24/2001 - 08/31/2004 FY02: \$0 Total: \$350,000
Prin. Invest.: B WEINER
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NGT 3 52376 UNIV OF PUERTO RICO-RIO PIEDRAS 9942
 GRADUATE STUDENT RESEARCH
 06/08/2001 - 08/31/2003 FY02: \$24,000 Total: \$46,000
Prin. Invest.: C R CABRERA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 12 – CHEMISTRY

NGT 3 52381 UNIV OF PUERTO RICO-RIO PIEDRAS 9943
 GRADUATE STUDENT RESEARCHERS PROGRAM - DEVELOPMENT OF A
 METHODOLOGY FOR THE PREPARATION OF ORDERED
 07/09/2002 - 07/31/2003 FY02: \$24,000 Total: \$24,000
Prin. Invest.: C R CABRERA
Tech. Officer: GRC/F J MONTEGANI
CASE Category: 12 – CHEMISTRY

NGT 5 40091 UNIV OF PUERTO RICO-RIO PIEDRAS 9944
 PUERTO RICO SPACE GRANT COLL AND FELLOWSHIP PROGRAM
 02/22/2001 - 02/28/2005 FY02: \$406,250 Total: \$812,500
Prin. Invest.: W WEINER
Tech. Officer: GSFC/D DETROYE
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

NAG 5 10240 UNIV OF TURABO 9945
 ENGINEERING PREPARATORY PROJECT FOR HISPANIC HIGH SCHOOL
 STUDENTS
 01/05/2001 - 02/28/2002 FY02: \$0 Total: \$192,998
Prin. Invest.: A COURTIER
Tech. Officer: GSFC/M MATEU
CASE Category: 49 – ENGINEERING, OTHER

NAG 5 11727 UNIV OF TURABO 9946
 ENGINEERING PREPARATORY PROJECT FOR HISPANIC HIGH SCHOOL
 STUDENTS
 02/07/2002 - 02/28/2003 FY02: \$192,998 Total: \$192,998
Prin. Invest.: A M COURTIE
Tech. Officer: GSFC/M MATEAU
CASE Category: 99 – MULTI INTERDISCIPL, OTHER

CANADA

NAG 5 9875 BROCK UNIV 9949
 U.S.-CANADA: FLUORESCENCE-BASED DIAGNOSTIC OF IRON LIMITATION
 FOR ANALYSIS OF NATURAL PHYTOPLANKTON
 08/22/2000 - 08/31/2001 FY02: \$0 Total: \$21,000
Prin. Invest.: D BRUCE
Tech. Officer: GSFC/M BEHRENFELD
CASE Category: 32 – GEOLOGICAL SCIENCE

GREAT BRITAIN

NAGW 2127 UNIV OF WALES 9950
 SOLUTION ALGORITHMS FOR HIGH SPEED COMPRESSIBLE FLOWS
 06/15/1990 - 04/30/2002 FY02: \$0 Total: \$672,400
Prin. Invest.: O C ZIENKIEWICZ
Tech. Officer: ARC/K K GUPTA, ARC/K L PETERSEN
CASE Category: 41 – AERONAUTICAL ENGR

NETHERLANDS

NAG 1 2129 DELFT UNIV OF TECHNOLOGY-NETHERLANDS 9951
 INVESTIGATION OF THE SENSITIVITY OF THE BUCKLING LOAD TO
 VARIATIONS IN DESIGN PARAMETERS AND GEOMET
 01/14/1999 - 06/30/2002 FY02: \$0 Total: \$75,001
Prin. Invest.: J ARBOCZ
Tech. Officer: LARC/J H STARNES, JR., LARC/M P NEMETH
CASE Category: 41 – AERONAUTICAL ENGR

NEW ZEALAND

NAG 2 1395 UNIV OF OTAGO 9952
 THE ROLE OF AIRCRAFT ACCIDENT AND INCIDENT CASE HISTORIES IN
 AVIATION SAFETY AND TRAINING
 02/03/2000 - 01/31/2002 FY02: \$34,296 Total: \$205,780
Prin. Invest.: D O'HARE
Tech. Officer: ARC/I BARSHI
CASE Category: 41 – AERONAUTICAL ENGR

PERU

NAS 5 99121 UNIV NACIONAL DE SAN AGUSTIN - AREQUIPA 9953
 OPERATE & MAINTAIN LASER TRACKING STATION AT AREQUIPA PERU
 03/18/1999 - 01/23/2002 FY02: \$154,018 Total: \$583,395
Prin. Invest.: N APPLICABLE
Tech. Officer: GSFC/D L CARTER
CASE Category: 32 – GEOLOGICAL SCIENCE

NCC 1 01005 MOSCOW INST OF PHYSICS & TECHNOLOGY 9948
 INVEST A/C WAKE MOD 4 MITIGATN/REDUCTN OF HARMFUL ATMOSPH
 EFFECTS SUBSONIC/SUPRSONIC A/C ENGINE EXH
 09/20/2001 - 09/19/2004 FY02: \$0 Total: \$100,000
Prin. Invest.: M L KOGAN, W L GROSS
Tech. Officer: LARC/W L GROSS, LARC/R S ECKMAN
CASE Category: 31 – ATMOSPHERIC SCIENCE

RUSSIA

NCC 1 353 ALL RUSSIA INST. OF AVIATION METALS (VIAM) 9947
 EVALUATION OF LIGHTWEIGHT ALLOYS & ADVANCED MATERIALS PRO-
 CESSING FOR AIRFRAMS & SPACE VEHICLE
 01/13/2000 - 12/31/2002 FY02: \$12,000 Total: \$234,000
Prin. Invest.: J FRIDLYANDER
Tech. Officer: LARC/R K BIRD
CASE Category: 47 – METAL & MATERIALS ENGR

NASA'S UNIVERSITY PROGRAM APPENDIX CROSS INDEX BY FIELD OF SCIENCE AND ENGINEERING

The fields used here are specified by Amendment J, "Standard Classification of Fields of Science and Engineering," to Office of Management and Budget (OMB) Circular A-46, "Standards for Statistical Surveys." Field codes are interpreted as follows:

<i>PHSICAL SCIENCES</i>	<i>ENVIRONMENTAL SCIENCES</i> (Terrestrial and extraterrestrial)	<i>LIFE SCIENCES</i>	<i>SOCIAL SCIENCES</i>
11 ASTRONOMY	31 ATMOSPHERIC SCIENCES	51 BIOLOGICAL SCIENCES	71 ANTHROPOLOGY
12 CHEMISTRY	32 GEOLOGICAL SCIENCES	54 ENVIRONMENTAL BIOLOGY	72 ECONOMICS
13 PHYSICS	33 OCEANOGRAPHY	55 AGRICULTURAL SCIENCES	73 HISTORY
19 PHYSICAL SCIENCES, NEC*	39 ENVIRONMENTAL SCIENCES, NEC*	56 MEDICAL SCIENCES	74 LINGUISTICS
		59 LIFE SCIENCES, NEC*	75 POLITICAL SCIENCE
			76 SOCIOLOGY
			79 SOCIAL SCIENCE, NEC*
<i>MATHEMATICAL/COMPUTER SCIENCE</i>	<i>ENGINEERING</i>	<i>PSYCHOLOGY</i>	<i>OTHER SCIENCES**</i>
21 MATHEMATICS	41 AERONAUTICAL	61 BIOLOGICAL	99 ALL DISCIPLINE(S)
22 COMPUTER SCIENCES	42 ASTRONAUTICAL	62 SOCIAL SCIENCES	
29 MATHEMATICAL COMPUTER SCIENCES, NEC*	43 CHEMICAL	69 PSYCHOLOGICAL, NEC*	
	44 CIVIL		
	45 ELECTRICAL		
	46 MECHANICAL		
	47 METALLURGY AND MATERIALS		
	49 ENGINEERING, NEC*		

* Not elsewhere classified (for interdisciplinary projects and others not listed by discipline name)

** For interdisciplinary projects which cannot be classified within any of the preceding main fields

Abbreviations used in the *Technical Officer Location* column are discussed in the prefatory pages.

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	ARIZONA STATE UNIV	D BOGAN	GSFC	R GREELY	NAG 5 8897	20
11	ARIZONA STATE UNIV	D BOGAN	GSFC	S A FAGENTS	NAG 5 8898	20
11	ARIZONA STATE UNIV	D K WEST	GSFC	S STARRFIELD	NAG 5 6741	19
11	ARIZONA STATE UNIV	D K WEST	GSFC	S G STARRFIELD	NAG 5 8278	19
11	ARIZONA STATE UNIV	D K WEST	GSFC	M POLITANO	NAG 5 8481	19
11	ARIZONA STATE UNIV	D NAVA	GSFC	T G SHARP	NAG 5 9381	20
11	ARIZONA STATE UNIV	D SENSKE	GSFC	R GREELY	NAG 5 10460	21
11	ARIZONA STATE UNIV	G SONNEBORN	GSFC	A P COWLEY	NAG 5 8805	20
11	ARIZONA STATE UNIV	G SONNEBORN	GSFC	S G STARRFIELD	NAG 5 9395	20
11	ARIZONA STATE UNIV	G SONNEBORN	GSFC	J B HOLBERG	NAG 5 10316	21
11	ARIZONA STATE UNIV	J BOYCE	GSFC	D R HUSS	NAG 5 8173	19
11	ARIZONA STATE UNIV	J BOYCE	GSFC	L A LESHIN	NAG 5 8286	19
11	ARIZONA STATE UNIV	J BOYCE	GSFC	R GREELEY	NAG 5 8721	20
11	ARIZONA STATE UNIV	J BOYCE	GSFC	P R BUSECK	NAG 5 9352	20
11	ARIZONA STATE UNIV	J BOYCE	GSFC	R GREELY	NAG 5 9773	20
11	ARIZONA STATE UNIV	J BOYCE	GSFC	S WYCKOFF	NAG 5 10077	20
11	ARIZONA STATE UNIV	J BOYCE	GSFC	P R CHRISTIANSON	NAG 5 10310	21
11	ARIZONA STATE UNIV	J BOYCE	GSFC	G HUSS	NAG 5 10449	21
11	ARIZONA STATE UNIV	J BOYCE	GSFC	H VANHALA	NAG 5 11566	21
11	ARIZONA STATE UNIV	J BOYCE	GSFC	G R HUSS	NAG 5 11770	22
11	ARIZONA STATE UNIV	J BOYCE	GSFC	L A LESHIN	NAG 5 11809	22
11	ARIZONA STATE UNIV	J BOYCE	GSFC	P WILLIAMS	NAG 5 11899	22
11	ARIZONA STATE UNIV	J BOYCE	GSFC	M A PRESLEY	NAG 5 12141	22
11	ARIZONA STATE UNIV	J BOYCE	GSFC	R GREELEY	NAG 5 12142	22
11	ARIZONA STATE UNIV	J GRANT	GSFC	R GREELEY	NAG 5 8948	20
11	ARIZONA STATE UNIV	J M BOYCE	GSFC	S WYCKOFF	NAG 5 10753	21
11	ARIZONA STATE UNIV	J M BOYCE	GSFC	S FAGENTS	NAG 5 11199	21
11	ARIZONA STATE UNIV	M GREENHOUSE	GSFC	R A WINDHORST	NAG 5 12460	22
11	ARIZONA STATE UNIV	R OLIVERSEN	GSFC	S STARRFIELD	NAG 5 9263	20
11	ARIZONA STATE UNIV	J BOYCE	HQ	L LESHIN	NAG 5 7540	19
11	ARIZONA STATE UNIV	J BOYCE	HQ	D R HUSS	NAG 5 8158	19
11	ARIZONA STATE UNIV	J BOYCE	HQ	R GREELEY	NAG 5 8453	19
11	AUBURN UNIV	D BRUNNER	GSFC	H W BRANDHORST	NCC 5 459	4

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	AUBURN UNIV	D EVANS	GSFC	D LIN	NAG 5 8081	3
11	BLOOMSBURG UNIV	J GRANT	GSFC	M K SHEPARD	NAG 5 7964	431
11	BOSTON COLL	R J OLIVERSEN	GSFC	S J CAREY	NAG 5 10824	275
11	BOSTON UNIV	D WEST	GSFC	J R MATTOX	NAG 5 3384	276
11	BOSTON UNIV	J LING	GSFC	N CROOKER	NAG 5 6658	276
11	BOSTON UNIV	J LING	GSFC	N U CROOKER	NAG 5 7049	276
11	BOSTON UNIV	J M BOYCE	GSFC	M MENDILLO	NAG 5 11077	278
11	BOSTON UNIV	J R BYRD	GSFC	P CHAKRABARTI	NAG 5 10801	277
11	BOSTON UNIV	R J OLIVERSEN	GSFC	J M JACKSON	NAG 5 10808	278
11	BOSTON UNIV	R J OLIVERSEN	GSFC	A P MARSCHER	NAG 5 11811	278
11	BOSTON UNIV	R OLIVERSEN	GSFC	A MARSCHER	NAG 5 9161	277
11	BOSTON UNIV	T MORGAN	GSFC	J BAUMGARDNER	NAG 5 10496	277
11	BOWIE STATE UNIV	J TILTON	GSFC	M MAREBOYANA	NAG 5 2829	237
11	BROWN UNIV	B CAMPBELL	GSFC	P H SCHULTZ	NAG 5 7082	453
11	BROWN UNIV	C STAHL	GSFC	G SEIDEL	NAG 5 10383	454
11	BROWN UNIV	D BOGAN	GSFC	D T PAPPALARDO	NAG 5 8046	453
11	BROWN UNIV	D NAVA	GSFC	M J RUTHERFRD	NAG 5 9522	454
11	BROWN UNIV	D SENSKE	GSFC	P H SCHULTZ	NAG 5 10188	454
11	BROWN UNIV	D SENSKE	GSFC	J HEAD	NAG 5 10690	454
11	BROWN UNIV	G STRINGFELLOW	GSFC	G TUCKER	NAG 5 9453	454
11	BROWN UNIV	J BOYCE	GSFC	D C HESS	NAG 5 8174	453
11	BROWN UNIV	J BOYCE	GSFC	J F MUSTARD	NAG 5 9589	454
11	BROWN UNIV	J BOYCE	GSFC	C M PIETERS	NAG 5 10010	454
11	BROWN UNIV	J BOYCE	GSFC	J W HEAD III	NAG 5 10031	454
11	BROWN UNIV	J BOYCE	GSFC	M J RUTHERFORD	NAG 5 12225	455
11	BROWN UNIV	J BOYCE	GSFC	M KRESLAVSKY	NAG 5 12286	455
11	BROWN UNIV	J BOYCE	GSFC	J HEAD	NAG 5 12474	455
11	BROWN UNIV	J M BOYCE	GSFC	J HEAD	NAG 5 10573	454
11	BROWN UNIV	L SMITH	GSFC	P H SCHULTZ	NGT 5 50166	456
11	BROWN UNIV	M MEYER	GSFC	Y HUANG	NAG 5 10665	454
11	BROWN UNIV	R BEEBE	GSFC	D T PAPPALARDO	NAG 5 7866	453
11	BROWN UNIV	J BOYCE	HQ	M J RUTHERFORD	NAG 5 8181	453
11	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	S BOGGS	NAG 5 5286	42
11	CALIFORNIA INST OF TECH	B BETTS	GSFC	J KIRSCHVINK	NAG 5 10410	45
11	CALIFORNIA INST OF TECH	B CAMPBELL	GSFC	J BEAUCHAMP	NAG 5 7081	43
11	CALIFORNIA INST OF TECH	B WORRALL	GSFC	E STONE	NAG 5 6912	43
11	CALIFORNIA INST OF TECH	D K WEST	GSFC	S KULKARNI	NAG 5 6402	42
11	CALIFORNIA INST OF TECH	D K WEST	GSFC	R BLANDFORD	NAG 5 7007	43
11	CALIFORNIA INST OF TECH	D K WEST	GSFC	E PHINNEY	NAG 5 7034	43
11	CALIFORNIA INST OF TECH	D K WEST	GSFC	J M CARPENTER	NAG 5 8217	43
11	CALIFORNIA INST OF TECH	D NAVA	GSFC	D S BURNETT	NAG 5 4319	41
11	CALIFORNIA INST OF TECH	D SENSKE	GSFC	T AHRENS	NAG 5 10208	45
11	CALIFORNIA INST OF TECH	E J WOLLACK	GSFC	A E LANGE	NAG 5 10317	45
11	CALIFORNIA INST OF TECH	F A HERRERO	GSFC	S BOGGS	NAG 5 8743	43
11	CALIFORNIA INST OF TECH	F SNOW	GSFC	C MARTIN	NAG 5 98034	48
11	CALIFORNIA INST OF TECH	G STRINGFELLOW	GSFC	A LANGE	NAG 5 9344	44
11	CALIFORNIA INST OF TECH	H HASAN	GSFC	P LINDBLOM	NAG 5 4093	41
11	CALIFORNIA INST OF TECH	J A GRANT	GSFC	T J AHRENS	NAG 5 8907	43
11	CALIFORNIA INST OF TECH	J A GRANT	GSFC	T AHRENS	NAG 5 8915	43
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	S KULKARNI	NAG 5 6981	43
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	D A PAPANASTASSIOU	NAG 5 8251	43
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	S R KULKARNI	NAG 5 8318	43
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	S SARGENT	NAG 5 9530	44
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	A P INGERSOL	NAG 5 9601	44
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	B C MURRAY	NAG 5 9606	44
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	G J WASSERBURG	NAG 5 10293	45
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	G BLAKE	NAG 5 10467	45
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	D STEVENSON	NAG 5 10602	45
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	Y YUNG	NAG 5 10724	46
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	A INGERSOLL	NAG 5 11288	46
11	CALIFORNIA INST OF TECH	J BOYCE	GSFC	M RICHARDSON	NAG 5 12156	47
11	CALIFORNIA INST OF TECH	J BOYCE, SR	GSFC	G A BLAKE	NAG 5 9434	44
11	CALIFORNIA INST OF TECH	J M BOYCE	GSFC	S KULKARNI	NAG 5 10558	45
11	CALIFORNIA INST OF TECH	J M BOYCE	GSFC	D STEVENSON	NAG 5 10587	45
11	CALIFORNIA INST OF TECH	J R BYRD	GSFC	D A MEWALDT	NAG 5 10804	46
11	CALIFORNIA INST OF TECH	M MEYER	GSFC	J L KIRSCHVINK	NAG 5 10618	45

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	CALIFORNIA INST OF TECH	M SALAMON	GSFC	M P KAMIONKOWSKI	NAG 5 11985	47
11	CALIFORNIA INST OF TECH	M SALAMON	GSFC	R D BLANDFORD	NAG 5 12032	47
11	CALIFORNIA INST OF TECH	M SALAMON	GSFC	P M GOLDREICH	NAG 5 12037	47
11	CALIFORNIA INST OF TECH	P E HUNTER	GSFC	S G DJORGOVSKI	NAG 5 12118	47
11	CALIFORNIA INST OF TECH	R F MUSHOTZKY	GSFC	F WALTER	NAG 5 9919	44
11	CALIFORNIA INST OF TECH	R H PLESS	GSFC	C MARTIN	NAG 5 5052	42
11	CALIFORNIA INST OF TECH	R J OLIVERSEN	GSFC	M P KAMIONKOWSKI	NAG 5 9821	44
11	CALIFORNIA INST OF TECH	R J OLIVERSEN	GSFC	E PHINNEY	NAG 5 10707	45
11	CALIFORNIA INST OF TECH	R J OLIVERSEN	GSFC	R J BRUNNER	NAG 5 10885	46
11	CALIFORNIA INST OF TECH	R J OLIVERSEN	GSFC	D THOMPSON	NAG 5 10955	46
11	CALIFORNIA INST OF TECH	R J OLIVERSEN	GSFC	A MARSTON	NAG 5 11388	46
11	CALIFORNIA INST OF TECH	R J OLIVERSEN	GSFC	L HILLENBRAND	NAG 5 11645	47
11	CALIFORNIA INST OF TECH	R MUSHOTZKY	GSFC	F A HARRISON	NAG 5 10047	44
11	CALIFORNIA INST OF TECH	R MUSHOTZKY	GSFC	R E RUTLEDGE	NAG 5 11419	46
11	CALIFORNIA INST OF TECH	R OLIVERSEN	GSFC	R SARI	NAG 5 10761	46
11	CALIFORNIA INST OF TECH	T MORGAN	GSFC	E SERABYN	NAG 5 6816	42
11	CALIFORNIA INST OF TECH	A NURRIDIN	HQ	S G DJORGOVSKI	NGT 5 50215	48
11	CALIFORNIA STATE UNIV - FULLERTON	G SONNEBORN	GSFC	K CHEN	NAG 5 10312	50
11	CALIFORNIA STATE UNIV - FULLERTON	J BOYCE	GSFC	D WOODLUM	NAG 5 9433	50
11	CALIFORNIA STATE UNIV - FULLERTON	J BOYCE	GSFC	D WOOLUM	NAG 5 10695	50
11	CALIFORNIA STATE UNIV - LOS ANGELES	D BOGAN	GSFC	K KHURANA	NAG 5 8945	51
11	CALIFORNIA STATE UNIV - NORTHRIDGE	J SHARBER	GSFC	D A CHAPMAN	NAG 5 7778	51
11	CALIFORNIA STATE UNIV - NORTHRIDGE	W J WAGNER	GSFC	G A CHAPMAN	NAG 5 4973	51
11	CALIFORNIA STATE UNIV - NORTHRIDGE	W WAGNER	GSFC	G A CHAPMAN	NAG 5 7191	51
11	CARNEGIE - MELLON UNIV	B H HANKS	GSFC	T KANADE	NCC 5 223	435
11	CARNEGIE - MELLON UNIV	D K WEST	GSFC	A K ROMER	NAG 5 7926	432
11	CARNEGIE - MELLON UNIV	D LAVERY	GSFC	W WHITTAKER	NAG 5 7707	432
11	CARNEGIE - MELLON UNIV	D WEST	GSFC	R NICHOL	NAG 5 6548	432
11	CARNEGIE - MELLON UNIV	N WHITE	GSFC	R E GRIFFITHS	NAG 5 9902	433
11	CARNEGIE - MELLON UNIV	P M ATKINS	GSFC	A F PTAK	NAG 5 9922	433
11	CARNEGIE - MELLON UNIV	R F MUSHOTZKY	GSFC	A ROMER	NAG 5 9899	433
11	CARNEGIE - MELLON UNIV	R J OLIVERSEN	GSFC	T MIYAJI	NAG 5 10875	433
11	CARNEGIE - MELLON UNIV	R J OLIVERSEN	GSFC	A K ROMER	NAG 5 11634	433
11	CARNEGIE - MELLON UNIV	R MUSHOTZKY	GSFC	R C NICHOL	NAG 5 10014	433
11	CARNEGIE - MELLON UNIV	R MUSHOTZKY	GSFC	T MIYAJI	NAG 5 10043	433
11	CARNEGIE - MELLON UNIV	R MUSHOTZKY	GSFC	A F PTAK	NAG 5 10170	433
11	CARNEGIE - MELLON UNIV	R MUSHOTZKY	GSFC	T DIMATTEO	NAG 5 11888	433
11	CASE WESTERN RESERVE UNIV	D K WEST	GSFC	C MIHOS	NAG 5 7019	402
11	CASE WESTERN RESERVE UNIV	J BOYCE	GSFC	R HARVEY	NAG 5 11122	402
11	CASE WESTERN RESERVE UNIV	J BOYCE	HQ	R HARVEY	NAG 5 6715	402
11	CHRISTOPHER NEWPORT UNIV	D STARR	GSFC	N POUGATCHEV	NAG 5 6503	503
11	CITY U COL OF NY YORK COLL	P SAKIMOTO	GSFC	M SPERGEL	NAG 5 10152	365
11	CITY UNIV OF NY SYSTEM	P R HOUSER	GSFC	A FREI	NAG 5 10645	367
11	CLARK ATLANTA UNIV	R BEEBE	GSFC	S TAYAL	NAG 5 6889	179
11	CLEMSON UNIV - CLEMSON	J BOYCE	GSFC	D D CLAYTON	NAG 5 11808	459
11	CLEMSON UNIV - CLEMSON	J P NORRIS	GSFC	M D LEISING	NAG 5 8075	458
11	CLEMSON UNIV - CLEMSON	J P NORRIS	GSFC	L THE	NAG 5 9702	459
11	CLEMSON UNIV - CLEMSON	R J OLIVERSEN	GSFC	M D LEISING	NAG 5 10764	459
11	CLEMSON UNIV - CLEMSON	J BOYCE	HQ	D D CLAYTON	NAG 5 8448	458
11	COLL OF CHARLESTON	G SONNEBORN	GSFC	J E NEFF	NAG 5 10313	460
11	COLL OF CHARLESTON	J BOYCE	GSFC	C R COOMBS	NAG 5 7183	460
11	COLL OF CHARLESTON	J M BOYCE	GSFC	C RUNYON	NAG 5 10633	460
11	COLL OF CHARLESTON	J ROSENDHAL	GSFC	M COLGAN	NCC 5 263	460
11	COLL OF CHARLESTON	R J OLIVERSEN	GSFC	T W GIBLIN	NAG 5 11017	460
11	COLL OF WOOSTER	G SONNEBORN	GSFC	B BOROSON	NAG 5 10396	408
11	COLL OF WOOSTER	K HARTNETT	GSFC	B BOROSON	NAG 5 10233	408
11	COLORADO SCH OF MINES	J BOYCE	GSFC	M B DUKE	NAG 5 9684	118
11	COLUMBIA UNIV	B A MERRITT	GSFC	E APRILE	NAG 5 5280	368
11	COLUMBIA UNIV	D F MUSHOTZKY	GSFC	F B PAERLES	NAG 5 9929	370
11	COLUMBIA UNIV	D F MUTSHOTZKY	GSFC	D J HELFAND	NAG 5 9928	370
11	COLUMBIA UNIV	D K WEST	GSFC	A P CROTTS	NAG 5 3502	367
11	COLUMBIA UNIV	D K WEST	GSFC	D HELFAND	NAG 5 6035	368
11	COLUMBIA UNIV	D K WEST	GSFC	J P HALPERN	NAG 5 7814	368
11	COLUMBIA UNIV	D K WEST	GSFC	E V GOTTHELF	NAG 5 7935	369
11	COLUMBIA UNIV	D K WEST	GSFC	J O PATTERSON	NAG 5 7977	369
11	COLUMBIA UNIV	J BOYCE	GSFC	D LONGHI	NAG 5 4649	368

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	COLUMBIA UNIV	J P NORRIS	GSFC	U OBERLACK	NAG 5 9653	369
11	COLUMBIA UNIV	N E WHITE	GSFC	S M KAHN	NAG 5 7737	368
11	COLUMBIA UNIV	P ATKINS	GSFC	D HELFAND	NAG 5 9870	369
11	COLUMBIA UNIV	R F MUSHOTZKY	GSFC	F B PAERELS	NAG 5 9898	370
11	COLUMBIA UNIV	R F MUSHOTZKY	GSFC	D J HELFAND	NAG 5 9946	370
11	COLUMBIA UNIV	R J OLIVERSEN	GSFC	J P HALPERN	NAG 5 9094	369
11	COLUMBIA UNIV	R J OLIVERSEN	GSFC	J P HALPERN	NAG 5 9095	369
11	COLUMBIA UNIV	R J OLIVERSEN	GSFC	E V GOTTHELF	NAG 5 9136	369
11	COLUMBIA UNIV	R M MUSHOTZKY	GSFC	E V GOTTHELF	NAG 5 9911	370
11	COLUMBIA UNIV	R MUSHOTZKY	GSFC	J P HALPERN	NAG 5 9950	370
11	COLUMBIA UNIV	R MUSHOTZKY	GSFC	C A SCHARF	NAG 5 10082	370
11	CORNELL UNIV	D K WEST	GSFC	T J LOREDO	NAG 5 3427	373
11	CORNELL UNIV	D K WEST	GSFC	D F CHERNOFF	NAG 5 8356	374
11	CORNELL UNIV	D K WEST	GSFC	D LAI	NAG 5 8484	374
11	CORNELL UNIV	D SENSKE	GSFC	B E CLARK	NAG 5 10289	375
11	CORNELL UNIV	D SENSKE	GSFC	J VEVERKA	NAG 5 10434	375
11	CORNELL UNIV	D SENSKE	GSFC	J F BELL	NAG 5 10636	375
11	CORNELL UNIV	F M FLASAR	GSFC	B J CONRATH	NCC 5 375	377
11	CORNELL UNIV	F M FLASAR	GSFC	P J GIERASCH	NCC 5 539	377
11	CORNELL UNIV	F M FLASAR	GSFC	B J CONRATH	NCC 5 622	377
11	CORNELL UNIV	G MUCKLOW	GSFC	G J STACEY	NAG 5 8673	374
11	CORNELL UNIV	G STRINGFELLOW	GSFC	D L HERTER	NAG 5 6495	373
11	CORNELL UNIV	J BERGSTRALH	GSFC	D J GIERABCH	NAG 5 3862	373
11	CORNELL UNIV	J BOYCE	GSFC	R LOVELACE	NAG 5 9735	374
11	CORNELL UNIV	J BOYCE	GSFC	J F BELL	NAG 5 9774	375
11	CORNELL UNIV	J BOYCE	GSFC	P GIERASCH	NAG 5 10579	375
11	CORNELL UNIV	J BOYCE	GSFC	R O POHL	NAG 5 10584	375
11	CORNELL UNIV	J M BOYCE	GSFC	R SULLIVAN	NAG 5 10574	375
11	CORNELL UNIV	J M BOYCE	GSFC	B CONRATH	NAG 5 10580	375
11	CORNELL UNIV	L D DEMING	GSFC	J HARRINGTON	NAG 5 9594	374
11	CORNELL UNIV	M SALAMON	GSFC	D LAI	NAG 5 12034	376
11	CORNELL UNIV	P CRANE	GSFC	A SIEVERS	NAG 5 9140	374
11	CORNELL UNIV	R BEEBE	GSFC	D J GIERASCH	NAG 5 7864	373
11	CORNELL UNIV	R BEEBE	GSFC	P HELFENSTEIN	NAG 5 8010	373
11	CORNELL UNIV	R OLIVERSEN	GSFC	R LOVELACE	NAG 5 9047	374
11	CORNELL UNIV	T MORGAN	GSFC	D S HOWELL	NAG 5 8070	374
11	CORNELL UNIV	T MORGAN	GSFC	P NICHOLSON	NAG 5 10438	375
11	CORNELL UNIV	J BOYCE	HQ	D J BANDFIELD	NAG 5 8282	374
11	CORNELL UNIV	D B JARRETT	JPL	J F VEVERKA	NASW 00005	377
11	DARTMOUTH COLL	D EVANS	GSFC	B U SONNERUP	NAG 5 7185	340
11	DARTMOUTH COLL	D EVANS	GSFC	M K HUDSON	NAG 5 7689	341
11	DARTMOUTH COLL	R OLIVERSEN	GSFC	B CHABOYER	NAG 5 9225	341
11	DEPAUL UNIV	J ROSENDHAL	GSFC	C C NARASIMHAN	NCC 5 272	199
11	DEPAUL UNIV	P SAKIMOTO	GSFC	C C	NCC 5 641	199
11	DINE COLL (FORMERLY NAVAJO COMM COLL)	P SAKIMOTO	GSFC	S SEMKEN	NAG 5 10254	23
11	DREXEL UNIV	D K WEST	GSFC	S L MCMILLAN	NAG 5 6964	436
11	DREXEL UNIV	J CENTRELLA	GSFC	M VALLIERES	NAG 5 11119	436
11	DREXEL UNIV	R J OLIVERSEN	GSFC	S L MCMILLAN	NAG 5 10775	436
11	DREXEL UNIV	R J OLIVERSEN	GSFC	M VOGLEY	NAG 5 12243	436
11	DREXEL UNIV	R OLIVERSEN	GSFC	S MCMILLAN	NAG 5 9264	436
11	EAST TENNESSEE STATE UNIV	G SONNEBORN	GSFC	D G LUTTERMOSER	NAG 5 10344	463
11	EAST NEW MEX. UNIV - MAIN CAMP	P SAKIMOTO	GSFC	S NUTTER	NAG 5 10150	357
11	FAIRFIELD UNIV	G MUCKLOW	GSFC	N HAEGEL	NAG 5 8650	143
11	FLA INTERNATIONAL UNIV	R HARTLE	GSFC	K HARDY	NAG 5 3826	161
11	FLORIDA A&M UNIV	P SAKIMOTO	GSFC	C A WEATHERFORD	NAG 5 10148	162
11	FLORIDA INST OF TECH	R J OLIVERSEN	GSFC	M ZHANG	NAG 5 10888	164
11	FLORIDA STATE UNIV	J BOYCE	GSFC	J C CAIN	NAG 5 8284	165
11	FLORIDA STATE UNIV	J BOYCE	GSFC	J C CAIN	NAG 5 12475	166
11	FLORIDA STATE UNIV	M MEYER	GSFC	I FRIEDMAN	NAG 5 9845	166
11	FRANKLIN-MARSHALL COLL	D K WEST	GSFC	D BACKMAN	NAG 5 6858	437
11	GEORGE MASON UNIV	D K WEST	GSFC	J WALLIN	NAG 5 8834	505
11	GEORGE MASON UNIV	M MCCUMBER	GSFC	M KAFATOS	NCC 5 555	506
11	GEORGE MASON UNIV	R J OLIVERSEN	GSFC	R M SAMBRUNA	NAG 5 10073	505
11	GEORGE MASON UNIV	R J OLIVERSEN	GSFC	R M SAMBRUNA	NAG 5 10243	505
11	GEORGE MASON UNIV	R J OLIVERSEN	GSFC	R M SAMBRUNA	NAG 5 10244	505
11	GEORGE MASON UNIV	R J OLIVERSEN	GSFC	R M SAMBRUNA	NAG 5 10708	506

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	GEORGE MASON UNIV	R J OLIVERSEN	GSFC	L OZNEROY	NAG 5 10776	506
11	GEORGE MASON UNIV	R MUSHOTZKY	GSFC	R M SAMBRUNA	NAG 5 10038	505
11	GEORGE MASON UNIV	S KEMPLER	GSFC	M KAFATOS	NCC 5 143	506
11	GEORGE WASHINGTON UNIV	J BOYCE	GSFC	G M KEATING	NAG 5 8287	151
11	GEORGE WASHINGTON UNIV	J SWANK	GSFC	W PARKE	NAG 5 11951	152
11	GEORGE WASHINGTON UNIV	R BEEBE	GSFC	D A LEVIN	NAG 5 8068	151
11	GEORGIA INST OF TECH	J M BOYCE	GSFC	J BRADLEY	NAG 5 10632	183
11	GEORGIA STATE UNIV	T P GREENE	ARC	T J HENRY	NCC 2 5479	187
11	GEORGIA STATE UNIV	D K WEST	GSFC	D GIES	NAG 5 6904	187
11	GEORGIA STATE UNIV	H HASAN	GSFC	S T MANSON	NAG 5 7752	187
11	GEORGIA STATE UNIV	H THRONSON	GSFC	D PERERA	NAG 5 4950	187
11	HAMPTON UNIV	J R BYRD	GSFC	D M RUSSELL	NAG 5 10796	508
11	HAMPTON UNIV	P SAKIMOTO	GSFC	A OMAR	NAG 5 10163	508
11	HARVARD UNIV	D NAVA	GSFC	D B JACOBSEN	NAG 5 4720	281
11	HARVARD UNIV	E SMITH	GSFC	R KIRSHNER	NAG 5 7768	281
11	HARVARD UNIV	G SONNEBORN	GSFC	J C RAYMOND	NAG 5 9019	282
11	HARVARD UNIV	J BOYCE	GSFC	D B JACOBSEN	NAG 5 4430	281
11	HARVARD UNIV	J BOYCE	GSFC	A W CAMERON	NAG 5 8467	281
11	HARVARD UNIV	J BOYCE	GSFC	S JACOBSEN	NAG 5 11925	283
11	HARVARD UNIV	M MEYER	GSFC	H D HOLLAND	NAG 5 10631	282
11	HARVARD UNIV	M SALAMON	GSFC	M WHITE	NAG 5 12041	283
11	HARVARD UNIV	M SALAMON	GSFC	L E HERNQUIST	NAG 5 12140	283
11	HARVARD UNIV	P CRANE	GSFC	A H DALGARNO	NAG 5 4348	281
11	HARVARD UNIV	R BEEBE	GSFC	W H PARKINSON	NAG 5 7859	281
11	HARVARD UNIV	R J OLIVERSEN	GSFC	A LOEB	NAG 5 7039	281
11	HARVARD UNIV	R J OLIVERSEN	GSFC	R NARAYAN	NAG 5 10780	282
11	HARVARD UNIV	R MUSHOTZKY	GSFC	J E GRINDLAY	NAG 5 10046	282
11	HARVARD UNIV	R MUSHOTZKY	GSFC	R NARAYAN	NAG 5 10105	282
11	HARVARD UNIV	RMUSHOTZKY	GSFC	J E GRINDLAY	NAG 5 10040	282
11	HAVERFORD COLL	R J OLIVERSEN	GSFC	S P BOUGHN	NAG 5 9285	437
11	INDIANA UNIV - BLOOMINGTON	D WEST	GSFC	STEIMAN-CAMERON	NAG 5 6773	213
11	INDIANA UNIV - BLOOMINGTON	G SONNEBORN	GSFC	S SHORE	NAG 5 9236	214
11	INDIANA UNIV - BLOOMINGTON	J BOYCE	GSFC	D H DURISEN	NAG 5 4295	213
11	INDIANA UNIV - BLOOMINGTON	J BOYCE	GSFC	A BASU	NAG 5 9369	214
11	INDIANA UNIV - BLOOMINGTON	J BOYCE	GSFC	R DURISEN	NAG 5 11964	214
11	INDIANA UNIV - BLOOMINGTON	B MERRIT	WFF	J MUSSER	NAG 5 5224	213
11	IOWA STATE UNIV	D K WEST	GSFC	S D KAWALER	NAG 5 8352	221
11	IOWA STATE UNIV	W WAGNER	GSFC	L A WILLSON	NAG 5 8465	221
11	JOHNS HOPKINS UNIV	L CAROFF	ARC	T HENRY	NAG 2 1392	238
11	JOHNS HOPKINS UNIV	B BETTS	GSFC	R L MCNUTT	NAG 5 8516	242
11	JOHNS HOPKINS UNIV	B BETTS	GSFC	R W MCENTIRE	NAG 5 9719	243
11	JOHNS HOPKINS UNIV	B BETTS	GSFC	W BRINCKERHOFF	NAG 5 10693	246
11	JOHNS HOPKINS UNIV	B CAMPBELL	GSFC	A F CHENG	NAG 5 7080	240
11	JOHNS HOPKINS UNIV	D C LING	GSFC	D M RUST	NAG 5 7921	241
11	JOHNS HOPKINS UNIV	D EVANS	GSFC	D Y LUI	NAG 5 7797	241
11	JOHNS HOPKINS UNIV	D EVANS	GSFC	D G SIBECK	NAG 5 7920	241
11	JOHNS HOPKINS UNIV	D K WEST	GSFC	K R SEMBACH	NAG 5 3485	239
11	JOHNS HOPKINS UNIV	D K WEST	GSFC	A S SZALAY	NAG 5 3503	239
11	JOHNS HOPKINS UNIV	D K WEST	GSFC	G R MEURER	NAG 5 8279	241
11	JOHNS HOPKINS UNIV	D R MENGERS	GSFC	H W MOOS	NAS 5 32985	251
11	JOHNS HOPKINS UNIV	D WEST	GSFC	G A KRISS	NAG 5 3255	239
11	JOHNS HOPKINS UNIV	G H MUCKLOW	GSFC	D G MITCHELL	NAG 5 8687	242
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	J A MORSE	NAG 5 8955	242
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	T M HECKMAN	NAG 5 9012	242
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	R SANKRIT	NAG 5 10248	244
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	T M HECKMAN	NAG 5 10302	244
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	S D FRIEDMAN	NAG 5 10355	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	L BIANCHI	NAG 5 10364	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	R SANKRIT	NAG 5 10380	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	R L SHELTON	NAG 5 10394	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	S R MCCANDLISS	NAG 5 10403	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	W V DIXON	NAG 5 10405	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	P CHAYER	NAG 5 10647	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	A FULLERTON	NAG 5 10650	245
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	H A WEAVER	NAG 5 10921	246
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	C HOWK	NAG 5 10957	247

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	J DUPUIS	NAG 5 11570	248
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	W P BLAIR	NAG 5 11581	248
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	J DUPUIS	NAG 5 11717	248
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	W ZHENG	NAG 5 11728	248
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	C HOWK	NAG 5 11945	249
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	J KRUK	NAG 5 11967	249
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	R SANKRIT	NAG 5 12017	249
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	C HOWK	NAG 5 12135	249
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	T M HECKMAN	NAG 5 12213	249
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	A FULLERTON	NAG 5 12261	249
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	L BIANCHI	NAG 5 12294	250
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	W P BLAIR	NAG 5 12423	250
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	W P BLAIR	NAG 5 12448	250
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	G WILLIGER	NAG 5 12456	250
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	R L SHELTON	NAG 5 12481	250
11	JOHNS HOPKINS UNIV	G SONNEBORN	GSFC	L BIANCHI	NAG 5 12518	250
11	JOHNS HOPKINS UNIV	H HASAN	GSFC	D R MCCANDLISS	NAG 5 4261	239
11	JOHNS HOPKINS UNIV	J BOYCE	GSFC	S L MURCHIE	NAG 5 8171	241
11	JOHNS HOPKINS UNIV	J BOYCE	GSFC	E RHODES	NAG 5 11783	248
11	JOHNS HOPKINS UNIV	J E ROBINSON	GSFC	N AVAILABLE	NAS 5 01072	251
11	JOHNS HOPKINS UNIV	J J WOLFF	GSFC	D GRANT	NAS 5 97179	251
11	JOHNS HOPKINS UNIV	J JELETIC	GSFC	H FORD	NAG 5 7697	241
11	JOHNS HOPKINS UNIV	J M BOYCE	GSFC	O BARNOUIN-JHA	NAG 5 11211	247
11	JOHNS HOPKINS UNIV	J R BYRD	GSFC	D ZHENG	NAG 5 10798	246
11	JOHNS HOPKINS UNIV	J SPANN	GSFC	S WING	NAG 5 10971	247
11	JOHNS HOPKINS UNIV	J WOLFF	GSFC	T COUGHLIN	NAS 5 97271	251
11	JOHNS HOPKINS UNIV	K E WEAVER	GSFC	E T VISHNIAC	NCC 5 447	252
11	JOHNS HOPKINS UNIV	M GUTATHAKURTA	GSFC	S M KRIMIGIS	NAG 5 12291	250
11	JOHNS HOPKINS UNIV	M MELLOTT	GSFC	R E ERLANDSON	NAG 5 9118	243
11	JOHNS HOPKINS UNIV	P HUNTER	GSFC	S R NYLUND	NAG 5 8149	241
11	JOHNS HOPKINS UNIV	R A HOFFMAN	GSFC	N J FOX	NAG 5 9903	243
11	JOHNS HOPKINS UNIV	R BEEBE	GSFC	D STROBEL	NAG 5 7769	241
11	JOHNS HOPKINS UNIV	R BEEBE	GSFC	C P PARANICAS	NAG 5 7863	241
11	JOHNS HOPKINS UNIV	R BEEBE	GSFC	D MAUK	NAG 5 8191	241
11	JOHNS HOPKINS UNIV	R F MUSHOTZKY	GSFC	A F PTAK	NAG 5 11378	247
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	M A HOUDASHELT	NAG 5 10922	246
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	T HECKMAN	NAG 5 6400	240
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	A S SZALAY	NAG 5 9186	243
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	J H KROLIK	NAG 5 9187	243
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	E COLBERT	NAG 5 9878	243
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	S RIDGWAY	NAG 5 10762	246
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	T YAQOOB	NAG 5 10769	246
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	C A NORMAN	NAG 5 10807	246
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	W V DIXON	NAG 5 10916	246
11	JOHNS HOPKINS UNIV	R J OLIVERSEN	GSFC	E COLBERT	NAG 5 11670	248
11	JOHNS HOPKINS UNIV	R M MUSHOTZKY	GSFC	T HECKMAN	NAG 5 9910	243
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	J H KROLIK	NAG 5 10304	244
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	M E KAISER	NAG 5 9837	243
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	T HECKMAN	NAG 5 9948	244
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	W BLAIR	NAG 5 9963	244
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	H FORD	NAG 5 10176	244
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	L M LUBIN	NAG 5 10511	245
11	JOHNS HOPKINS UNIV	R MUSHOTZKY	GSFC	A F PTAK	NAG 5 11572	248
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	L BIANCHI	NAG 5 9219	243
11	JOHNS HOPKINS UNIV	R OLIVERSEN	GSFC	J DUPUIS	NAG 5 11844	248
11	JOHNS HOPKINS UNIV	R POLIDAN	GSFC	G KRISS	NAG 5 6764	240
11	JOHNS HOPKINS UNIV	S CURTIS	GSFC	R GREEWALD	NAG 5 8361	242
11	JOHNS HOPKINS UNIV	T MORGAN	GSFC	H WEAVER	NAG 5 7186	240
11	JOHNS HOPKINS UNIV	W WAGNER	GSFC	D M RUST	NAG 5 8331	241
11	JOHNS HOPKINS UNIV	M SMITH	MSFC	R GIACCONI	NAG 8 1527	250
11	LOUISIANA STATE UNIV - BATON ROUGE	D K WEST	GSFC	G C CLAYATON	NAG 5 7933	231
11	LOUISIANA STATE UNIV - BATON ROUGE	G SONNEBORN	GSFC	G C CLAYTON	NAG 5 10185	231
11	LOUISIANA STATE UNIV - BATON ROUGE	R J OLIVERSEN	GSFC	J FRANK	NAG 5 8497	231
11	LOUISIANA STATE UNIV - BATON ROUGE	R J OLIVERSEN	GSFC	G C CLAYTON	NAG 5 9709	231
11	LOUISIANA STATE UNIV - BATON ROUGE	R OLIVERSEN	GSFC	G CLAYTON	NAG 5 9203	231
11	MASSACHUSETTS INST OF TECH	D C LING	GSFC	D J LAZARUS	NAG 5 7794	288

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	MASSACHUSETTS INST OF TECH	D C LING	GSFC	D J LAZARUS	NAG 5 7967	288
11	MASSACHUSETTS INST OF TECH	D K WEST	GSFC	W H LEWIN	NAG 5 3558	287
11	MASSACHUSETTS INST OF TECH	D K WEST	GSFC	M H VAN PUTTEN	NAG 5 7012	288
11	MASSACHUSETTS INST OF TECH	D K WEST	GSFC	V M KASPI	NAG 5 8063	289
11	MASSACHUSETTS INST OF TECH	D K WEST	GSFC	S A RAPPAPORT	NAG 5 8368	289
11	MASSACHUSETTS INST OF TECH	D SENSKE	GSFC	J WISDOM	NAG 5 11536	292
11	MASSACHUSETTS INST OF TECH	D SENSKE	GSFC	A S RIVKIN	NAG 5 11617	292
11	MASSACHUSETTS INST OF TECH	G MUCKLOW	GSFC	M W BAUTZ	NAG 5 8668	289
11	MASSACHUSETTS INST OF TECH	J BERGSTRALH	GSFC	D P BINZEL	NAG 5 3939	287
11	MASSACHUSETTS INST OF TECH	J BERGSTRALH	GSFC	D L ELLIOT	NAG 5 3940	287
11	MASSACHUSETTS INST OF TECH	J BOYCE	GSFC	M T ZUBER	NAG 5 8707	289
11	MASSACHUSETTS INST OF TECH	J BOYCE	GSFC	J I RICHARDSON	NAG 5 8720	289
11	MASSACHUSETTS INST OF TECH	J BOYCE	GSFC	T L GROVE	NAG 5 9525	290
11	MASSACHUSETTS INST OF TECH	J BOYCE	GSFC	T GROVE	NAG 5 10728	291
11	MASSACHUSETTS INST OF TECH	J KING	GSFC	A J LAZARUS	NAG 5 8031	288
11	MASSACHUSETTS INST OF TECH	J SWANK	GSFC	G W CLARK	NAG 5 7279	288
11	MASSACHUSETTS INST OF TECH	M MEYER	GSFC	S A BOWRING	NAG 5 8814	289
11	MASSACHUSETTS INST OF TECH	P CRANE	GSFC	B F BURKE	NAG 5 9763	290
11	MASSACHUSETTS INST OF TECH	R J OLIVERSEN	GSFC	F A RASIO	NAG 5 8460	289
11	MASSACHUSETTS INST OF TECH	R J OLIVERSEN	GSFC	W H LEWIN	NAG 5 9135	290
11	MASSACHUSETTS INST OF TECH	R J OLIVERSEN	GSFC	W H LEWIN	NAG 5 10815	291
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	B M GAENSLER	NAG 5 9962	291
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	C R CANIZARES	NAG 5 10008	291
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	D S DAVIS	NAG 5 10107	291
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	W LEWIN	NAG 5 10192	291
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	W LEWIN	NAG 5 11683	292
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	W LEWIN	NAG 5 11878	292
11	MASSACHUSETTS INST OF TECH	R MUSHOTZKY	GSFC	W LEWIN	NAG 5 11930	292
11	MASSACHUSETTS INST OF TECH	R OLIVERSEN	GSFC	G ALLEN	NAG 5 9237	290
11	MASSACHUSETTS INST OF TECH	R PETRE	GSFC	M SCHATTENBURG	NCC 5 525	295
11	MASSACHUSETTS INST OF TECH	R PETRE	GSFC	M L SCHTTENBURG	NCC 5 633	296
11	MASSACHUSETTS INST OF TECH	T MORGAN	GSFC	J ELLIOT	NAG 5 10444	291
11	MASSACHUSETTS INST OF TECH	T MORGAN	GSFC	A RIVKIN	NAG 5 10604	291
11	MASSACHUSETTS INST OF TECH	W DAVIS	GSFC	H BRADT	NAS 5 30612	294
11	MASSACHUSETTS INST OF TECH	J BOYCE	HQ	P L GROVE	NAG 5 4768	287
11	MASSACHUSETTS INST OF TECH	M C SMITH	MSFC	C R CANIZARIES	NAS 8 01129	294
11	MEDGAR EVERS COLL	P SAKIMOTO	GSFC	L P JOHNSON	NAG 5 10142	378
11	MICHIGAN STATE UNIV	R J OLIVERSEN	GSFC	S SEPF	NAG 5 11319	305
11	MICHIGAN STATE UNIV	R J OLIVERSEN	GSFC	S ZEPF	NAG 5 11320	305
11	MICHIGAN STATE UNIV	W J WAGNER	GSFC	R F STEIN	NAG 5 9563	305
11	MIDDLEBURY COLL	D K WEST	GSFC	P WINKLER	NAG 5 8020	502
11	MONTANA STATE UNIV	D DETROYE	GSFC	W HISCOCK	NCC 5 240	334
11	MONTANA STATE UNIV	J GURMAN	GSFC	P MARTENS	NAG 5 12081	334
11	MONTANA STATE UNIV	M MEYER	GSFC	T R MCDERMOTT	NAG 5 8807	333
11	MONTANA STATE UNIV	M MEYER	GSFC	D M WARD	NAG 5 8824	333
11	MONTANA STATE UNIV	M SALAMON	GSFC	S TSURUTA	NAG 5 12079	334
11	MONTANA STATE UNIV	W WAGNER	GSFC	D CANFIELD	NAG 5 6110	333
11	MONTANA STATE UNIV	W WAGNER	GSFC	R C CANFIELD	NAG 5 11873	334
11	MONTANA STATE UNIV	M J HAGYARD	MSFC	R C CANFIELD	NAG 8 1399	334
11	MOORHEAD STATE UNIV	J BOYCE	HQ	R O COLSON	NAG 5 7366	318
11	NEW JERSEY INST OF TECH	D EVANS	GSFC	P R GOODE	NAG 5 7454	347
11	NEW JERSEY INST OF TECH	W WAGNER	GSFC	H WANG	NAG 5 7085	347
11	NEW JERSEY INST OF TECH	W WAGNER	GSFC	M F WOODARD	NAG 5 8485	347
11	NEW JERSEY INST OF TECH	W WAGNER	GSFC	P R GOODE	NAG 5 11007	348
11	NEW MEXICO HIGHLANDS UNIV	T MORGAN	GSFC	D V RYAN	NAG 5 8734	357
11	NEW MEXICO INST OF MINING & TECH	M Y WEI	GSFC	F M PHILLIPS	NGT 5 30169	359
11	NEW MEXICO STATE UNIV - LAS CRUCES	C P MCKAY	ARC	M MARLEY	NAG 2 6007	359
11	NEW MEXICO STATE UNIV - LAS CRUCES	B A MERRITT	GSFC	S J STOCHAJ	NAG 5 5159	359
11	NEW MEXICO STATE UNIV - LAS CRUCES	D C LING	GSFC	D R WEBBER	NAG 5 7795	359
11	NEW MEXICO STATE UNIV - LAS CRUCES	D K WEST	GSFC	A KLYPIN	NAG 5 3842	359
11	NEW MEXICO STATE UNIV - LAS CRUCES	D K WEST	GSFC	A KLYPIN	NAG 5 8242	360
11	NEW MEXICO STATE UNIV - LAS CRUCES	F C JONES	GSFC	W R WEBBER	NAG 5 7524	359
11	NEW MEXICO STATE UNIV - LAS CRUCES	J HARRINGTON	GSFC	H BAPTISTE	NAG 5 11311	360
11	NEW MEXICO STATE UNIV - LAS CRUCES	J M BOYCE	GSFC	V SOLOMATOV	NAG 5 10578	360
11	NEW MEXICO STATE UNIV - LAS CRUCES	J M BOYCE	GSFC	J R MURPHY	NAG 5 11164	360
11	NEW MEXICO STATE UNIV - LAS CRUCES	R J OLIVERSEN	GSFC	M S MARLEY	NAG 5 9273	360

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	NEW MEXICO STATE UNIV - LAS CRUCES	T MORGAN	GSFC	D J CHANOVER	NAG 5 7904	360
11	NY UNIV	M SALAMON	GSFC	R SCOCCIMARRO	NAG 5 12100	379
11	NY UNIV	R J OLIVERSEN	GSFC	D W HOGG	NAG 5 11669	379
11	NY UNIV	R OLIVERSEN	GSFC	G FARRAR	NAG 5 9246	379
11	NORFOLK STATE UNIV	P SAKIMOTO	GSFC	C W SALGADO	NAG 5 10140	511
11	NORTH CAROLINA STATE UNIV. - RALEIGH	D K WEST	GSFC	S P REYNOLDS	NAG 5 7153	396
11	NORTH CAROLINA STATE UNIV. - RALEIGH	R J OLIVERSEN	GSFC	S P REYNOLDS	NAG 5 10940	396
11	NORTHEAST LOUISIANA UNIV	J M BOYCE	GSFC	D A DE HON	NAG 5 4293	232
11	NORTHERN ARIZONA UNIV	J BOYCE	GSFC	D CORNELISON	NAG 5 11729	24
11	NORTHERN ARIZONA UNIV	J BOYCE	GSFC	N BARLOW	NAG 5 12510	24
11	NORTHERN ARIZONA UNIV	T MORGAN	GSFC	C A GRIFFITH	NAG 5 6790	23
11	NORTHERN ARIZONA UNIV	T MORGAN	GSFC	S C TEGLER	NAG 5 7757	23
11	NORTHERN ARIZONA UNIV	J BOYCE	HQ	C A GRIFFITH	NAG 5 8146	23
11	NORTHERN ARIZONA UNIV	J BOYCE	HQ	D M CORNELISON	NAG 5 8203	24
11	NORTHWESTERN UNIV	D K WEST	GSFC	R E TAAM	NAG 5 7011	200
11	NORTHWESTERN UNIV	D SENSKE	GSFC	M S ROBINSON	NAG 5 10847	201
11	NORTHWESTERN UNIV	D SENSKE	GSFC	M S ROBINSON	NAG 5 12018	201
11	NORTHWESTERN UNIV	G SONNEBORN	GSFC	D M MEYER	NAG 5 10323	201
11	NORTHWESTERN UNIV	G SONNEBORN	GSFC	J T LAUROESCH	NAG 5 10324	201
11	NORTHWESTERN UNIV	G SONNEBORN	GSFC	D M MEYER	NAG 5 10465	201
11	NORTHWESTERN UNIV	J BOYCE	GSFC	D JURDY	NAG 5 12157	201
11	NORTHWESTERN UNIV	M SALAMON	GSFC	F A RASIO	NAG 5 12044	201
11	NORTHWESTERN UNIV	R J OLIVERSEN	GSFC	F YUSEF-ZADEH	NAG 5 9188	200
11	NORTHWESTERN UNIV	R J OLIVERSEN	GSFC	F A RASIO	NAG 5 11396	201
11	NORTHWESTERN UNIV	R OLIVERSEN	GSFC	D MEYER	NAG 5 9272	200
11	NORTHWESTERN UNIV	W ZHANG	GSFC	M ULMER	NAG 5 10598	201
11	NORTHWESTERN UNIV	J BOYCE	HQ	M S ROBINSON	NAG 5 8294	200
11	NORTHWESTERN UNIV	J D JORDAN	LARC	C A MIRKIN	NAG 1 01058	199
11	OHIO STATE UNIV	D K WEST	GSFC	M H PINSONNEAULT	NAG 5 7150	411
11	OHIO STATE UNIV	D K WEST	GSFC	B M PETERSON	NAG 5 8397	412
11	OHIO STATE UNIV	D K WEST	GSFC	A K PRADHAN	NAG 5 8423	412
11	OHIO STATE UNIV	G SONNEBORN	GSFC	S MATHUR	NAG 5 10320	413
11	OHIO STATE UNIV	H HASAN	GSFC	D K PRADHAN	NAG 5 7903	412
11	OHIO STATE UNIV	H THRONSON	GSFC	E HERBST	NAG 5 7252	411
11	OHIO STATE UNIV	J BOYCE	GSFC	D DEPOY	NAG 5 10678	413
11	OHIO STATE UNIV	M SALAMON	GSFC	A K PRADHAN	NAG 5 11984	413
11	OHIO STATE UNIV	R K OLIVERSEN	GSFC	D H WEINBERG	NAG 5 3525	411
11	OHIO STATE UNIV	R MUSHOTZKY	GSFC	S MATHUR	NAG 5 9936	412
11	OHIO STATE UNIV	R MUSHOTZKY	GSFC	S MATHUR	NAG 5 9937	412
11	OHIO UNIV	R J OLIVERSEN	GSFC	B MCNAMARA	NAG 5 11025	415
11	OLD DOMINION UNIV	J MARRA	GSFC	E HOFMANN	NCC 5 258	515
11	OREGON STATE UNIV	J BOYCE	GSFC	J R BARNES	NAG 5 9771	428
11	PENN STATE UNIV. - UNIV. PARK	D F MUSHOTZKY	GSFC	W N BRANDT	NAG 5 9932	442
11	PENN STATE UNIV. - UNIV. PARK	D F MUSHOTZKY	GSFC	W N BRANDT	NAG 5 9933	442
11	PENN STATE UNIV. - UNIV. PARK	D K WEST	GSFC	J CHARLTON	NAG 5 6399	441
11	PENN STATE UNIV. - UNIV. PARK	D K WEST	GSFC	G G PAVLOV	NAG 5 7017	441
11	PENN STATE UNIV. - UNIV. PARK	D K WEST	GSFC	W N BRANDT	NAG 5 8107	441
11	PENN STATE UNIV. - UNIV. PARK	D NAVA	GSFC	D WOLSKZCZAN	NAG 5 4301	440
11	PENN STATE UNIV. - UNIV. PARK	D WEST	GSFC	M AKRITAS	NAG 5 6737	441
11	PENN STATE UNIV. - UNIV. PARK	J BOYCE	GSFC	A WOLSKZCZAN	NAG 5 12181	444
11	PENN STATE UNIV. - UNIV. PARK	M MEYER	GSFC	J F KASTING	NAG 5 8710	442
11	PENN STATE UNIV. - UNIV. PARK	M MEYER	GSFC	H OHMOTO	NAG 5 9089	442
11	PENN STATE UNIV. - UNIV. PARK	M S BURRELL	GSFC	JIAN GE	NGT 5 119	447
11	PENN STATE UNIV. - UNIV. PARK	N GEHRELS	GSFC	P I MESZAROS	NAG 5 9153	442
11	PENN STATE UNIV. - UNIV. PARK	P M ATKINS	GSFC	W N BRANDT	NAG 5 9924	442
11	PENN STATE UNIV. - UNIV. PARK	R BORELLI	GSFC	J A NOUSEK	NAS 5 00136	445
11	PENN STATE UNIV. - UNIV. PARK	R F MUSHOTZKY	GSFC	G PAVLOV	NAG 5 9938	443
11	PENN STATE UNIV. - UNIV. PARK	R F MUSHOTZKY	GSFC	W N BRANDT	NAG 5 9940	443
11	PENN STATE UNIV. - UNIV. PARK	R F MUSKOTZKY	GSFC	W N BRANDT	NAG 5 9918	442
11	PENN STATE UNIV. - UNIV. PARK	R J OLIVERSEN	GSFC	E D FEIGELSON	NAG 5 8422	442
11	PENN STATE UNIV. - UNIV. PARK	R J OLIVERSEN	GSFC	R CIARDULLO	NAG 5 9377	442
11	PENN STATE UNIV. - UNIV. PARK	R J OLIVERSEN	GSFC	S PARK	NAG 5 10706	443
11	PENN STATE UNIV. - UNIV. PARK	R J OLIVERSEN	GSFC	M ERACLEOUS	NAG 5 10817	443
11	PENN STATE UNIV. - UNIV. PARK	R J OLIVERSEN	GSFC	G PAVLOV	NAG 5 10865	444
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	G CHARTAS	NAG 5 9934	442
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	W BRANDT	NAG 5 9939	443

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	G CHARTAS	NAG 5 9949	443
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	Y TSUBOI	NAG 5 9970	443
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	Y MAEDA	NAG 5 9976	443
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	M ERACLEOUS	NAG 5 9982	443
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	D N BURROWS	NAG 5 10079	443
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	D N BURROWS	NAG 5 10080	443
11	PENN STATE UNIV. - UNIV. PARK	R MUSHOTZKY	GSFC	N BRANDT	NAG 5 10089	443
11	PENN STATE UNIV. - UNIV. PARK	R OLIVERSEN	GSFC	P MESZAROS	NAG 5 9192	442
11	PENN STATE UNIV. - UNIV. PARK	S D HUNTER	GSFC	T JACKSON	NAG 5 9587	442
11	PENN STATE UNIV. - UNIV. PARK	S H MOSELY	GSFC	D GE	NAG 5 10617	443
11	POMONA COLL	J BOYCE	GSFC	E GROSFILS	NAG 5 10498	53
11	PRAIRIE VIEW A&M UNIV	J HARRINGTON	GSFC	D HUANG	NCC 5 591	472
11	PRAIRIE VIEW A&M UNIV	J L HARRINGTON	GSFC	T HUANG	NCC 5 670	472
11	PRAIRIE VIEW A&M UNIV	K KRISHEN	JSC	T S HWANG	NAG 9 1405	471
11	PRAIRIE VIEW A&M UNIV	J M DAVIS	MSFC	T HUANG	NAG 8 1338	471
11	PRINCETON UNIV	C BENNET	GSFC	L PAGE	NAG 5 10481	350
11	PRINCETON UNIV	D K WEST	GSFC	B T DRAINE	NAG 5 7030	349
11	PRINCETON UNIV	D K WEST	GSFC	S D TREMAINE	NAG 5 7066	349
11	PRINCETON UNIV	D K WEST	GSFC	D N SPERGEL	NAG 5 7154	349
11	PRINCETON UNIV	D K WEST	GSFC	U SELJAK	NAG 5 8084	350
11	PRINCETON UNIV	D K WEST	GSFC	R CEN	NAG 5 8365	350
11	PRINCETON UNIV	D VITAGLINO	GSFC	E JENKINS	NAS 5 30110	352
11	PRINCETON UNIV	D WEST	GSFC	G R KNAPP	NAG 5 3364	349
11	PRINCETON UNIV	D WEST	GSFC	G KNAPP	NAG 5 6734	349
11	PRINCETON UNIV	G SONNEBORN	GSFC	D V BOWEN	NAG 5 11947	351
11	PRINCETON UNIV	G SONNEBORN	GSFC	E L JENKINS	NAG 5 12519	351
11	PRINCETON UNIV	J BOYCE	GSFC	J GOODMAN	NAG 5 8385	350
11	PRINCETON UNIV	J BOYCE	GSFC	S TREMAINE	NAG 5 10456	350
11	PRINCETON UNIV	J BOYCE	GSFC	J GOODMAN	NAG 5 11664	351
11	PRINCETON UNIV	J BOYCE	GSFC	B PACZYNSKI	NAG 5 12212	351
11	PRINCETON UNIV	M SALAMON	GSFC	U SELJAK	NAG 5 11983	351
11	PRINCETON UNIV	R CUDDAPAH	GSFC	D WILKINSON	NAS 5 96021	352
11	PRINCETON UNIV	R J OLIVERSEN	GSFC	J P OSTRICKER	NAG 5 9284	350
11	PRINCETON UNIV	R J OLIVERSEN	GSFC	B T DRAINE	NAG 5 10811	350
11	PRINCETON UNIV	R J OLIVERSEN	GSFC	G R KNAPP	NAG 5 11094	351
11	PRINCETON UNIV	R J OLIVERSEN	GSFC	T M TRIPP	NAG 5 11136	351
11	PRINCETON UNIV	R J OLIVERSEN	GSFC	U SELJAK	NAG 5 11489	351
11	PRINCETON UNIV	R OLIVERSEN	GSFC	E TURNER	NAG 5 9274	350
11	PRINCETON UNIV	J BOYCE	HQ	S D TREMAINE	NAG 5 7310	349
11	PURDUE UNIV	D BOGAN	GSFC	T ZWIER	NAG 5 8155	216
11	PURDUE UNIV	J BOYCE	GSFC	M LIPSCHUTZ	NAG 5 10422	216
11	PURDUE UNIV	R J OLIVERSEN	GSFC	W CUI	NAG 5 9098	216
11	PURDUE UNIV	R J OLIVERSEN	GSFC	W CUI	NAG 5 9998	216
11	RENSSSELAER POLYTECH INST	D K WEST	GSFC	D C WHITTET	NAG 5 7884	381
11	RENSSSELAER POLYTECH INST	D SENSKE	GSFC	D J GAFFEY	NAG 5 10345	381
11	RENSSSELAER POLYTECH INST	J BOYCE	GSFC	D WHITTET	NAG 5 11662	381
11	RENSSSELAER POLYTECH INST	M A MEYER	GSFC	D P FERRIS	NAG 5 7598	381
11	RENSSSELAER POLYTECH INST	T MORGAN	GSFC	M J GAFFEY	NAG 5 8976	381
11	RICE UNIV	D J HOLLENBACH	ARC	D J DUFOUR	NGT 2 52252	475
11	RICE UNIV	D EVANS	GSFC	D W HILL	NAG 5 8131	473
11	RICE UNIV	G SONNEBORN	GSFC	P HARTIGAN	NAG 5 9011	473
11	RICE UNIV	G SONNEBORN	GSFC	R J DUFOUR	NAG 5 12266	474
11	RICE UNIV	J BOYCE	GSFC	A LENARDIC	NAG 5 12166	474
11	RICE UNIV	J P NORRIS	GSFC	E P LIANG	NAG 5 7980	473
11	RICE UNIV	J PNORRIS	GSFC	E P LIANG	NAG 5 9904	473
11	RICE UNIV	R J OLIVERSEN	GSFC	E P LIANG	NAG 5 10816	473
11	RICE UNIV	R J OLIVERSEN	GSFC	M G BARING	NAG 5 10841	473
11	RICE UNIV	R J OLIVERSEN	GSFC	D FOSSATI	NAG 5 11796	473
11	RICE UNIV	R J OLIVERSEN	GSFC	G FOSSATI	NAG 5 11853	473
11	RICE UNIV	R OLIVERSEN	GSFC	E LIANG	NAG 5 9223	473
11	RICE UNIV	S NASH-STEVENSON	MSFC	E P LIANG	NGT 8 52899	475
11	ROCHESTER INST OF TECH	P CRANE	GSFC	Z NINKOV	NAG 5 9090	382
11	ROWAN UNIV	J M BOYCE	GSFC	D R KLASSEN	NAG 5 11076	353
11	ROWAN UNIV	T MORGAN	GSFC	D KLASSEN	NAG 5 6776	353
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	D F MUSHOTZKY	GSFC	J P HUGHES	NAG 5 9927	354
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	D K WEST	GSFC	D MERRITT	NAG 5 6037	354

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	D K WEST	GSFC	A B KOSOWSKY	NAG 5 7015	354
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	D NAVA	GSFC	D F HERZOG	NAG 5 4327	353
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J BOYCE	GSFC	R H HEWINS	NAG 5 4597	353
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J BOYCE	GSFC	J S DELANEY	NAG 5 9528	354
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J BOYCE	GSFC	R HEWINS	NAG 5 10495	355
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R J OLIVERSEN	GSFC	D MERRITT	NAG 5 9046	354
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R J OLIVERSEN	GSFC	L FERRARESE	NAG 5 10003	355
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R K OLIVERSEN	GSFC	J P HUGHES	NAG 5 3432	353
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R MUSHOTZKY	GSFC	J P HUGHES	NAG 5 9979	354
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R MUSHOTZKY	GSFC	J P HUGHES	NAG 5 9990	354
11	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	W WAGNER	GSFC	C L JOSEPH	NAG 5 7148	354
11	RUTGERS STATE UNIV OF NJ NEW BRUNS	J BOYCE	GSFC	J S DELANEY	NAG 5 12148	356
11	RUTGERS STATE UNIV OF NJ NEW BRUNS	R J OLIVERSEN	GSFC	P J COTE	NAG 5 11714	356
11	SAN DIEGO STATE UNIV	G SONNEBORN	GSFC	J WOOD	NAG 5 10376	53
11	SAN DIEGO STATE UNIV	G SONNEBORN	GSFC	J WOOD	NAG 5 12348	53
11	SAN DIEGO STATE UNIV	D D MAZANEK	LARC	P ETZEL	NGT 1 02018	54
11	SAN JOSE STATE UNIV	D J HOLLEN	ARC	M J KAUFMAN	NCC 2 5338	57
11	SAN JOSE STATE UNIV	D J HOLLENBACH	ARC	M J KAUFMAN	NCC 2 5460	58
11	SAN JOSE STATE UNIV	J N CUZZI	ARC	P J HAMIL	NCC 2 1248	56
11	SAN JOSE STATE UNIV	J N CUZZI	ARC	P A HAMILL	NCC 2 5465	58
11	SAN JOSE STATE UNIV	K ZAHNLE	ARC	P HAMILL	NCC 2 5435	57
11	SAN JOSE STATE UNIV	K ZAHNLE	ARC	P HAMILL	NCC 2 5521	58
11	SAN JOSE STATE UNIV	R E YOUNG	ARC	A BRIDGER	NCC 2 1168	56
11	SAN JOSE STATE UNIV	T L ROUSH	ARC	P A HAMILL	NCC 2 1285	56
11	SAN JOSE STATE UNIV	J BOYCE	GSFC	A BRIDGER	NAG 5 9766	55
11	SAN JOSE STATE UNIV	J BOYCE	GSFC	A BRIDGER	NAG 5 12302	55
11	SONOMA STATE UNIV	A M PARSONS	GSFC	L R COMINSKY	NAG 5 11328	59
11	SONOMA STATE UNIV	A PARSONS	GSFC	L R COMINSKY	NAG 5 9495	58
11	SONOMA STATE UNIV	N GEHRELS	GSFC	L R COMINSKY	NAG 5 9782	58
11	SOUTH CAROLINA STATE UNIV	P SAKIMOTO	GSFC	D K WALTER	NAG 5 10145	461
11	SOUTHERN METHODIST UNIV	D SENSKE	GSFC	V L HANSEN	NAG 5 10586	475
11	SOUTHERN UNIV & A&M COLL	P SAKIMOTO	GSFC	G STACY	NAG 5 10253	233
11	SOUTHWESTERN INDIAN POLYTECH INST	P SAKIMOTO	GSFC	K GCHACHU	NAG 5 10143	361
11	STANFORD UNIV	J CUZZI	ARC	G L TYLER	NCC 2 1345	64
11	STANFORD UNIV	J N CUZZI	ARC	A L TYLER	NCC 2 908	64
11	STANFORD UNIV	G D HOLMAN	GSFC	V PETROSIAN	NAG 5 8600	61
11	STANFORD UNIV	H HASAN	GSFC	A C WALKER	NAG 5 7464	61
11	STANFORD UNIV	J BOYCE	GSFC	P H SCHERRER	NAG 5 8714	61
11	STANFORD UNIV	J BOYCE	GSFC	T IRELAND	NAG 5 9887	62
11	STANFORD UNIV	J GURMAN	GSFC	P H SCHERRER	NAG 5 11955	63
11	STANFORD UNIV	J M BOYCE	GSFC	G TYLER	NAG 5 10576	62
11	STANFORD UNIV	J R BYRD	GSFC	C EVERITT	NAG 5 10799	62
11	STANFORD UNIV	M MEYER	GSFC	D R LOWE	NAG 5 9842	62
11	STANFORD UNIV	P CRANE	GSFC	B CABRERA	NAG 5 9087	61
11	STANFORD UNIV	R MUTSHOTZKY	GSFC	G MADEJSKI	NAG 5 11972	63
11	STANFORD UNIV	S LAMBROSS	GSFC	P MICHELSON	NAG 5 00147	64
11	STANFORD UNIV	W WAGNER	GSFC	V PETROSIAN	NAG 5 7144	60
11	STANFORD UNIV	J BOYCE	HQ	R ZARE	NAG 5 7208	61
11	STATE UNIV OF NY - ALBANY	D WICKLAND	GSFC	D R FITZJARRALD	NAG 5 6227	382
11	STATE UNIV OF NY - ALBANY	M MEYER	GSFC	N E LEHMAN	NAG 5 8815	383
11	STATE UNIV OF NY - STONY BROOK	D BOGAN	GSFC	J L FOX	NAG 5 6879	385
11	STATE UNIV OF NY - STONY BROOK	D K WEST	GSFC	F M WALTER	NAG 5 7978	385
11	STATE UNIV OF NY - STONY BROOK	G SONNEBORN	GSFC	F M WALKER	NAG 5 8980	385
11	STATE UNIV OF NY - STONY BROOK	G SONNEBORN	GSFC	F M WALTER	NAG 5 10318	386
11	STATE UNIV OF NY - STONY BROOK	G SONNEBORN	GSFC	F M WALTER	NAG 5 12441	386
11	STATE UNIV OF NY - STONY BROOK	J BOYCE	GSFC	J J LISSAUR	NAG 5 9680	386
11	STATE UNIV OF NY - STONY BROOK	J LING	GSFC	D A FORMAN	NAG 5 8106	385
11	STATE UNIV OF NY - STONY BROOK	J M BOYCE	GSFC	S MCLENNAN	NAG 5 10583	386
11	STATE UNIV OF NY - STONY BROOK	M MEYER	GSFC	M A SCHOONEN	NAG 5 9029	385
11	STATE UNIV OF NY - STONY BROOK	R J OLIVERSEN	GSFC	R A WIJERS	NAG 5 10772	386
11	STATE UNIV OF NY - STONY BROOK	R MUSHOTZKY	GSFC	F M WALTER	NAG 5 9958	386
11	STATE UNIV OF NY - STONY BROOK	J BOYCE	HQ	S M MCLENNAN	NAG 5 8169	385
11	STATE UNIV OF NY COL - PLATTSBURGH	J BOYCE	GSFC	G J FLYNN	NAG 5 9383	387
11	STATE UNIV OF NY COL - PLATTSBURGH	J BOYCE	GSFC	G J FLYNN	NAG 5 11904	387
11	STEVENS INST OF TECH	J HILLMAN	GSFC	K BECKER	NAG 5 8971	357
11	SWARTHMORE COLL	R MUSHOTZKY	GSFC	D H COHEN	NAG 5 10094	448

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	SYRACUSE UNIV	H HASAN	GSFC	G VIDALI	NAG 5 6822	388
11	SYRACUSE UNIV	P CRANE	GSFC	G VIDALI	NAG 5 9093	388
11	TEXAS A&M UNIV	J LANDERS	GSFC	F R BEST	NCC 5 456	480
11	TEXAS CHRISTIAN UNIV	D K WEST	GSFC	P MARCUM	NAG 5 7040	481
11	THE CATHOLIC UNIV OF AMERICA	B WOODGATE	GSFC	F C BRUHWEILER	NAG 5 8622	155
11	THE CATHOLIC UNIV OF AMERICA	B WOODGATE	GSFC	F C BRUHWEILER	NAG 5 10006	156
11	THE CATHOLIC UNIV OF AMERICA	C CRANNEL	GSFC	F C BRUHWEILER	NAG 5 10013	156
11	THE CATHOLIC UNIV OF AMERICA	D C REUTER	GSFC	F C BRUHWEILER	NAG 5 10095	156
11	THE CATHOLIC UNIV OF AMERICA	D E JENNINGS	GSFC	T MORAN	NAG 5 12575	159
11	THE CATHOLIC UNIV OF AMERICA	D K WEST	GSFC	F C BRUNHWEILER	NAG 5 3487	155
11	THE CATHOLIC UNIV OF AMERICA	D KAZANAS	GSFC	G WILLIGER	NAG 5 10680	157
11	THE CATHOLIC UNIV OF AMERICA	D WEST	GSFC	M SMITH	NAG 5 8793	156
11	THE CATHOLIC UNIV OF AMERICA	G D HOLMAN	GSFC	L OFMAN	NAG 5 10867	157
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	F C BRUHWEILER	NAG 5 8968	156
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	C R PROFFITT	NAG 5 8977	156
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	T BROWN	NAG 5 9696	156
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	D CRENSHAW	NAG 5 10382	157
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	V KRASNOPOLSKY	NAG 5 10931	157
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	R IPING	NAG 5 10944	157
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	V KRASNOPOLSKY	NAG 5 11014	157
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	M SAHU	NAG 5 12121	158
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	D CRENSHAW	NAG 5 12178	158
11	THE CATHOLIC UNIV OF AMERICA	G SONNEBORN	GSFC	R IPING	NAG 5 12347	159
11	THE CATHOLIC UNIV OF AMERICA	J A NUTH	GSFC	R D STARR	NCC 5 636	159
11	THE CATHOLIC UNIV OF AMERICA	J BOYCE	GSFC	T DICKINSON	NAG 5 8508	155
11	THE CATHOLIC UNIV OF AMERICA	J BOYCE	GSFC	V KRASNOPOLSKY	NAG 5 10575	157
11	THE CATHOLIC UNIV OF AMERICA	J BOYCE	GSFC	D CRIDER	NAG 5 12235	158
11	THE CATHOLIC UNIV OF AMERICA	J DAVILA	GSFC	L OFMAN	NAG 5 11841	158
11	THE CATHOLIC UNIV OF AMERICA	J SWANK	GSFC	R D ROBINSON	NAG 5 8691	155
11	THE CATHOLIC UNIV OF AMERICA	K G CARPENTER	GSFC	R D ROBINSON	NAG 5 6239	155
11	THE CATHOLIC UNIV OF AMERICA	L ORWIG	GSFC	R D STARR	NCC 5 380	159
11	THE CATHOLIC UNIV OF AMERICA	M L KAISER	GSFC	N GOPALSWAMY	NAG 5 8998	156
11	THE CATHOLIC UNIV OF AMERICA	M L KAISER	GSFC	N GOPALSWANY	NAG 5 10231	156
11	THE CATHOLIC UNIV OF AMERICA	M M FREUND	GSFC	F C BRUHWEILER	NAG 5 11395	158
11	THE CATHOLIC UNIV OF AMERICA	R BEEBE	GSFC	N RUSSO	NAG 5 7753	155
11	THE CATHOLIC UNIV OF AMERICA	R J OLIVERSEN	GSFC	G W WAHLGREN	NAG 5 9539	156
11	THE CATHOLIC UNIV OF AMERICA	R J OLIVERSEN	GSFC	R D ROBINSON	NAG 5 10870	157
11	THE CATHOLIC UNIV OF AMERICA	R J OLIVERSEN	GSFC	F C BRUHWEILER	NAG 5 11137	157
11	THE CATHOLIC UNIV OF AMERICA	R J OLIVERSEN	GSFC	P C CHEN	NAG 5 11327	158
11	THE CATHOLIC UNIV OF AMERICA	R J OLIVERSEN	GSFC	M A SMITH	NAG 5 11705	158
11	THE CATHOLIC UNIV OF AMERICA	R K OLIVERSEN	GSFC	C R PROFFITT	NAG 5 8276	155
11	THE CATHOLIC UNIV OF AMERICA	S G NEFF	GSFC	P C CHEN	NAG 5 10033	156
11	THE CATHOLIC UNIV OF AMERICA	S HEAP	GSFC	F C BRUHWEILER	NAG 5 11342	158
11	THE CATHOLIC UNIV OF AMERICA	T GULL	GSFC	F C BRUHWEILER	NAG 5 12265	159
11	THE CATHOLIC UNIV OF AMERICA	T MORGAN	GSFC	D A DISANTI	NAG 5 7905	155
11	THE CATHOLIC UNIV OF AMERICA	T MORGAN	GSFC	V KRASNOPOLSKY	NAG 5 10492	157
11	THE CATHOLIC UNIV OF AMERICA	T MORGAN	GSFC	N D RUSSO	NAG 5 10795	157
11	THE CATHOLIC UNIV OF AMERICA	T R GULL	GSFC	A BOGGESS	NAG 5 3378	155
11	THE CATHOLIC UNIV OF AMERICA	W J WAGNER	GSFC	D GOPALSWAMY	NAG 5 6139	155
11	THE CATHOLIC UNIV OF AMERICA	W WAGNER	GSFC	T MORAN	NAG 5 9888	156
11	THE UNIV OF CENTRAL FLORIDA	B BETTS	GSFC	R G SELLAR	NAG 5 10730	168
11	THE UNIV OF CENTRAL FLORIDA	J BOYCE	HQ	N G BARLOW	NAG 5 8265	168
11	TUFTS UNIV	J BOYCE	GSFC	S KOUNAVES	NAG 5 11806	298
11	UNIV HOUSTON-HOUSTON	D NAVA	GSFC	D M REID	NAG 5 4765	482
11	UNIV HOUSTON-HOUSTON	M MEYER	GSFC	D FOX	NAG 5 8140	482
11	UNIV HOUSTON-HOUSTON	G JOHNSON	JSC	L PINSKY	NAG 9 1429	484
11	UNIV OF ALABAMA - BIRMINGHAM	H HASAN	GSFC	T WDOWIAK	NAG 5 6815	6
11	UNIV OF ALABAMA - BIRMINGHAM	J BOYCE	GSFC	D WDOWIAK	NAG 5 4853	6
11	UNIV OF ALABAMA - BIRMINGHAM	J BOYCE	GSFC	T WDOWIAK	NAG 5 10694	7
11	UNIV OF ALABAMA - BIRMINGHAM	M MEYER	GSFC	T WDOWIAK	NAG 5 8819	7
11	UNIV OF ALABAMA - HUNTSVILLE	D K WEST	GSFC	S ZHANG	NAG 5 7927	8
11	UNIV OF ALABAMA - HUNTSVILLE	D K WEST	GSFC	M S BRIGGS	NAG 5 7972	9
11	UNIV OF ALABAMA - HUNTSVILLE	D K WEST	GSFC	R LIEU	NAG 5 8210	9
11	UNIV OF ALABAMA - HUNTSVILLE	D K WEST	GSFC	S ZHANG	NAG 5 8523	9
11	UNIV OF ALABAMA - HUNTSVILLE	G SONNEBORN	GSFC	R LIEU	NAG 5 8956	9
11	UNIV OF ALABAMA - HUNTSVILLE	G SONNEBORN	GSFC	M BONAMENTE	NAG 5 12530	11

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF ALABAMA - HUNTSVILLE	J A LING	GSFC	P A MILLER	NAG 5 4608	8
11	UNIV OF ALABAMA - HUNTSVILLE	J BREDEKAMP	GSFC	G A GERMANY	NAG 5 8303	9
11	UNIV OF ALABAMA - HUNTSVILLE	J H BREDEKAMP	GSFC	M SHEA	NAG 5 8011	9
11	UNIV OF ALABAMA - HUNTSVILLE	J P NORRIS	GSFC	R PREECE	NAG 5 7811	8
11	UNIV OF ALABAMA - HUNTSVILLE	J P NORRIS	GSFC	S ZHANG	NAG 5 8440	9
11	UNIV OF ALABAMA - HUNTSVILLE	J P NORRIS	GSFC	W PACIESAS	NAG 5 9686	10
11	UNIV OF ALABAMA - HUNTSVILLE	J SWANK	GSFC	C ROBINSON	NAG 5 8234	9
11	UNIV OF ALABAMA - HUNTSVILLE	M MELLOTT	GSFC	G A GERMANY	NAG 5 6986	8
11	UNIV OF ALABAMA - HUNTSVILLE	P M ATKINS	GSFC	R LIEU	NAG 5 9923	10
11	UNIV OF ALABAMA - HUNTSVILLE	R HOFFMAN	GSFC	H COMFORT	NAG 5 8034	9
11	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	R LIEU	NAG 5 9183	9
11	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	W PACIESAS	NAG 5 9292	9
11	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	M R KIPPEN	NAG 5 10949	10
11	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	V C CONNAUGHTON	NAG 5 11209	11
11	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	R LIEU	NAG 5 11484	11
11	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	V C CONNAUGHTON	NAG 5 11606	11
11	UNIV OF ALABAMA - HUNTSVILLE	R MUSHOTZKY	GSFC	S N ZHANG	NAG 5 10009	10
11	UNIV OF ALABAMA - HUNTSVILLE	R MUSHOTZKY	GSFC	S N ZHANG	NAG 5 10012	10
11	UNIV OF ALABAMA - HUNTSVILLE	W J WAGNER	GSFC	J J MILLER	NAG 5 8480	9
11	UNIV OF ALABAMA - UNIV	G SONNEBORN	GSFC	W C KEEL	NAG 5 8959	15
11	UNIV OF ALABAMA - UNIV	J BOYCE	GSFC	R H TIPPING	NAG 5 8269	15
11	UNIV OF ALABAMA - UNIV	R J OLIVERSEN	GSFC	J W SULENTIC	NAG 5 10914	15
11	UNIV OF ALABAMA - UNIV	R MUSHOTZKY	GSFC	J W SULENTIC	NAG 5 11204	15
11	UNIV OF ALASKA - FAIRBANKS	G H TROFFORD	GSFC	J MILLER	NCA 5 112	18
11	UNIV OF ALASKA - FAIRBANKS	J BOYCE	GSFC	V SHARPTON	NAG 5 8722	17
11	UNIV OF ALASKA - FAIRBANKS	L ZANETTI	GSFC	W A BRISTOW	NAG 5 7799	17
11	UNIV OF ARIZONA	C R MCCREIGHT	ARC	E T YOUNG	NAG 2 1446	25
11	UNIV OF ARIZONA	D C LING	GSFC	J GIACALONE	NAG 5 7793	27
11	UNIV OF ARIZONA	D C LING	GSFC	K HSIEH	NAG 5 7966	27
11	UNIV OF ARIZONA	D C MATHER	GSFC	D H REIKE	NAG 5 11461	34
11	UNIV OF ARIZONA	D K WEST	GSFC	D GARNETT	NAG 5 7734	27
11	UNIV OF ARIZONA	D K WEST	GSFC	F MELIA	NAG 5 8239	28
11	UNIV OF ARIZONA	D K WEST	GSFC	R C KENNICUTT	NAG 5 8426	28
11	UNIV OF ARIZONA	D NAVA	GSFC	D D SWINDLE	NAG 5 4767	26
11	UNIV OF ARIZONA	D NAVA	GSFC	D V BOYNTON	NAG 5 4944	26
11	UNIV OF ARIZONA	G SONNEBORN	GSFC	G SCHMIDT	NAG 5 10245	31
11	UNIV OF ARIZONA	G SONNEBORN	GSFC	J B HOLBERG	NAG 5 10315	31
11	UNIV OF ARIZONA	G SONNEBORN	GSFC	J B HOLBERG	NAG 5 10700	32
11	UNIV OF ARIZONA	G SONNEBORN	GSFC	J B HOLBERG	NAG 5 11968	35
11	UNIV OF ARIZONA	G STRINGFELLOW	GSFC	D F BERNATH	NAG 5 9577	30
11	UNIV OF ARIZONA	J BERGSTRALH	GSFC	D FINK	NAG 5 3937	25
11	UNIV OF ARIZONA	J BERGSTRALH	GSFC	D B HUBBARD	NAG 5 4214	25
11	UNIV OF ARIZONA	J BOYCE	GSFC	D S MCMILLAN	NAG 5 4598	26
11	UNIV OF ARIZONA	J BOYCE	GSFC	D JULL	NAG 5 4832	26
11	UNIV OF ARIZONA	J BOYCE	GSFC	S W BOUGHER	NAG 5 8152	27
11	UNIV OF ARIZONA	J BOYCE	GSFC	A CAMERON	NAG 5 9609	30
11	UNIV OF ARIZONA	J BOYCE	GSFC	A S MCEWEN	NAG 5 9775	30
11	UNIV OF ARIZONA	J BOYCE	GSFC	V R BAKER	NAG 5 9790	30
11	UNIV OF ARIZONA	J BOYCE	GSFC	P H SMITH	NAG 5 10267	31
11	UNIV OF ARIZONA	J BOYCE	GSFC	W BOYNTON	NAG 5 10452	32
11	UNIV OF ARIZONA	J BOYCE	GSFC	S BOUGHER	NAG 5 10660	32
11	UNIV OF ARIZONA	J BOYCE	GSFC	L L HOOD	NAG 5 11168	33
11	UNIV OF ARIZONA	J BOYCE	GSFC	L L HOOD	NAG 5 11565	34
11	UNIV OF ARIZONA	J BOYCE	GSFC	R MALHOTRA	NAG 5 11661	34
11	UNIV OF ARIZONA	J BOYCE	GSFC	L CLOSE	NAG 5 12086	35
11	UNIV OF ARIZONA	J BOYCE	GSFC	L L HOOD	NAG 5 12471	35
11	UNIV OF ARIZONA	J GRANT	GSFC	A S MCEWEN	NAG 5 8911	28
11	UNIV OF ARIZONA	J JELETIC	GSFC	R THOMPSON	NAG 5 7923	27
11	UNIV OF ARIZONA	J JELETIC	GSFC	R THOMPSON	NAG 5 10843	32
11	UNIV OF ARIZONA	J LING	GSFC	B R SANDEL	NAG 5 7089	26
11	UNIV OF ARIZONA	J M BOYCE	GSFC	A BURROWS	NAG 5 10629	32
11	UNIV OF ARIZONA	J M BOYCE	GSFC	T SWINDLE	NAG 5 10734	32
11	UNIV OF ARIZONA	J M BOYCE	GSFC	A CAMERON	NAG 5 11153	33
11	UNIV OF ARIZONA	J M BOYCE	GSFC	P E GEISSLER	NAG 5 11169	33
11	UNIV OF ARIZONA	J M BOYCE	GSFC	S W BOUGHER	NAG 5 11183	33
11	UNIV OF ARIZONA	J SHARBER	GSFC	W A SPRIGG	NAG 5 7780	27

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF ARIZONA	M A FORMAN	GSFC	M KOTA	NAG 5 4834	26
11	UNIV OF ARIZONA	M GREENHOUSE	GSFC	J I LUNINE	NAG 5 12459	35
11	UNIV OF ARIZONA	M MEYER	GSFC	E PIERAZZO	NAG 5 10592	32
11	UNIV OF ARIZONA	N GEHRELS	GSFC	B PETERSON	NAG 5 9803	30
11	UNIV OF ARIZONA	P CRANE	GSFC	J HOLBERG	NAG 5 9072	29
11	UNIV OF ARIZONA	R BEEBE	GSFC	D HERBERT	NAG 5 8051	27
11	UNIV OF ARIZONA	R BEEBE	GSFC	D E GEISSLER	NAG 5 8340	28
11	UNIV OF ARIZONA	R CSMITH	GSFC	M RIEKE	NAS 5 02105	37
11	UNIV OF ARIZONA	R J OLIVERSEN	GSFC	A S BURROWS	NAG 5 7073	26
11	UNIV OF ARIZONA	R J OLIVERSEN	GSFC	J HOLBERG	NAG 5 9181	29
11	UNIV OF ARIZONA	R J OLIVERSEN	GSFC	J HOLBERG	NAG 5 9182	29
11	UNIV OF ARIZONA	R J OLIVERSEN	GSFC	C D IMPEY	NAG 5 9306	30
11	UNIV OF ARIZONA	R J OLIVERSEN	GSFC	A S BURROWS	NAG 5 10760	32
11	UNIV OF ARIZONA	R J OLIVERSEN	GSFC	A I ZABLUDOFF	NAG 5 11108	33
11	UNIV OF ARIZONA	R MUSHOTZKY	GSFC	A I ZABLUDOFF	NAG 5 9957	30
11	UNIV OF ARIZONA	R OLIVERSEN	GSFC	F MELIA	NAG 5 9205	29
11	UNIV OF ARIZONA	R OLIVERSEN	GSFC	D F ZARITSKY	NAG 5 9691	30
11	UNIV OF ARIZONA	R OLIVERSON	GSFC	M STEINMETZ	NAG 5 10827	32
11	UNIV OF ARIZONA	S D BARTHELOMY	GSFC	B PETERSON	NAG 5 11348	34
11	UNIV OF ARIZONA	T H MORGAN	GSFC	S M LARSON	NAG 5 9081	29
11	UNIV OF ARIZONA	T MORGAN	GSFC	D GEHRELS	NAG 5 3938	25
11	UNIV OF ARIZONA	T MORGAN	GSFC	R H BROWN	NAG 5 7083	26
11	UNIV OF ARIZONA	T MORGAN	GSFC	R S MCMILLAN	NAG 5 7533	27
11	UNIV OF ARIZONA	T MORGAN	GSFC	D S MCMILLAN	NAG 5 7854	27
11	UNIV OF ARIZONA	T MORGAN	GSFC	A L SPRAGUE	NAG 5 9234	29
11	UNIV OF ARIZONA	T MORGAN	GSFC	H CAMPINS	NAG 5 10441	31
11	UNIV OF ARIZONA	T MORGAN	GSFC	M SYKES	NAG 5 10442	31
11	UNIV OF ARIZONA	T MORGAN	GSFC	R BROWN	NAG 5 10446	32
11	UNIV OF ARIZONA	T MORGAN	GSFC	R MCMILLAN	NAG 5 10447	32
11	UNIV OF ARIZONA	TMORGAN	GSFC	M V SYKES	NAG 5 7758	27
11	UNIV OF ARIZONA	A NURRIDIN	HQ	R H BROWN	NGT 5 50190	39
11	UNIV OF ARIZONA	J BOYCE	HQ	T D SWINDLE	NAG 5 7215	26
11	UNIV OF ARIZONA	J BOYCE	HQ	J GANGULY	NAG 5 7364	26
11	UNIV OF ARIZONA	J BOYCE	HQ	A BURROWS	NAG 5 7499	27
11	UNIV OF ARIZONA	J BOYCE	HQ	L L HOOD	NAG 5 8185	28
11	UNIV OF ARIZONA	J BOYCE	HQ	L KESZTHELYI	NAG 5 8308	28
11	UNIV OF ARIZONA	J BOYCE	HQ	P H SMITH	NAG 5 8349	28
11	UNIV OF ARIZONA	J BOYCE	HQ	J LUNINE	NAG 5 10450	32
11	UNIV OF ARKANSAS - LITTLE ROCK	D DETROYE	HQ	M HUDSON	NCC 5 260	40
11	UNIV. OF CALIFORNIA	M GOLDSTEIN	GSFC	F S MOZER	NAG 5 11944	67
11	UNIV OF CALIFORNIA - BERKELEY	C P MCKAY	ARC	I DEPATER	NGT 2 52258	77
11	UNIV OF CALIFORNIA - BERKELEY	D GOORVITCH	ARC	M COHEN	NCC 2 1125	76
11	UNIV OF CALIFORNIA - BERKELEY	D HOLLENBACH	ARC	C F MCKEE	NCC 2 5492	77
11	UNIV OF CALIFORNIA - BERKELEY	D J HOLLENBACH	ARC	C F MCKEE	NGT 2 52278	77
11	UNIV OF CALIFORNIA - BERKELEY	D J HOLLENBACH	ARC	C F MCKEE	NCC 2 5416	76
11	UNIV OF CALIFORNIA - BERKELEY	B BETTS	GSFC	A WESTPHAL	NAG 5 10411	72
11	UNIV OF CALIFORNIA - BERKELEY	C SAVINELL	GSFC	V ANGELOPOULOS	NAS 5 02099	76
11	UNIV OF CALIFORNIA - BERKELEY	D DANCHI	GSFC	C TOWNES	NAG 5 12193	75
11	UNIV OF CALIFORNIA - BERKELEY	D EVANS	GSFC	R P LIN	NGT 5 30110	77
11	UNIV OF CALIFORNIA - BERKELEY	D GOLOMBEK	GSFC	J DUPUIS	NAG 5 10851	73
11	UNIV OF CALIFORNIA - BERKELEY	D K WEST	GSFC	M I DAVIS	NAG 5 3499	68
11	UNIV OF CALIFORNIA - BERKELEY	D K WEST	GSFC	K C HURLEY	NAG 5 3500	68
11	UNIV OF CALIFORNIA - BERKELEY	D K WEST	GSFC	A V FILIPPENKO	NAG 5 3556	68
11	UNIV OF CALIFORNIA - BERKELEY	D K WEST	GSFC	S VENNES	NAG 5 6551	69
11	UNIV OF CALIFORNIA - BERKELEY	D K WEST	GSFC	D M SMITH	NAG 5 7265	70
11	UNIV OF CALIFORNIA - BERKELEY	D K WEST	GSFC	M COHEN	NAG 5 7936	70
11	UNIV OF CALIFORNIA - BERKELEY	D WEST	GSFC	B FLYNN	NAG 5 6748	69
11	UNIV OF CALIFORNIA - BERKELEY	F SNOW	GSFC	R P LIN	NAS 5 98033	76
11	UNIV OF CALIFORNIA - BERKELEY	G MUCKLOW	GSFC	O H SIEGMUND	NAG 5 8667	70
11	UNIV OF CALIFORNIA - BERKELEY	G SONNEBORN	GSFC	G H FISHER	NAG 5 8984	71
11	UNIV OF CALIFORNIA - BERKELEY	G SONNEBORN	GSFC	J DUPIUS	NAG 5 10393	72
11	UNIV OF CALIFORNIA - BERKELEY	G SONNEBORN	GSFC	B Y WELSH	NAG 5 12232	75
11	UNIV OF CALIFORNIA - BERKELEY	G SONNEBORN	GSFC	O W SIEGMUND	NAG 5 12324	75
11	UNIV OF CALIFORNIA - BERKELEY	G SONNEBORN	GSFC	O W SIEGMUND	NAG 5 12424	75
11	UNIV OF CALIFORNIA - BERKELEY	G STRINGFELLOW	GSFC	P L RICHARDS	NAG 5 9398	71
11	UNIV OF CALIFORNIA - BERKELEY	H HASAN	GSFC	D H SIEGMUND	NAG 5 3913	68

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF CALIFORNIA - BERKELEY	H HASAN	GSFC	D V HURWITZ	NAG 5 4194	69
11	UNIV OF CALIFORNIA - BERKELEY	H HASAN	GSFC	D EDELSTEIN	NAG 5 7755	70
11	UNIV OF CALIFORNIA - BERKELEY	J BERGSTRALH	GSFC	D SPINRAD	NAG 5 6103	69
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	G H FISHER	NAG 5 8098	70
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	D W MARCY	NAG 5 8861	71
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	F SHU	NAG 5 10433	72
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	P KALAS	NAG 5 11769	74
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	G DELORY	NAG 5 11781	74
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	K NISHIIZUMI	NAG 5 11901	74
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	A J WESTPHAL	NAG 5 11902	74
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	G W MARCY	NAG 5 12090	75
11	UNIV OF CALIFORNIA - BERKELEY	J BOYCE	GSFC	A GLASSGOLD	NAG 5 12167	75
11	UNIV OF CALIFORNIA - BERKELEY	J HILLMAN	GSFC	I DE PATER	NAG 5 6890	70
11	UNIV OF CALIFORNIA - BERKELEY	J LING	GSFC	J G LUHMANN	NAG 5 7951	70
11	UNIV OF CALIFORNIA - BERKELEY	J M BOYCE	GSFC	W WELCH	NAG 5 10657	72
11	UNIV OF CALIFORNIA - BERKELEY	J M BOYCE	GSFC	P MARCUS	NAG 5 10664	72
11	UNIV OF CALIFORNIA - BERKELEY	J M BOYCE	GSFC	W DIETRICH	NAG 5 11179	73
11	UNIV OF CALIFORNIA - BERKELEY	J R BYRD	GSFC	D EDELSTEIN	NAG 5 10800	73
11	UNIV OF CALIFORNIA - BERKELEY	J R BYRD	GSFC	D WESTPHAL	NAG 5 10803	73
11	UNIV OF CALIFORNIA - BERKELEY	L SMITH	GSFC	C F MCKEE	NGT 5 50253	79
11	UNIV OF CALIFORNIA - BERKELEY	M L KAISER	GSFC	S BALE	NAG 5 9115	71
11	UNIV OF CALIFORNIA - BERKELEY	M SALAMON	GSFC	J ARONS	NAG 5 12031	74
11	UNIV OF CALIFORNIA - BERKELEY	M SALAMON	GSFC	R I KLEIN	NAG 5 12042	74
11	UNIV OF CALIFORNIA - BERKELEY	M SALAMON	GSFC	E QUATAERT	NAG 5 12043	75
11	UNIV OF CALIFORNIA - BERKELEY	M SALAMON	GSFC	C M MA	NAG 5 12173	75
11	UNIV OF CALIFORNIA - BERKELEY	M SALAMON	GSFC	M WHITE	NAG 5 12437	75
11	UNIV OF CALIFORNIA - BERKELEY	N GEHRELS	GSFC	K HURLEY	NAG 5 9210	71
11	UNIV OF CALIFORNIA - BERKELEY	P CRANE	GSFC	J EDELSTEIN	NAG 5 9091	71
11	UNIV OF CALIFORNIA - BERKELEY	P CRANE	GSFC	O SIEGMUND	NAG 5 9149	71
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	G F SMOOT	NAG 5 6552	69
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	O H SIEGMUND	NAG 5 9130	71
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	K C HURLEY	NAG 5 10710	73
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	G H FISHER	NAG 5 10839	73
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	I ROTH	NAG 5 10866	73
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	K C HURLEY	NAG 5 11451	74
11	UNIV OF CALIFORNIA - BERKELEY	R J OLIVERSEN	GSFC	R MALINA	NCC 5 138	77
11	UNIV OF CALIFORNIA - BERKELEY	R K OLIVERSEN	GSFC	M DAVIS	NAG 5 7833	70
11	UNIV OF CALIFORNIA - BERKELEY	R MUSHOTZKY	GSFC	E QUATAERT	NAG 5 11333	73
11	UNIV OF CALIFORNIA - BERKELEY	R MUSHOTZKY	GSFC	A V FILIPPENKO	NAG 5 11689	74
11	UNIV OF CALIFORNIA - BERKELEY	R PFAFF	GSFC	D W CARLSON	NAG 5 12590	75
11	UNIV OF CALIFORNIA - BERKELEY	T MORGAN	GSFC	K C HURLEY	NAG 5 9503	71
11	UNIV OF CALIFORNIA - BERKELEY	W WAGNER	GSFC	G H FISHER	NAG 5 8468	70
11	UNIV OF CALIFORNIA - DAVIS	D K WEST	GSFC	R H BECKER	NAG 5 8391	80
11	UNIV OF CALIFORNIA - DAVIS	D K WEST	GSFC	S STANFORD	NAG 5 8430	80
11	UNIV OF CALIFORNIA - DAVIS	M MEYER	GSFC	D Y SUMNER	NAG 5 10591	80
11	UNIV OF CALIFORNIA - DAVIS	R BEEBE	GSFC	W JACKSON	NAG 5 8258	80
11	UNIV OF CALIFORNIA - DAVIS	R F MUSHOTZKY	GSFC	R H BECKER	NAG 5 9947	80
11	UNIV OF CALIFORNIA - DAVIS	R J OLIVERSEN	GSFC	N ARAV	NAG 5 9540	80
11	UNIV OF CALIFORNIA - DAVIS	R J OLIVERSEN	GSFC	N ARAV	NAG 5 11607	80
11	UNIV OF CALIFORNIA - DAVIS	R MUSHOTZKY	GSFC	L M LUBIN	NAG 5 12373	81
11	UNIV OF CALIFORNIA - DAVIS	R OLIVERSEN	GSFC	L KNOX	NAG 5 11098	80
11	UNIV OF CALIFORNIA - IRVINE	R MUSHOTZKY	GSFC	D BUOTE	NAG 5 10748	84
11	UNIV OF CALIFORNIA - IRVINE	R MUSHOTZKY	GSFC	D BUOTE	NAG 5 10758	84
11	UNIV OF CALIFORNIA - LOS ANGELES	C BENNET	GSFC	E L WRIGHT	NAG 5 8540	89
11	UNIV OF CALIFORNIA - LOS ANGELES	C SAVINELLI	GSFC	E WRIGHT	NAS 5 02100	93
11	UNIV OF CALIFORNIA - LOS ANGELES	D EVANS	GSFC	R J STRANGEWAY	NAG 5 6965	87
11	UNIV OF CALIFORNIA - LOS ANGELES	D EVANS	GSFC	D SCHRIVER	NAG 5 8085	88
11	UNIV OF CALIFORNIA - LOS ANGELES	D K WEST	GSFC	R A EDELSON	NAG 5 7899	88
11	UNIV OF CALIFORNIA - LOS ANGELES	D K WEST	GSFC	M A JURA	NAG 5 7924	88
11	UNIV OF CALIFORNIA - LOS ANGELES	D NAVA	GSFC	D E RUBIN	NAG 5 4766	87
11	UNIV OF CALIFORNIA - LOS ANGELES	D NAVA	GSFC	F T KYTE	NAG 5 9441	90
11	UNIV OF CALIFORNIA - LOS ANGELES	D SENSKE	GSFC	G SCHUBERT	NAG 5 11691	92
11	UNIV OF CALIFORNIA - LOS ANGELES	G SONNEBORN	GSFC	M A JURA	NAG 5 10351	90
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	D M ZUCKERMAN	NAG 5 4688	87
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	G SCHUBERT	NAG 5 8530	89
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	P H WARREN	NAG 5 9027	89

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	K D MCKEEGAN	NAG 5 9789	90
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	A E RUBIN	NAG 5 12215	93
11	UNIV OF CALIFORNIA - LOS ANGELES	J M BOYCE	GSFC	W MOORE	NAG 5 10615	91
11	UNIV OF CALIFORNIA - LOS ANGELES	J M BOYCE	GSFC	B ZUCKERMAN	NAG 5 10663	91
11	UNIV OF CALIFORNIA - LOS ANGELES	J M BOYCE	GSFC	D PAIGE	NAG 5 10973	91
11	UNIV OF CALIFORNIA - LOS ANGELES	K BLANDING	GSFC	B ZUCKERMAN	NGT 5 50187	94
11	UNIV OF CALIFORNIA - LOS ANGELES	L ZANETTI	GSFC	L R LYONS	NAG 5 7962	88
11	UNIV OF CALIFORNIA - LOS ANGELES	R BEEBE	GSFC	D G KIVELSON	NAG 5 7959	88
11	UNIV OF CALIFORNIA - LOS ANGELES	R BEEBE	GSFC	D K KHURANA	NAG 5 8050	88
11	UNIV OF CALIFORNIA - LOS ANGELES	R BEEBE	GSFC	D M THORNE	NAG 5 8065	88
11	UNIV OF CALIFORNIA - LOS ANGELES	R BEEBE	GSFC	D SCHUBERT	NAG 5 8066	88
11	UNIV OF CALIFORNIA - LOS ANGELES	R J OLIVERSEN	GSFC	R A EDELSON	NAG 5 9023	89
11	UNIV OF CALIFORNIA - LOS ANGELES	R J OLIVERSEN	GSFC	S SAKAI	NAG 5 9826	90
11	UNIV OF CALIFORNIA - LOS ANGELES	R MUSHOTZKY	GSFC	R EDELSON	NAG 5 10032	90
11	UNIV OF CALIFORNIA - LOS ANGELES	W J WAGNER	GSFC	R K ULRICH	NAG 5 10905	91
11	UNIV OF CALIFORNIA - LOS ANGELES	W WAGNER	GSFC	J M PAP	NAG 5 8507	89
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	HQ	A GHEZ	NAG 5 6975	87
11	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	HQ	D JURA	NAG 5 8335	88
11	UNIV OF CALIFORNIA - RIVERSIDE	M MEYER	GSFC	C Y SWITZER	NAG 5 9812	95
11	UNIV OF CALIFORNIA - RIVERSIDE	N WHITE	GSFC	C FOSTER	NAG 5 12382	95
11	UNIV OF CALIFORNIA - RIVERSIDE	N WHITE	GSFC	F CORDOVA	NAG 5 12390	95
11	UNIV OF CALIFORNIA - RIVERSIDE	W WAGNER	GSFC	G P ZANK	NAG 5 11393	95
11	UNIV OF CALIFORNIA - RIVERSIDE	A B MERRITT	WFF	A D ZYCHE	NAG 5 5211	95
11	UNIV OF CALIFORNIA - SAN DIEGO	D H WOODEN	ARC	D E HARKER	NCC 2 5520	103
11	UNIV OF CALIFORNIA - SAN DIEGO	B BETTS	GSFC	J L BADA	NAG 5 9659	99
11	UNIV OF CALIFORNIA - SAN DIEGO	D EVANS	GSFC	K QUEST	NAG 5 6947	97
11	UNIV OF CALIFORNIA - SAN DIEGO	D NAVA	GSFC	M H THIEMENS	NAG 5 11660	101
11	UNIV OF CALIFORNIA - SAN DIEGO	F A HERRERO	GSFC	J L MATTESON	NAG 5 8731	99
11	UNIV OF CALIFORNIA - SAN DIEGO	F HERRERO	GSFC	R E ROTHSCHILD	NAG 5 10968	100
11	UNIV OF CALIFORNIA - SAN DIEGO	G SONNEBORN	GSFC	C HOWK	NAG 5 12345	102
11	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	D H THIEMENS	NAG 5 4574	96
11	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	D MARTI	NAG 5 8167	98
11	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	G W LUNGMAIR	NAG 5 8172	98
11	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	D GUIRRENBAC	NAG 5 8272	98
11	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	M H THIEMENS	NAG 5 9679	99
11	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	M H THIEMENS	NAG 5 10487	100
11	UNIV OF CALIFORNIA - SAN DIEGO	J P MURPHY	GSFC	J L MATTESON	NAS 5 97121	103
11	UNIV OF CALIFORNIA - SAN DIEGO	J SHARBER	GSFC	C MCILWAIN	NAG 5 9036	99
11	UNIV OF CALIFORNIA - SAN DIEGO	K SWANK	GSFC	D E GRIBER	NAG 5 7119	97
11	UNIV OF CALIFORNIA - SAN DIEGO	M MEYER	GSFC	M N FOMENKOVA	NAG 5 8551	98
11	UNIV OF CALIFORNIA - SAN DIEGO	M MEYER	GSFC	G ARRHENIUS	NAG 5 10667	100
11	UNIV OF CALIFORNIA - SAN DIEGO	N WHITE	GSFC	R D COHEN	NAG 5 7362	97
11	UNIV OF CALIFORNIA - SAN DIEGO	R J OLIVERSEN	GSFC	D FOSSATI	NAG 5 9122	99
11	UNIV OF CALIFORNIA - SAN DIEGO	R J OLIVERSEN	GSFC	P R BLANCO	NAG 5 9825	100
11	UNIV OF CALIFORNIA - SAN DIEGO	R J OLIVERSEN	GSFC	J TOMSICK	NAG 5 10886	100
11	UNIV OF CALIFORNIA - SAN DIEGO	R OLIVERSEN	GSFC	D TYTLER	NAG 5 9224	99
11	UNIV OF CALIFORNIA - SAN DIEGO	R OLIVERSEN	GSFC	Y REPHAELI	NAG 5 9247	99
11	UNIV OF CALIFORNIA - SAN DIEGO	R OLIVERSEN	GSFC	W HEINDL	NAG 5 10691	100
11	UNIV OF CALIFORNIA - SAN DIEGO	R OLIVERSON	GSFC	Y REPHAELI	NAG 5 10871	100
11	UNIV OF CALIFORNIA - SAN DIEGO	T MORGAN	GSFC	J R ARNOLD	NAG 5 9005	99
11	UNIV OF CALIFORNIA - SAN DIEGO	W D DAVIS	GSFC	R E ROTHSCHILD	NAS 5 30720	103
11	UNIV OF CALIFORNIA - SAN DIEGO	W WAGNER	GSFC	B V JACKSON	NAG 5 8504	98
11	UNIV OF CALIFORNIA - SAN DIEGO	D EVANS	HQ	W WHITE	NAG 5 7653	98
11	UNIV OF CALIFORNIA - SAN DIEGO	B MERRITT	WFF	D LINGENFELTER	NAG 5 5332	96
11	UNIV OF CALIFORNIA - SANTA BARBARA	D K WEST	GSFC	O M BLAES	NAG 5 7075	106
11	UNIV OF CALIFORNIA - SANTA BARBARA	G STRINGFELLOW	GSFC	P LUBIN	NAG 5 9073	107
11	UNIV OF CALIFORNIA - SANTA BARBARA	J A GRANT	GSFC	D TANIMOTO	NAG 5 7981	106
11	UNIV OF CALIFORNIA - SANTA BARBARA	J BOYCE	GSFC	S J PEALE	NAG 5 7177	106
11	UNIV OF CALIFORNIA - SANTA BARBARA	J BOYCE	GSFC	L BECKER	NAG 5 11385	108
11	UNIV OF CALIFORNIA - SANTA BARBARA	J BOYCE	GSFC	S PEALE	NAG 5 12087	108
11	UNIV OF CALIFORNIA - SANTA BARBARA	J FROGEL	GSFC	J E RUHL	NAG 5 9251	107
11	UNIV OF CALIFORNIA - SANTA BARBARA	N E WHITE	GSFC	D A CORDOVA	NAG 5 7714	106
11	UNIV OF CALIFORNIA - SANTA BARBARA	N E WHITE	GSFC	D FOSTER	NAG 5 7940	106
11	UNIV OF CALIFORNIA - SANTA BARBARA	R DONNELLY	GSFC	D CORDOVA	NAG 5 6911	106
11	UNIV OF CALIFORNIA - SANTA BARBARA	R J OLIVERSEN	GSFC	L BILDSTEN	NAG 5 8658	107
11	UNIV OF CALIFORNIA - SANTA BARBARA	R MUSHOTZKY	GSFC	R E SHIREY	NAG 5 9971	107

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF CALIFORNIA - SANTA CRUZ	D HOLLENBACK	ARC	G LAUGHLIN	NCC 2 5501	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	D J HOLLENBACH	ARC	P H BODENHEIMER	NCC 2 1081	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	D J HOLLENBACH	ARC	P BODENHEIMER	NCC 2 5418	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	J N CUZZI	ARC	P BODENHEIMER	NCC 2 5436	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	K J ZAHNLE	ARC	P H	NGT 2 52260	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	K J ZAHNLE	ARC	E I ASPHAUGH	NCC 2 5428	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	D K WEST	GSFC	S E WOOSLEY	NAG 5 8128	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	D K WEST	GSFC	J R PRIMACK	NAG 5 8218	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	D K WEST	GSFC	P GUHATHAKURTA	NAG 5 8348	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	D K WEST	GSFC	W G MATHEWS	NAG 5 8409	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	G SONNEBORN	GSFC	B J WEINER	NAG 5 10683	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	G SONNEBORN	GSFC	J X PROCHASKA	NAG 5 12496	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	J A GRANT	GSFC	E ASPHAUG	NAG 5 8914	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	J BOYCE	GSFC	D H BODENHEIMER	NAG 5 4494	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	J BOYCE	GSFC	P BODENHEIMER	NAG 5 9526	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	J BOYCE	GSFC	P BODENHEIMER	NAG 5 9661	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	J BOYCE	GSFC	D LIN	NAG 5 10727	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	J BOYCE	GSFC	D LIN	NAG 5 11779	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	J M BOYCE	GSFC	D LIN	NAG 5 10612	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	M MEYER	GSFC	D DEAMER	NAG 5 9403	111
11	UNIV OF CALIFORNIA - SANTA CRUZ	M S BURRELL	GSFC	P GUHATHAKURTA	NGT 5 43	113
11	UNIV OF CALIFORNIA - SANTA CRUZ	M SALAMON	GSFC	S E WOOSLEY	NAG 5 12036	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	M SALAMON	GSFC	J R PRIMACK	NAG 5 12326	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	M SALOMON	GSFC	D C LIN	NAG 5 12151	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	R F MUSHOTZKY	GSFC	B J WEINER	NAG 5 10053	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	R J OLIVERSEN	GSFC	P MADAU	NAG 5 11513	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	R MUSHOTZKY	GSFC	W G MATHEWS	NAG 5 9956	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	R OLIVERSEN	GSFC	P MADAU	NAG 5 10232	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	S LAMBROS	GSFC	D E THORSETT	NAG 5 9711	112
11	UNIV OF CALIFORNIA - SANTA CRUZ	J BOYCE	HQ	D N LIN	NAG 5 8196	111
11	UNIV OF CHICAGO	B F SMITH	ARC	R N MILLER	NCC 2 1103	205
11	UNIV OF CHICAGO	C BENNETT	GSFC	S MEYER	NAG 5 8539	204
11	UNIV OF CHICAGO	D K WEST	GSFC	A KONIGL	NAG 5 3687	203
11	UNIV OF CHICAGO	D K WEST	GSFC	J E CARLSTROM	NAG 5 7986	204
11	UNIV OF CHICAGO	D WEST	GSFC	P FRISCH	NAG 5 6405	203
11	UNIV OF CHICAGO	E S CHENG	GSFC	S S MEYER	NAG 5 11380	205
11	UNIV OF CHICAGO	G SONNEBORN	GSFC	D E WELTY	NAG 5 10370	204
11	UNIV OF CHICAGO	J BOYCE	GSFC	D GROSSMAN	NAG 5 4476	203
11	UNIV OF CHICAGO	J BOYCE	GSFC	F RICHTER	NAG 5 9378	204
11	UNIV OF CHICAGO	J BOYCE	GSFC	T E ECONOMOU	NAG 5 11793	205
11	UNIV OF CHICAGO	J BOYCE	GSFC	R S LEWIS	NAG 5 11903	205
11	UNIV OF CHICAGO	J KING	GSFC	C LOPATE	NAG 5 8032	204
11	UNIV OF CHICAGO	J KING	GSFC	C LOPATE	NAG 5 11860	205
11	UNIV OF CHICAGO	J M BOYCE	GSFC	T ECONOMOU	NAG 5 11043	205
11	UNIV OF CHICAGO	P CRANE	GSFC	T OKA	NAG 5 9583	204
11	UNIV OF CHICAGO	P HUNTER	GSFC	P C FRISCH	NAG 5 8163	204
11	UNIV OF CHICAGO	R BEEBE	GSFC	R PIERREHUMBERT	NAG 5 7731	203
11	UNIV OF CHICAGO	R J OLIVERSEN	GSFC	A KONIGL	NAG 5 9063	204
11	UNIV OF CHICAGO	R J OLIVERSEN	GSFC	D Q LAMB	NAG 5 10759	204
11	UNIV OF CHICAGO	R J OLIVERSEN	GSFC	W HU	NAG 5 10840	204
11	UNIV OF CHICAGO	R J OLIVERSEN	GSFC	J J CONNELL	NAG 5 10878	205
11	UNIV OF CHICAGO	R J OLIVERSEN	GSFC	D E WELTY	NAG 5 11413	205
11	UNIV OF CHICAGO	R OLIVERSEN	GSFC	D E WELTY	NAG 5 3228	203
11	UNIV OF CHICAGO	T MORGAN	GSFC	P PALMER	NAG 5 8708	204
11	UNIV OF CHICAGO	A NURRIDIN	HQ	J E CARLSTROM	NGT 5 50173	206
11	UNIV OF CHICAGO	J BOYCE	HQ	F M RICHTER	NAG 5 6972	203
11	UNIV OF CHICAGO	J BOYCE	HQ	L GROSSMAN	NAG 5 7307	203
11	UNIV OF CHICAGO	S NASH-STEVENSON	MSFC	J CARLSTROM	NGT 8 52906	206
11	UNIV OF CHICAGO	S NASH-STEVENSON	MSFC	J CARLSTORM	NGT 8 52921	206
11	UNIV OF CINCINNATI	G SONNEBORN	GSFC	M L SITKO	NAG 5 8986	419
11	UNIV OF CINCINNATI	M MEYER	GSFC	A I MILLER	NAG 5 9418	419
11	UNIV OF COLORADO - BOULDER	D BOGAN	GSFC	D R PRYOR	NAG 5 8096	127
11	UNIV OF COLORADO - BOULDER	D BOGAN	GSFC	L W ESPOSITO	NAG 5 8338	127
11	UNIV OF COLORADO - BOULDER	D EVANS	GSFC	F BAGENAL	NAG 5 7088	125
11	UNIV OF COLORADO - BOULDER	D EVANS	GSFC	D RUSCH	NAG 5 7725	126
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	M J SHULL	NAG 5 4063	123

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	M BEGELMAN	NAG 5 6337	124
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	J T STOCKE	NAG 5 6936	125
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	A J HAMILTON	NAG 5 7128	125
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	M C BEGELMAN	NAG 5 7723	126
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	J BALLY	NAG 5 8108	127
11	UNIV OF COLORADO - BOULDER	D K WEST	GSFC	R A MCCRAY	NAG 5 8236	127
11	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	K OHTSUKI	NAG 5 11498	134
11	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	R PAPPALARDO	NAG 5 11616	135
11	UNIV OF COLORADO - BOULDER	D WEST	GSFC	T A AYRES	NAG 5 3226	123
11	UNIV OF COLORADO - BOULDER	D WEST	GSFC	G S STRINGFELLOW	NAG 5 3394	123
11	UNIV OF COLORADO - BOULDER	D WEST	GSFC	G HARPER	NAG 5 4804	124
11	UNIV OF COLORADO - BOULDER	DBOGAN	GSFC	W PRYOR	NAG 5 8256	127
11	UNIV OF COLORADO - BOULDER	F HERRERO	GSFC	A L BETZ	NAG 5 8538	128
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	G HARPER	NAG 5 9010	128
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	J SHULL	NAG 5 9018	128
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	J A MORSE	NAG 5 10319	131
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	G HARPER	NAG 5 10339	131
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	T R AYRES	NAG 5 10340	131
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	J SHULL	NAG 5 10948	132
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	J SHULL	NAG 5 10950	132
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	T AYRES	NAG 5 11848	135
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	B E WOOD	NAG 5 11950	136
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	G HARPER	NAG 5 12210	136
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	A BROWN	NAG 5 12233	137
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	J A MORSE	NAG 5 12240	137
11	UNIV OF COLORADO - BOULDER	G SONNEBORN	GSFC	G HARPER	NAG 5 12438	137
11	UNIV OF COLORADO - BOULDER	H HASAN	GSFC	P T STOCKE	NAG 5 3794	123
11	UNIV OF COLORADO - BOULDER	H HASAN	GSFC	D L BENDER	NAG 5 4095	123
11	UNIV OF COLORADO - BOULDER	H HASAN	GSFC	T P SNOW	NAG 5 6758	125
11	UNIV OF COLORADO - BOULDER	H HASAN	GSFC	D WILKINSON	NAG 5 7465	126
11	UNIV OF COLORADO - BOULDER	H HASAN	GSFC	D BENDER	NAG 5 7638	126
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	J M FORBES	NAG 5 8755	128
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	S W LEE	NAG 5 9631	130
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	G STEWART	NAG 5 10000	130
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	G R STEWART	NAG 5 10508	131
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	M MELON	NAG 5 10581	131
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	T SNOW	NAG 5 10601	132
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	G R STEWART	NAG 5 11766	135
11	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	K OHTSUKI	NAG 5 11895	136
11	UNIV OF COLORADO - BOULDER	J JELETIC	GSFC	D GREEN	NAG 5 12279	137
11	UNIV OF COLORADO - BOULDER	J M BOYCE	GSFC	B JAKOSKY	NAG 5 10616	132
11	UNIV OF COLORADO - BOULDER	J M BOYCE	GSFC	F BAGENAL	NAG 5 11177	133
11	UNIV OF COLORADO - BOULDER	J M GREBOWSKY	GSFC	J TOOMRE	NAG 5 8133	127
11	UNIV OF COLORADO - BOULDER	J R BYRD	GSFC	D M SCHNEIDER	NAG 5 10797	132
11	UNIV OF COLORADO - BOULDER	J SWANK	GSFC	C REYNOLDS	NAG 5 7329	126
11	UNIV OF COLORADO - BOULDER	L D DEMING	GSFC	L W ESPOSITO	NAG 5 9694	130
11	UNIV OF COLORADO - BOULDER	L FEINBERG	GSFC	J GREEN	NAS 5 98043	138
11	UNIV OF COLORADO - BOULDER	L LING	GSFC	D PRYOR	NAG 5 6474	125
11	UNIV OF COLORADO - BOULDER	M L KAISER	GSFC	R ERGUN	NAG 5 9114	129
11	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	S PALO	NAG 5 6791	125
11	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	M CODRESCU	NAG 5 6984	125
11	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	M V GOLDMAN	NAG 5 9026	128
11	UNIV OF COLORADO - BOULDER	M SALAMON	GSFC	N GNEDIN	NAG 5 12029	136
11	UNIV OF COLORADO - BOULDER	M SALAMON	GSFC	M C BEGELMAN	NAG 5 12035	136
11	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	R T STEBBINS	NAG 5 6880	125
11	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	J GREEN	NAG 5 9092	129
11	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	T AYRES	NAG 5 11241	133
11	UNIV OF COLORADO - BOULDER	R BEEBE	GSFC	O TOON	NAG 5 6900	125
11	UNIV OF COLORADO - BOULDER	R BEEBE	GSFC	N M SCHNEIDER	NAG 5 8047	127
11	UNIV OF COLORADO - BOULDER	R BEEBE	GSFC	A HENDRIX	NAG 5 8178	127
11	UNIV OF COLORADO - BOULDER	R J OLIVERSEN	GSFC	G S STRINGFELLOW	NAG 5 7223	126
11	UNIV OF COLORADO - BOULDER	R J OLIVERSEN	GSFC	J SHULL	NAG 5 7262	126
11	UNIV OF COLORADO - BOULDER	R J OLIVERSEN	GSFC	B WOOD	NAG 5 9041	128
11	UNIV OF COLORADO - BOULDER	R J OLIVERSEN	GSFC	A J HAMILTON	NAG 5 10763	132
11	UNIV OF COLORADO - BOULDER	R J OLIVERSEN	GSFC	D PROGA	NAG 5 11736	135
11	UNIV OF COLORADO - BOULDER	R J OLIVERSEN	GSFC	J C GREEN	NAG 5 11490	134

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF COLORADO - BOULDER	R MUSHOTZKY	GSFC	C S REYNOLDS	NAG 5 10083	130
11	UNIV OF COLORADO - BOULDER	R MUSHOTZKY	GSFC	S L SKINNER	NAG 5 10325	131
11	UNIV OF COLORADO - BOULDER	R MUSHOTZKY	GSFC	S L SKINNER	NAG 5 10326	131
11	UNIV OF COLORADO - BOULDER	R MUSHOTZKY	GSFC	S L SKINNER	NAG 5 10362	131
11	UNIV OF COLORADO - BOULDER	R MUSHOTZKY	GSFC	J STOCKE	NAG 5 11890	136
11	UNIV OF COLORADO - BOULDER	T H MORGAN	GSFC	N M SCHNEIDER	NAG 5 9007	128
11	UNIV OF COLORADO - BOULDER	A NURRIDIN	HQ	J C GREEN	NGT 5 50176	141
11	UNIV OF COLORADO - BOULDER	A NURRIDIN	HQ	P S CONTI	NGT 5 50194	141
11	UNIV OF COLORADO - BOULDER	A NURRIDIN	HQ	F BAGENAL	NGT 5 50197	141
11	UNIV OF COLORADO - BOULDER	J BOYCE	HQ	D STEWART	NAG 5 6048	124
11	UNIV OF COLORADO - BOULDER	J BOYCE	HQ	T P SNOW	NAG 5 7449	126
11	UNIV OF COLORADO - BOULDER	J BOYCE	HQ	A W NOLIN	NAG 5 8259	127
11	UNIV OF COLORADO - BOULDER	J BOYCE	HQ	J M FORBES	NAG 5 8266	127
11	UNIV OF COLORADO - BOULDER	J SHARBER	HQ	D W RUSCH	NAG 5 7652	126
11	UNIV OF CONNECTICUT	J I TROMBKA	GSFC	J S SCHWEITZER	NAG 5 8602	144
11	UNIV OF CONNECTICUT	M MEYER	GSFC	P J GOGARTEN	NAG 5 7915	144
11	UNIV OF DAYTON	J BOYCE	GSFC	A PHELPS	NAG 5 9804	420
11	UNIV OF DAYTON	J BOYCE	GSFC	A M KOZIOL	NAG 5 9808	420
11	UNIV OF DELAWARE	D K WEST	GSFC	T STANOV	NAG 5 7009	149
11	UNIV OF DELAWARE	G SONNEBORN	GSFC	S P OWOCKI	NAG 5 11095	149
11	UNIV OF DELAWARE	G SONNEBORN	GSFC	S P OWOCKI	NAG 5 11886	149
11	UNIV OF DELAWARE	G SONNEBORN	GSFC	J L PROVENCAL	NAG 5 12323	149
11	UNIV OF DELAWARE	J DAVILA	GSFC	D MULLAN	NAG 5 11630	149
11	UNIV OF DELAWARE	R J OLIVERSEN	GSFC	D MULLAN	NAG 5 11228	149
11	UNIV OF DELAWARE	R MUSHOTZKY	GSFC	J MCDONALD	NAG 5 10416	149
11	UNIV OF DELAWARE	RJ OLIVERSEN	GSFC	T STANLEV	NAG 5 10919	149
11	UNIV OF DELAWARE	W WAGNER	GSFC	W H MATHAEUS	NAG 5 11006	149
11	UNIV OF DELAWARE - BARTOL RES INST	D C LING	GSFC	G P ZANK	NAG 5 7796	150
11	UNIV OF DELAWARE - BARTOL RES INST	D K WEST	GSFC	S P OWOCKI	NAG 5 3530	150
11	UNIV OF DELAWARE - BARTOL RES INST	J LING	GSFC	J A LE ROUX	NAG 5 6969	150
11	UNIV OF DELAWARE - BARTOL RES INST	W WAGNER	GSFC	W H MATTHAEUS	NAG 5 7164	150
11	UNIV OF DELAWARE - BARTOL RES INST	J LING	HQ	S OWOCKI	NAG 5 6470	150
11	UNIV OF DELAWARE - BARTOL RES INST	J LING	HQ	C SMITH	NAG 5 6570	150
11	UNIV OF DELAWARE - BARTOL RES INST	J LING	HQ	J BIEBER	NAG 5 7142	150
11	UNIV OF DENVER	T MOORE	GSFC	T M STEPHEN	NCC 5 506	143
11	UNIV OF DENVER	S NASH-STEVENSON	MSFC	R AMME	NGT 8 52894	143
11	UNIV OF FLORIDA	E F ERICKSON	ARC	R K PINA	NCC 2 5424	173
11	UNIV OF FLORIDA	E F ERICKSON	ARC	C M TELESCO	NCC 2 5246	173
11	UNIV OF FLORIDA	R J OLIVERSEN	GSFC	K GROGAN	NAG 5 9280	171
11	UNIV OF FLORIDA	R J OLIVERSEN	GSFC	R GUZMAN	NAG 5 11635	172
11	UNIV OF FLORIDA	R K OLIVERSEN	GSFC	F W HAMANN	NAG 5 8522	171
11	UNIV OF GEORGIA	D K WEST	GSFC	L MAGNANI	NAG 5 8376	189
11	UNIV OF GEORGIA	D K WEST	GSFC	P H HAUSCHILDT	NAG 5 8425	189
11	UNIV OF GEORGIA	J BOYCE	GSFC	P C STANCIL	NAG 5 10551	189
11	UNIV OF GEORGIA	P CRANE	GSFC	P C STANCIL	NAG 5 9088	189
11	UNIV OF GEORGIA	R J OLIVERSEN	GSFC	P H HAUSCHILDT	NAG 5 9222	189
11	UNIV OF HAWAII AT MANOA - HONOLULU	K W HODAPP	ARC	D N HALL	NAS 2 98077	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MANCINI	ARC	G JACOB	NAG 2 6057	190
11	UNIV OF HAWAII AT MANOA - HONOLULU	B BETTS	GSFC	P LUCEY	NAG 5 10704	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	B CAMPBELL	GSFC	S K SHARMA	NAG 5 7139	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	D K WEST	GSFC	T SIMON	NAG 5 8216	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	D NAVA	GSFC	D C JEWITT	NAG 5 4669	190
11	UNIV OF HAWAII AT MANOA - HONOLULU	D SENSKE	GSFC	S K ROWLAND	NAG 5 10228	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	D SENSKE	GSFC	B R HAWKE	NAG 5 10237	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	E SMITH	GSFC	D N HALL	NAG 5 8421	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	G L BJORAKER	GSFC	T C OWEN	NCC 5 373	197
11	UNIV OF HAWAII AT MANOA - HONOLULU	G SONNEBORN	GSFC	T SIMON	NAG 5 8979	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	G SONNEBORN	GSFC	T SIMON	NAG 5 10646	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	G SONNEBORN	GSFC	R KUDRITZKI	NAG 5 11938	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	G SONNEBORN	GSFC	T SIMON	NAG 5 12198	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	H FREY	GSFC	S ANDERSON	NAG 5 12506	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	H FREY	GSFC	S ANDERSON	NAG 5 12508	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BERGSTRALH	GSFC	D J MEECH	NAG 5 4495	190
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BERGSTRALH	GSFC	D OWEN	NAG 5 6561	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	K KEIL	NAG 5 8713	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	G TAYLOR	NAG 5 9190	193

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	L BECKER	NAG 5 9354	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	P MOUGINIS-MARK	NAG 5 9576	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	B HAWKE	NAG 5 9765	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	D JEWITT	NAG 5 10427	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	D C JEWITT	NAG 5 11564	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	E GRUEN	NAG 5 11782	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	V HAMILTON	NAG 5 12485	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	J HAMMER	NAG 5 12486	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	J GRANT	GSFC	S K ROWLAND	NAG 5 8921	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	J GURMAN	GSFC	J R KUHN	NAG 5 8002	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	J M BOYCE	GSFC	A KROT	NAG 5 10610	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	J SWANK	GSFC	H EBELING	NAG 5 6336	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	M MEYER	GSFC	T C OWEN	NAG 5 8593	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	M MEYER	GSFC	T C OWEN	NAG 5 8863	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	M SALAMON	GSFC	I SZAPUDI	NAG 5 12101	196
11	UNIV OF HAWAII AT MANOA - HONOLULU	R F MUSHOTZKY	GSFC	T SIMON	NAG 5 9896	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R F MUSHOTZKY	GSFC	W BRANDNER	NAG 5 9921	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R J OLIVERSEN	GSFC	N KAISER	NAG 5 7038	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	R J OLIVERSEN	GSFC	H EBELING	NAG 5 8253	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	R J OLIVERSEN	GSFC	W D HEACOX	NAG 5 9042	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	R J OLIVERSEN	GSFC	H EBELING	NAG 5 10773	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	E MARTIN	NAG 5 9992	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	I M GIOIA	NAG 5 9994	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	D B SANDERS	NAG 5 10025	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	H EBELING	NAG 5 10041	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	H EBELING	NAG 5 10085	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	T SIMON	NAG 5 10128	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	R MUSHOTZKY	GSFC	T SIMON	NAG 5 10564	195
11	UNIV OF HAWAII AT MANOA - HONOLULU	R OLIVERSEN	GSFC	J HENRY	NAG 5 9166	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	R OLIVERSON	GSFC	H EBELING	NAG 5 9238	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	D J THOLEN	NAG 5 4524	190
11	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	D JEWITT	NAG 5 7056	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	D G LUCEY	NAG 5 7855	191
11	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	P G LUCEY	NAG 5 8991	193
11	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	D JEWITT	NAG 5 10437	194
11	UNIV OF HAWAII AT MANOA - HONOLULU	W HUEBNER	GSFC	D J THOLEN	NAG 5 4223	190
11	UNIV OF HAWAII AT MANOA - HONOLULU	W WAGNER	GSFC	J R KUHN	NAG 5 8330	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	A NURRIDIN	HQ	J HENRY	NGT 5 50175	197
11	UNIV OF HAWAII AT MANOA - HONOLULU	E BARKER	HQ	D N HALL	NASW 5062	197
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	HQ	D J RODDIER	NAG 5 8298	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	HQ	T MCCORD	NAG 5 8300	192
11	UNIV OF HAWAII AT MANOA - HONOLULU	K BLANDING	HQ	R JOSEPH	NGT 5 50396	197
11	UNIV OF HAWAII AT MANOA - HONOLULU	P SAKIMOTO	HQ	R A CROWE	NAG 5 10141	194
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	A BARNES	ARC	T MOUSCHOVIAS	NGT 2 52244	212
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D C MATHER	GSFC	D MEIXNER	NAG 5 11460	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D K WEST	GSFC	U CHU	NAG 5 8104	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D K WEST	GSFC	F K LAMB	NAG 5 8424	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	G SONNEBORN	GSFC	R A GRUENDL	NAG 5 10182	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	G SONNEBORN	GSFC	Y CHU	NAG 5 10303	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	G SONNEBORN	GSFC	M A GUERRERO	NAG 5 12255	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J BOYCE	GSFC	F LAMB	NAG 5 8740	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M MEYER	GSFC	G OLSEN	NAG 5 8479	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M SALAMON	GSFC	F LAMB	NAG 5 12030	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSEN	GSFC	S L SHAPIRO	NAG 5 7152	208
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSEN	GSFC	S L SHAPIRO	NAG 5 8418	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSEN	GSFC	C F GAMMIE	NAG 5 9180	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSEN	GSFC	R F WEBBINK	NAG 5 11016	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSEN	GSFC	J J MOHR	NAG 5 11415	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSEN	GSFC	A SPECK	NAG 5 11644	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J OLIVERSON	GSFC	S L SHAPIRO	NAG 5 10781	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R MUSHOTZKY	GSFC	Y CHU	NAG 5 10011	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R MUSHOTZKY	GSFC	Y CHU	NAG 5 10037	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R MUSHOTZKY	GSFC	Y CHU	NAG 5 10042	209
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R MUTSHOTZKY	GSFC	J R DICKEL	NAG 5 11159	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R PFAFF	GSFC	E KUDEKI	NAG 5 11011	210
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	T MORGAN	GSFC	L SYNDER	NAG 5 8521	209

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	T MORGAN	GSFC	L SNYDER	NAG 5 10491	210
11	UNIV OF IOWA	DFAIRFIELD	GSFC	L FRANK	NAG 5 11485	224
11	UNIV OF IOWA	J BREDEKAMP	GSFC	D ANDERSON	NAG 5 7187	223
11	UNIV OF IOWA	J LING	GSFC	I H CAIRNS	NAG 5 7390	223
11	UNIV OF IOWA	R MUSHOTZKY	GSFC	R IGNACE	NAG 5 9964	224
11	UNIV OF KANSAS MEDICAL CTR	D J BOGAN	GSFC	T E CRAVENS	NAG 5 11038	228
11	UNIV OF KENTUCKY	D GOORTVITCH	ARC	G J FERLAND	NCC 2 5405	229
11	UNIV OF KENTUCKY	D K WEST	GSFC	I SHLOSMAN	NAG 5 3841	229
11	UNIV OF KENTUCKY	D K WEST	GSFC	G FERLAND	NAG 5 6937	229
11	UNIV OF KENTUCKY	D K WEST	GSFC	G J FERLAND	NAG 5 8212	229
11	UNIV OF KENTUCKY	E DWEK	GSFC	M ELITZUR	NAG 5 10518	229
11	UNIV OF KENTUCKY	M SALAMON	GSFC	G J FERLAND	NAG 5 12020	229
11	UNIV OF KENTUCKY	R J OLIVERSEN	GSFC	I SHLOSMAN	NAG 5 10823	229
11	UNIV OF LOUISVILLE	D J BOGAN	GSFC	T DOWLING	NAG 5 11040	230
11	UNIV OF MARYLAND - COLL PARK	D J HOLLENBACH	ARC	M G WOLFIRE	NCC 2 5348	268
11	UNIV OF MARYLAND - COLL PARK	L ALLAMANDOLA	ARC	M GUDIPATI	NCC 2 1303	268
11	UNIV OF MARYLAND - COLL PARK	A HARDING	GSFC	J D TRASCO	NCC 5 180	268
11	UNIV OF MARYLAND - COLL PARK	A HARDING	GSFC	J TRASCO	NCC 5 640	269
11	UNIV OF MARYLAND - COLL PARK	B DENNIS	GSFC	E J SCHUMAH	NAG 5 10180	261
11	UNIV OF MARYLAND - COLL PARK	D C LING	GSFC	D LUKASIAK	NAG 5 8079	258
11	UNIV OF MARYLAND - COLL PARK	D K WEST	GSFC	J L WANG	NAG 5 3836	255
11	UNIV OF MARYLAND - COLL PARK	D K WEST	GSFC	E C OSTRIKER	NAG 5 3840	255
11	UNIV OF MARYLAND - COLL PARK	D LAVERY	GSFC	D L AKIN	NCC 5 417	269
11	UNIV OF MARYLAND - COLL PARK	D LEISAWITZ	GSFC	L G MUNDY	NAG 5 9750	260
11	UNIV OF MARYLAND - COLL PARK	D NORTON	GSFC	J D TRASCO	NAG 5 8842	259
11	UNIV OF MARYLAND - COLL PARK	D TOLL	GSFC	J TOWNSHEND	NAG 5 96060	267
11	UNIV OF MARYLAND - COLL PARK	D WEST	GSFC	D G CURRLA	NAG 5 3361	255
11	UNIV OF MARYLAND - COLL PARK	D WEST	GSFC	S VEILLEUX	NAG 5 6547	257
11	UNIV OF MARYLAND - COLL PARK	D WEST	GSFC	M WOLFIRE	NAG 5 6750	257
11	UNIV OF MARYLAND - COLL PARK	F C JONES	GSFC	F B MCDONALD	NAG 5 11091	263
11	UNIV OF MARYLAND - COLL PARK	G SONNEBORN	GSFC	T LANZ	NAG 5 10895	263
11	UNIV OF MARYLAND - COLL PARK	G SONNEBORN	GSFC	T LANZ	NAG 5 10929	263
11	UNIV OF MARYLAND - COLL PARK	G SONNEBORN	GSFC	T LANZ	NAG 5 12383	266
11	UNIV OF MARYLAND - COLL PARK	G SONNEBORN	GSFC	T LANZ	NAG 5 12480	266
11	UNIV OF MARYLAND - COLL PARK	J BERGSTRALH	GSFC	D F A'HEARN	NAG 5 4080	256
11	UNIV OF MARYLAND - COLL PARK	J BOYCE	GSFC	D C RICHARDSON	NAG 5 11722	265
11	UNIV OF MARYLAND - COLL PARK	J BOYCE	GSFC	J M STONE	NAG 5 11767	265
11	UNIV OF MARYLAND - COLL PARK	J J HILMAN	GSFC	C M LISSE	NAG 5 11468	264
11	UNIV OF MARYLAND - COLL PARK	J KING	GSFC	F IPAVICH	NAG 5 8033	258
11	UNIV OF MARYLAND - COLL PARK	J LING	GSFC	F B MCDONALD	NAG 5 7141	257
11	UNIV OF MARYLAND - COLL PARK	J M BOYCE	GSFC	L MUNDY	NAG 5 10611	262
11	UNIV OF MARYLAND - COLL PARK	J PARRISH	GSFC	D AKIN	NCC 5 243	269
11	UNIV OF MARYLAND - COLL PARK	K CARPENTER	GSFC	L MUNDY	NAG 5 11854	265
11	UNIV OF MARYLAND - COLL PARK	M GUHATHAKURTA	GSFC	F B MCDONALD	NAG 5 7762	257
11	UNIV OF MARYLAND - COLL PARK	M M FREUND	GSFC	L G MUNDY	NAG 5 10502	262
11	UNIV OF MARYLAND - COLL PARK	R BEEBE	GSFC	D P HAMILTON	NAG 5 7958	258
11	UNIV OF MARYLAND - COLL PARK	R HARTLE	GSFC	M BROWN	NCC 5 374	269
11	UNIV OF MARYLAND - COLL PARK	R J OLIVERSEN	GSFC	M MILLER	NAG 5 9756	260
11	UNIV OF MARYLAND - COLL PARK	R MUSHOTZKY	GSFC	A J YOUNG	NAG 5 9935	261
11	UNIV OF MARYLAND - COLL PARK	R MUSHOTZKY	GSFC	C S REYNOLDS	NAG 5 11523	264
11	UNIV OF MARYLAND - COLL PARK	R OLIVERSEN	GSFC	P J TEUBEN	NAG 5 8833	259
11	UNIV OF MARYLAND - COLL PARK	R OLIVERSEN	GSFC	E OSTRIKER	NAG 5 9167	259
11	UNIV OF MARYLAND - COLL PARK	R OLIVERSEN	GSFC	M WOLFIRE	NAG 5 9271	259
11	UNIV OF MARYLAND - COLL PARK	T KOSTIUK	GSFC	J D TRASCO	NCC 5 372	269
11	UNIV OF MARYLAND - COLL PARK	T VON ROSENVINGE	GSFC	G MASON	NAG 5 8877	259
11	UNIV OF MARYLAND - COLL PARK	T VONROSENVINGE	GSFC	G M MASON	NAG 5 9793	260
11	UNIV OF MARYLAND - COLL PARK	W J WAGNER	GSFC	T GOLLA	NAG 5 10810	262
11	UNIV OF MARYLAND - COLL PARK	W WAGNER	GSFC	T GOLLA	NAG 5 7145	257
11	UNIV OF MARYLAND - COLL PARK	W WAGNER	GSFC	M R KUNDU	NAG 5 11872	265
11	UNIV OF MARYLAND - COLL PARK	J BOYCE	HQ	R J WALKER	NAG 5 7634	257
11	UNIV OF MARYLAND - COLL PARK	D JARRETT	JPL	M F A'HEARN	NASW 00004	268
11	UNIV OF MARYLAND - COLL PARK	M SMITH	MSFC	A S WILSON	NAG 8 1755	267
11	UNIV OF MARYLAND BALTIMORE COUNTY	D K WEST	GSFC	T J TURNER	NAG 5 7385	271
11	UNIV OF MARYLAND BALTIMORE COUNTY	J BOYCE	GSFC	S SAKIMOTOS	NAG 5 12287	274
11	UNIV OF MARYLAND BALTIMORE COUNTY	J M BOYCE	GSFC	S SAKIMOTO	NAG 5 11150	273
11	UNIV OF MARYLAND BALTIMORE COUNTY	J M BOYCE	GSFC	S SAKIMOTO	NAG 5 11174	273

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF MARYLAND BALTIMORE COUNTY	N E WHITE	GSFC	M J HENRIKSEN	NCC 5 367	275
11	UNIV OF MARYLAND BALTIMORE COUNTY	N WHITE	GSFC	M J HENRIKSEN	NCC 5 610	275
11	UNIV OF MARYLAND BALTIMORE COUNTY	R J OLIVERSEN	GSFC	T J TURNER	NAG 5 9346	272
11	UNIV OF MARYLAND BALTIMORE COUNTY	R J OLIVERSEN	GSFC	E S PERLMAN	NAG 5 9995	272
11	UNIV OF MARYLAND BALTIMORE COUNTY	R J OLIVERSEN	GSFC	E S PERLMAN	NAG 5 9997	272
11	UNIV OF MARYLAND BALTIMORE COUNTY	R J OLIVERSEN	GSFC	T J TURNER	NAG 5 11092	273
11	UNIV OF MARYLAND BALTIMORE COUNTY	R MUSHOTZKY	GSFC	E S PERLMAN	NAG 5 10024	272
11	UNIV OF MARYLAND BALTIMORE COUNTY	R MUSHOTZKY	GSFC	E S PERLMAN	NAG 5 10086	272
11	UNIV OF MARYLAND BALTIMORE COUNTY	R MUSHOTZKY	GSFC	E S PERLMAN	NAG 5 10109	272
11	UNIV OF MARYLAND BALTIMORE COUNTY	W WAGNER	GSFC	J M PAP	NAG 5 12161	274
11	UNIV OF MASSACHUSETTS	J BOYCE	GSFC	B W REINISCH	NAG 5 11792	299
11	UNIV OF MASSACHUSETTS - AMHERST	D NAVA	GSFC	D I GOLDSTEIN	NAG 5 4652	299
11	UNIV OF MASSACHUSETTS - AMHERST	E S CHENG	GSFC	G WILSON	NAG 5 11940	300
11	UNIV OF MASSACHUSETTS - AMHERST	H THRONSON	GSFC	D R ERICKSON	NAG 5 4272	299
11	UNIV OF MASSACHUSETTS - AMHERST	J BOYCE	GSFC	G E MCGILL	NAG 5 12158	300
11	UNIV OF MASSACHUSETTS - AMHERST	J BREDEKAMP	GSFC	M WEINBERG	NAG 5 8197	299
11	UNIV OF MASSACHUSETTS - AMHERST	J GRANT	GSFC	G E MCGILL	NAG 5 8909	299
11	UNIV OF MASSACHUSETTS - AMHERST	M MEYER	GSFC	W M IRVINE	NAG 5 8718	299
11	UNIV OF MASSACHUSETTS - AMHERST	M MEYER	GSFC	L MARGULIS	NAG 5 10681	300
11	UNIV OF MASSACHUSETTS - AMHERST	M SALAMON	GSFC	M D WEINBERG	NAG 5 12038	300
11	UNIV OF MASSACHUSETTS - AMHERST	R J OLIVERSEN	GSFC	Q WANG	NAG 5 8999	299
11	UNIV OF MASSACHUSETTS - AMHERST	R MUSHOTZKY	GSFC	S IMMLER	NAG 5 11855	300
11	UNIV OF MASSACHUSETTS - AMHERST	R OLIVERSEN	GSFC	Q WANG	NAG 5 9429	299
11	UNIV OF MASSACHUSETTS - AMHERST	R OLIVERSEN	GSFC	Q WANG	NAG 5 10783	300
11	UNIV OF MASSACHUSETTS - AMHERST	T MORGAN	GSFC	P SCHOERB	NAG 5 10677	300
11	UNIV OF MASSACHUSETTS - AMHERST	J BOYCE	HQ	G E MCGILL	NAG 5 8184	299
11	UNIV OF MIAMI	C TREES	GSFC	D BOGUCKI	NAG 5 12513	175
11	UNIV OF MIAMI	C W TREES	GSFC	R ZIKA	NAG 5 6659	174
11	UNIV OF MICHIGAN - ANN ARBOR	D J HOLLENBACH	ARC	F C ADAMS	NCC 2 5442	314
11	UNIV OF MICHIGAN - ANN ARBOR	J J LISSAUER	ARC	F C ADAMS	NGT 2 52257	315
11	UNIV OF MICHIGAN - ANN ARBOR	D BOGAN	GSFC	M R COMBI	NAG 5 8942	310
11	UNIV OF MICHIGAN - ANN ARBOR	D BOGAN	GSFC	A NAGY	NAG 5 8946	310
11	UNIV OF MICHIGAN - ANN ARBOR	D GOLOMBEK	GSFC	K FREESE	NAG 5 10907	312
11	UNIV OF MICHIGAN - ANN ARBOR	D J BOGAN	GSFC	T I GOMBOSI	NAG 5 11041	312
11	UNIV OF MICHIGAN - ANN ARBOR	D K WEST	GSFC	D O RICHSTONE	NAG 5 8238	310
11	UNIV OF MICHIGAN - ANN ARBOR	D SENSKE	GSFC	D J SCHEERES	NAG 5 11639	313
11	UNIV OF MICHIGAN - ANN ARBOR	D WEST	GSFC	F C ADAMS	NAG 5 2869	309
11	UNIV OF MICHIGAN - ANN ARBOR	G SONNEBORN	GSFC	J N BREGMAN	NAG 5 9021	310
11	UNIV OF MICHIGAN - ANN ARBOR	G SONNEBORN	GSFC	J N BREGMAN	NAG 5 11448	312
11	UNIV OF MICHIGAN - ANN ARBOR	G SONNEBORN	GSFC	J N BREGMAN	NAG 5 11483	312
11	UNIV OF MICHIGAN - ANN ARBOR	J BOYCE	GSFC	D J SCHEERES	NAG 5 8715	310
11	UNIV OF MICHIGAN - ANN ARBOR	J BOYCE	GSFC	R JAYAWARDHANA	NAG 5 11905	313
11	UNIV OF MICHIGAN - ANN ARBOR	J BOYCE	GSFC	S BOUGHER	NAG 5 12567	313
11	UNIV OF MICHIGAN - ANN ARBOR	J GRANT	GSFC	D J SCHEERES	NAG 5 9017	310
11	UNIV OF MICHIGAN - ANN ARBOR	J LING	GSFC	T ZURBUCHEN	NAG 5 6471	309
11	UNIV OF MICHIGAN - ANN ARBOR	J M BOYCE	GSFC	S W BOUGHER	NAG 5 12442	313
11	UNIV OF MICHIGAN - ANN ARBOR	J R BYRD	GSFC	D TARLE	NAG 5 10805	311
11	UNIV OF MICHIGAN - ANN ARBOR	M MELLOTT	GSFC	D R BARKER	NAG 5 8080	310
11	UNIV OF MICHIGAN - ANN ARBOR	R BEEBE	GSFC	D SHYN	NAG 5 7858	310
11	UNIV OF MICHIGAN - ANN ARBOR	R J OLIVERSEN	GSFC	A E EVRARD	NAG 5 8458	310
11	UNIV OF MICHIGAN - ANN ARBOR	R J OLIVERSEN	GSFC	J N BREGMAN	NAG 5 10765	311
11	UNIV OF MICHIGAN - ANN ARBOR	R J OLIVERSEN	GSFC	J N BREGMAN	NAG 5 10806	311
11	UNIV OF MICHIGAN - ANN ARBOR	R MUSHOTZKY	GSFC	J N BREGMAN	NAG 5 9980	311
11	UNIV OF MICHIGAN - ANN ARBOR	R MUSHOTZKY	GSFC	J N BREGMAN	NAG 5 9981	311
11	UNIV OF MICHIGAN - ANN ARBOR	R MUSHOTZKY	GSFC	M F ALLER	NAG 5 11973	313
11	UNIV OF MICHIGAN - ANN ARBOR	T MORGAN	GSFC	D M BERNSTEIN	NAG 5 7860	310
11	UNIV OF MICHIGAN - ANN ARBOR	T MORGAN	GSFC	D J SCHEERES	NAG 5 8993	310
11	UNIV OF MICHIGAN - ANN ARBOR	E G STANSBERY	JSC	P O SEITZER	NAG 9 1251	314
11	UNIV OF MINN	D EVANS	GSFC	D LIN	NAG 5 8205	319
11	UNIV OF MINN	G A SOFFEN	GSFC	K DAVIDSON	NGT 5 102	322
11	UNIV OF MINN	J FROGEL	GSFC	S HANANY	NAG 5 9349	320
11	UNIV OF MINN	J SHARBER	GSFC	D L LYSAK	NAG 5 8082	319
11	UNIV OF MINN	J SPANN	GSFC	C A CATTELL	NAG 5 11124	320
11	UNIV OF MINN	M H ACUNA	GSFC	N LIN	NAG 5 7462	319
11	UNIV OF MINN	M KAISER	GSFC	K GOETZ	NAG 5 9146	320
11	UNIV OF MINN	M L KAISER	GSFC	K GOETZ	NAG 5 10178	320

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF MINN	ML KAISER	GSFC	K GOETZ	NAG 5 11325	320
11	UNIV OF MINN	P HUNTER	GSFC	R HUMPHREYS	NAG 5 9407	320
11	UNIV OF MINN	R J OLIVERSEN	GSFC	T W JONES	NAG 5 10774	320
11	UNIV OF MINN	R OLIVERSEN	GSFC	E SKILLMAN	NAG 5 9221	320
11	UNIV OF MINN	T MORGAN	GSFC	D J JONES	NAG 5 7906	319
11	UNIV OF MINN	J BOYCE	HQ	R O PEPIN	NAG 5 7094	319
11	UNIV OF NEBRASKA - LINCOLN	N WHITE	GSFC	M GASKELL	NAG 5 6506	337
11	UNIV OF NEVADA - LAS VEGAS	D VITAGLIANO	GSFC	D WEISTROP	NAS 5 31231	338
11	UNIV OF NEVADA - LAS VEGAS	H HASAN	GSFC	V H KWONG	NAG 5 6727	338
11	UNIV OF NEVADA - RENO	J BOYCE	GSFC	R SCHULTZ	NAG 5 8267	339
11	UNIV OF NEVADA - RENO	J BOYCE	GSFC	R A SCHULTZ	NAG 5 12222	339
11	UNIV OF NEVADA - RENO	J BOYCE	GSFC	W M CALVIN	NAG 5 12223	339
11	UNIV OF NEVADA - RENO	P ROGERS	GSFC	R SCHULTZ	NAG 5 6881	339
11	UNIV OF NEW HAMPSHIRE - DURHAM	D C LING	GSFC	D A LEE	NAG 5 7792	343
11	UNIV OF NEW HAMPSHIRE - DURHAM	G MUCKLOW	GSFC	J QUINN	NAG 5 8733	344
11	UNIV OF NEW HAMPSHIRE - DURHAM	J LING	GSFC	P A ISENBERG	NAG 5 7097	344
11	UNIV OF NEW HAMPSHIRE - DURHAM	J NORRIS	GSFC	J RYAN	NAS 5 26645	346
11	UNIV OF NEW HAMPSHIRE - DURHAM	J P NORRIS	GSFC	J RYAN	NAG 5 9685	344
11	UNIV OF NEW HAMPSHIRE - DURHAM	J P NORRIS	GSFC	M L MCCONNELL	NAG 5 9689	344
11	UNIV OF NEW HAMPSHIRE - DURHAM	L ZANETTI	GSFC	D A LYNCH	NAG 5 7798	343
11	UNIV OF NEW HAMPSHIRE - DURHAM	M MELLOTT	GSFC	K A LYNCH	NGT 5 50379	347
11	UNIV OF NEW HAMPSHIRE - DURHAM	T E MOORE	GSFC	J M QUINN	NCC 5 499	346
11	UNIV OF NEW HAMPSHIRE - DURHAM	B A MERRITT	WFF	J M RYAN	NAG 5 5212	342
11	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	J J PAPIKE	NAG 5 9463	362
11	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	A BREARLEY	NAG 5 9798	362
11	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	A BREARLY	NAG 5 11862	363
11	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	J J PIPIKE	NAG 5 11976	363
11	UNIV OF NEW MEXICO-ALBUQUERQUE	J M BOYCE	GSFC	D J RIETMEIJER	NAG 5 4441	362
11	UNIV OF NOTRE DAME	R J OLIVERSEN	GSFC	P GARNAVICH	NAG 5 9364	219
11	UNIV OF OKLAHOMA - NORMAN	D K WEST	GSFC	E A BARON	NAG 5 3505	425
11	UNIV OF OKLAHOMA - NORMAN	G SONNEBORN	GSFC	K M LEIGHLY	NAG 5 10366	426
11	UNIV OF OKLAHOMA - NORMAN	M SALAMON	GSFC	E BARON	NAG 5 12127	426
11	UNIV OF OKLAHOMA - NORMAN	R J OLIVERSEN	GSFC	D BRANCH	NAG 5 9165	426
11	UNIV OF OKLAHOMA - NORMAN	R J OLIVERSEN	GSFC	K M LEIGHLY	NAG 5 9745	426
11	UNIV OF OKLAHOMA - NORMAN	R J OLIVERSEN	GSFC	K M LEIGHLY	NAG 5 10171	426
11	UNIV OF OKLAHOMA - NORMAN	R MUSHOTZKY	GSFC	K M LEIGHLY	NAG 5 9991	426
11	UNIV OF OREGON - EUGENE	D GOLOMBEK	GSFC	D SCHOMBERT	NAG 5 6109	431
11	UNIV OF OREGON - EUGENE	R J OLIVERSEN	GSFC	J IMAMURA	NAG 5 10709	431
11	UNIV OF OREGON - EUGENE	R K OLIVERSEN	GSFC	J IMAMURA	NAG 5 8505	431
11	UNIV OF PENNSYLVANIA	G STRINGFELLOW	GSFC	M DEVLIN	NAG 5 9229	449
11	UNIV OF PENNSYLVANIA	J BOYCE	GSFC	C ALCOCK	NAG 5 10731	449
11	UNIV OF PENNSYLVANIA	M SALAMON	GSFC	C M MA	NAG 5 12033	449
11	UNIV OF PENNSYLVANIA	R J OLIVERSEN	GSFC	B JAIN	NAG 5 10923	449
11	UNIV OF PENNSYLVANIA	R J OLIVERSEN	GSFC	B JAIN	NAG 5 10924	449
11	UNIV OF PENNSYLVANIA	R J OLIVERSEN	GSFC	M TEGMARK	NAG 5 11099	449
11	UNIV OF PENNSYLVANIA	R OLIVERSEN	GSFC	M TEGMARK	NAG 5 9194	448
11	UNIV OF PITTSBURGH	B BETTS	GSFC	B W STEWART	NAG 5 8531	450
11	UNIV OF PITTSBURGH	D K WEST	GSFC	D A TURNSHEK	NAG 5 7930	450
11	UNIV OF PITTSBURGH	D K WEST	GSFC	J D HILLIER	NAG 5 8211	450
11	UNIV OF PITTSBURGH	D K WEST	GSFC	A CONNOLLY	NAG 5 8546	450
11	UNIV OF PITTSBURGH	G SONNEBORN	GSFC	J D HILLIER	NAG 5 10377	451
11	UNIV OF PITTSBURGH	G SONNEBORN	GSFC	J D HILLIER	NAG 5 10378	451
11	UNIV OF PITTSBURGH	J BREDEKAMP	GSFC	A CONNOLLY	NAG 5 9399	450
11	UNIV OF PITTSBURGH	J M BOYCE	GSFC	G GATEWOOD	NAG 5 10628	451
11	UNIV OF PITTSBURGH	S HEAP	GSFC	D HILLIER	NAG 5 9836	451
11	UNIV OF ROCHESTER	C R MCCREIGHT	ARC	W J FORREST	NAG 2 1533	389
11	UNIV OF ROCHESTER	C R MCCREIGHT	ARC	W J FORREST	NAG 2 1452	389
11	UNIV OF ROCHESTER	G MUCKLOW	GSFC	J L PIPHER	NAG 5 8642	389
11	UNIV OF ROCHESTER	G STRINGFELLOW	GSFC	J L PIPHER	NAG 5 6267	389
11	UNIV OF ROCHESTER	M GREENHOUSE	GSFC	D J FORREST	NAG 5 10429	389
11	UNIV OF ROCHESTER	R K OLIVERSEN	GSFC	A FRANK	NAG 5 8428	389
11	UNIV OF ROCHESTER	W J WAGNER	GSFC	D H THOMAS	NAG 5 6119	389
11	UNIV OF SOUTH FLORIDA	H V FREY	GSFC	C B CONNOR	NAG 5 11318	176
11	UNIV OF SOUTHERN CALIFORNIA	D BOGAN	GSFC	D SHEMANSKY	NAG 5 8939	115
11	UNIV OF SOUTHERN CALIFORNIA	D K WEST	GSFC	G J PETERS	NAG 5 3429	115
11	UNIV OF SOUTHERN CALIFORNIA	D K WEST	GSFC	G PETERS	NAG 5 8367	115

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF SOUTHERN CALIFORNIA	G SONNEBORN	GSFC	G J PETERS	NAG 5 8978	115
11	UNIV OF SOUTHERN CALIFORNIA	G SONNEBORN	GSFC	D E SHEMANSKY	NAG 5 10930	116
11	UNIV OF SOUTHERN CALIFORNIA	G SONNEBORN	GSFC	G J PETERS	NAG 5 12239	116
11	UNIV OF SOUTHERN CALIFORNIA	G SONNEBORN	GSFC	G J PETERS	NAG 5 12253	116
11	UNIV OF SOUTHERN CALIFORNIA	J BOYCE	GSFC	D L JUDGE	NAG 5 11807	116
11	UNIV OF SOUTHERN CALIFORNIA	J GURMAN	GSFC	E J RHODES	NAG 5 8021	115
11	UNIV OF SOUTHERN CALIFORNIA	J LING	GSFC	M A GRUNTMAN	NAG 5 6966	115
11	UNIV OF SOUTHERN CALIFORNIA	R BEEBE	GSFC	D JUDGE	NAG 5 8274	115
11	UNIV OF SOUTHERN CALIFORNIA	R J OLIVERSEN	GSFC	G J PETERS	NAG 5 7117	115
11	UNIV OF SOUTHERN CALIFORNIA	R J OLIVERSEN	GSFC	G PETERS	NAG 5 9124	116
11	UNIV OF SOUTHERN CALIFORNIA	R J OLIVERSEN	GSFC	G PETERS	NAG 5 11802	116
11	UNIV OF SOUTHERN CALIFORNIA	R POLIDAN	GSFC	G J PETERS	NAG 5 6696	115
11	UNIV OF SOUTHERN CALIFORNIA	W WAGNER	GSFC	D L JUDGE	NAG 5 7147	115
11	UNIV OF SOUTHERN CALIFORNIA	W WAGNER	GSFC	E J RHODES	NAG 5 8545	115
11	UNIV OF SOUTHERN MISSISSIPPI	M MEYER	GSFC	F HUANG	NAG 5 10668	325
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	D V MCSWEEN	NAG 5 4541	465
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	L A TAYLOR	NAG 5 8726	465
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	L A TAYLOR	NAG 5 10414	466
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	H MCSWEEN	NAG 5 10525	466
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	N THONNARD	NAG 5 10582	466
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	J MOERSCH	NAG 5 10635	466
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	L TAYLOR	NAG 5 10794	466
11	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	H MCSWEEN	NAG 5 11567	466
11	UNIV OF TENNESSEE - KNOXVILLE	J GRANT	GSFC	D BRITT	NAG 5 8926	466
11	UNIV OF TENNESSEE - KNOXVILLE	J M BOYCE	GSFC	J E MOERSCH	NAG 5 11201	466
11	UNIV OF TENNESSEE - KNOXVILLE	M MEYER	GSFC	L KAH	NAG 5 10666	466
11	UNIV OF TENNESSEE - KNOXVILLE	M MEYER	GSFC	J E MOERSH	NAG 5 10788	466
11	UNIV OF TENNESSEE - KNOXVILLE	R J OLIVERSEN	GSFC	A MEZZACAPPA	NAG 5 8405	465
11	UNIV OF TENNESSEE - KNOXVILLE	T MORGAN	GSFC	D T BRITT	NAG 5 9061	466
11	UNIV OF TENNESSEE SPACE INST-TULLAHOMA	J BOYCE	HQ	D Y MCSWEEN	NAG 5 4387	467
11	UNIV OF TEXAS - AUSTIN	D BOGAN	GSFC	D GOLDSTEIN	NAG 5 8143	489
11	UNIV OF TEXAS - AUSTIN	D GOLOMBEK	GSFC	C WHEELER	NAG 5 9302	490
11	UNIV OF TEXAS - AUSTIN	D K WEST	GSFC	B J WILLS	NAG 5 3431	488
11	UNIV OF TEXAS - AUSTIN	D K WEST	GSFC	P HOEFLICH	NAG 5 7937	489
11	UNIV OF TEXAS - AUSTIN	D SENSKE	GSFC	Y NAKAMURA	NAG 5 11619	491
11	UNIV OF TEXAS - AUSTIN	G SONNEBORN	GSFC	H L DINERSTEIN	NAG 5 11597	491
11	UNIV OF TEXAS - AUSTIN	G SONNEBORN	GSFC	E L ROBINSON	NAG 5 12322	491
11	UNIV OF TEXAS - AUSTIN	G STRINGFELLOW	GSFC	D JAFFE	NAG 5 4209	488
11	UNIV OF TEXAS - AUSTIN	G STRINGFELLOW	GSFC	D JAFFE	NAG 5 9230	490
11	UNIV OF TEXAS - AUSTIN	H DINERSTEIN	GSFC	G SONNEBORN	NAG 5 9239	490
11	UNIV OF TEXAS - AUSTIN	H HASAN	GSFC	P J SHELUS	NAG 5 6728	489
11	UNIV OF TEXAS - AUSTIN	H V FREY	GSFC	D P CHAMBERS	NAG 5 9144	490
11	UNIV OF TEXAS - AUSTIN	J BERGSTRALH	GSFC	D N BASH	NAG 5 3786	488
11	UNIV OF TEXAS - AUSTIN	J BOYCE	GSFC	W P COCHRAN	NAG 5 8301	489
11	UNIV OF TEXAS - AUSTIN	J BOYCE	GSFC	W COCHRAN	NAG 5 9227	490
11	UNIV OF TEXAS - AUSTIN	J BOYCE	GSFC	P HARVEY	NAG 5 10458	490
11	UNIV OF TEXAS - AUSTIN	J BOYCE	GSFC	N J EVANS	NAG 5 10488	490
11	UNIV OF TEXAS - AUSTIN	J BREDEKAMP	GSFC	D E WINGET	NAG 5 9321	490
11	UNIV OF TEXAS - AUSTIN	L KALUZIENSKI	GSFC	J C WHEELER	NAG 5 10121	490
11	UNIV OF TEXAS - AUSTIN	M S BURRELL	GSFC	D T JAFFE	NGT 5 137	493
11	UNIV OF TEXAS - AUSTIN	R J OLIVERSEN	GSFC	J WHEELER	NAG 5 10766	490
11	UNIV OF TEXAS - AUSTIN	R J OLIVERSEN	GSFC	J WHEELER	NAG 5 10767	491
11	UNIV OF TEXAS - AUSTIN	R J OLIVERSEN	GSFC	P R SHAPIRO	NAG 5 10825	491
11	UNIV OF TEXAS - AUSTIN	R J OLIVERSEN	GSFC	H MARTEL	NAG 5 10826	491
11	UNIV OF TEXAS - AUSTIN	T H MORGAN	GSFC	A L COCHRAN	NAG 5 9003	489
11	UNIV OF TEXAS - AUSTIN	T MORGAN	GSFC	D S BARKER	NAG 5 7791	489
11	UNIV OF TEXAS - AUSTIN	T MORGAN	GSFC	L TRAFTON	NAG 5 10435	490
11	UNIV OF TEXAS - AUSTIN	J BOYCE	HQ	N J EVANS	NAG 5 7203	489
11	UNIV OF TEXAS - DALLAS	J BYRD	GSFC	R A HEELIS	NAS 5 01068	494
11	UNIV OF TEXAS - EL PASO	J N CUZZI	ARC	S M ROACH	NCC 2 5441	495
11	UNIV OF TEXAS - EL PASO	P SAKIMOTO	GSFC	R LOPEZ	NAG 5 10151	495
11	UNIV OF TEXAS - EL PASO	R J OLIVERSEN	GSFC	V E SMITH	NAG 5 9213	495
11	UNIV OF TOLEDO	D K WEST	GSFC	S R FEDERMAN	NAG 5 4957	421
11	UNIV OF TOLEDO	D K WEST	GSFC	K S BJORKMAN	NAG 5 8054	421
11	UNIV OF TOLEDO	D K WEST	GSFC	J E BJORKMAN	NAG 5 8794	422
11	UNIV OF TOLEDO	D WEST	GSFC	J E BJORKMAN	NAG 5 3248	421

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF TOLEDO	G SONNEBORN	GSFC	S R FEDERMAN	NAG 5 8961	422
11	UNIV OF TOLEDO	G SONNEBORN	GSFC	S R FEDERMAN	NAG 5 10305	422
11	UNIV OF TOLEDO	G SONNEBORN	GSFC	N D MORRISON	NAG 5 12320	422
11	UNIV OF TOLEDO	H HASAN	GSFC	S R FEDERMAN	NAG 5 7754	421
11	UNIV OF TOLEDO	H THRONSON	GSFC	D N WITT	NAG 5 4338	421
11	UNIV OF TOLEDO	J LING	GSFC	A WITT	NAG 5 6624	421
11	UNIV OF TOLEDO	R J OLIVERSEN	GSFC	A N WITT	NAG 5 9376	422
11	UNIV OF TOLEDO	R OLIVERSEN	GSFC	A WITT	NAG 5 9202	422
11	UNIV OF TOLEDO	J BOYCE	HQ	P B JAMES	NAG 5 8183	422
11	UNIV OF UTAH	D K WEST	GSFC	B C BROMLEY	NAG 5 8277	498
11	UNIV OF UTAH	L BARBIER	GSFC	E LOHBER	NAS 5 00120	499
11	UNIV OF UTAH	L M BARBIER	GSFC	E C LOH	NAG 5 3902	498
11	UNIV OF VIRGINIA	D BOYCE	GSFC	D E JOHNSON	NAG 5 4283	518
11	UNIV OF VIRGINIA	D SENSKE	GSFC	R A BARAGIOLA	NAG 5 10436	520
11	UNIV OF VIRGINIA	G SONNEBORN	GSFC	T X THUAN	NAG 5 8954	519
11	UNIV OF VIRGINIA	G SONNEBORN	GSFC	E M MURPHY	NAG 5 10250	520
11	UNIV OF VIRGINIA	G SONNEBORN	GSFC	T X THUAN	NAG 5 10341	520
11	UNIV OF VIRGINIA	G SONNEBORN	GSFC	R W O'CONNELL	NAG 5 12262	521
11	UNIV OF VIRGINIA	G SONNEBORN	GSFC	R W O'CONNEL	NAG 5 12267	521
11	UNIV OF VIRGINIA	G SONNEBORN	GSFC	E M MURPHY	NAG 5 12609	521
11	UNIV OF VIRGINIA	J BOYCE	GSFC	R A BARAGIOLA	NAG 5 11771	521
11	UNIV OF VIRGINIA	J BOYCE	GSFC	R E JOHNSON	NAG 5 12472	521
11	UNIV OF VIRGINIA	J M BOYCE	GSFC	S BALBUS	NAG 5 10655	520
11	UNIV OF VIRGINIA	M SALAMON	GSFC	Z LI	NAG 5 12102	521
11	UNIV OF VIRGINIA	R BEEBE	GSFC	R BARAGIOLA	NAG 5 6828	518
11	UNIV OF VIRGINIA	R BEEBE	GSFC	R E JOHNSON	NAG 5 7749	519
11	UNIV OF VIRGINIA	R F MUSHOTZKY	GSFC	T X THUAN	NAG 5 9900	520
11	UNIV OF VIRGINIA	R J OLIVERSEN	GSFC	R A CHEVALIER	NAG 5 8130	519
11	UNIV OF VIRGINIA	R J OLIVERSEN	GSFC	R A CHEVALIER	NAG 5 8232	519
11	UNIV OF VIRGINIA	R K OLIVERSEN	GSFC	R O'CONNELL	NAG 5 6403	518
11	UNIV OF VIRGINIA	R MUSHOTZKY	GSFC	C L SARAZIN	NAG 5 10074	520
11	UNIV OF VIRGINIA	R MUSHOTZKY	GSFC	C L SARAZIN	NAG 5 10075	520
11	UNIV OF VIRGINIA	R OLIVERSEN	GSFC	J HAWLEY	NAG 5 9266	519
11	UNIV OF VIRGINIA	J BOYCE	HQ	S BALBUS	NAG 5 7500	519
11	UNIV OF VIRGINIA	J BOYCE	HQ	D A CHEVALIER	NAG 5 8088	519
11	UNIV OF VIRGINIA	J BOYCE	HQ	R A BARAGIOLA	NAG 5 8444	519
11	UNIV OF WASHINGTON	D H WOODEN	ARC	D BROWNLEE	NGT 2 52219	537
11	UNIV OF WASHINGTON	J J LISSAUER	ARC	T QUINN	NGT 2 52288	537
11	UNIV OF WASHINGTON	D K WEST	GSFC	S F ANDERSON	NAG 5 7932	531
11	UNIV OF WASHINGTON	D K WEST	GSFC	P SZKODY	NAG 5 8374	531
11	UNIV OF WASHINGTON	D WEST	GSFC	G R LAKE	NAG 5 3023	529
11	UNIV OF WASHINGTON	G SONNEBORN	GSFC	E H BOHM-VITENSE	NAG 5 8966	532
11	UNIV OF WASHINGTON	G SONNEBORN	GSFC	P SZKODY	NAG 5 8981	532
11	UNIV OF WASHINGTON	G SONNEBORN	GSFC	P SZKODY	NAG 5 10246	533
11	UNIV OF WASHINGTON	G SONNEBORN	GSFC	P SZKODY	NAG 5 10343	533
11	UNIV OF WASHINGTON	G SONNEBORN	GSFC	P SZKODY	NAG 5 10400	533
11	UNIV OF WASHINGTON	G SONNEBORN	GSFC	P SZKODY	NAG 5 12203	535
11	UNIV OF WASHINGTON	J BOYCE	GSFC	D S MCCALLUM	NAG 5 4540	529
11	UNIV OF WASHINGTON	J FISCHER	GSFC	G LAKE	NAG 5 6626	530
11	UNIV OF WASHINGTON	J SHARBER	GSFC	R M WINGLEE	NAG 5 8089	531
11	UNIV OF WASHINGTON	J SHARBER	GSFC	R M WINGLEE	NAG 5 11869	534
11	UNIV OF WASHINGTON	J SPANN	GSFC	R M WINGLEE	NAG 5 10962	533
11	UNIV OF WASHINGTON	J SWANK	GSFC	P SZKODY	NAG 5 7278	530
11	UNIV OF WASHINGTON	L KALUZIENSKI	GSFC	B MARGON	NAG 5 7330	530
11	UNIV OF WASHINGTON	M MEYER	GSFC	D CATLING	NAG 5 11542	534
11	UNIV OF WASHINGTON	P CRANE	GSFC	J GUNDLACH	NAG 5 9086	532
11	UNIV OF WASHINGTON	P HUNTER	GSFC	G LAKE	NAG 5 8164	531
11	UNIV OF WASHINGTON	R J LAWRENCE	GSFC	R A HOUZE	NAG 5 9668	532
11	UNIV OF WASHINGTON	R OLIVERSEN	GSFC	P SZKODY	NAG 5 3121	529
11	UNIV OF WASHINGTON	R PFAFF	GSFC	R H HOLZWORTH	NAG 5 11679	534
11	UNIV OF WASHINGTON	M DAHL	HQ	D E BROWNLEE	NAG 7 99001	535
11	UNIV OF WISCONSIN - MADISON	B BETTS	GSFC	L SROMOVSKY	NAG 5 10729	545
11	UNIV OF WISCONSIN - MADISON	D F MUSHOTZKY	GSFC	H A KOBULNICKY	NAG 5 9931	544
11	UNIV OF WISCONSIN - MADISON	D K WEST	GSFC	W T SANDERS	NAG 5 3524	542
11	UNIV OF WISCONSIN - MADISON	D K WEST	GSFC	K H NORDSIECK	NAG 5 7931	543
11	UNIV OF WISCONSIN - MADISON	D K WEST	GSFC	R D MATHIEU	NAG 5 8280	543

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	UNIV OF WISCONSIN - MADISON	D K WEST	GSFC	D P COX	NAG 5 8417	543
11	UNIV OF WISCONSIN - MADISON	D WEST	GSFC	M BERSHADY	NAG 5 6032	542
11	UNIV OF WISCONSIN - MADISON	G SONNEBORN	GSFC	R BENJAMIN	NAG 5 8967	543
11	UNIV OF WISCONSIN - MADISON	G SONNEBORN	GSFC	B P WAKKER	NAG 5 9024	543
11	UNIV OF WISCONSIN - MADISON	G SONNEBORN	GSFC	R BENJAMIN	NAG 5 11849	545
11	UNIV OF WISCONSIN - MADISON	G SONNEBORN	GSFC	R BENJAMIN	NAG 5 12196	546
11	UNIV OF WISCONSIN - MADISON	H D VITAGLIANO	GSFC	F ROESLER	NAS 5 30131	547
11	UNIV OF WISCONSIN - MADISON	J SHARBER	GSFC	P WANG	NAG 5 7605	543
11	UNIV OF WISCONSIN - MADISON	M S BURRELL	GSFC	P TIMBIE	NGT 5 46	548
11	UNIV OF WISCONSIN - MADISON	M S BURRELL	GSFC	K H NORDSIECK	NGT 5 115	548
11	UNIV OF WISCONSIN - MADISON	M SALAMON	GSFC	D P COX	NAG 5 12128	546
11	UNIV OF WISCONSIN - MADISON	P CRANE	GSFC	J E LAWLER	NAG 5 10196	544
11	UNIV OF WISCONSIN - MADISON	R BEEBE	GSFC	D M HARRIS	NAG 5 7952	543
11	UNIV OF WISCONSIN - MADISON	R BEEBE	GSFC	L A SROMOVSKY	NAG 5 8057	543
11	UNIV OF WISCONSIN - MADISON	R J OLIVERSEN	GSFC	B P WAKKER	NAG 5 9179	544
11	UNIV OF WISCONSIN - MADISON	R J OLIVERSEN	GSFC	H A KOBULNICKY	NAG 5 10770	545
11	UNIV OF WISCONSIN - MADISON	R J OLIVERSEN	GSFC	J P CASSINELLI	NAG 5 11221	545
11	UNIV OF WISCONSIN - MADISON	R L KELLEY	GSFC	D MCCAMMON	NAG 5 8652	543
11	UNIV OF WISCONSIN - MADISON	R MUSHOTZKY	GSFC	M ORIO	NAG 5 10415	545
11	UNIV OF WISCONSIN - MADISON	R MUSHOTZKY	GSFC	R IGNACE	NAG 5 12557	546
11	UNIV OF WISCONSIN - MADISON	R OLIVERSEN	GSFC	J CASSINELLI	NAG 5 9226	544
11	UNIV OF WISCONSIN - MADISON	T MORGAN	GSFC	L A SROMOVSKY	NAG 5 6788	542
11	UNIV OF WYOMING	J P NORRIS	GSFC	R CANTERNA	NAG 5 11191	549
11	UTAH STATE UNIV	G SCHWEMMER	GSFC	T D WILKERSON	NCC 5 219	501
11	UTAH STATE UNIV	J BOYCE	GSFC	B G FEJER	NAG 5 8638	500
11	UTAH STATE UNIV	J M GREBOWSKY	GSFC	R W SCHUNK	NAG 5 8227	500
11	VA POLYTECH INST & ST UNIV	J BOYCE	GSFC	R BODNAR	NAG 5 10733	525
11	VANDERBILT UNIV	J M BOYCE	GSFC	D WEINTRAVB	NAG 5 10572	468
11	VANDERBILT UNIV	R HOFFMAN	GSFC	R CHAPPELL	NAG 5 8618	468
11	VILLANOVA UNIV	D K WEST	GSFC	E FITZPATRICK	NAG 5 7113	452
11	VILLANOVA UNIV	D K WEST	GSFC	E M SION	NAG 5 8388	452
11	VILLANOVA UNIV	G Q SONNEBORN	GSFC	E F QUINAN	NAG 5 12138	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E F QUINAN	NAG 5 8985	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E F QUINAN	NAG 5 10369	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E L FITZPATRICK	NAG 5 10385	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E M SION	NAG 5 10386	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E F QUINAN	NAG 5 10387	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E L FITPATRICK	NAG 5 10686	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E M SION	NAG 5 12067	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E F QUINAN	NAG 5 12125	452
11	VILLANOVA UNIV	G SONNEBORN	GSFC	E FITZPATRICK	NAG 5 12137	452
11	VILLANOVA UNIV	R J OLIVERSEN	GSFC	E M SION	NAG 5 11482	452
11	WASHINGTON STATE UNIV	J BOYCE	GSFC	E BROOK	NAG 5 9345	538
11	WASHINGTON UNIV - ST. LOUIS	B BETTS	GSFC	L HASKIN	NAG 5 10703	331
11	WASHINGTON UNIV - ST. LOUIS	B CAMPBELL	GSFC	L HASKIN	NAG 5 7140	330
11	WASHINGTON UNIV - ST. LOUIS	D BOGAN	GSFC	W MCKINNON	NAG 5 8899	331
11	WASHINGTON UNIV - ST. LOUIS	D S SENSKE	GSFC	R E ARVIDSON	NAG 5 11620	332
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	R L KOROTEV	NAG 5 8609	330
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	J T GLEAVES	NAG 5 8717	330
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	R M WALKER	NAG 5 8729	330
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	C M HOHENBERG	NAG 5 9442	331
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	F PODOSEK	NAG 5 9449	331
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	R M WALKER	NAG 5 9801	331
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	B FEGLEY	NAG 5 10553	331
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	F S STADERMANN	NAG 5 11865	332
11	WASHINGTON UNIV - ST. LOUIS	J M BOYCE	GSFC	R J PHILLIPS	NAG 5 11202	332
11	WASHINGTON UNIV - ST. LOUIS	J R BYRD	GSFC	W BINNS	NAG 5 10802	331
11	WASHINGTON UNIV - ST. LOUIS	M MEYER	GSFC	E L SHOCK	NAG 5 7696	330
11	WASHINGTON UNIV - ST. LOUIS	R BEEBE	GSFC	W B MCKINNON	NAG 5 8056	330
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	HQ	D A PODOSEK	NAG 5 4098	329
11	WASHINGTON UNIV - ST. LOUIS	J BOYCE	HQ	T J BERNATOWICZ	NAG 5 8336	330
11	WASHINGTON UNIV - ST. LOUIS	M CHRISTI	MSFC	P L HINK	NCC 8 154	333
11	WELLESLEY COLL	D SENSKE	GSFC	R G FRENCH	NAG 5 10197	302
11	WESLEYAN UNIV	DNAVA	GSFC	D HERBST	NAG 5 4821	145
11	WESLEYAN UNIV	J M BOYCE	GSFC	W HERBST	NAG 5 12502	146
11	WESTERN KENTUCKY UNIV	JD ROSENDHAL	GSFC	C H MCGRUDER	NAG 5 8762	230

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
11	WHITMAN COLL	G SONNEBORN	GSFC	U SOFIA	NAG 5 9249	539
11	WHITMAN COLL	R POLIDAN	GSFC	U J SOFIA	NAG 5 8248	539
11	WICHITA STATE UNIV	D K WEST	GSFC	D ALEXANDER	NAG 5 3435	228
11	YALE UNIV	D K WEST	GSFC	P F DEMARQUE	NAG 5 8406	146
11	YALE UNIV	G MUCKLOW	GSFC	R J SCHOELKOPF	NAG 5 8589	147
11	YALE UNIV	M MEYER	GSFC	R L DORIT	NAG 5 8813	147
11	YALE UNIV	R J OLIVERSEN	GSFC	C BAILYN	NAG 5 6404	146
11	YALE UNIV	R J OLIVERSEN	GSFC	S ZEPF	NAG 5 9168	147
11	YALE UNIV	R J OLIVERSEN	GSFC	S ZEPF	NAG 5 9651	147
12	ARIZONA STATE UNIV	J BOYCE	GSFC	L A LESHIN	NAG 5 10523	21
12	ARIZONA STATE UNIV	J BOYCE	GSFC	D LAURETTA	NAG 5 10524	21
12	ARIZONA STATE UNIV	J BOYCE	GSFC	G HUSS	NAG 5 11543	21
12	ARIZONA STATE UNIV	M MEYER	GSFC	S PIZZARELLO	NAG 5 9451	20
12	BROWN UNIV	J BOYCE	GSFC	C PIETERS	NAG 5 10469	454
12	BROWN UNIV	J BOYCE	GSFC	C PIETERS	NAG 5 11763	455
12	BROWN UNIV	J BOYCE	GSFC	P C HESS	NAG 5 11931	455
12	CALIFORNIA INST OF TECH	J BOYCE	GSFC	E STOLPER	NAG 5 10423	45
12	CALIFORNIA INST OF TECH	J BOYCE	GSFC	D BURNETT	NAG 5 11640	47
12	CALIFORNIA INST OF TECH	J BOYCE	GSFC	G WASSERBURG	NAG 5 11725	47
12	CARNEGIE - MELLON UNIV	B GUYNES	MSFC	R D TILTON	NAG 8 1842	434
12	CARNEGIE - MELLON UNIV	P DOTY	MSFC	G S ROHRER	NAG 8 1674	433
12	CASE WESTERN RESERVE UNIV	D L BRITTON	GRC	D A SCHERSON	NAG 3 2644	402
12	CHARLES COUNTY COMM COLL	J A NUTH	GSFC	G KRAUSE	NCC 5 400	238
12	CHRISTOPHER NEWPORT UNIV	E J SIOCHI	LARC	T M ABDEL-FATTAH	NCC 1 02021	503
12	CITY UNIV NY KINGSBOROUGH COMM COLL	J BOYCE	HQ	M WEISBERG	NAG 5 11546	365
12	CLARK ATLANTA UNIV	M A MEADOR	GRC	E A MINTZ	NAS 3 01201	179
12	CLARK ATLANTA UNIV	M A MEADOR	GRC	D R BU	NCC 3 910	179
12	CLARK ATLANTA UNIV	M A MEADOR	GRC	D PANG	NCC 3 911	179
12	CLARKSON UNIV	P DOTY	MSFC	W R WILCOX	NAG 8 1703	367
12	CLEMSON UNIV - CLEMSON	J BOYCE	GSFC	B MEYER	NAG 5 10454	459
12	CLEMSON UNIV - CLEMSON	J BOYCE	GSFC	D CLAYTON	NAG 5 11871	459
12	CLEMSON UNIV - CLEMSON	J W CONNELL	LARC	Y P SUN	NGT 1 01036	460
12	CLEMSON UNIV - CLEMSON	J W CONNELL	LARC	Y P SUN	NGT 1 52238	460
12	CLEMSON UNIV - CLEMSON	J W CONWELL	LARC	Y SUN	NCC 1 01036	459
12	CLEVELAND STATE UNIV	A E HEPP	GRC	D G HEHEMANN	NCC 3 817	407
12	CLEVELAND STATE UNIV	K KUNDU	GRC	D G NEHEMANN	NAG 3 2631	406
12	CLEVELAND STATE UNIV	M J ZEHE	GRC	D W BALL	NAG 3 2607	406
12	CLEVELAND STATE UNIV	S G BAILEY	GRC	D HEHEMANN	NAG 3 2802	406
12	CLEVELAND STATE UNIV	S G BAILEY	GRC	J D HARRIS	NCC 3 869	408
12	COLL OF WILLIAM AND MARY	J W CONNELL	LARC	R A ORWOLL	NAG 1 01107	504
12	COLL OF WILLIAM AND MARY	J W CONNELL	LARC	R A ORWOLL	NAG 1 2314	504
12	COLL OF WILLIAM AND MARY	J W CONNELL	LARC	R A ORWOLL	NAG 1 02109	504
12	COLUMBIA UNIV	D J BOGAN	GSFC	R BERSOHN	NAG 5 11049	370
12	COLUMBIA UNIV	J BOYCE	GSFC	J LONGHI	NAG 5 12074	370
12	ECKERD COLL	M H MOORE	GSFC	R L HUDSON	NAG 5 11097	160
12	GEORGIA INST OF TECH	P T LILLEHEI	LARC	L A BOTTOMLEY	NGT 1 02002	185
12	GEORGIA SOUTHERN UNIV	J ALLEN	GSFC	R NELSON	NCC 5 254	187
12	HAMPTON UNIV	F SCHMIDLIN	GSFC	D P MCCORMICK	NAG 5 5299	508
12	HARVARD UNIV	J BOYCE	GSFC	S JACOBSEN	NAG 5 10484	282
12	HARVEY MUDD COLL	D F BLAKE	ARC	J A KING	NCC 2 5510	52
12	INDIANA STATE UNIV	D BRITTON	GRC	D W ZWANZIGER	NAG 3 2588	213
12	INDIANA UNIV - BLOOMINGTON	J BOYCE	GSFC	A BASU	NAG 5 10459	214
12	IOWA STATE UNIV	W M HUO	ARC	M S GORDON	NCC 2 5349	222
12	IOWA STATE UNIV	N H HAGEDORN	GRC	S W MARTIN	NAG 3 2540	221
12	JACKSON STATE UNIV	A POHORILLE	ARC	J LESZCZYNSKI	NCC 2 5398	323
12	JOHNS HOPKINS UNIV	M SHIRLEY	ARC	D P WATSON	NAG 2 1559	239
12	KENT STATE UNIV	A F HEPP	GRC	C VARCAS ABURTO	NCC 3 563	409
12	MICHIGAN STATE UNIV	S G CAMPBELL	GRC	T J PINNAVAIA	NAG 3 2472	304
12	MICHIGAN TECHNOLOGICAL UNIV	J HINKLEY	LARC	L DRZAL	NAG 1 01004	306
12	MT HOLYOKE COLL	J BOYCE	GSFC	D DYAR	NAG 5 10424	297
12	NY UNIV	S NASH-STEVEN	MSFC	S WILSON	NGT 8 52893	380
12	NORFOLK STATE UNIV	A F HEPP	GRC	S SUN	NAG 3 2289	510
12	NORFOLK STATE UNIV	W J LOVE	MSFC	L SALARY	NAG 8 1862	511
12	NORTHWESTERN UNIV	R S BALDWIN	GRC	D F SHRIVER	NAG 3 2628	200
12	OAKWOOD COLL	W BRANTLEY	MSFC	A VOLKOV	NAG 8 1734	5
12	OREGON STATE UNIV	J BOYCE	GSFC	R DUNCAN	NAG 5 11652	429

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
12	PRAIRIE VIEW A&M UNIV	M A MEADOR	GRC	L E CARSON-ISABELLE	NCC 3 577	471
12	PRAIRIE VIEW A&M UNIV	M MEADOR	GRC	D CARSON-ISABELLE	NCC 3 980	472
12	PRINCETON UNIV	E J SIOCHI	LARC	I A AKSAY	NCC 1 01010	352
12	PRINCETON UNIV	D NOENER	MSFC	D SAVILLE	NAG 8 1368	351
12	PRINCETON UNIV	T L STCLAIR	WFF	A AKSAY	NAG 1 01010	348
12	RENSSELAER POLYTECH INST	D LARKIN	GRC	D INTERRANTE	NAG 3 2525	380
12	RICE UNIV	G K HORIUCHI	JSC	R C SMALLEY	NCC 9 77	475
12	ROCHESTER INST OF TECH	N HAGEDORN	GRC	D P RAFFAELLE	NAG 3 2484	381
12	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J BOYCE	GSFC	R HEWINS	NAG 5 10494	355
12	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J BOYCE	GSFC	G F HERZOG	NAG 5 11719	355
12	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	N J JOHNSON	LARC	M JAFFE	NAG 1 2182	353
12	SAN JOSE STATE UNIV	L T IRACI	ARC	P J HAMILL	NCC 2 5452	58
12	SOUTHWEST TEXAS STATE UNIV	D M STOAKLEY	LARC	P E CASSIDY	NCC 1 376	475
12	SOUTHWEST TEXAS STATE UNIV	D M STOAKLEY	LARC	P E CASSIDY	NCC 1 01033	475
12	SOUTHWEST TEXAS STATE UNIV	G A MINER	LARC	P E CASSIDY	NCC 1 02030	475
12	SPELMAN COLL	Q NGUYEN	GRC	D C CHEN	NAG 3 2758	188
12	STANFORD UNIV	H PARTIDGE	ARC	K J CHO	NCC 2 5400	65
12	STANFORD UNIV	H PARTRIDGE	ARC	R W DAVIS	NCC 2 5488	65
12	STANFORD UNIV	H PATRIDGE	ARC	Z X SHEN	NCC 2 5446	65
12	STANFORD UNIV	T R GOVINDAN	ARC	H DAI	NCC 2 5270	64
12	STANFORD UNIV	J M BOYCE	GSFC	R ZARE	NAG 5 10544	62
12	STANFORD UNIV	P DOTY	MSFC	G M HOMSY	NAG 8 1692	63
12	STATE UNIV OF NY - STONY BROOK	J BOYCE	GSFC	S MCLENNAN	NAG 5 10506	386
12	STATE UNIV OF NY - STONY BROOK	P DOTY	MSFC	M RAFILOVICH	NAG 8 1698	386
12	TEXAS A&M UNIV	R BALDWIN	GRC	D APPLEBY	NAG 3 2617	476
12	TEXAS SOUTHERN UNIV	C B AGEE	JSC	B L WILSON	NCC 9 80	482
12	THE CATHOLIC UNIV OF AMERICA	J BOYCE	GSFC	T DICKINSON	NAG 5 12071	158
12	THE CATHOLIC UNIV OF AMERICA	J E ALLEN	GSFC	T THORN	NCC 5 452	159
12	TUFTS UNIV	N HAGEDORN	GRC	D B GOLDNER	NAG 3 2563	297
12	U OF ARKANSAS MAIN CAMP-FAYETTEVILLE	J BOYCE	GSFC	P BENOIT	NAG 5 10736	40
12	UNIV HOUSTON-HOUSTON	D F BLAKE	ARC	A D HAYMET	NCC 2 5396	484
12	UNIV HOUSTON-HOUSTON	A NURRIDIN	HQ	G E FOX	NGT 5 50182	484
12	UNIV OF AKRON	C CHUANG	GRC	F W HARRIS	NAG 3 2572	417
12	UNIV OF AKRON	F J MONTEGANI	GRC	D PERRY	NGT 3 52364	418
12	UNIV OF AKRON	M MEADOR	GRC	C PUGH	NCC 3 794	418
12	UNIV OF AKRON	M MEADOR	GRC	F W HARRIS	NCC 3 802	418
12	UNIV OF AKRON	J W CONNELL	LARC	F W HARRIS	NAG 1 02035	416
12	UNIV OF ALABAMA - HUNTSVILLE	J CAMPBELL	MSFC	L SMALLEY	NAG 8 1403	12
12	UNIV OF ALABAMA - UNIV	D E LUECK	KSC	R D ROGERS	NAG10 305	15
12	UNIV OF ARIZONA	J BOYCE	GSFC	J GANGULY	NAG 5 10486	32
12	UNIV OF ARIZONA	J BOYCE	GSFC	D LAURETTA	NAG 5 11355	34
12	UNIV OF ARIZONA	J BOYCE	GSFC	W BOYNTON	NAG 5 11745	34
12	UNIV OF ARIZONA	J BOYCE	GSFC	A JULL	NAG 5 11979	35
12	UNIV OF ARIZONA	J BOYCE	GSFC	T SWINDLE	NAG 5 12059	35
12	UNIV OF CALIFORNIA - BERKELEY	J F BOYCE	GSFC	D NISHIZUMI	NAG 5 4992	69
12	UNIV OF CALIFORNIA - BERKELEY	R F PFAFF, JR.	GSFC	C W CARLSON	NAG 5 3596	68
12	UNIV OF CALIFORNIA - IRVINE	D HUBBARD	MSFC	P TABOREK	NAG 8 1437	85
12	UNIV OF CALIFORNIA - LOS ANGELES	D NAVA	GSFC	J WASSON	NAG 5 10421	90
12	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	D H WARREN	NAG 5 4215	87
12	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	P WARREN	NAG 5 10490	91
12	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	P WARREN	NAG 5 11541	91
12	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	P WARREN	NAG 5 11556	92
12	UNIV OF CALIFORNIA - LOS ANGELES	J BOYCE	GSFC	J WASSON	NAG 5 12058	93
12	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	K MARTI	NAG 5 11554	101
12	UNIV OF CALIFORNIA - SAN DIEGO	J BOYCE	GSFC	G W LUGMAIR	NAG 5 11768	101
12	UNIV OF CALIFORNIA - SAN FRANCISCO	M H NEW	ARC	M A WILSON	NCC 2 1126	104
12	UNIV OF CALIFORNIA - SAN FRANCISCO	R L JAFFE	ARC	M A WILSON	NCC 2 5294	105
12	UNIV OF CALIFORNIA - SANTA BARBARA	E J SIOCHI	LARC	D E MORSE	NAG 1 01003	105
12	UNIV OF CALIFORNIA - SANTA CRUZ	H PARTRIDGE	ARC	W E BERRY	NAG 2 1580	111
12	UNIV OF CHICAGO	J BOYCE	GSFC	R CLAYTON	NAG 5 10634	204
12	UNIV OF CHICAGO	J BOYCE	GSFC	R N CLAYTON	NAG 5 11568	205
12	UNIV OF CHICAGO	J BOYCE	GSFC	L GROSSMAN	NAG 5 11588	205
12	UNIV OF CINCINNATI	F J MONTEGANI	GRC	C BURDA	NGT 3 52383	419
12	UNIV OF COLORADO - BOULDER	P L LOYSELLE	GRC	J MICHL	NAG 3 2651	123
12	UNIV OF COLORADO - BOULDER	D L THOMSEN	LARC	D M WALBA	NAG 1 02079	122
12	UNIV OF FLORIDA	F ADAMS	KSC	R A YOST	NGT10 52626	174

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
12	UNIV OF HAWAII AT MANOA - HONOLULU	D NAVA	GSFC	D KEIL	NAG 5 4212	190
12	UNIV OF HAWAII AT MANOA - HONOLULU	D SENSKE	GSFC	K KEIL	NAG 5 11591	195
12	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	T MCCORD	NAG 5 10514	195
12	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R S OKOJIE	GRC	I ADESIDA	NAG 3 2599	208
12	UNIV OF MARYLAND - COLL PARK	J BOYCE	GSFC	J FARGUHAR	NAG 5 11544	264
12	UNIV OF MASSACHUSETTS - AMHERST	J BOYCE	GSFC	J GOLDSTEIN	NAG 5 10515	300
12	UNIV OF MASSACHUSETTS - AMHERST	J BOYCE	GSFC	J GOLDSTEIN	NAG 5 11778	300
12	UNIV OF MICHIGAN - ANN ARBOR	J BOYCE	GSFC	J BLUM	NAG 5 10552	311
12	UNIV OF MINN	N H HAGEDORN	GRC	W H SMYRL	NAG 3 2600	319
12	UNIV OF MINN	J BOYCE	GSFC	R O PEPIN	NAG 5 11723	320
12	UNIV OF MISSOURI - SAINT LOUIS	M J ZEHE	GRC	J CHICKOS	NAG 3 2592	329
12	UNIV OF MISSOURI - SAINT LOUIS	M ZEHE	GRC	J S CHICKOS	NAG 3 2797	329
12	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	L BORG	NAG 5 11555	363
12	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	F J RIETMEIJER	NAG 5 11762	363
12	UNIV OF NEW MEXICO-ALBUQUERQUE	J BOYCE	GSFC	R C REEDY	NAG 5 11764	363
12	UNIV OF NORTH CAROLINA - CHAPEL HILL	E J SIOCHI	LARC	E T SAMULSKI	NAG 1 2301	398
12	UNIV OF NOTRE DAME	J BOYCE	GSFC	C NEAL	NAG 5 10638	220
12	UNIV OF NOTRE DAME	J BOYCE	GSFC	C NEAL	NAG 5 12076	220
12	UNIV OF PUERTO RICO-RIO PIEDRAS	F J MONTEGANI	GRC	C R CABRERA	NGT 3 52376	552
12	UNIV OF PUERTO RICO-RIO PIEDRAS	F J MONTEGANI	GRC	C R CABRERA	NGT 3 52381	552
12	UNIV OF PUERTO RICO-RIO PIEDRAS	T B MILLER	GRC	R S KATIYAR	NAG 3 2676	551
12	UNIV OF PUERTO RICO-RIO PIEDRAS	T B MILLER	GRC	C CABRERA	NAG 3 2769	551
12	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	H Y MCSWEEN	NAG 5 11744	466
12	UNIV OF TENNESSEE - KNOXVILLE	J BOYCE	GSFC	L A TAYLOR	NAG 5 11978	466
12	UNIV OF TOLEDO	M J RABINOWITZ	GRC	K DEWITT	NAG 3 2674	421
12	UNIV OF UTAH	J A HINKLEY	LARC	G D SMITH	NAG 1 2319	497
12	UNIV OF VERMONT	J BOYCE	GSFC	T RUCHMER	NAG 5 10463	502
12	UNIV OF VIRGINIA	H PARTRIDGE	ARC	L S ANDREWS	NCC 2 5415	522
12	UNIV OF VIRGINIA	J BOYCE	GSFC	R A BARAGIOLA	NAG 5 12055	521
12	UNIV OF WASHINGTON	T BENCIC	GRC	D GOUTERMAN	NAG 3 2455	529
12	UNIV OF WASHINGTON	J BOYCE	GSFC	S MCCALLUM	NAG 5 11587	534
12	UNIV OF WASHINGTON	J M BOYCE	GSFC	D E BROWNLEE	NAG 5 10499	533
12	UNIV OF WISCONSIN - MADISON	R B PIERCE	LARC	D R JOHNSON	NCC 1 02017	547
12	VA POLYTECH INST & ST UNIV	M B MEADOR	GRC	J E MCGRATH	NCC 3 866	526
12	VA POLYTECH INST & ST UNIV	M ZEHE	GRC	T CRAWFORD	NAG 3 2796	525
12	VA POLYTECH INST & ST UNIV	C C FAY	LARC	H C DORN	NCC 1 01044	526
12	VA POLYTECH INST & ST UNIV	E J SIOCHI	LARC	T C WARD	NGT 1 01003	526
12	VA POLYTECH INST & ST UNIV	E J SIOCHI	LARC	T C WARD	NAG 1 2310	523
12	VA POLYTECH INST & ST UNIV	T L ST.CLAIR	LARC	L T TAYLOR	NAG 1 2324	523
12	VIRGINIA COMMONWEALTH UNIV	P M DOTY	MSFC	M S EL-SHALL	NAG 8 1484	527
12	WASHINGTON UNIV - ST. LOUIS	G MUCKLOW	GSFC	D LEOPOLD	NAG 5 8536	330
12	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	D HOHENBERG	NAG 5 4173	329
12	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	T BERNATOWICZ	NAG 5 10426	331
12	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	L HASKIN	NAG 5 10485	331
12	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	F PODOSEK	NAG 5 10513	331
12	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	L HASKIN	NAG 5 10533	331
12	WASHINGTON UNIV - ST. LOUIS	J BOYCE	GSFC	E ZINNER	NAG 5 11545	332
12	WHEELING JESUIT UNIV	A F HEPP	GRC	N N DUFFY	NCC 3 858	540
13	ALABAMA A&M UNIV	G ADAMOVSKY	GRC	D CURLEY	NCC 3 736	2
13	ALABAMA A&M UNIV	G ADAMOVSKY	GRC	P VENKATESWARLY	NAG 3 1956	1
13	ALABAMA A&M UNIV	D MENCHAN	GSFC	R B LAL	NAG 5 11752	1
13	ALABAMA A&M UNIV	H A ABDELDAYEM	GSFC	M EDWARDS	NAG 5 12028	1
13	ALABAMA A&M UNIV	D PIERSON	JSC	M TADROS	NAG 9 1095	2
13	ALABAMA A&M UNIV	B G PENN	MSFC	N KUKHATAREV	NAG 8 1620	2
13	ALABAMA A&M UNIV	B PENN	MSFC	S SARKISOV	NAG 8 1498	1
13	ALABAMA A&M UNIV	D FRAZIER	MSFC	M D AGGARWAL	NAG 8 1390	1
13	ALABAMA A&M UNIV	S NASH-STEVENSON	MSFC	J C WANG	NGT 8 52902	3
13	ARIZONA STATE UNIV	M MEYYAPPAN	ARC	Y ZHANG	NCC 2 5362	23
13	ARIZONA STATE UNIV	I KRANSKY	GRC	N NEWMAN	NAG 3 2591	19
13	AUBURN UNIV	G E SCHWARZE	GRC	J R WILLIAMS	NAG 3 2639	3
13	AUBURN UNIV	R REED	GSFC	J D CRESSLER	NAG 5 11121	3
13	AUBURN UNIV	R REED	GSFC	G NIU	NAG 5 12316	3
13	BETHUNE - COOKMAN COLL	S E HETHERINGTON	GSFC	E F EKPO	NCC 5 426	160
13	BOSTON COLL	N P BARNES	LARC	B D BARTOLO	NAG 1 02034	275
13	BOSTON COLL	N P BARNES	LARC	B DIBARTOIO	NAG 1 2057	275
13	BOSTON COLL	N P BARNES	LARC	B DIBARTOLO	NAG 1 01019	275

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	BOSTON UNIV	N R HALL	GRC	R G HOLT	NAG 3 2143	276
13	BOSTON UNIV	J GREBOWSKY	GSFC	D MENDILLO	NAG 5 4246	276
13	BOSTON UNIV	J GREBOWSKY	GSFC	G L SISCOE	NAG 5 8135	277
13	BOSTON UNIV	M GOLDSTEIN	GSFC	T FRITZ	NAG 5 10108	277
13	BOSTON UNIV	M M MELLOTT	GSFC	D MENDILLO	NAG 5 4707	276
13	BOSTON UNIV	M MELLOTT	GSFC	M OPPENHEIM	NAG 5 7452	276
13	BOSTON UNIV	P CRANE	GSFC	S CHAKRABARTI	NAG 5 9582	277
13	BOSTON UNIV	W J WAGNER	GSFC	N U CROOKER	NAG 5 10856	278
13	BOSTON UNIV	J C BARNES	LARC	K P HARLING	NGT 1 52199	279
13	BOSTON UNIV	J BRINTIN	WFF	J CLARKE	NAG 5 5383	276
13	BOSTON UNIV	W B JOHNSON	WFF	S CHAKRABARTI	NAG 5 5251	276
13	BROWN UNIV	B S SINGH	GRC	D ELBAUM	NAG 3 1929	453
13	BROWN UNIV	B FLOWERS	GSFC	G SEIDEL	NAG 5 5133	453
13	BROWN UNIV	D HUBBARD	MSFC	H J MARIS	NAG 8 1774	455
13	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	R A MEWALDT	NAG 5 5166	42
13	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	E C STONE	NAG 5 5216	42
13	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	E C STONE	NAG 5 5227	42
13	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	E C STONE	NAG 5 5228	42
13	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	F HARRISON	NAG 5 5289	42
13	CALIFORNIA INST OF TECH	B MERRITT	GSFC	E STONE	NAG 5 5346	42
13	CALIFORNIA INST OF TECH	C STAHL	GSFC	J ZMUZINAS	NAG 5 10358	45
13	CALIFORNIA INST OF TECH	G MUCKLOW	GSFC	F A HARRISON	NAG 5 8535	43
13	CALIFORNIA INST OF TECH	C D ARMSTRONG	LARC	H A ATWATER	NAG 1 01038	41
13	CALIFORNIA INST OF TECH	B A MERRITT	WFF	F HARRISON	NAG 5 5322	42
13	CALIFORNIA INST OF TECH	J C BRINTON	WFF	C MARTIN	NAG 5 5303	42
13	CALIFORNIA STATE UNIV - LONG BEACH	K HSIEH	GRC	J LIU	NAG 3 1830	50
13	CARNEGIE - MELLON UNIV	B S SINGH	GRC	S GAROFF	NAG 3 2449	432
13	CARNEGIE - MELLON UNIV	R B ROGERS	GRC	P J SIDES	NAG 3 2159	432
13	CASE WESTERN RESERVE UNIV	A CHIT	GRC	P L TAYLOR	NCC 3 587	403
13	CASE WESTERN RESERVE UNIV	R OKOJIE	GRC	P PIROUZ	NCC 3 895	404
13	CASE WESTERN RESERVE UNIV	C R TALLEY	MSFC	C ROSENBLATT	NAG 8 1270	402
13	CASE WESTERN RESERVE UNIV	J BRUNSON	MSFC	D H MATTHIESEN	NCC 8 152	405
13	CHRISTOPHER NEWPORT UNIV	R A WINCHESKI	LARC	R SELIM	NAG 1 02055	503
13	CITY UNIV OF NY CITY COLL	B S SINGH	GRC	C MALDARELLI	NAG 3 2167	365
13	CITY UNIV OF NY CITY COLL	N P BARNES	LARC	R A ALFANO	NAG 1 2259	365
13	CLARK ATLANTA UNIV	A TEMKIN	GSFC	A MSEZANE	NAG 5 8792	179
13	CLEMSON UNIV - CLEMSON	M MEYYAPPAN	ARC	A M RAO	NCC 2 5421	459
13	CLEMSON UNIV - CLEMSON	H SHAW	GSFC	D L CARROLL	NAG 5 11293	459
13	CLEMSON UNIV - CLEMSON	J BRINTON	GSFC	M LARSON	NAG 5 5320	458
13	CLEMSON UNIV - CLEMSON	J C BRINTON	GSFC	M F LARSEN	NAG 5 5317	458
13	CLEMSON UNIV - CLEMSON	M MELLOTT	GSFC	M P HICKEY	NAG 5 7592	458
13	CLEMSON UNIV - CLEMSON	W B JOHNSON	GSFC	M F LARSEN	NAG 5 5186	457
13	CLEMSON UNIV - CLEMSON	W B JOHNSON	GSFC	M F LARSEN	NAG 5 5242	457
13	CLEMSON UNIV - CLEMSON	W B JOHNSON	GSFC	M F LARSEN	NAG 5 5259	457
13	CLEMSON UNIV - CLEMSON	B A MERRITT	WFF	D H HARTMANN	NAG 5 5325	458
13	CLEMSON UNIV - CLEMSON	J BRINTON	WFF	M LARSEN	NAG 5 5372	458
13	CLEMSON UNIV - CLEMSON	J BRINTON	WFF	M LARSON	NAG 5 5373	458
13	CLEMSON UNIV - CLEMSON	J BRINTON	WFF	M LARSEN	NAG 5 5378	458
13	CLEMSON UNIV - CLEMSON	J BRINTON	WFF	M LARSEN	NAG 5 5379	458
13	CLEMSON UNIV - CLEMSON	J BRINTON	WFF	G LEHMACHER	NAG 5 5385	458
13	CLEVELAND STATE UNIV	A CHAIT	GRC	J A LOCK	NCC 3 521	407
13	CLEVELAND STATE UNIV	A DECKER	GRC	J LOCK	NAG 3 2774	406
13	CLEVELAND STATE UNIV	C R MERCER	GRC	J LOCK	NAG 3 2232	405
13	CLEVELAND STATE UNIV	G ADAMOVSKY	GRC	J A LOCK	NCC 3 909	408
13	CLEVELAND STATE UNIV	S K RUTLEDGE	GRC	P HAMBOURGER	NCC 3 740	407
13	COLL OF WILLIAM AND MARY	M H SMITH	LARC	D C BENNER	NCC 1 390	504
13	COLL OF WILLIAM AND MARY	P H JOHNSTON	LARC	J S BOGHOSIAN	NGT 1 52180	505
13	COLL OF WILLIAM AND MARY	S A THIBEAULT	LARC	R L KIEFER	NCC 1 02032	504
13	COLL OF WOOSTER	J W POE	MSFC	D T JACOBS	NAG 8 1433	408
13	COLORADO STATE UNIV	V K RAWLIN	GRC	P J WILBUR	NAG 3 1801	118
13	COLORADO STATE UNIV	V K RAWLIN	GRC	P J WILBUR	NAG 8 1801	120
13	COLUMBIA UNIV	L J EARLY	GSFC	R NOVICK	NAG 5 618	367
13	COLUMBIA UNIV	W B JOHNSON	GSFC	S M KAHN	NAG 5 5123	368
13	COLUMBIA UNIV	W B JOHNSON	GSFC	D L WINDT	NAG 5 5254	368
13	COLUMBIA UNIV	W B JOHNSON	GSFC	D W SAVIN	NAG 5 5261	368
13	COLUMBIA UNIV	W J WAGNER	GSFC	D W SAVIN	NAG 5 9581	369

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	COLUMBIA UNIV	W J WAGNER	GSFC	D WINDT	NAG 5 9615	369
13	CORNELL UNIV	W B JOHNSON	GSFC	M C KELLEY	NAG 5 5244	373
13	CORNELL UNIV	S K KAHNG	LARC	P L MCEUEN	NAG 1 01034	372
13	CORNELL UNIV	J W POE	MSFC	D M LEE	NAG 8 1445	376
13	CORNELL UNIV	W BJOHNSON	MSFC	P M KINTNER	NAG 5 5233	373
13	CORNELL UNIV	J BRINTON	WFF	P KINTNER	NAG 5 5366	373
13	CORNELL UNIV	J BRINTON	WFF	L GELINAS	NAG 5 5370	373
13	CORNELL UNIV	J BRINTON	WFF	D HYSELL	NAG 5 5380	373
13	DARTMOUTH COLL	J BRINTON	GSFC	M LESSARD	NAG 5 5367	340
13	DARTMOUTH COLL	J BRINTON	GSFC	K LYNCH	NAG 5 5382	340
13	DARTMOUTH COLL	J C BRINTON	GSFC	J W LABELLE	NAG 5 5318	340
13	DARTMOUTH COLL	J M GREBOWSKY	GSFC	W LOTKO	NAG 5 8441	341
13	DARTMOUTH COLL	J M GREBOWSKY	GSFC	W LOTKO	NAG 5 11735	341
13	DARTMOUTH COLL	M H ACUNA	GSFC	W LOTKO	NAG 5 7803	341
13	DARTMOUTH COLL	M M MELLOTT	GSFC	D LOTKO	NAG 5 4529	340
13	DARTMOUTH COLL	S A CURTIS	GSFC	M K HUDSON	NAG 5 11712	341
13	DARTMOUTH COLL	W B JOHNSON	GSFC	J W LABELLE	NAG 5 5238	340
13	DARTMOUTH COLL	W B JOHNSON	GSFC	J W LABELLE	NAG 5 5239	340
13	DELAWARE STATE UNIV	W C EDWARDS	LARC	N MELIKECHI	NAG 1 2030	148
13	DUKE UNIV	B S SINGH	GRC	H MEYER	NAG 3 1838	390
13	EMBRY-RIDDLE AERONAUTICAL UNIV	W B JOHNSON	GSFC	P J ESPY	NAG 5 5199	160
13	EMBRY-RIDDLE AERONAUTICAL UNIV	W B JOHNSON	GSFC	P W ERDMAN	NAG 5 5265	160
13	FISK UNIV	E CLARK	GRC	D O HENDERSON	NAG 3 2308	463
13	FISK UNIV	D O FRAZIER	MSFC	E SILHERMAN	NCC 8 133	463
13	FLA INTERNATIONAL UNIV	R HARTLE	GSFC	K HARDY	NAG 5 8791	161
13	FLORIDA INST OF TECH	W WAGNER	GSFC	J R DWYER	NAG 5 11921	164
13	FLORIDA STATE UNIV	B S SINGH	GRC	E MANOUSAKIS	NAG 3 1841	165
13	FLORIDA STATE UNIV	J D JORDAN	LARC	S HONG	NAG 1 02022	164
13	GEORGE MASON UNIV	W WAGNER	GSFC	J ZHANG	NAG 5 11874	506
13	GEORGE WASHINGTON UNIV	B MERRITT	GSFC	F BAGINSKI	NAG 5 5353	151
13	GEORGE WASHINGTON UNIV	M LI	GSFC	M ZAGHLOUL	NAG 5 12594	152
13	GEORGE WASHINGTON UNIV	B A MERRITT	WFF	F BAGINSKI	NAG 5 5292	151
13	GEORGIA INST OF TECH	R A REED	GSFC	J D CRESSLER	NAG 5 12268	183
13	GEORGIA INST OF TECH	S NASH-STEVENSON	MSFC	J OLDS	NGT 8 52898	187
13	HAMPTON UNIV	F J MONTEGANI	GRC	D R LYONS	NGT 3 52354	509
13	HAMPTON UNIV	R HATHAWAY	LARC	D A TEMPLE	NCC 1 251	509
13	HARVARD UNIV	B S SINGH	GRC	D WEITZ	NAG 3 2284	281
13	HARVARD UNIV	B A MERRITT	GSFC	G GRINDLAY	NAG 5 5279	281
13	HOWARD UNIV	D MENCHAN	GSFC	A N THORPE	NAG 5 12110	153
13	HOWARD UNIV	J TUTTLE	GSFC	T HUBER	NAG 5 10371	153
13	HOWARD UNIV	W R HOEGY	GSFC	S T SMITH	NCC 5 387	154
13	IONA COLL	M J MUMMA	GSFC	R NOVAK	NAG 5 11398	378
13	IOWA STATE UNIV	E R GENERAZIO	LARC	R B THOMPSON	NAG 1 02098	220
13	JOHN CARROLL UNIV	M L TUMA	GRC	R L HANSLER	NCC 3 945	409
13	JOHN CARROLL UNIV	M L TUMA	GRC	R HANSLER	NCC 3 948	409
13	JOHN CARROLL UNIV	S WRBANEK	GRC	R L HANSLER	NAG 3 2564	409
13	JOHNS HOPKINS UNIV	B J FLOWERS	GSFC	P D FELDMAN	NAG 5 5122	240
13	JOHNS HOPKINS UNIV	C P HOLMES	GSFC	D M KRIMIGIS	NAG 5 4365	240
13	JOHNS HOPKINS UNIV	D EVANS	GSFC	D OHTANI	NAG 5 6178	240
13	JOHNS HOPKINS UNIV	F HERRERO	GSFC	J L CHAMPION	NAG 5 10084	244
13	JOHNS HOPKINS UNIV	J BARTH	GSFC	A GARRISON-DARRIN	NAG 5 9968	244
13	JOHNS HOPKINS UNIV	J BREDEKAMP	GSFC	D MORRISON	NAG 5 9432	243
13	JOHNS HOPKINS UNIV	J C BRINTON	GSFC	P D FELDMAN	NAG 5 5315	240
13	JOHNS HOPKINS UNIV	J G GREBOWSKY	GSFC	D J ANDERSON	NAG 5 4664	240
13	JOHNS HOPKINS UNIV	M H ACUNA	GSFC	N J FOX	NAG 5 8019	241
13	JOHNS HOPKINS UNIV	M M MELLOTT	GSFC	J J YEE	NAG 5 8122	241
13	JOHNS HOPKINS UNIV	M MELLOTT	GSFC	D MORRISON	NAG 5 8062	241
13	JOHNS HOPKINS UNIV	M WEI	GSFC	C LEUSCHEN	NAG 5 12623	250
13	JOHNS HOPKINS UNIV	R HOFFMAN	GSFC	N FOX	NAG 5 12525	250
13	JOHNS HOPKINS UNIV	R REED	GSFC	J KINNISON	NAG 5 11116	247
13	JOHNS HOPKINS UNIV	V JONES	GSFC	R E GOLD	NAG 5 11894	248
13	JOHNS HOPKINS UNIV	V JONESS	GSFC	R E GOLD	NAG 5 6113	240
13	JOHNS HOPKINS UNIV	W B JOHNSON	GSFC	J H YEE	NAG 5 5198	240
13	JOHNS HOPKINS UNIV	W J WAGNER	GSFC	D M RUST	NAG 5 10998	247
13	JOHNS HOPKINS UNIV	W WAGNER	GSFC	D M RUST	NAG 5 11876	248
13	KANSAS STATE UNIV	F P CHIARAMONTE	GRC	C SORENSEN	NAG 3 2360	226

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	KENT STATE UNIV	J POUCH	GRC	P BROS	NAG 3 2539	409
13	KETTERING UNIV	M MANTENIEKS	GRC	S ROY	NAG 3 2520	304
13	LOMA LINDA UNIV	F A CUCINOTTA	JSC	G A NELSON	NCC 9 79	52
13	LOMA LINDA UNIV	F CUCINOTTA	JSC	G NELSON	NCC 9 118	52
13	LOMA LINDA UNIV	F CUCINOTTA	JSC	J SLATER	NCC 9 149	52
13	LOUISIANA STATE UNIV - BATON ROUGE	B A MERRITT	GSFC	M L CHERRY	NAG 5 5177	231
13	LOUISIANA STATE UNIV - BATON ROUGE	B A MERRITT	GSFC	J P WEFEL	NAG 5 5306	231
13	LOUISIANA STATE UNIV - BATON ROUGE	B A MERRITT	GSFC	M L CHERRY	NAG 5 5323	231
13	LOUISIANA STATE UNIV - BATON ROUGE	B MERRITT	GSFC	M CHERRY	NAG 5 5359	231
13	LOUISIANA STATE UNIV - BATON ROUGE	T ROBERTSON	MSFC	R G GOODRICH	NAG 8 1731	232
13	LOUISIANA STATE UNIV - BATON ROUGE	B A MERRITT	WFF	M L CHERRY	NAG 5 5297	231
13	LOUISIANA STATE UNIV - BATON ROUGE	B MERRITT	WFF	D FAZELY	NAG 5 5307	231
13	MASSACHUSETTS INST OF TECH	J BRINTON	GSFC	A LEVINE	NAG 5 5329	288
13	MASSACHUSETTS INST OF TECH	J BRINTON	GSFC	G RICKER	NAG 5 5330	288
13	MASSACHUSETTS INST OF TECH	J C BRINTON	GSFC	M SCHATTENBURG	NAG 5 5271	288
13	MASSACHUSETTS INST OF TECH	M H ACUNA	GSFC	A J LAZARUS	NAG 5 8045	289
13	MASSACHUSETTS INST OF TECH	W J WAGNER	GSFC	T CHANG	NAG 5 9616	290
13	MASSACHUSETTS INST OF TECH	D GILMAN	HQ	G RICKER	NASW 4690	295
13	MASSACHUSETTS INST OF TECH	F CHANG-DIAZ	JSC	K MOLVING	NAG 9 1455	294
13	MASSACHUSETTS INST OF TECH	F R CHANG-DIAZ	JSC	K MOLVIG	NAG 9 1224	294
13	MASSACHUSETTS INST OF TECH	D HUBBARD	MSFC	W KETTERLE	NAG 8 1435	293
13	MASSACHUSETTS INST OF TECH	D HUBBARD	MSFC	W KETTERLE	NAG 8 1768	293
13	MASSACHUSETTS INST OF TECH	P DOTY	MSFC	M C FLEMING	NAG 8 1685	293
13	MICHIGAN STATE UNIV	E CHENG	GSFC	E D LOH	NAG 5 3218	304
13	MICHIGAN STATE UNIV	H SHAW	GSFC	D TOMANEK	NAG 5 9276	305
13	MICHIGAN TECHNOLOGICAL UNIV	B A MERRITT	WFF	R NEMIROFF	NAG 5 5278	306
13	MIDDLEBURY COLL	W J WAGNER	GSFC	R WOLFSON	NAG 5 9733	302
13	MONTANA STATE UNIV	W J WAGNER	GSFC	C C KANKELBORG	NAG 5 10997	334
13	MORGAN STATE UNIV	J CHITWOOD	GSFC	C WILLIAMS	NAG 5 8857	252
13	NEW JERSEY INST OF TECH	W J WAGNER	GSFC	H WANG	NAG 5 9501	347
13	NEW JERSEY INST OF TECH	W J WAGNER	GSFC	M F WOODARD	NAG 5 9519	347
13	NEW JERSEY INST OF TECH	W J WAGNER	GSFC	P R GOODE	NAG 5 9682	347
13	NEW JERSEY INST OF TECH	W WAGNER	GSFC	D E GARY	NAG 5 11875	348
13	NEW MEXICO HIGHLANDS UNIV	B G PENN	MSFC	R D CLARK	NAG 8 1639	357
13	NEW MEXICO STATE UNIV - LAS CRUCES	J GRANT	GSFC	V SOLOMATOV	NAG 5 8803	360
13	NEW MEXICO STATE UNIV - LAS CRUCES	B A MERRITT	WSTF	S J STOCHAJ	NAG 5 5226	359
13	NORFOLK STATE UNIV	R E STREITMATTER	GSFC	C W SALGADO	NAG 5 8653	511
13	NORFOLK STATE UNIV	N P BARNES	LARC	M NOGINOV	NAG 1 2172	510
13	NORTH CAROLINA A&T STATE UNIV	J A JACKSON	GSFC	E WILLIAMS	NAG 5 9170	393
13	NORTH CAROLINA STATE UNIV. - RALEIGH	J M GREBOWSKY	GSFC	D C ELLISON	NAG 5 8215	396
13	NORTH CAROLINA STATE UNIV. - RALEIGH	M S BURRELL	GSFC	S O REYNOLDS	NGT 5 65	397
13	NORTHWESTERN UNIV	M WEISLOGEL	GRC	S LICHTER	NAG 3 1892	200
13	NORTHWESTERN UNIV	L W GURKIN	GSFC	M P ULMER	NAG 5 5094	200
13	NORTHWESTERN UNIV	M S BURRELL	GSFC	G NOVAK	NGT 5 88	202
13	OHIO STATE UNIV	E J PENCIL	GRC	D Y YORK	NAG 3 2438	410
13	OHIO STATE UNIV	W T YOST	LARC	S I ROKHLIN	NAG 1 02066	410
13	OHIO STATE UNIV	D HUBBARD	MSFC	T HO	NAG 8 1441	414
13	OHIO STATE UNIV	D HUBBARD	MSFC	T L HO	NAG 8 1765	414
13	OKLAHOMA STATE UNIV	B SINGH	GRC	O TONG	NAG 3 1852	424
13	OLD DOMINION UNIV	M N ABEDINE	LARC	R P JOSHI	NAG 1 02072	513
13	OLD DOMINION UNIV	R C SINGLETERRY	LARC	J H HEINBOCKEL	NCC 1 320	514
13	OLD DOMINION UNIV	R C SINGLETERRY	LARC	J TWEED	NCC 1 396	514
13	OLD DOMINION UNIV	T H HOU	LARC	R PRABHAKARAN	NCC 1 01052	515
13	PENN STATE UNIV. - UNIV. PARK	J S LING	GRC	J M TAZBELL	NAG 3 1871	439
13	PENN STATE UNIV. - UNIV. PARK	R S OKOJIE	GRC	P M LENAHAAN	NCC 3 973	446
13	PENN STATE UNIV. - UNIV. PARK	B A MERRITT	GSFC	S COUTU	NAG 5 5174	440
13	PENN STATE UNIV. - UNIV. PARK	B A MERRITT	GSFC	J J BEATTY	NAG 5 5220	440
13	PENN STATE UNIV. - UNIV. PARK	B A MERRITT	GSFC	T N JACKSON	NAG 5 5356	441
13	PENN STATE UNIV. - UNIV. PARK	B MERRITT	GSFC	BEATTY	NAG 5 5248	440
13	PENN STATE UNIV. - UNIV. PARK	B MERRITT	GSFC	S COUTU	NAG 5 5363	441
13	PENN STATE UNIV. - UNIV. PARK	J C BRINTON	GSFC	D N BURROWS	NAG 5 5277	441
13	PENN STATE UNIV. - UNIV. PARK	J C BRINTON	GSFC	C L CROSKEY	NAG 5 5313	441
13	PENN STATE UNIV. - UNIV. PARK	M S BURRELL	GSFC	P LAGUNA	NGT 5 127	447
13	PENN STATE UNIV. - UNIV. PARK	W B JOHNSON	GSFC	J D MITCHELL	NAG 5 5169	440
13	PENN STATE UNIV. - UNIV. PARK	W B JOHNSON	GSFC	C L CROSKEY	NAG 5 5256	441
13	PENN STATE UNIV. - UNIV. PARK	D HUBBARD	MSFC	M CHAN	NAG 8 1761	444

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	PENN STATE UNIV. - UNIV. PARK	D HUBBARD	MSFC	K GIBBLE	NAG 8 1854	445
13	PENN STATE UNIV. - UNIV. PARK	B A MERRITT	WFF	S E COUTU	NAG 5 5250	440
13	PENN STATE UNIV. - UNIV. PARK	J BRINTON	WFF	J MITCHELL	NAG 5 5369	441
13	PENN STATE UNIV. - UNIV. PARK	J BRINTON	WFF	T WHEELER	NAG 5 5375	441
13	PRESCOTT COLL	E P CONDON	ARC	W W ORR	NAG 2 1409	24
13	PRINCETON UNIV	W B JOHNSON	GSFC	E B JENKINS	NAG 5 616	349
13	RENSSELAER POLYTECH INST	T R GOVINDAN	ARC	P M AJAYAN	NCC 2 5494	381
13	RENSSELAER POLYTECH INST	M N ABEDIN	LARC	P DUTTA	NAG 1 02089	380
13	RENSSELAER POLYTECH INST	D SCHAEFER	MSFC	A G OSTROGORSKY	NCC 8 97	381
13	RICE UNIV	M MEYYAPPAN	ARC	B YAKOBSON	NAG 2 1401	472
13	RICE UNIV	D EVANS	GSFC	D R TOFFOLETTO	NAG 5 4726	472
13	RICE UNIV	J GREBOWSKY	GSFC	D W HILL	NAG 5 4822	472
13	RICE UNIV	J GREBOWSKY	GSFC	R A WOLF	NAG 5 8136	473
13	RICE UNIV	J M GREBOWSKY	GSFC	R A WOLF	NAG 5 11881	473
13	RICE UNIV	M H ACUNA	GSFC	P A CLOUTIER	NAG 5 7037	472
13	RICE UNIV	M H ACUNA	GSFC	P CLOUTIER	NAG 5 11417	473
13	RICE UNIV	M H ACUNA	GSFC	P CLOUTIER	NAG 5 11418	473
13	RICE UNIV	F CHANG-DIAZ	JSC	A A CHAN	NAG 9 978	474
13	RICE UNIV	D S HUBBARD	MSFC	R G HULET	NAG 8 1766	474
13	ROANOKE COLL	B A MERRITT	GSFC	C H TSAO	NAG 5 5165	517
13	ROCHESTER INST OF TECH	A F HEPP	GRC	D P RAFAELLE	NCC 3 786	382
13	ROCHESTER INST OF TECH	A HEPP	GRC	D P RAFAELLE	NCC 3 807	382
13	ROCHESTER INST OF TECH	G LANDIS	GRC	D RAFAELLE	NCC 3 953	382
13	ROCHESTER INST OF TECH	S BAILEY	GRC	D RAFAELLE	NAG 3 2593	381
13	ROCHESTER INST OF TECH	S BAILEY	GRC	D P RAFAELLE	NAG 3 2595	382
13	ROCHESTER INST OF TECH	S BAILEY	GRC	D RAFAELLE	NAG 3 2596	382
13	ROCHESTER INST OF TECH	S BAILEY	GRC	D RAFAELLE	NAG 3 2596	382
13	ROWAN UNIV	M J MUMMA	GSFC	K MAGEE-SAUER	NAG 5 9593	353
13	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	N HAGEDORN	GRC	D H GAROFALINI	NAG 3 2589	353
13	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	C STAHL	GSFC	M GERSHENSON	NAG 5 10357	355
13	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	W J WAGNER	GSFC	C L JOSEPH	NAG 5 10809	355
13	RUTGERS STATE UNIV OF NJ NEW BRUNS	B MERRITT	GSFC	C JOSEPH	NAG 5 5344	356
13	SAN DIEGO STATE UNIV	W P WINFREE	LARC	R A KLINE	NAG 1 02082	53
13	SOUTHERN UNIV & A&M COLL	H C NEEDLEMAN	GSFC	A R FAZELY	NAG 5 5066	233
13	SOUTHERN UNIV & A&M COLL	J TUELLER	GSFC	J STACY	NAG 5 7157	233
13	SOUTHERN UNIV & A&M COLL	D SCHMIDT	MSFC	H L LAWRENCE	NAG 8 1495	233
13	STANFORD UNIV	H PATRIDGE	ARC	K CHO	NCC 2 5439	65
13	STANFORD UNIV	M L FONDA	ARC	R B LAUGHLIN	NCC 2 5359	65
13	STANFORD UNIV	M MEYYAPPAN	ARC	Z SHEN	NCC 2 5371	65
13	STANFORD UNIV	T R GOVINDAN	ARC	K CHO	NCC 2 5350	65
13	STANFORD UNIV	W M HUO	ARC	C H KRUGER	NAG 2 1079	59
13	STANFORD UNIV	B S SINGH	GRC	E G SHAQTEH	NAG 3 1843	59
13	STANFORD UNIV	C K STAHL	GSFC	B CABRERA	NAG 5 12315	63
13	STANFORD UNIV	D MENCHAN	GSFC	B CABRERA	NAG 5 10519	62
13	STANFORD UNIV	W B JOHNSON	GSFC	A B WALKER	NAG 5 5200	60
13	STANFORD UNIV	W J WAGNER	GSFC	P T SCHERER	NAG 5 9784	62
13	STANFORD UNIV	W J WAGNER	GSFC	V PETROSIAN	NAG 5 10976	62
13	STANFORD UNIV	W WAGNER	GSFC	V PETROSIAN	NAG 5 11918	63
13	STANFORD UNIV	J C BRINTON	HQ	B C WALKER	NAG 5 5300	60
13	STANFORD UNIV	D HUBBARD	MSFC	J A LIPA	NAG 8 1431	63
13	STANFORD UNIV	D HUBBARD	MSFC	S CHU	NAG 8 1864	63
13	STANFORD UNIV	J W POE	MSFC	J A LIPA	NAG 8 1439	63
13	STANFORD UNIV	R S GEVEDEN	MSFC	C W EVERITT	NAG 8 39225	64
13	STATE UNIV OF NY - STONY BROOK	W WAGNER	GSFC	M A FORMAN	NAG 5 10995	386
13	STATE UNIV OF NY - STONY BROOK	C TALLEY	MSFC	M DUDLEY	NCC 8 93	387
13	STATE UNIV OF NY - STONY BROOK	P M DOTY	MSFC	D LARSON	NAG 8 1700	386
13	STATE UNIV OF NY COL - PLATTSBURGH	E K GIBSON	JSC	G J FLYNN	NAG 9 1109	387
13	SYRACUSE UNIV	H SHAW	GSFC	D KORNREIGH	NAG 5 12391	388
13	TEXAS A&M UNIV-KINGSVILLE	D THOMPSON	GSFC	D SUSON	NAG 5 7159	481
13	TEXAS TECH UNIV	B A MERRITT	GSFC	R WIGMANS	NAG 5 5156	482
13	THE AMERICAN UNIV	J L BUFTON	GSFC	R B KAY	NCC 5 482	154
13	THE CATHOLIC UNIV OF AMERICA	A ROBERTS	GSFC	L OFMAN	NAG 5 11377	158
13	THE CATHOLIC UNIV OF AMERICA	B DENNIS	GSFC	J BROSIUS	NCC 5 548	159
13	THE CATHOLIC UNIV OF AMERICA	D C REUTER	GSFC	D W STEYERT	NAG 5 12591	159
13	THE CATHOLIC UNIV OF AMERICA	E SITTLER	GSFC	L OFMAN	NAG 5 11815	158
13	THE CATHOLIC UNIV OF AMERICA	K W OGILVIE	GSFC	Y WHANG	NAG 5 10130	156
13	THE CATHOLIC UNIV OF AMERICA	M J MUMMA	GSFC	N DELLO RUSSO	NCC 5 445	159

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	THE CATHOLIC UNIV OF AMERICA	M J MUMMA	GSFC	M A DISANTI	NCC 5 504	159
13	THE CATHOLIC UNIV OF AMERICA	R FITZENREITER	GSFC	Y WHANG	NAG 5 11883	158
13	THE CATHOLIC UNIV OF AMERICA	W J WAGNER	GSFC	O C ST.CYR	NAG 5 4940	155
13	THE CATHOLIC UNIV OF AMERICA	W J WAGNER	GSFC	O ST.CYR	NAG 5 9502	156
13	THE CATHOLIC UNIV OF AMERICA	W J WAGNER	GSFC	N GOPALSWAMY	NAG 5 9600	156
13	THE CATHOLIC UNIV OF AMERICA	W WAGNER	GSFC	L OFMAN	NAG 5 11877	158
13	THE UNIV OF CENTRAL FLORIDA	A F HEPP	GRC	N G DHERE	NCC 3 712	169
13	THE UNIV OF CENTRAL FLORIDA	T STEVENSON	GSFC	G D BOREMAN	NAG 5 10308	168
13	THE UNIV OF CENTRAL FLORIDA	C D BLACK	KSC	D C MAJOCHA	NGT10 52634	170
13	THE UNIV OF CENTRAL FLORIDA	C DAVIS	KSC	R SELLAR	NAG10 290	168
13	THE UNIV OF CENTRAL FLORIDA	R YOUNGQUIST	KSC	D LUO	NGT10 52627	169
13	TUSKEGEE UNIV	M A MANTENIEKS	GRC	D K RAY	NAG 3 2347	5
13	UNIV HOUSTON-HOUSTON	G BADHWAR	JSC	L S PINSKY	NAG 9 1347	483
13	UNIV OF ALABAMA - BIRMINGHAM	J F DOWDY	MSFC	C M LAWSON	NGT 8 52845	8
13	UNIV OF ALABAMA - BIRMINGHAM	R KING	MSFC	J B ANDREWS	NAG 8 99059	7
13	UNIV OF ALABAMA - HUNTSVILLE	J BOHLIN	GSFC	D H COMFORT	NAG 5 4268	8
13	UNIV OF ALABAMA - HUNTSVILLE	R LEPPING	GSFC	C WU	NAG 5 12468	11
13	UNIV OF ALABAMA - HUNTSVILLE	W J WAGNER	GSFC	S WU	NAG 5 9508	10
13	UNIV OF ALABAMA - HUNTSVILLE	W J WAGNER	GSFC	J K MILLER	NAG 5 9598	10
13	UNIV OF ALABAMA - HUNTSVILLE	A NURRIDIN	HQ	E EMSLIE	NGT 5 50163	14
13	UNIV OF ALABAMA - HUNTSVILLE	B A MERRITT	WFF	PENDLETON	NAG 5 5298	8
13	UNIV OF ALASKA - FAIRBANKS	D EVANS	GSFC	D D CRAVEN	NAG 5 4269	16
13	UNIV OF ALASKA - FAIRBANKS	H NEEDLEMAN	GSFC	E WESTCOTT	NAG 5 5125	16
13	UNIV OF ALASKA - FAIRBANKS	J C BRINTON	GSFC	M CONDE	NAG 5 5316	16
13	UNIV OF ALASKA - FAIRBANKS	M H ACUNA	GSFC	J D CRAVEN	NAG 5 8042	17
13	UNIV OF ALASKA - FAIRBANKS	S A CURTIS	GSFC	M H REES	NAG 5 7683	17
13	UNIV OF ALASKA - FAIRBANKS	W B JOHNSON	GSFC	R COLLINS	NAG 5 5243	16
13	UNIV OF ALASKA - FAIRBANKS	W JOHNSON	GSFC	COLLINS	NAG 5 5218	16
13	UNIV OF ARIZONA	J S LING	GRC	K R SRIDHAR	NAG 3 2154	25
13	UNIV OF ARIZONA	G A SOFFEN	GSFC	J A REAGAN	NGT 5 111	38
13	UNIV OF ARIZONA	L C SHACKELFORD	JSC	H B	NAG 9 1212	36
13	UNIV OF ARIZONA	B MERRITT	WFF	G WILLIAMS	NAG 5 5336	26
13	UNIV OF CALIFORNIA - BERKELEY	C MCCREIGHT	ARC	P L RICHARDS	NAG 2 1398	68
13	UNIV OF CALIFORNIA - BERKELEY	B J MOTIL	GRC	V P CAREY	NAG 3 2105	68
13	UNIV OF CALIFORNIA - BERKELEY	J R SKARDA	GRC	E KNOBLOCK	NAG 3 2152	68
13	UNIV OF CALIFORNIA - BERKELEY	A HARPER	GSFC	J LUHMAN	NAG 5 00133	76
13	UNIV OF CALIFORNIA - BERKELEY	B A MERRITT	GSFC	A J WESTPHAL	NAG 5 5231	69
13	UNIV OF CALIFORNIA - BERKELEY	D PIERCE	GSFC	M HURWITZ	NAG 5 5213	69
13	UNIV OF CALIFORNIA - BERKELEY	G STRINGFELLOW	GSFC	R J SAYKALLY	NAG 5 9384	71
13	UNIV OF CALIFORNIA - BERKELEY	H C NEEDLEMAN	GSFC	R W LIN	NAG 5 5102	69
13	UNIV OF CALIFORNIA - BERKELEY	H NEEDLEMAN	GSFC	C HAILEY	NAG 5 5146	69
13	UNIV OF CALIFORNIA - BERKELEY	J BRINTON	GSFC	J EDELSTEIN	NAG 5 5355	69
13	UNIV OF CALIFORNIA - BERKELEY	J C BRINTON	GSFC	G T DELORY	NAG 5 5312	69
13	UNIV OF CALIFORNIA - BERKELEY	J THIEMAN	GSFC	I HAWKINS	NCC 5 253	77
13	UNIV OF CALIFORNIA - BERKELEY	K OBILVIE	GSFC	R P LIN	NAG 5 6928	70
13	UNIV OF CALIFORNIA - BERKELEY	M HESSE	GSFC	C W CARLSON	NAG 5 6932	70
13	UNIV OF CALIFORNIA - BERKELEY	W B JOHNSN	GSFC	M V HURWITZ	NAG 5 696	68
13	UNIV OF CALIFORNIA - BERKELEY	W B JOHNSON	GSFC	M V HURWITZ	NAG 5 5197	69
13	UNIV OF CALIFORNIA - BERKELEY	W M FARREL	GSFC	D T DELORY	NAG 5 10715	73
13	UNIV OF CALIFORNIA - BERKELEY	W WAGNER	GSFC	G H FISHER	NAG 5 11914	74
13	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	R JEANLOZ	NGT 5 50188	78
13	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	G SMOOT	NGT 5 50189	78
13	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	P L RICHARDS	NGT 5 50195	78
13	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	C F MCKEE	NGT 5 50196	78
13	UNIV OF CALIFORNIA - BERKELEY	D HUBBARD	MSFC	R E PACKARD	NAG 8 1432	76
13	UNIV OF CALIFORNIA - BERKELEY	B MERRITT	WFF	R P LIN	NAG 5 5285	69
13	UNIV OF CALIFORNIA - LOS ANGELES	B S SINGH	GRC	J RUDNICK	NAG 3 1862	86
13	UNIV OF CALIFORNIA - LOS ANGELES	W M DUVAL	GRC	S J PUTTERMAN	NAG 3 2108	86
13	UNIV OF CALIFORNIA - LOS ANGELES	J BOHLIN	GSFC	R J STRANGEWAY	NAG 5 3764	87
13	UNIV OF CALIFORNIA - LOS ANGELES	J D BOHLIN	GSFC	D L PRITCHETT	NAG 5 4339	87
13	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	J P BERCHEM	NAG 5 9071	89
13	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	K K KHURANA	NAG 5 9546	90
13	UNIV OF CALIFORNIA - LOS ANGELES	M M MELLOTT	GSFC	D M THORNE	NAG 5 4270	87
13	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	F V CORONITI	NAG 5 8059	88
13	UNIV OF CALIFORNIA - LOS ANGELES	M S BURRELL	GSFC	M MOLDWIN	NGT 5 117	94
13	UNIV OF CALIFORNIA - LOS ANGELES	S A CURTIS	GSFC	A ABDALLA	NAG 5 11704	92

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	UNIV OF CALIFORNIA - LOS ANGELES	J M BOYCE	HQ	B ZUCKERMAN	NAG 5 9573	90
13	UNIV OF CALIFORNIA - RIVERSIDE	B A MERRITT	GSFC	T O TUMER	NAG 5 5288	95
13	UNIV OF CALIFORNIA - RIVERSIDE	H C NEEDLEMAN	GSFC	A D ZYCH	NAG 5 5116	95
13	UNIV OF CALIFORNIA - RIVERSIDE	H C NEEDLEMAN	GSFC	O T TUMER	NAG 5 5118	95
13	UNIV OF CALIFORNIA - SAN DIEGO	J R SKARDA	GRC	C POZRIKIDIS	NAG 3 2117	96
13	UNIV OF CALIFORNIA - SAN DIEGO	O MEHMED	GRC	J KOSMATKA	NCC 3 741	103
13	UNIV OF CALIFORNIA - SAN DIEGO	B A MERRITT	GSFC	J L MATTESON	NAG 5 5287	96
13	UNIV OF CALIFORNIA - SAN DIEGO	B MERRITT	GSFC	J MATTESON	NAG 5 5349	97
13	UNIV OF CALIFORNIA - SAN DIEGO	J C BRINTON	GSFC	M H THIEMENS	NAG 5 5266	96
13	UNIV OF CALIFORNIA - SAN DIEGO	J M GREBOWSKY	GSFC	H KARIMABADI	NAG 5 11754	101
13	UNIV OF CALIFORNIA - SAN DIEGO	M HESSE	GSFC	C E MCILWAIN	NAG 5 6931	97
13	UNIV OF CALIFORNIA - SAN DIEGO	W WAGNER	GSFC	P P HICK	NAG 5 11906	101
13	UNIV OF CALIFORNIA - SAN DIEGO	A NURRIDIN	HQ	G M FULLER	NGT 5 50183	104
13	UNIV OF CALIFORNIA - SANTA BARBARA	A J KOGUT	GSFC	P M LUBIN	NAG 5 9941	107
13	UNIV OF CALIFORNIA - SANTA BARBARA	A J KOGUT	GSFC	P M LUBIN	NAG 5 11887	108
13	UNIV OF CALIFORNIA - SANTA BARBARA	D HUBBARD	GSFC	G AHLERS	NAG 8 1757	109
13	UNIV OF CALIFORNIA - SANTA BARBARA	G MUCKLOW	GSFC	A CLELAND	NAG 5 8669	107
13	UNIV OF CALIFORNIA - SANTA BARBARA	J POE	MSFC	G AHLERS	NAG 8 1429	108
13	UNIV OF CALIFORNIA - SANTA CRUZ	G A SOFFEN	GSFC	D A WILLIAMS	NGT 5 108	114
13	UNIV OF CHICAGO	B A MERRITT	GSFC	J A SIMPSON	NAG 5 5179	203
13	UNIV OF CHICAGO	B A MERRITT	GSFC	D MULLER	NAG 5 5223	203
13	UNIV OF CHICAGO	B A MERRITT	GSFC	D MULLER	NAG 5 5305	203
13	UNIV OF CHICAGO	B MERRITT	GSFC	SWORDY	NAG 5 5229	203
13	UNIV OF CHICAGO	M S BURRELL	GSFC	S MEYER	NGT 5 86	206
13	UNIV OF CHICAGO	W J WAGNER	GSFC	D CATTANEO	NAG 5 4953	203
13	UNIV OF CINCINNATI	J BOYCE	GSFC	M SITKO	NAG 5 9475	419
13	UNIV OF COLORADO - BOULDER	H K NAHRA	GRC	J E COLWELL	NAG 3 2136	122
13	UNIV OF COLORADO - BOULDER	A J KLIMAS	GSFC	D N BAKER	NAG 5 8442	128
13	UNIV OF COLORADO - BOULDER	D T NGUYEN	GSFC	D CASH	NAG 5 11299	134
13	UNIV OF COLORADO - BOULDER	J BOHLIN	GSFC	D HORANYI	NAG 5 4343	124
13	UNIV OF COLORADO - BOULDER	J BRINTON	GSFC	D CASH	NAG 5 5331	124
13	UNIV OF COLORADO - BOULDER	J M GREBOWSKY	GSFC	J TOOMRE	NAG 5 11879	135
13	UNIV OF COLORADO - BOULDER	L EARLY	GSFC	S SOLOMON	NAG 5 5027	124
13	UNIV OF COLORADO - BOULDER	L J EARLY	GSFC	J FORBES	NAG 5 5028	124
13	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	P FORBES	NAG 5 4467	124
13	UNIV OF COLORADO - BOULDER	M S BURRELL	GSFC	R MCCRAY	NGT 5 80	140
13	UNIV OF COLORADO - BOULDER	M S BURRELL	GSFC	E ELLINGSON	NGT 5 140	140
13	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	P L BENDER	NAG 5 10259	130
13	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	J GLENN	NAG 5 11911	136
13	UNIV OF COLORADO - BOULDER	R HOWARD	GSFC	D C SOLOMON	NAG 5 3949	123
13	UNIV OF COLORADO - BOULDER	R T STEBBINS	GSFC	P L BENDER	NAG 5 12188	136
13	UNIV OF COLORADO - BOULDER	W G WAGNER	GSFC	D JULIEN	NAG 5 4918	124
13	UNIV OF COLORADO - BOULDER	W J WAGNER	GSFC	N H BRUMMELL	NAG 5 9537	130
13	UNIV OF COLORADO - BOULDER	W JOHNSON	GSFC	E WILKINSON	NAG 5 5096	124
13	UNIV OF COLORADO - BOULDER	W WAGNER	GSFC	D HABER	NAG 5 11920	136
13	UNIV OF COLORADO - BOULDER	P M DOTY	MSFC	A GREENBERG	NAG 8 1475	138
13	UNIV OF CONNECTICUT	D HUBBARD	MSFC	J JAVANAINEN	NAG 8 1428	145
13	UNIV OF DELAWARE	B A MERRITT	GSFC	T K GAISSER	NAG 5 5181	148
13	UNIV OF DELAWARE	B A MERRITT	GSFC	P A EVENSON	NAG 5 5221	148
13	UNIV OF DELAWARE	M H ACUNA	GSFC	N F NESS	NAG 5 9116	149
13	UNIV OF DELAWARE	J W POE	MSFC	S T CHUI	NAG 8 1427	150
13	UNIV OF DELAWARE - BARTOL RES INST	J GREBOWSKY	GSFC	W H MATTAEUS	NAG 5 8134	150
13	UNIV OF DELAWARE - BARTOL RES INST	M H ACUNA	GSFC	N F NESS	NAG 5 8827	150
13	UNIV OF HAWAII AT MANOA - HONOLULU	E CHENG	GSFC	G LUPPINO	NAG 5 8751	192
13	UNIV OF HAWAII AT MANOA - HONOLULU	W WAGNER	GSFC	J R KUHN	NAG 5 4941	191
13	UNIV OF ILLINOIS - CHICAGO CIRCLE	R MARTINEAU	GSFC	C GREIN	NAG 5 10334	206
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	W JOHNSON	GSFC	C GARDNER	NAG 5 5241	208
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	C TALLEY	MSFC	J S WALKER	NAG 8 1453	211
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D HUBBARD	MSFC	D M CEPERLEY	NAG 8 1760	211
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	K SORENSON	MSFC	V L COVERSTON	NAG 8 1803	211
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	P M DOTY	MSFC	J A LEWIS	NAG 8 1471	211
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J BRINTON	WFF	E KUDEKIE	NAG 5 5368	208
13	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J BRINTON	WFF	E KUDEKI	NAG 5 5377	208
13	UNIV OF IOWA	R B ROGERS	GRC	J A GOREE	NAG 3 2128	223
13	UNIV OF IOWA	D H FAIRFIELD	GSFC	L A FRANK	NAG 5 7684	223
13	UNIV OF IOWA	D H FAIRFIELD	GSFC	R R ANDERSON	NAG 5 7710	223

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	UNIV OF IOWA	J C BRINTON	GSFC	C A KLETZING	NAG 5 5319	223
13	UNIV OF IOWA	R HOFFMAN	GSFC	L A FRANK	NAG 5 7712	223
13	UNIV OF IOWA	W B JOHNSON	GSFC	C A KLETZING	NAG 5 5232	223
13	UNIV OF KENTUCKY	B BIEGEL	ARC	M MENON	NCC 2 5491	229
13	UNIV OF KENTUCKY	H PARTRIDGE	ARC	M MENON	NCC 2 5486	229
13	UNIV OF MARYLAND - COLL PARK	B A MERRITT	GSFC	E S SEO	NAG 5 5155	256
13	UNIV OF MARYLAND - COLL PARK	B A MERRITT	GSFC	E S SEO	NAG 5 5204	256
13	UNIV OF MARYLAND - COLL PARK	B A MERRITT	GSFC	E S SEO	NAG 5 5225	256
13	UNIV OF MARYLAND - COLL PARK	B A MERRITT	GSFC	E S SEO	NAG 5 5308	256
13	UNIV OF MARYLAND - COLL PARK	B MERRITT	GSFC	E SEO	NAG 5 5249	256
13	UNIV OF MARYLAND - COLL PARK	B MERRITT	GSFC	J WANG	NAG 5 5347	256
13	UNIV OF MARYLAND - COLL PARK	J BOYCE	GSFC	L MUNDY	NAG 5 9575	260
13	UNIV OF MARYLAND - COLL PARK	K OGILVIE	GSFC	M COPLAN	NAG 5 10958	263
13	UNIV OF MARYLAND - COLL PARK	M HESSE	GSFC	J DRAKE	NAG 5 8459	258
13	UNIV OF MARYLAND - COLL PARK	M HESSE	GSFC	J DRAKE	NAG 5 12276	266
13	UNIV OF MARYLAND - COLL PARK	S A CURTIS	GSFC	K PAPADOPOLOUS	NAG 5 11693	264
13	UNIV OF MARYLAND - COLL PARK	T KOSTIUK	GSFC	J TRASCO	NCC 5 609	269
13	UNIV OF MARYLAND - COLL PARK	W B JOHNSON	GSFC	M A COPLAN	NAG 5 5263	256
13	UNIV OF MARYLAND - COLL PARK	F R CHANG-DIAZ	JSC	R SAGDEEV	NAG 9 1920	267
13	UNIV OF MARYLAND - COLL PARK	J W POE	MSFC	H J PAIK	NAG 8 1440	267
13	UNIV OF MEMPHIS	W J WAGNER	GSFC	J T SCHMELZ	NAG 5 9783	465
13	UNIV OF MICHIGAN - ANN ARBOR	K SACKSTEADER	GRC	A ATREYA	NCC 3 482	315
13	UNIV OF MICHIGAN - ANN ARBOR	B A MERRITT	GSFC	G TARLE	NAG 5 5173	309
13	UNIV OF MICHIGAN - ANN ARBOR	B A MERRITT	GSFC	G TARLE	NAG 5 5230	309
13	UNIV OF MICHIGAN - ANN ARBOR	M H ACUNA	GSFC	L FISK	NCC 5 383	315
13	UNIV OF MICHIGAN - ANN ARBOR	M M MELLOTT	GSFC	D D SKINNER	NAG 5 4007	309
13	UNIV OF MICHIGAN - ANN ARBOR	M S BURRELL	GSFC	C W AKERLOF	NGT 5 135	316
13	UNIV OF MICHIGAN - ANN ARBOR	R PLESS	GSFC	J KOZYRA	NAG 5 5030	309
13	UNIV OF MICHIGAN - ANN ARBOR	W B JOHNSON	GSFC	T L KILLEN	NAG 5 5049	309
13	UNIV OF MICHIGAN - ANN ARBOR	W B JOHNSON	GSFC	J T CLARK	NAG 5 5262	309
13	UNIV OF MICHIGAN - ANN ARBOR	B A MERRITT	WFF	C W AKERLOFF	NAG 5 5281	309
13	UNIV OF MINN	L J SALERNO	ARC	J MAPS	NAG 2 1474	318
13	UNIV OF MINN	B A MERRITT	GSFC	T W JONES	NAG 5 5182	319
13	UNIV OF MINN	D PIERCE	GSFC	J WYGANT	NAG 5 5214	319
13	UNIV OF MINN	M H ACUNA	GSFC	C A CATTELL	NAG 5 8073	319
13	UNIV OF MINN	R HOWARD	GSFC	D A CATTELL	NAG 5 3735	319
13	UNIV OF MINN	R J MACDOWALL	GSFC	P J KELLOGG	NAG 5 10274	320
13	UNIV OF MINN	W B JOHNSON	GSFC	J R WYGANT	NAG 5 5172	319
13	UNIV OF MINN	C TALLEY	MSFC	J J DERBY	NAG 8 1474	321
13	UNIV OF MISSOURI - ROLLA	M PURVEY	MSFC	D E DAY	NAG 8 1465	328
13	UNIV OF NEBRASKA - LINCOLN	M MEYAPPAN	ARC	S BANDYOPADHYAY	NCC 2 5304	337
13	UNIV OF NEBRASKA - LINCOLN	D A JAWORSKE	GRC	J A WOOLLAM	NAG 3 2219	337
13	UNIV. OF NEVADA - DESERT RES. INST	F THIO	MSFC	F WINTERBERG	NAG 8 1718	338
13	UNIV OF NEW HAMPSHIRE - DURHAM	A HARPER	GSFC	A GALVIN	NAS 5 00132	346
13	UNIV OF NEW HAMPSHIRE - DURHAM	B A MERRITT	GSFC	M L MCCONNELL	NAG 5 5324	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	B A MERRITT	GSFC	J M RYAN	NAG 5 5326	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	B MERRITT	GSFC	J RYAN	NAG 5 5358	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	F HERRERO	GSFC	M L MCCONNELL	NAG 5 8641	344
13	UNIV OF NEW HAMPSHIRE - DURHAM	H NEEDLEMAN	GSFC	J RYAN	NAG 5 5147	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	H NEEDLEMAN	GSFC	J RYAN	NAG 5 5117	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	J BRINTON	GSFC	K LYNCH	NAG 5 5381	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	J M GREBOWSKY	GSFC	J V HOLLWEG	NAG 5 8228	343
13	UNIV OF NEW HAMPSHIRE - DURHAM	J M GREBOWSKY	GSFC	J V HOLLWEG	NAG 5 11797	345
13	UNIV OF NEW HAMPSHIRE - DURHAM	K OGILVIE	GSFC	R TORBERT	NAG 5 6860	343
13	UNIV OF NEW HAMPSHIRE - DURHAM	M H ACUNA	GSFC	V K JORDANOVA	NAG 5 7804	343
13	UNIV OF NEW HAMPSHIRE - DURHAM	M H ACUNA	GSFC	R B TOBBERT	NAG 5 8041	343
13	UNIV OF NEW HAMPSHIRE - DURHAM	M HESSE	GSFC	R B TORBERT	NAG 5 6935	343
13	UNIV OF NEW HAMPSHIRE - DURHAM	W B JOHNSON	GSFC	R L ARNOLDY	NAG 5 5237	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	W J WAGNER	GSFC	T G FORBES	NAG 5 9614	344
13	UNIV OF NEW HAMPSHIRE - DURHAM	W JOHNSON	GSFC	K LYNCH	NAG 5 5234	342
13	UNIV OF NEW HAMPSHIRE - DURHAM	B MERRITT	WFF	J RYAN	NAG 5 5327	342
13	UNIV OF NEW MEXICO-ALBUQUERQUE	B S SINGH	GRC	S T BOYD	NAG 3 1976	362
13	UNIV OF NEW MEXICO-ALBUQUERQUE	M G MILLIS	GRC	K J MALLOY	NAS 3 00103	364
13	UNIV OF NEW MEXICO-ALBUQUERQUE	E R CANAVAN	GSFC	R I EPSTEIN	NAG 5 10373	363
13	UNIV OF NEW MEXICO-ALBUQUERQUE	M LI	GSFC	S BOYD	NAG 5 10359	363
13	UNIV OF NORTH CAROLINA - CHAPEL HILL	H PARTRIDGE	ARC	J LU	NCC 2 5499	398

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	UNIV OF NORTH CAROLINA - CHAPEL HILL	M MEYYAPPAN	ARC	J LU	NCC 2 5372	398
13	UNIV OF NORTH TEXAS	B MERRITT	GSFC	N D'SOUZA	NAG 5 5352	487
13	UNIV OF NOTRE DAME	J BOYCE	GSFC	D BENNET	NAG 5 9731	219
13	UNIV OF PENNSYLVANIA	R A WILKINSEN	GRC	A G YODH	NAG 3 2172	448
13	UNIV OF PITTSBURGH	D J LARKIN	GRC	W J CHOYKE	NAG 3 2538	450
13	UNIV OF PITTSBURGH	J C BINTON	GSFC	E ZIPF	NAG 5 5267	450
13	UNIV OF PUERTO RICO - MAYAGUEZ	M VLASSE	MSFC	A BARRIENTOS	NAG 8 1389	550
13	UNIV OF PUERTO RICO HUMACAO U COL	F MIRANDA	GRC	N J PINTO	NCC 3 963	551
13	UNIV OF ROCHESTER	C R MCCREIGHT	ARC	W J FORREST	NAG 2 1142	388
13	UNIV OF ROCHESTER	G STRINGFELLOW	GSFC	D M WATSON	NAG 5 9351	389
13	UNIV OF SOUTHERN CALIFORNIA	M MEYYAPPAN	ARC	C ZHOU	NCC 2 5420	117
13	UNIV OF SOUTHERN CALIFORNIA	W B JOHNSON	GSFC	D J JUDGE	NAG 5 5018	115
13	UNIV OF SOUTHERN CALIFORNIA	J BRINTON	WFF	D JUDGE	NAG 5 5333	115
13	UNIV OF SOUTHERN MISSISSIPPI	W S SPEARMAN	MSFC	J A POJMAN	NAG 8 1466	325
13	UNIV OF TENNESSEE - KNOXVILLE	J POE	MSFC	A J SANDERS	NAG 8 1442	467
13	UNIV OF TENNESSEE - KNOXVILLE	P DOTY	MSFC	L W TOWNSEND	NAG 8 1669	467
13	UNIV OF TENNESSEE SPACE INST-TULLAHOMA	J COLE	MSFC	J W MUELHAUSER	NAS 8 97301	467
13	UNIV OF TEXAS - AUSTIN	B S SINGH	GRC	D J HEINZEN	NAG 3 1901	488
13	UNIV OF TEXAS - AUSTIN	G SCHWARZE	GRC	D D DUPUIS	NAG 3 2633	488
13	UNIV OF TEXAS - AUSTIN	F HERRERO	GSFC	D T JAFFE	NAG 5 8858	489
13	UNIV OF TEXAS - AUSTIN	M S BURREL	GSFC	R MATZNER	NGT 5 130	493
13	UNIV OF TEXAS - AUSTIN	M SALAMON	GSFC	P SHELUS	NAG 5 11464	491
13	UNIV OF TEXAS - DALLAS	C STAHL	GSFC	G D EARLE	NAG 5 10335	494
13	UNIV OF TEXAS - DALLAS	M M MELLOTT	GSFC	D A HEELIS	NAG 5 4465	494
13	UNIV OF TEXAS - DALLAS	W B JOHNSON	GSFC	G D EARLE	NAG 5 5257	494
13	UNIV OF TEXAS - EL PASO	M H ACUNA	GSFC	R E LOPEZ	NAG 5 8882	495
13	UNIV OF TOLEDO	D REDDY	GRC	T G KEITH	NCC 3 855	423
13	UNIV OF VIRGINIA	T L PARROTT	LARC	W E ZORUMSKI	NCC 1 361	522
13	UNIV OF VIRGINIA	B GUYNES	MSFC	M C WIENER	NAG 8 1567	521
13	UNIV OF WASHINGTON	B S SINGH	GRC	W NAGOURNEY	NAG 3 1865	529
13	UNIV OF WASHINGTON	J S LING	GRC	E J DAVIS	NAG 3 1837	529
13	UNIV OF WASHINGTON	J C BRINTON	GSFC	J D SAHR	NAG 5 5294	530
13	UNIV OF WASHINGTON	J L CHRISTENSEN	GSFC	G K PARKS	NAG 5 30613	536
13	UNIV OF WASHINGTON	M HESSE	GSFC	G PARKS	NAG 5 6924	530
13	UNIV OF WASHINGTON	R HOFFMAN	GSFC	G K PARKS	NAG 5 7732	531
13	UNIV OF WASHINGTON	W B JOHNSON	GSFC	R H HOLZWORTH	NAG 5 5183	530
13	UNIV OF WASHINGTON	W B JOHNSON	GSFC	M MCCARTHY	NAG 5 5190	530
13	UNIV OF WISCONSIN - MADISON	C K STAHL	GSFC	D MCCAMMON	NAG 5 11322	545
13	UNIV OF WISCONSIN - MADISON	E S CHENG	GSFC	P TIMBIE	NAG 5 12422	546
13	UNIV OF WISCONSIN - MADISON	G MUCKLOW	GSFC	D MCCAMMON	NAG 5 8537	543
13	UNIV OF WISCONSIN - MADISON	J BRINTON	GSFC	D MCCAMMON	NAG 5 5270	542
13	UNIV OF WISCONSIN - MADISON	J CHERVENAK	GSFC	P TIMBIE	NAG 5 10258	545
13	UNIV OF WISCONSIN - MADISON	L J EARLY	GSFC	R J REYNOLDS	NAG 5 674	542
13	UNIV OF WISCONSIN - MADISON	L J EARLY	GSFC	D MCCAMMON	NAG 5 679	542
13	UNIV OF WISCONSIN - MADISON	S LAMBROS	GSFC	P DINGUS	NAG 5 9712	544
13	UNIV OF WISCONSIN - MADISON	W B JOHNSON	GSFC	K H NORDSIECK	NAG 5 5252	542
13	UNIV OF WISCONSIN - MADISON	W B JOHNSON	GSFC	W HARRIS	NAG 5 5253	542
13	UNIV OF WISCONSIN - MADISON	A NURRIDIN	HQ	P TIMBIE	NGT 5 50185	548
13	UNIV OF WISCONSIN - MADISON	C TALLEY	MSFC	R F COOPER	NAG 8 1460	546
13	UNIV OF WISCONSIN - MILWAUKEE	R C SINGLETERRY	LARC	J W NORBURY	NCC 1 354	548
13	UNIV OF WISCONSIN - MILWAUKEE	R C SINGLETERRY	LARC	S R BLATTNING	NGT 1 52217	549
13	UTAH STATE UNIV	J C BRINTON	GSFC	B G FEJER	NAG 5 5293	500
13	UTAH STATE UNIV	J M GREBOWSKY	GSFC	R W SCHUNK	NAG 5 11880	500
13	UTAH STATE UNIV	M M MELLOTT	GSFC	D G FEJER	NAG 5 4469	499
13	UTAH STATE UNIV	M S BURRELL	GSFC	R W SCHUNK	NGT 5 142	502
13	UTAH STATE UNIV	W B JOHNSON	GSFC	C M SWENSON	NAG 5 5187	499
13	UTAH STATE UNIV	W B JOHNSON	GSFC	J C ULWICK	NAG 5 5189	500
13	UTAH STATE UNIV	W B JOHNSON	GSFC	J C ULWICK	NAG 5 5245	500
13	UTAH STATE UNIV	W B JOHNSON	GSFC	C M SWENSON	NAG 5 5258	500
13	UTAH STATE UNIV	D HARDAGE	MSFC	J R DENNISON	NAS 8 02031	501
13	UTAH STATE UNIV	S NASH-STEVENSON	MSFC	J DENNISON	NGT 8 52885	502
13	UTAH STATE UNIV	J BRINTON	WFF	C SWENSON	NAG 5 5374	500
13	VA POLYTECH INST & ST UNIV	J C BRINTON	GSFC	W SCALES	NAG 5 5295	525
13	VANDERBILT UNIV	J GRANT	GSFC	D SAUMON	NAG 5 8906	468
13	WASHINGTON STATE UNIV	N HALL	ARC	M A OSMAN	NCC 2 5407	539
13	WASHINGTON UNIV - ST. LOUIS	M MILLIS	GRC	M S CONRAD	NAS 3 00094	332

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
13	WASHINGTON UNIV - ST. LOUIS	B MERRITT	GSFC	R BINNS	NAG 5 5343	330
13	WASHINGTON UNIV - ST. LOUIS	H C NEDDLEMAN	GSFC	R W BINNS	NAG 5 5078	329
13	WASHINGTON UNIV - ST. LOUIS	H NEEDLEMAN	GSFC	R BINNS	NAG 5 5110	329
13	WASHINGTON UNIV - ST. LOUIS	H NEEDLEMAN	GSFC	W R BINNS	NAG 5 5154	329
13	WASHINGTON UNIV - ST. LOUIS	K E BLANDING	GSFC	P L HINK	NGT 5 50170	333
13	WASHINGTON UNIV - ST. LOUIS	B A MERRITT	WFF	W R BINNS	NAG 5 5296	330
13	WASHINGTON UNIV - ST. LOUIS	B MERRITT	WFF	R BINNS	NAG 5 5357	330
13	WEST VIRGINIA UNIV	W WAGNER	GSFC	J E LITTLETON	NAG 5 11915	540
13	WESTERN MICHIGAN UNIV	P CRANE	GSFC	T GORCZYCA	NAG 5 10448	318
13	WHITWORTH COLL	D DOMOMKOS	GRC	D STEVENS	NAG 3 2510	539
13	WORCESTER POLYTECH INST	E J PENCIL	GRC	D GATSONIS	NAG 3 2405	303
13	WRIGHT STATE UNIV	M M MELLOTT, SR	GSFC	D L FOX	NAG 5 4188	424
13	YALE UNIV	F HERRERO	GSFC	R J SCHOELKOPF	NAG 5 10755	147
13	YALE UNIV	G STRINGFELLOW	GSFC	R J SHOELKOPF	NAG 5 11425	147
13	YALE UNIV	M S BURRELL	GSFC	D SCHOELKOPF	NGT 5 121	148
13	YALE UNIV	N J DENNEHY	GSFC	P KASEVICH	NAG 5 10439	147
13	YALE UNIV	W B JOHNSON	GSFC	D E PROBER	NAG 5 5255	146
13	YALE UNIV	C TALLEY	MSFC	R E APFEL	NAG 8 1461	148
13	YALE UNIV	D HUBBARD	MSFC	M A KASEVICH	NAG 8 1443	148
13	YALE UNIV	D HUBBARD	MSFC	K GIBBLE	NAG 8 1449	148
13	YALE UNIV	D HUBBARD	MSFC	M A KASEVICH	NAG 8 1767	148
19	ALABAMA A&M UNIV	R C ANDERSON	GRC	E W ROTHE	NAG 8 1800	2
19	AUBURN UNIV	P J GEORGE	GRC	H W BRANDHORST	NAS 3 99200	3
19	BAYLOR COLL OF MED	S SCHNEIDER	JSC	A BEBLANC	NCC 9 88	470
19	BOSTON COLL	J C BARNES	LARC	B DIBARTOLOL	NAG 1 01067	275
19	BOSTON UNIV	J GURMAN	GSFC	N U CROOKER	NAG 5 10881	278
19	BOSTON UNIV	P BUCHANAN	GSFC	D SPENCE	NAG 5 10419	277
19	BOSTON UNIV	R HOFFMAN	GSFC	T FRITZ	NAG 5 7677	276
19	BOSTON UNIV	R HOFFMAN	GSFC	H E SPENCER	NAG 5 7706	277
19	BOSTON UNIV	R HOFFMAN	GSFC	H SPENCE	NAG 5 9557	277
19	BOSTON UNIV	R HOFFMAN	GSFC	J CHEN	NAG 5 9562	277
19	BOSTON UNIV	R HOFFMAN	GSFC	T FRITZ	NAG 5 11397	278
19	BOSTON UNIV	R HOFFMAN	GSFC	H SPENCE	NAG 5 11751	278
19	CALIFORNIA INST OF TECH	E K STANSBERY	JSC	D S BURNETT	NAG 9 1013	48
19	CALIFORNIA INST OF TECH	D HUBBARD	MSFC	D GOODSTEIN	NAG 8 1763	48
19	CALIFORNIA INST OF TECH	D S HUBBARD	MSFC	A PONCE	NAG 8 1785	48
19	CALIFORNIA INST OF TECH	P DOTY	MSFC	J BRADY	NAG 8 1661	48
19	CALIFORNIA STATE UNIV - FULLERTON	E K STANSBERY	JSC	D S WOOLUM	NAG 9 1009	50
19	CALIFORNIA STATE UNIV - NORTHRIDGE	J GURMAN	GSFC	G A CHAPMAN	NAG 5 7878	51
19	CALIFORNIA STATE UNIV - NORTHRIDGE	J GURMAN	GSFC	A CADAVID	NAG 5 10880	52
19	CARNEGIE - MELLON UNIV	K BLANDING	HQ	S SINGH	NGT 5 50347	435
19	CARNEGIE - MELLON UNIV	P DOTY	MSFC	R F SEKERKA	NAG 8 1704	433
19	CASE WESTERN RESERVE UNIV	D HUBBARD	MSFC	C ROSENBLATT	NAG 8 1779	402
19	CITY UNIV OF NY CITY COLL	J HANSEN	GSFC	L P JOHNSON	NCC 5 425	366
19	CITY UNIV OF NY SYSTEM	M MATEU	GSFC	M WEINER	NCC 5 654	367
19	CLARKSON UNIV	C TALLEY	MSFC	L L REGEL	NAG 8 1482	367
19	CLEVELAND STATE UNIV	D ADAMOVSKY	GRC	D FLANAGAN	NCC 3 914	408
19	COLL OF THE HOLY CROSS	A JACKSON	MSFC	M KOSS	NAG 8 1796	280
19	COLL OF WILLIAM AND MARY	S A THIBEAULT	LARC	R L KIEFER	NCC 1 327	504
19	COLORADO STATE UNIV	D STARR	GSFC	G L STEPHENS	NAG 5 11109	119
19	COLUMBIA UNIV	W B JOHNSON	GSFC	C J HAILEY	NAG 5 5260	368
19	CORNELL UNIV	D HUBBARD	MSFC	L POLLACK	NAG 8 1778	377
19	CORNELL UNIV	D S HUBBARD	MSFC	C A BATT	NAG 8 1759	377
19	CORNELL UNIV	G GUYNES	MSFC	R E THORNE	NAG 8 1831	377
19	DARTMOUTH COLL	S CURTIS	GSFC	M HUDSON	NAG 5 7442	340
19	DUKE UNIV	D HUBBARD	MSFC	J E THOMAS	NAG 8 1781	391
19	FISK UNIV	U	MSFC	D O HENDERSON	NAG 8 1604	463
19	FLORIDA ATLANTIC UNIV	R J GUNDERMAN	GRC	H F HELMKEN	NAS 3 26956	163
19	FLORIDA STATE UNIV	D HUBBARD	MSFC	E MANOUSAKIS	NAG 8 1773	166
19	HAHNEMANN UNIV	B GUYNES	MSFC	P J LOLL	NAG 8 1840	437
19	HAMPTON UNIV	D DESMARAIS	ARC	B FAISON	NGT 2 52261	509
19	HAMPTON UNIV	T KUCERA	GSFC	W R PRYOR	NAG 5 11818	509
19	HARVARD UNIV	G MADDREA	LARC	S C WOFYSY	NAS 1 18946	283
19	INDIANA UNIV - BLOOMINGTON	D HUBBARD	MSFC	V A KOSTELECKY	NAG 8 1770	214
19	IOWA STATE UNIV	R C OEFTERING	GRC	J A MANN	NAG 3 2784	221
19	IOWA STATE UNIV	W P WINFREE	LARC	J GRAY	NAG 1 1933	220

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
19	IOWA STATE UNIV	M HAMMOND	MSFC	R K TRIVEDI	NCC 8 98	222
19	JOHNS HOPKINS UNIV	H K NAHRA	GRC	H N OGUZ	NAG 3 2118	239
19	JOHNS HOPKINS UNIV	D FAIRFIELD	GSFC	R W MCENTIRE	NAG 5 11571	248
19	JOHNS HOPKINS UNIV	J SPANN	GSFC	B J ANDERSON	NAG 5 12303	250
19	JOHNS HOPKINS UNIV	M ACUNA	GSFC	R MCENTIRE	NAG 5 10242	244
19	JOHNS HOPKINS UNIV	M DESCH	GSFC	D G SIBECK	NAG 5 9569	243
19	JOHNS HOPKINS UNIV	R HOFFMAN	GSFC	C I MENG	NAG 5 7724	241
19	JOHNS HOPKINS UNIV	R HOFFMAN	GSFC	C MENG	NAG 5 11350	247
19	JOHNS HOPKINS UNIV	S CURTIS	GSFC	R GREENWALD	NAG 5 10597	245
19	JOHNS HOPKINS UNIV	T KUCERA	GSFC	D M RUST	NAG 5 11584	248
19	JOHNS HOPKINS UNIV	W P WINFREE	LARC	J M GREEN	NAG 1 2304	238
19	JOHNS HOPKINS UNIV	B GUYNES	MSFC	D WIRTZ	NAG 8 1377	250
19	JOHNS HOPKINS UNIV	P DOTY	MSFC	R MAUER	NAG 8 1695	251
19	JOHNS HOPKINS UNIV	S M SMITH	SSC	K O O'BRIEN	NAG 9 1146	251
19	KANSAS STATE UNIV	B BILLS	GSFC	A ARCHER	NCC 5 234	226
19	KANSAS STATE UNIV	P DOTY	MSFC	C M KLABUNDE	NAG 8 1687	226
19	KANSAS STATE UNIV	P DOTY	MSFC	M D HOLLINGSWORTH	NAG 8 1702	226
19	KENT STATE UNIV	A HEPP	GRC	D CHOWDHURY	NCC 3 734	409
19	LAMAR UNIV	G A MCKAY	SSC	S L JORDAN	NCC 9 126	470
19	LOUISIANA STATE UNIV - BATON ROUGE	B GUYNES	MSFC	K ALSHIBLI	NAS 8 01042	232
19	LOUISIANA STATE UNIV - BATON ROUGE	B A MERRITT	WFF	M CHERRY	NAG 5 5208	231
19	MASSACHUSETTS INST OF TECH	N R HALL	GRC	G H MCKINLEY	NAG 3 2155	286
19	MASSACHUSETTS INST OF TECH	N R HALL	GRC	G H MCKINLEY	NCC 3 610	295
19	MASSACHUSETTS INST OF TECH	S OLESON	GRC	D MARTINEZ-SANCHEZ	NCC 3 875	295
19	MASSACHUSETTS INST OF TECH	J KING	GSFC	J RICHRADSON	NAG 5 9622	290
19	MASSACHUSETTS INST OF TECH	K OGILVIE	GSFC	A LAZARUS	NAG 5 10915	291
19	MASSACHUSETTS INST OF TECH	K W OGILVIE	GSFC	A J LAZARUS	NAS 5 99181	294
19	MASSACHUSETTS INST OF TECH	T KUCERA	GSFC	C WANG	NAG 5 11623	292
19	MASSACHUSETTS INST OF TECH	P DOTY	MSFC	G BENEDEK	NAG 8 1659	293
19	MASSACHUSETTS INST OF TECH	P DOTY	MSFC	M CIMA	NAG 8 1688	293
19	MICHIGAN STATE UNIV	J GURMAN	GSFC	R F STEIN	NAG 5 8053	304
19	MICHIGAN TECHNOLOGICAL UNIV	C TALLEY	MSFC	T H COURTNEY	NAG 8 1478	307
19	MIDDLE TENNESSEE STATE UNIV	C TALLEY	MSFC	A C FRIEDLI	NAG 8 1486	463
19	NEW JERSEY INST OF TECH	J GURMAN	GSFC	H WANG	NAG 5 7837	347
19	NEW JERSEY INST OF TECH	J GURMAN	GSFC	P GOODE	NAG 5 9730	348
19	NEW JERSEY INST OF TECH	J GURMAN	GSFC	H WANG	NAG 5 9738	348
19	NEW JERSEY INST OF TECH	J GURMAN	GSFC	J LEE	NAG 5 10891	348
19	NEW JERSEY INST OF TECH	J GURMAN	GSFC	J CHAE	NAG 5 10894	348
19	NEW JERSEY INST OF TECH	J GURMAN	GSFC	H WANG	NAG 5 10910	348
19	NEW MEXICO STATE UNIV - LAS CRUCES	L M BARBER	GSFC	S J STOCHAJ	NAS 5 02083	360
19	NEW MEXICO STATE UNIV - LAS CRUCES	W LOVE	MSFC	C YING	NAG 8 1710	360
19	NORTH CAROLINA A&T STATE UNIV	A BEAM	MSFC	A KENNEDY	NAG 8 1632	393
19	NORTH CAROLINA STATE UNIV. - RALEIGH	G MADDREA	LARC	V SAXENA	NAS 1 18944	396
19	NORTH CAROLINA STATE UNIV. - RALEIGH	C TALLEY	MSFC	J BERNHOLC	NAG 8 1479	396
19	NORTH CAROLINA STATE UNIV. - RALEIGH	P DOTY	MSFC	N DIETZ	NAG 8 1686	396
19	NORTHEASTERN UNIV	C TALLEY	MSFC	A SACCO	NAG 8 1485	297
19	NORTHWESTERN UNIV	P DOTY	MSFC	J ALKEMPER	NAG 8 1660	201
19	OHIO STATE UNIV	D W GRIFFIN	GRC	C D ANDERECK	NAG 3 2138	410
19	OHIO STATE UNIV	C TALLEY	MSFC	P K GUPTA	NAG 8 1470	414
19	OLD DOMINION UNIV	M A TALLEY	LARC	G R HOY	NAG 1 2211	511
19	OREGON STATE UNIV	B BILLS	GSFC	G D EGBERT	NAG 5 6156	427
19	OREGON STATE UNIV	D STARR	GSFC	M H FREILICH	NAG 5 11105	429
19	PENN STATE UNIV. - UNIV. PARK	D L UBRAN	GRC	R A YETTER	NCC 3 718	446
19	PENN STATE UNIV. - UNIV. PARK	C TALLEY	MSFC	R M GERMAN	NAG 8 1452	444
19	PENN STATE UNIV. - UNIV. PARK	P DOTY	MSFC	J SINGH	NAG 8 1272	444
19	POLYTECH UNIV - BROOKLYN	B GUYNES	MSFC	A MYERSON	NAG 8 1370	380
19	PRAIRIE VIEW A&M UNIV	F A CUCINOTTA	JSC	R WILKINS	NCC 9 114	472
19	PRINCETON UNIV	F P CHIARAMONTE	GRC	D A SAVILLE	NAG 3 2380	349
19	PRINCETON UNIV	D STARR	GSFC	E F WOOD	NAG 5 11111	351
19	PURDUE UNIV	H PARTRIDGE	ARC	J A COOPER	NAG 2 1542	215
19	PURDUE UNIV	H PATRIDGE	ARC	S DATTA	NCC 2 1363	218
19	PURDUE UNIV	B V GUYNES	MSFC	B L GOLDEN	NAG 8 1833	217
19	PURDUE UNIV	P DOTY	MSFC	D JOHNSON	NAG 8 1691	217
19	RENSSELAER POLYTECH INST	L B JETER	MSFC	M E GLICKSMAN	NAG 8 1468	381
19	RICE UNIV	R HOFFMAN	GSFC	P REIFF	NAG 5 8380	473
19	RICE UNIV	C L TALLEY	MSFC	N J HALAS	NAG 8 1467	474

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
19	ROCHESTER INST OF TECH	A F HEPP	GRC	D P RAFFAELLE	NCC 3 806	382
19	ROCHESTER INST OF TECH	A F HEPP	GRC	D P RAFFAELLE	NCC 3 956	382
19	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	D HUBBARD	MSFC	H KOJIMA	NAG 8 1769	355
19	RUTGERS STATE UNIV OF NJ NEW BRUNS	B MOTT	GSFC	D JOSEPH	NAG 5 9833	356
19	SAN JOSE STATE UNIV	A BARNES	ARC	P J HAMILL	NCC 2 1060	56
19	SOUTH DAKOTA STATE UNIV	V ZANONI	SSC	D HELDER	NAG13 02045	463
19	STANFORD UNIV	J C DUH	GRC	G M HOMSY	NAG 3 1943	59
19	STANFORD UNIV	J GURMAN	GSFC	D B GALARCE	NAG 5 7835	61
19	STANFORD UNIV	J GURMAN	GSFC	P SCHERRER	NAG 5 8878	61
19	STANFORD UNIV	J GURMAN	GSFC	P H SCHERRER	NAG 5 10483	62
19	STANFORD UNIV	R HOFFMAN	GSFC	M WALT	NAG 5 8025	61
19	STANFORD UNIV	R HOFFMAN	GSFC	M WALT	NAG 5 11573	62
19	STANFORD UNIV	T KUCERA	GSFC	V PETROSIAN	NAG 5 12111	63
19	STANFORD UNIV	B GUYNES	MSFC	C FRANK	NAG 8 1843	63
19	STANFORD UNIV	C TALLEY	MSFC	R S FEIGELSON	NAG 8 1457	63
19	STANFORD UNIV	D A REISS	MSFC	R S FEIGELSON	NAG 8 1151	63
19	STANFORD UNIV	D HUBBARD	MSFC	J A LIPA	NAG 8 1772	63
19	STANFORD UNIV	D HUBBARD	MSFC	D D OSHEROFF	NAG 8 1777	63
19	TAYLOR UNIV	R HOFFMAN	GSFC	H D VOSS	NAG 5 8077	219
19	TAYLOR UNIV	R HOFFMAN	GSFC	H VOSS	NAG 5 11982	219
19	THE CATHOLIC UNIV OF AMERICA	J GURMAN	GSFC	M GUATHAKURTA	NAG 5 8018	155
19	THE CATHOLIC UNIV OF AMERICA	J GURMAN	GSFC	N GOPALSWAMY	NCC 5 512	159
19	THE CATHOLIC UNIV OF AMERICA	L F BURLAGA	GSFC	Y C WHANG	NAG 5 11131	157
19	THE CATHOLIC UNIV OF AMERICA	L F BURLAGA	GSFC	Y C WHANG	NAG 5 12529	159
19	THE CATHOLIC UNIV OF AMERICA	M ACUNA	GSFC	J W BROSIUS	NAG 5 11162	157
19	THE CATHOLIC UNIV OF AMERICA	T KUCERA	GSFC	J W BROSIUS	NAG 5 11757	158
19	THE SCRIPPS RES INST (TSRI) -LA JOLLA	B GUYNES	MSFC	G A CHANG	NAG 8 1834	67
19	TUFTS UNIV	T KUCERA	GSFC	K LANG	NAG 5 11605	298
19	TUFTS UNIV	P M DOTY	MSFC	P CEBE	NAG 8 1480	298
19	UNIV HOUSTON-HOUSTON	P J SHIRRON	GSFC	P W CHU	NAG 5 10714	483
19	UNIV HOUSTON-HOUSTON	B GUYNES	MSFC	J M FRIEDMAN	NAG 8 1363	483
19	UNIV HOUSTON-HOUSTON	P DOTY	MSFC	L S PINSKY	NAG 8 1658	483
19	UNIV OF AKRON	D NG	GRC	G C GIAKOS	NAG 3 2632	417
19	UNIV OF ALABAMA - BIRMINGHAM	C HUA SU	MSFC	R SCRIPA	NCC 8 204	7
19	UNIV OF ALABAMA - BIRMINGHAM	P DOTY	MSFC	J B ANDREWS	NAG 8 1228	7
19	UNIV OF ALABAMA - BIRMINGHAM	P M DOTY	MSFC	J W MAYS	NAG 8 1678	7
19	UNIV OF ALABAMA - HUNTSVILLE	B GILES	GSFC	R COMFORT	NAG 5 11626	11
19	UNIV OF ALABAMA - HUNTSVILLE	D STARR	GSFC	M J NEWCHURCH	NAG 5 11100	11
19	UNIV OF ALABAMA - HUNTSVILLE	J GURMAN	GSFC	G EMSLIE	NAG 5 7991	9
19	UNIV OF ALABAMA - HUNTSVILLE	R HOFFMAN	GSFC	R SHELDON	NAG 5 9741	10
19	UNIV OF ALABAMA - HUNTSVILLE	T KUCERA	GSFC	G EMSLIE	NAG 5 11843	11
19	UNIV OF ALABAMA - HUNTSVILLE	C H SU	MSFC	J BAIRD	NAG 8 1850	12
19	UNIV OF ALABAMA - HUNTSVILLE	E ETHRIDGE	MSFC	W KINKLER	NCC 8 207	13
19	UNIV OF ALABAMA - HUNTSVILLE	H K HIGGINBOTHAM	MSFC	R JUDGE	NAG 8 1816	12
19	UNIV OF ALABAMA - HUNTSVILLE	P DOTY	MSFC	S FETH	NCC 8 205	13
19	UNIV OF ALABAMA - HUNTSVILLE	R N GRUGEL	MSFC	A FEDOSEYEV	NCC 8 209	13
19	UNIV OF ALABAMA - HUNTSVILLE	R N GRUGEL	MSFC	W KAUHLER	NCC 8 245	14
19	UNIV OF ALABAMA - HUNTSVILLE	S NASH-STEVENSON	MSFC	W PACIESAS	NGT 8 52886	14
19	UNIV OF ALABAMA - UNIV	M PURVEY	MSFC	D M STEFANESCU	NAS 8 00207	15
19	UNIV OF ALABAMA - UNIV	T DE LOACH	MSFC	D M STEFANESCU	NAS 8 39715	15
19	UNIV OF ALASKA - FAIRBANKS	D O STARR	GSFC	S LI	NAG 5 6338	16
19	UNIV OF ARIZONA	C STOKER	ARC	P H SMITH	NCC 2 5477	38
19	UNIV OF ARIZONA	A T CHAI	GRC	J JACOBS	NAG 3 1869	25
19	UNIV OF ARIZONA	D O STARR	GSFC	R SCHOWENGERDT	NAG 5 6339	26
19	UNIV OF ARIZONA	D O STARR	GSFC	P KRIDER	NAG 5 6461	26
19	UNIV OF ARIZONA	D O STARR	GSFC	P KRIDER	NAG 5 9208	29
19	UNIV OF ARIZONA	J GURMAN	GSFC	J JOKIPII	NAG 5 10893	33
19	UNIV OF ARIZONA	T KUCERA	GSFC	K HSIEH	NAG 5 11596	34
19	UNIV OF ARIZONA	D HUBBARD	MSFC	P MEYSTRE	NAG 8 1775	36
19	UNIV OF ARIZONA	P DOTY	MSFC	K J JACKSON	NAG 8 1667	36
19	UNIV OF ARIZONA	V ZANONI	SSC	K THOME	NAG13 02044	37
19	UNIV OF ARKANSAS - LITTLE ROCK	C J BRYAN	KSC	T VISWANATHAN	NAG10 277	40
19	UNIV OF CALIFORNIA - BERKELEY	D FAIRFIELD	GSFC	F MOZER	NAG 5 9626	71
19	UNIV OF CALIFORNIA - BERKELEY	D STARR	GSFC	D BALDOCCHI	NAG 5 8753	71
19	UNIV OF CALIFORNIA - BERKELEY	K OGILVIE	GSFC	R P LIN	NAG 5 10428	72
19	UNIV OF CALIFORNIA - BERKELEY	K OGILVIE	GSFC	R LIN	NAG 5 11804	74

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
19	UNIV OF CALIFORNIA - BERKELEY	M ACUNA	GSFC	C CARLSON	NAG 5 9650	72
19	UNIV OF CALIFORNIA - BERKELEY	M GOLDSTEIN	GSFC	F MOZER	NAG 5 9975	72
19	UNIV OF CALIFORNIA - BERKELEY	M GOLDSTEIN	GSFC	G K PARKS	NAG 5 10131	72
19	UNIV OF CALIFORNIA - BERKELEY	P J SHIRRON	GSFC	P L RICHARDS	NAG 5 10713	73
19	UNIV OF CALIFORNIA - BERKELEY	R HOFFMAN	GSFC	F MOZER	NAG 5 8078	70
19	UNIV OF CALIFORNIA - BERKELEY	R HOFFMAN	GSFC	G PARKS	NAG 5 10466	72
19	UNIV OF CALIFORNIA - BERKELEY	R HOFFMAN	GSFC	G PARKS	NAG 5 11416	73
19	UNIV OF CALIFORNIA - BERKELEY	R HOFFMAN	GSFC	F MOZER	NAG 5 11733	74
19	UNIV OF CALIFORNIA - BERKELEY	W B JOHNSON	GSFC	C W CARLSON	NAG 6 10	75
19	UNIV OF CALIFORNIA - BERKELEY	K E CYR	JSC	K NISHIZUMI	NAG 9 1051	76
19	UNIV OF CALIFORNIA - BERKELEY	P M DOTY	MSFC	J W EVANS	NAG 8 1458	76
19	UNIV OF CALIFORNIA - IRVINE	J DORBAND	GSFC	I SCHERSON	NAG 5 9695	84
19	UNIV OF CALIFORNIA - LOS ANGELES	H PARTRIDGE	ARC	C HO	NCC 2 1364	93
19	UNIV OF CALIFORNIA - LOS ANGELES	J GURMAN	GSFC	J M PAP	NAG 5 7907	88
19	UNIV OF CALIFORNIA - LOS ANGELES	J GURMAN	GSFC	R K ULRICH	NAG 5 7995	88
19	UNIV OF CALIFORNIA - LOS ANGELES	J SPANN	GSFC	R RICHARD	NAG 5 12177	93
19	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	P L PRITCHETT	NAG 5 8060	88
19	UNIV OF CALIFORNIA - LOS ANGELES	R HOFFMAN	GSFC	C T RUSSELL	NAG 5 7721	88
19	UNIV OF CALIFORNIA - LOS ANGELES	R HOFFMAN	GSFC	C RUSSEL	NAG 5 11324	91
19	UNIV OF CALIFORNIA - LOS ANGELES	S CURTIS	GSFC	M ASHOUR-ABDOLLA	NAG 5 9772	90
19	UNIV OF CALIFORNIA - LOS ANGELES	T KUCERA	GSFC	C T RUSSELL	NAG 5 11583	92
19	UNIV OF CALIFORNIA - LOS ANGELES	T KUCERA	GSFC	R ULRICH	NAG 5 11708	92
19	UNIV OF CALIFORNIA - LOS ANGELES	E K STANSBERY	JSC	K D MCKEEGAN	NAG 9 1020	93
19	UNIV OF CALIFORNIA - RIVERSIDE	J GURMAN	GSFC	G ZANK	NAG 5 10932	95
19	UNIV OF CALIFORNIA - RIVERSIDE	T KUCERA	GSFC	J LE ROUX	NAG 5 11604	95
19	UNIV OF CALIFORNIA - RIVERSIDE	T KUCERA	GSFC	G ZANK	NAG 5 11621	95
19	UNIV OF CALIFORNIA - SAN DIEGO	D STARR	GSFC	D STRAMSKI	NAG 5 6466	97
19	UNIV OF CALIFORNIA - SAN DIEGO	J GURMAN	GSFC	P HICK	NAG 5 10874	100
19	UNIV OF CALIFORNIA - SAN DIEGO	E K STANSBERY	JSC	M H THIEMENS	NAG 9 1002	102
19	UNIV OF CALIFORNIA - SAN FRANCISCO	M H NEW	ARC	M A WILSON	NCC 2 5389	105
19	UNIV OF CALIFORNIA - SAN FRANCISCO	M NEW	ARC	M A WILSON	NCC 2 5453	105
19	UNIV OF CALIFORNIA - SANTA BARBARA	D STARR	GSFC	J SHI	NAG 5 6465	106
19	UNIV OF CALIFORNIA - SANTA CRUZ	K ZAHNLE	ARC	E ASPHAUGH	NCC 2 5480	113
19	UNIV OF CHICAGO	K CYR	JSC	M HUMAYYO	NAG 9 1096	205
19	UNIV OF CHICAGO	N ROBERTSON	JSC	M HUMAYUN	NAG 9 1436	205
19	UNIV OF COLORADO - BOULDER	C P MCKAY	ARC	M A TOLBERT	NGT 2 52270	139
19	UNIV OF COLORADO - BOULDER	D STARR	GSFC	A NOLIN	NAG 5 6462	124
19	UNIV OF COLORADO - BOULDER	D STARR	GSFC	R L ARMSTRONG	NAG 5 11107	133
19	UNIV OF COLORADO - BOULDER	D STARR	GSFC	H W VOEMEL	NAG 5 11110	133
19	UNIV OF COLORADO - BOULDER	D STARR	GSFC	J MASLANIK	NAG 5 11369	134
19	UNIV OF COLORADO - BOULDER	J GURMAN	GSFC	G DE TOMA	NAG 5 7838	126
19	UNIV OF COLORADO - BOULDER	J GURMAN	GSFC	J TOOMRE	NAG 5 7996	126
19	UNIV OF COLORADO - BOULDER	J GURMAN	GSFC	A KIPLINGER	NAG 5 10892	132
19	UNIV OF COLORADO - BOULDER	J GURMAN	GSFC	B HINDMAN	NAG 5 10917	132
19	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	S OSTERMAN	NAG 5 11463	134
19	UNIV OF COLORADO - BOULDER	R BINDSCHADLER	GSFC	T SCAMBOS	NAG 5 9477	129
19	UNIV OF COLORADO - BOULDER	R HOFFMAN	GSFC	D BAKER	NAG 5 8247	127
19	UNIV OF COLORADO - BOULDER	R HOFFMAN	GSFC	W K PETERSON	NAG 5 10967	133
19	UNIV OF COLORADO - BOULDER	R HOFFMAN	GSFC	W PETERSON	NAG 5 11391	134
19	UNIV OF COLORADO - BOULDER	R HOFFMAN	GSFC	D BAKER	NAG 5 11576	135
19	UNIV OF COLORADO - BOULDER	K BLANDING	HQ	W CASH	NGT 5 50397	142
19	UNIV OF DELAWARE	J GURMAN	GSFC	C W SMITH	NAG 5 10911	149
19	UNIV OF DELAWARE	T KUCERA	GSFC	W MATHAEUS	NAG 5 11603	149
19	UNIV OF DELAWARE	B GUYNES	MSFC	E W KALER	NAG 8 1830	150
19	UNIV OF DELAWARE	D SMITH	MSFC	E W KALER	NAG 8 1346	150
19	UNIV OF FLORIDA	A E WASHBURN	LARC	L N CATTAFESTA	NCC 1 01023	173
19	UNIV OF FLORIDA	P DOTY	MSFC	R ABBASCHIAM	NAG 8 1673	172
19	UNIV OF FLORIDA	P DOTY	MSFC	D TALHAM	NAG 8 1675	172
19	UNIV OF FLORIDA	P DOTY	MSFC	T J ANDERSON	NAG 8 1679	172
19	UNIV OF GEORGIA	D HUBBARD	MSFC	D P LANDAU	NAG 8 1771	189
19	UNIV OF HAWAII AT MANOA - HONOLULU	D O STARR	GSFC	J N PORTER	NAG 5 6340	191
19	UNIV OF HAWAII AT MANOA - HONOLULU	J MCGARRY	GSFC	D O'GARA	NAS 5 99180	196
19	UNIV OF IDAHO - MOSCOW	D STARR	GSFC	V P WALDEN	NAG 5 11112	198
19	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	P DOTY	MSFC	J A DANTZIG	NAG 8 1657	211
19	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	P DOTY	MSFC	J S WALKER	NAG 8 1705	211
19	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	P DOTY	MSFC	J A DANTZIG	NAG 8 1249	211

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
19	UNIV OF IOWA	D FAIRFIELD	GSFC	L FRANK	NAG 5 11117	224
19	UNIV OF IOWA	D FAIRFIELD	GSFC	R ANDERSON	NAG 5 11379	224
19	UNIV OF IOWA	D FAIRFIELD	GSFC	R ANDERSON	NAG 5 11707	224
19	UNIV OF IOWA	M GOLDSTEIN	GSFC	D GURNETT	NAG 5 9974	224
19	UNIV OF IOWA	R HOFFMAN	GSFC	D GURNATT	NAG 5 7943	223
19	UNIV OF IOWA	R HOFFMAN	GSFC	J SCUDDER	NAG 5 8119	223
19	UNIV OF IOWA	R HOFFMAN	GSFC	J SCUDDER	NAG 5 9499	224
19	UNIV OF IOWA	R HOFFMAN	GSFC	D GURNETT	NAG 5 9561	224
19	UNIV OF IOWA	R HOFFMAN	GSFC	L FRANK	NAG 5 11528	224
19	UNIV OF IOWA	R HOFFMAN	GSFC	J SCUDDER	NAG 5 11676	224
19	UNIV OF IOWA	R HOFFMAN	GSFC	D A GURNETT	NAG 5 11942	225
19	UNIV OF IOWA	B GUYNES	MSFC	M A ARNOLD	NAG 8 1835	225
19	UNIV OF IOWA	B GUYNES	MSFC	M A ARNOLD	NAG 8 1352	225
19	UNIV OF KANSAS	A J TUYAHOV	GSFC	K P PRICE	NAG 5 4990	226
19	UNIV OF KANSAS	A J TUYAHOV	GSFC	K P PRICE	NAG 5 9841	226
19	UNIV OF KANSAS	D STARR	GSFC	R BENNARTZ	NAG 5 11106	226
19	UNIV OF MARYLAND - COLL PARK	A CHAIT	GRC	A DEANE	NAG 3 2139	255
19	UNIV OF MARYLAND - COLL PARK	D GOLDSTEIN	GSFC	A DEANE	NAG 5 10626	262
19	UNIV OF MARYLAND - COLL PARK	D STARR	GSFC	S LIANG	NAG 5 6459	256
19	UNIV OF MARYLAND - COLL PARK	D STARR	GSFC	R PINKER	NAG 5 6464	256
19	UNIV OF MARYLAND - COLL PARK	J GURMAN	GSFC	F IPAVICH	NAG 5 9282	259
19	UNIV OF MARYLAND - COLL PARK	J GURMAN	GSFC	F M IPAVICH	NAG 5 12063	265
19	UNIV OF MARYLAND - COLL PARK	J R FISCHER	GSFC	A DEANE	NAG 5 8596	258
19	UNIV OF MARYLAND - COLL PARK	K OGILVIE	GSFC	M COPLAN	NAG 5 8621	259
19	UNIV OF MARYLAND - COLL PARK	K OGILVIE	GSFC	G GLOECKLER	NAG 5 11812	265
19	UNIV OF MARYLAND - COLL PARK	M ACUNA	GSFC	G GLOEKLER	NAG 5 10540	262
19	UNIV OF MARYLAND - COLL PARK	S CURTIS	GSFC	K PAPADOPOULIS	NAG 5 10596	262
19	UNIV OF MARYLAND - COLL PARK	D HUBBARD	MSFC	R FERRELL	NAG 8 1762	267
19	UNIV OF MARYLAND - EASTERN SHORE	W B KRABILL	GSFC	D R LEVIN	NAG 5 5328	270
19	UNIV OF MARYLAND BALTIMORE	J P GALLOWAY	GSFC	D BLAISDELL	NCC 5 544	271
19	UNIV OF MARYLAND BALTIMORE COUNTY	D O STARR	GSFC	W MCMILLAN	NAG 5 6460	271
19	UNIV OF MARYLAND BALTIMORE COUNTY	D O STARR	GSFC	A MARSHAK	NAG 5 6675	271
19	UNIV OF MARYLAND BALTIMORE COUNTY	D STARR	GSFC	W MCMILLAN	NAG 5 11156	273
19	UNIV OF MARYLAND BALTIMORE COUNTY	J GURMAN	GSFC	J M PAP	NAG 5 10876	273
19	UNIV OF MARYLAND BALTIMORE COUNTY	T KUCERA	GSFC	J PAP	NAG 5 11624	274
19	UNIV OF MASSACHUSETTS	D STARR	GSFC	R R GAMACHE	NAG 5 11064	298
19	UNIV OF MASSACHUSETTS - AMHERST	D G SICKOREZ	JSC	R E VAN EMMERIK	NGT 9 32	301
19	UNIV OF MIAMI	D Q STARR	GSFC	P J MINNETT	NAG 5 11104	175
19	UNIV OF MICHIGAN - ANN ARBOR	D F CHAO	GRC	G TRYGGVASON	NAG 3 2162	308
19	UNIV OF MICHIGAN - ANN ARBOR	D F CHAO	GRC	J B GROTBORG	NAG 3 2196	308
19	UNIV OF MICHIGAN - ANN ARBOR	J S SOVEY	GRC	A D GALLIMORE	NAG 3 2216	308
19	UNIV OF MICHIGAN - ANN ARBOR	R HOFFMAN	GSFC	A NAGY	NAG 5 10887	312
19	UNIV OF MICHIGAN - ANN ARBOR	D GALLAGHER	MSFC	M LIEMOHN	NCC 8 181	315
19	UNIV OF MINN	R J MACDOWELL	GSFC	K GOETZ	NAS 5 32994	321
19	UNIV OF MINN	E K STANSBERY	JSC	R O PEPIN	NAG 9 1007	321
19	UNIV OF MINN	P DOTY	MSFC	J DERBY	NAG 8 1258	321
19	UNIV OF MISSISSIPPI - UNIV	D P POWE	SSC	J JOHNSON	NAG13 01004	325
19	UNIV OF NEW HAMPSHIRE - DURHAM	J GURMAN	GSFC	E MOEBIUS	NAG 5 10890	345
19	UNIV OF NEW HAMPSHIRE - DURHAM	K OGILVIE	GSFC	R TORBERT	NAG 5 10360	344
19	UNIV OF NEW HAMPSHIRE - DURHAM	K OGILVIE	GSFC	R TORBERT	NAG 5 11803	345
19	UNIV OF NEW HAMPSHIRE - DURHAM	M GOLDSTEIN	GSFC	J M QUINN	NAG 5 9960	344
19	UNIV OF NEW HAMPSHIRE - DURHAM	P BUCHANAN	GSFC	D LYNCH	NAG 5 10420	344
19	UNIV OF NEW MEXICO-ALBUQUERQUE	J GURMAN	GSFC	S JEFFERIES	NAG 5 10918	363
19	UNIV OF NEW MEXICO-ALBUQUERQUE	D HUBBARD	MSFC	A V BABKIN	NAG 8 1758	363
19	UNIV OF OKLAHOMA - NORMAN	G SONNEBORN	GSFC	K LEIGHLY	NAG 5 10048	426
19	UNIV OF PENNSYLVANIA	P M DOTY	MSFC	P DUCHEYNE	NAG 8 1483	449
19	UNIV OF PENNSYLVANIA	R CROMISE	MSFC	P LOLL	NAG 8 1350	449
19	UNIV OF PUERTO RICO - MAYAGUEZ	G COLON	GSFC	J G GONZALEZ LAGOA	NAG 5 10255	550
19	UNIV OF PUERTO RICO-RIO PIEDRAS	B MOTT	GSFC	D MORELL	NAG 5 10321	552
19	UNIV OF SOUTH CAROLINA-COLUMBIA	B MOTT	GSFC	D KHAN	NAG 5 10322	461
19	UNIV OF SOUTH CAROLINA-COLUMBIA	D STARR	GSFC	V LAKSHMI	NAG 5 11128	461
19	UNIV OF SOUTH FLORIDA	G J GUNDERMAN	GRC	R E HENNING	NAS 3 26412	177
19	UNIV OF SOUTH FLORIDA	B GUYNES	MSFC	D CAMERON	NAG 8 1381	177
19	UNIV OF SOUTHERN CALIFORNIA	D O STARR	GSFC	M STRAMSKA	NAG 5 6512	115
19	UNIV OF SOUTHERN CALIFORNIA	T KUCERA	GSFC	E J RHODES	NAG 5 11582	116
19	UNIV OF SOUTHERN MISSISSIPPI	M BODIFORD	MSFC	J A POJMAN	NAG 8 1858	326

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
19	UNIV OF TENNESSEE - KNOXVILLE	T R GOVINDAN	ARC	P RAGHAVAN	NCC 2 5390	467
19	UNIV OF TENNESSEE - KNOXVILLE	B GUYNES	MSFC	G J BUNICK	NAG 8 1826	467
19	UNIV OF TEXAS - AUSTIN	A T CHAI	GRC	H L SWINNEY	NAG 3 1839	488
19	UNIV OF TEXAS - AUSTIN	D G SICKOREZ	JSC	B D TAPLEY	NAG 9 994	491
19	UNIV OF TEXAS - AUSTIN	D SICKOREZ	JSC	B D TAPLEY	NAG 9 1286	492
19	UNIV OF TEXAS - AUSTIN	D HUBBARD	MSFC	D J HEINZMAN	NAG 8 1764	491
19	UNIV OF TEXAS-PAN AMERICAN	A BEAM	MSFC	A LUMSDAINE	NAG 8 1634	485
19	UNIV OF TOLEDO	B GUYNES	MSFC	G E BORGSTAHL	NAG 8 1825	422
19	UNIV OF TOLEDO	B GUYNES	MSFC	C SCHALL	NAG 8 1838	422
19	UNIV OF TOLEDO	B GUYNES	MSFC	G BORGOTAH	NAG 8 1380	422
19	UNIV OF UTAH	R JAFFE	ARC	G SMITH	NCC 2 5516	499
19	UNIV OF UTAH	D STARR	GSFC	G MACE	NAG 5 6458	498
19	UNIV OF UTAH	P DOTY	MSFC	J J MAGDA	NAG 8 1665	499
19	UNIV OF VIRGINIA	J M MOORE	ARC	A D HOWARD	NCC 2 1192	522
19	UNIV OF WASHINGTON	D O STARR	GSFC	A T JESSUP	NAG 5 6463	530
19	UNIV OF WASHINGTON	G MADDREA	LARC	P V HOBBS	NAS 1 18940	535
19	UNIV OF WASHINGTON	D HUBBARD	MSFC	E G ADELBERGER	NAG 8 1756	535
19	UNIV OF WASHINGTON	D HUBBARD	MSFC	W NAGOURNEY	NAG 8 1776	535
19	UNIV OF WISCONSIN - MADISON	D O STARR	GSFC	S T GOWER	NAG 5 6457	542
19	UNIV OF WISCONSIN - MADISON	D STARR	GSFC	D C TOBIN	NAG 5 11155	545
19	UNIV OF WISCONSIN - MADISON	D S HUBBARD	MSFC	T G WALKER	NAG 8 1783	546
19	UNIV OF WISCONSIN - MADISON	P DOTY	MSFC	J N PEREPEZKO	NAG 8 1672	546
19	VANDERBILT UNIV	R HOFFMAN	GSFC	C CHAPPELL	NAG 5 9565	468
19	WASHINGTON STATE UNIV	C R TALLEY	MSFC	B Q LI	NCC 8 92	539
19	WASHINGTON STATE UNIV	C TALLEY	MSFC	B Q LI	NAG 8 1477	538
19	WASHINGTON STATE UNIV	P M DOTY	MSFC	B Q LI	NAG 8 1693	539
19	WASHINGTON UNIV - ST. LOUIS	E K STANSBERY	JSC	F A PODOSEK	NAG 9 1010	332
19	WASHINGTON UNIV - ST. LOUIS	K E CYR	JSC	C M HOHENBERG	NAG 9 1006	332
19	WASHINGTON UNIV - ST. LOUIS	P DOTY	MSFC	K F KELTON	NCC 8 85	333
19	YALE UNIV	C STAHLE	GSFC	D E PROBER	NAG 5 9595	147
19	YALE UNIV	J GURMAN	GSFC	S BASU	NAG 5 10912	147
21	ALABAMA A&M UNIV	D O FRAZIER	MSFC	M A ELSHAMY	NAG 8 1560	1
21	ALABAMA A&M UNIV	J DOWDY	MSFC	E TEMPLE	NAG 8 1643	2
21	ALABAMA A&M UNIV	W LOVE	MSFC	B CADY	NAG 8 1642	2
21	CALIFORNIA POLYTECH STATE U-SAN LUIS	S YEE	DFRC	R A WARD	NAG 4 202	49
21	CLARK ATLANTA UNIV	E ORDONEZ	MSFC	E MCDONALD	NAG 8 1814	179
21	CLARK ATLANTA UNIV	W LOVE	MSFC	A MSEZANE	NAG 8 1493	179
21	CORNELL UNIV	P J DRUMMOND	LARC	S B POPE	NGT 1 02011	377
21	ELIZABETH CITY STATE UNIV	M ANDRO	GRC	D SENGUPTA	NAG 3 2150	392
21	FAYETTEVILLE STATE UNIV	R A HATHAWAY	LARC	L EDWARDS	NAG 1 02107	392
21	HARVARD UNIV	S NASH-STEVENSON	MSFC	R PETERKIN	NGT 8 52922	284
21	IOWA STATE UNIV	P J HALEY	LARC	A G KELKAR	NCC 1 01047	222
21	NY UNIV	D S SPICER	GSFC	M BERGER	NAG 5 7583	379
21	NORTH CAROLINA A&T STATE UNIV	L M ARMENDARIZ	JSC	D CLEMENCE	NAG 9 1402	393
21	NORTH CAROLINA STATE UNIV. - RALEIGH	E R GENERAZIO	LARC	H T BANKS	NGT 1 02004	397
21	NORTH CAROLINA STATE UNIV. - RALEIGH	J S HARRISON	LARC	R C SMITH	NAG 1 01041	394
21	NORTH CAROLINA STATE UNIV. - RALEIGH	W P WINFREE	LARC	G P	NGT 1 52242	397
21	NORTH CAROLINA STATE UNIV. - RALEIGH	W P WINFREE	LARC	M L JOYNER	NGT 1 52196	397
21	NORTH CAROLINA STATE UNIV. - RALEIGH	W P WINIFREE	LARC	H T BANKS	NGT 1 01032	397
21	OAKWOOD COLL	W LOVE	MSFC	A OSEI	NAG 8 1888	5
21	OHIO STATE UNIV	R OLIVERSEN	GSFC	S MATHUR	NAG 5 8913	412
21	OLD DOMINION UNIV	K S BEY	LARC	H KANEKO	NAG 1 01092	513
21	SALISH KOOTENAI COLL	D MENCHAN	GSFC	T OLSON	NAG 5 9541	335
21	SOUTH DAKOTA SCH OF MINES & TECH	N KHAZENIE	GSFC	F CAMPONE	NAG 5 7746	462
21	SOUTHERN UNIV & A&M COLL	A BEAM	MSFC	M C DUNN	NAG 8 1633	233
21	SOUTHERN UNIV & A&M COLL	A JOYCE	SSC	M SUBBLEFIELD	NAG13 98013	233
21	SOUTHWEST TEXAS JUNIOR COLL	R A HATHAWAY	LARC	A HERNANDEZ	NAG 1 02112	475
21	TENNESSEE STATE UNIV	W LOVE	MSFC	L SHARPE	NAG 8 1855	464
21	TRENHOLM STATE TECH COLL	W LOVE	MSFC	C THOMPSON	NAG 8 1610	5
21	TURTLE MOUNTAIN COMM COLL	R M STARR	LARC	L J HENRY	NCC 1 02035	399
21	UNIV OF AKRON	M BRIGHT	GRC	H K QAMMAR	NAG 3 2494	416
21	UNIV OF CALIFORNIA - DAVIS	D KWAK	ARC	M HAFEZ	NCC 2 5447	82
21	UNIV OF COLORADO - BOULDER	E A PALMER	ARC	P POISON	NCC 2 1104	138
21	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M S BURRELL	GSFC	P E SAYLOR	NGT 5 134	212
21	UNIV OF NEW ORLEANS	R TRAVIS	SSC	K M AKYUZLU	NGT13 52721	235
21	UNIV OF TEXAS - EL PASO	R LEE	KSC	D ROJO	NAG10 287	495

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
21	UNIV OF TEXAS AT SAN ANTONIO	L M ARMENDARIZ	JSC	M P BERRIOZABAL	NAG 9 1301	496
21	UNIV OF TEXAS AT SAN ANTONIO	L M ARMENDARIZ	JSC	M P BERRIOZABAL	NAG 9 1403	496
21	UNIV OF WASHINGTON	G SOFFEN	GSFC	J BURKE	NGT 5 66	537
21	WESLEYAN UNIV	R J OLIVERSEN	GSFC	K V JOHNSTON	NAG 5 9064	146
21	XAVIER UNIV - LOUISIANA	W LOVE	MSFC	R P HALE	NAG 8 1609	235
22	ALABAMA A&M UNIV	K MCGILL	GSFC	E E MOYERS	NAG 5 12524	1
22	ARIZONA STATE UNIV	R A MORRIS	ARC	S KAMBHAMPPATI	NAG 2 1461	19
22	ARIZONA STATE UNIV	R MORRIS	ARC	S KAMBHAMPPATI	NCC 2 1225	22
22	ARIZONA STATE UNIV	R MORRIS	ARC	C BARAL	NCC 2 1232	23
22	ARIZONA STATE UNIV	B L DI VITO	LARC	G C GANNOD	NAG 1 2241	18
22	BOSTON UNIV	J C OUGHLAN	ARC	R B MYNENI	NCC 2 1233	279
22	BOWIE STATE UNIV	H PARK	GSFC	D CARVALO	NCC 5 446	238
22	BOWIE STATE UNIV	P L CROUSE	GSFC	N T WAKIM	NAG 5 11361	237
22	BROWN UNIV	M SHAFTO	ARC	S A SLOMAN	NCC 2 1217	455
22	CALIFORNIA INST OF TECH	K TURNER	ARC	J C DOYLE	NAG 2 1573	41
22	CALIFORNIA INST OF TECH	J FISCHER	GSFC	T STERLING	NAG 5 8576	43
22	CARNEGIE - MELLON UNIV	D CLANCY	ARC	R SIMMONS	NCC 2 5438	435
22	CARNEGIE - MELLON UNIV	J COUGHLAN	ARC	C GLYMOUR	NCC 2 1227	434
22	CARNEGIE - MELLON UNIV	J T ONUFER	ARC	T MOWRY	NAG 2 6054	432
22	CARNEGIE - MELLON UNIV	M DUENAS	ARC	I R NOURBAKHS	NCC 2 1319	435
22	CARNEGIE - MELLON UNIV	M E DUENAS	ARC	J H MORRIS	NCC 2 1188	434
22	CARNEGIE - MELLON UNIV	M H SIMS	ARC	W L WHITTAKER	NGT 2 52277	435
22	CARNEGIE - MELLON UNIV	M LOWRY	ARC	R G SIMMONS	NAG 2 1402	432
22	CARNEGIE - MELLON UNIV	M MATESSA	ARC	J R ANDERSON	NCC 2 1226	434
22	CARNEGIE - MELLON UNIV	M P MATESSA	ARC	B JOHN	NAG 2 1472	432
22	CARNEGIE - MELLON UNIV	M R LOWRY	ARC	J H MORRIS	NCC 2 1298	435
22	CARNEGIE - MELLON UNIV	M SHIRLEY	ARC	R SIMMONS	NAG 2 1393	432
22	CARNEGIE - MELLON UNIV	M SHIRLEY	ARC	R G SIMMONS	NCC 2 1324	435
22	CARNEGIE - MELLON UNIV	R MORRIS	ARC	I R NOURBAKHS	NAG 2 1537	432
22	CARNEGIE - MELLON UNIV	R MORRIS	ARC	J WING	NCC 2 1241	435
22	CARNEGIE - MELLON UNIV	R MORRIS	ARC	R SIMMONS	NCC 2 1243	435
22	CARNEGIE - MELLON UNIV	R REMINGTON	ARC	B E JOHN	NCC 2 1317	435
22	CARNEGIE - MELLON UNIV	P E HUNTER	GSFC	J SCHNEIDER	NAG 5 10739	433
22	CARNEGIE - MELLON UNIV	C FARMER	JSC	R SIMMONS	NGT 9 64	436
22	CARNEGIE - MELLON UNIV	C L FARMER	JSC	R SIMMONS	NAG 9 1326	434
22	CARNEGIE - MELLON UNIV	C L FARMER	JSC	H CHOSET	NAG 9 1440	434
22	CASE WESTERN RESERVE UNIV	D MACKALL	DFRC	K LOPARO	NAG 4 222	402
22	CAYUGA COUNTY COMM COLL	W CAMPBELL	GSFC	R BROWN	NAG 5 7473	364
22	CENTRAL WASHINGTON UNIV	H V FREY	GSFC	C RUBIN	NAG 5 10501	528
22	CHRISTOPHER NEWPORT UNIV	T E PINELLI	LARC	R A CANTON	NCC 1 02039	503
22	CITY UNIV OF NY CITY COLL	J HARRINGTON	GSFC	S AUSTIN	NCC 5 98	366
22	CITY UNIV OF NY CITY COLL	J TILTON	GSFC	G WOLBERG	NAG 5 7129	366
22	CLEMSON UNIV - CLEMSON	G A SOFFEN	GSFC	W LIGON	NGT 5 85	460
22	CLEMSON UNIV - CLEMSON	G SOFFEN	GSFC	W B LIGON	NGT 5 109	460
22	CLEMSON UNIV - CLEMSON	J DORBAND	GSFC	D LIGON III	NAG 5 10018	459
22	CLEMSON UNIV - CLEMSON	P CORONADO	GSFC	D SASS	NAG 5 11329	459
22	CLEVELAND STATE UNIV	C KIM	GRC	J SANG	NAG 3 2509	406
22	COLL OF WILLIAM AND MARY	B L DIVITO	LARC	G CIARDO	NAG 1 02095	504
22	COLL OF WILLIAM AND MARY	P W GOODE	LARC	G CIARDO	NAG 1 2168	503
22	COLL OF WILLIAM AND MARY	R HATHAWAY	LARC	N M ALEXANDROV	NGT 1 01008	504
22	DEPAUL UNIV	R W REMINGTON	ARC	C S MILLER	NCC 2 5414	199
22	DREXEL UNIV	J FISCHER	GSFC	D VALLIERES	NAG 5 10026	436
22	EAST CAROLINA UNIV	J P ZIEBARTH	ARC	J C HUSKAMP	NAG 2 6045	391
22	ELIZABETH CITY STATE UNIV	J HARRINGTON	GSFC	L HAYDEN	NCC 5 121	392
22	ELIZABETH CITY STATE UNIV	G D REESE	LARC	E LAWRENCE	NAG 1 2229	392
22	FLA INTERNATIONAL UNIV	M GROH-HAMMOND	KSC	M CENTENO	NAG10 292	161
22	FLA INTERNATIONAL UNIV	O MELENDEZ	KSC	I BECERRA-FERNANDEZ	NAG10 307	161
22	FLA INTERNATIONAL UNIV	S ROBERTS	KSC	I BECCERA-FERNANDEZ	NAG10 259	161
22	FLORIDA ATLANTIC UNIV	S YASSINI	ARC	T G KHOSGOFTAR	NCC 2 1141	164
22	FLORIDA ATLANTIC UNIV	K MCGILL	GSFC	T KHOSGOFTARR	NAG 5 12129	163
22	FLORIDA STATE UNIV	M E LIVINGSTON	ARC	M Y HUSSAINI	NCC 2 1349	167
22	GEORGE MASON UNIV	J DORBAND	GSFC	P Y WANG	NAG 5 9781	505
22	GEORGE MASON UNIV	K L MOE	GSFC	D KAFATOS	NAG 5 10177	505
22	GEORGE MASON UNIV	K MCDONALD	GSFC	L DI	NCC 5 645	506
22	GEORGE MASON UNIV	J J REHDER	LARC	T ARCISZEWSKI	NAG 1 2258	505
22	GEORGE WASHINGTON UNIV	R BISWAS	ARC	M K MYERS	NCC 2 1323	152

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
22	GEORGE WASHINGTON UNIV	R BISWAS	ARC	M MYERS	NAG 2 1456	151
22	GEORGE WASHINGTON UNIV	E TORRES-MARTINEZ	GSFC	R WILLIAMSON	NAG 5 11593	151
22	GEORGE WASHINGTON UNIV	E TORRES-MARTINEZ	GSFC	D A WILLIAMSON	NAG 5 10539	151
22	GEORGE WASHINGTON UNIV	J LE MOIGNE	GSFC	T EL-GHAZAWI	NAG 5 11101	151
22	GEORGIA INST OF TECH	J CATENA	GSFC	C MITCHELL	NAG 5 7519	182
22	GEORGIA INST OF TECH	W TRUSZOKWSKI	GSFC	C MITCHELL	NAG 5 7420	182
22	HARVARD UNIV	K TURNER	ARC	D PARKES	NCC 2 5505	283
22	HARVARD UNIV	R A MORRIS	ARC	A J PFEFFER	NCC 2 1236	283
22	HOWARD UNIV	J STEPHENS	GSFC	C GLOTZER	NAS 5 00214	154
22	HOWARD UNIV	M G REPH	GSFC	T E SHURN	NAG 5 12241	154
22	INDIANA UNIV - BLOOMINGTON	M E LIVINGSTON	ARC	D B LEAKE	NCC 2 1035	214
22	INDIANA UNIV - BLOOMINGTON	M G SHAFTO	ARC	D B LEAKE	NCC 2 1216	214
22	INDIANA UNIV - BLOOMINGTON	P S MINER	LARC	S D JOHNSON	NGT 1 01009	214
22	IOWA STATE UNIV	M R LOWRY	ARC	A KELKAR	NAG 2 1471	220
22	JACKSON STATE UNIV	B A BIEGEL	ARC	Q MALLUHI	NAG 2 1485	323
22	JACKSON STATE UNIV	B A BIEGEL	ARC	Q MALLUHI	NCC 2 1296	323
22	JACKSONVILLE STATE UNIV	Y BARNIV	ARC	M AGUILAR	NCC 2 1330	4
22	JOHNS HOPKINS UNIV	H STEWART	ARC	K J HEERES	NAG 2 1476	238
22	JOHNS HOPKINS UNIV	M SHIRLEY	ARC	K J HEERES	NAG 2 1477	239
22	JOHNS HOPKINS UNIV	G H MUCKLOW	GSFC	S HAWKINS	NAG 5 8688	242
22	JOHNS HOPKINS UNIV	J BRISTOW	GSFC	D P WATSON	NAG 5 12555	250
22	JOHNS HOPKINS UNIV	J BRISTOW	GSFC	P A STADTER	NCC 5 635	252
22	JOHNS HOPKINS UNIV	P E HUNTER	GSFC	P Z KUNSZT	NAG 5 10742	246
22	LOUISIANA STATE UNIV - BATON ROUGE	S SAINI	ARC	A NAKANO	NCC 2 5320	232
22	LOUISIANA STATE UNIV - BATON ROUGE	S SAINI	ARC	A NAKANO	NCC 2 5484	232
22	LOYOLA COLL	J LE MOIGNE	GSFC	P EASTMAN	NAG 5 10230	252
22	LOYOLA COLL	J LEMOIGNE	GSFC	P D EASTMAN	NAG 5 12313	252
22	MASSACHUSETTS INST OF TECH	M J AFTOSMIS	ARC	R HAIMES	NAG 2 1458	285
22	MASSACHUSETTS INST OF TECH	M LIVINGSTON	ARC	R HAIMES	NCC 2 1269	295
22	MASSACHUSETTS INST OF TECH	M M ESHOW	ARC	D N JACKSON	NAG 2 1338	285
22	MASSACHUSETTS INST OF TECH	P M JONES	ARC	N G LEVESON	NCC 2 1223	295
22	MASSACHUSETTS INST OF TECH	R A MORRIS	ARC	S ZILBERSTEIN	NAG 2 1463	285
22	MASSACHUSETTS INST OF TECH	R MORRIS	ARC	L KAEHLING	NCC 2 1237	295
22	MASSACHUSETTS INST OF TECH	R MORRIS	ARC	B C WILLIAMS	NCC 2 1235	295
22	MASSACHUSETTS INST OF TECH	R MORRIS	ARC	B WILLIAMS	NAG 2 1466	285
22	MASSACHUSETTS INST OF TECH	S LAU	ARC	B C WILLIAMS	NAG 2 1388	285
22	MASSACHUSETTS INST OF TECH	S LAU	ARC	L R YOUNG	NCC 2 570	295
22	MASSACHUSETTS INST OF TECH	Y K LIU	ARC	R L RIVEST	NAG 2 1136	285
22	MASSACHUSETTS INST OF TECH	R T SAVELY	JSC	C BREAZEL	NAG 9 1443	294
22	MASSACHUSETTS INST OF TECH	D E ECKMARDT	LARC	N LEVESON	NAG 1 2239	284
22	MICHIGAN TECHNOLOGICAL UNIV	J R FISCHER	GSFC	D MERKEY	NAG 5 8796	307
22	MOREHEAD STATE UNIV	V OXENHAM	GSFC	B K MALPHRUS	NAG 5 12319	228
22	MORGAN STATE UNIV	J MOIGNE	GSFC	D COLE-RHODES	NAG 5 10934	253
22	NATIONAL HISPANIC UNIV	A CARDENAS	ARC	M PEREZ	NCC 2 1343	53
22	NEW MEXICO STATE UNIV - LAS CRUCES	R SLYWCZAK	GRC	D HORAN	NAG 3 2793	359
22	NEW MEXICO STATE UNIV - LAS CRUCES	M CAULFIELD	GSFC	N R PRASAD	NAG 5 12068	360
22	NEW MEXICO STATE UNIV - LAS CRUCES	R E STREITMATTER	GSFC	S STOCHAJ	NCC 5 422	361
22	NORTH CAROLINA A&T STATE UNIV	M G SHATTO	ARC	A C ESTERLINE	NAG 2 1413	392
22	NORTHEASTERN UNIV	S COLOMBANO	ARC	F KIRCHNER	NCC 2 1336	297
22	NORTHWESTERN UNIV	A GRADY	ARC	V E TAYLOR	NCC 2 1013	202
22	OHIO STATE UNIV	D L KAO	ARC	H SHEN	NCC 2 1261	414
22	OHIO UNIV	B B PFARR	GSFC	L WELCH	NAG 5 10349	415
22	OHIO UNIV	B PFAR	GSFC	L WELCH	NAS 5 00185	415
22	OLD DOMINION UNIV	R SAVELY	JSC	R LOFTIN	NAG 9 1270	513
22	OLD DOMINION UNIV	J N MOSS	LARC	D E KEYES	NAG 1 01076	512
22	OLD DOMINION UNIV	M M LITTLE	LARC	K MALY	NAS 1 99160	513
22	OLD DOMINION UNIV	S L VAZQUEZ	LARC	R MUKKAMALA	NAG 1 2279	512
22	OLD DOMINION UNIV	S L VAZQUEZ	LARC	R MUKKAMALA	NAG 1 02039	513
22	OREGON GRADUATE INST OF SCI & TECH	I TUMER	ARC	T LEEN	NCC 2 1264	427
22	OREGON GRADUATE INST OF SCI & TECH	J C COUGLAN	ARC	M PAVEL	NCC 2 1218	427
22	OREGON GRADUATE INST OF SCI & TECH	T R GOVINDAN	ARC	M A JABRI	NCC 2 1253	427
22	OREGON STATE UNIV	K MOE	GSFC	M S ABBOTT	NAG 5 8400	428
22	PENN. ST. U. ERIE-BEHREND COLL	R OLIVERSEN	GSFC	R F KNACKE	NAG 5 3368	438
22	PENN STATE UNIV. - UNIV. PARK	A J AHUMADA	ARC	R KASTURI	NAG 2 1410	438
22	PENN STATE UNIV. - UNIV. PARK	A J AHUMADA	ARC	R KASTURI	NAG 2 1487	439
22	PENN STATE UNIV. - UNIV. PARK	J E PALLIX	ARC	J L WISE	NCC 2 1211	446

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
22	PENN STATE UNIV. - UNIV. PARK	S LIANG	ARC	H ZHA	NCC 2 5511	446
22	PENN STATE UNIV. - UNIV. PARK	J C NEWMAN	LARC	P RAGHAVAN	NAG 1 01085	438
22	PRAIRIE VIEW A&M UNIV	J HARRINGTON	GSFC	J R WILLIAMS	NCC 5 115	472
22	PRINCETON UNIV	M MEYAPPAN	ARC	I AKSAY	NAG 2 1475	348
22	PURDUE UNIV	C A HLAVKA	ARC	C BRODLEY	NCC 2 1245	218
22	PURDUE UNIV	A ROBERTS	GSFC	D S EBERT	NCC 5 627	218
22	PURDUE UNIV	A NURRIDIN	HQ	L H JAMIESON	NGT 5 50222	218
22	RICE UNIV	D FOLTZ	GRC	D B JOHNSON	NAG 3 2534	472
22	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	M R LOWRY	ARC	S AMAREL	NAG 2 1234	353
22	RUTGERS STATE UNIV OF NJ NEW BRUNS	M SCHWABACHER	ARC	H HIRSCH	NCC 2 1259	357
22	SAN FRANCISCO STATE UNIV	P R GRAMS	ARC	H SHAHNASSER	NCC 2 5301	54
22	SAN JOSE STATE UNIV	D KOZARSKY	ARC	G POUR	NAG 2 1421	55
22	SAN JOSE STATE UNIV	M E LIVINGSTON	ARC	R FATOOHI	NCC 2 1015	56
22	SAN JOSE STATE UNIV	T A LASINSKI	ARC	R FATOOHI	NCC 2 1071	56
22	SOUTHERN UNIV & A&M COLL	A CARDENAS	ARC	G L ZHAO	NCC 2 1344	233
22	SOUTHERN UNIV & A&M COLL	R MORRIS	ARC	C DEBESSONER	NAG 2 1468	232
22	SOUTHERN UNIV & A&M COLL	D F NOGA	GRC	D MOREMAN	NAG 3 2076	232
22	STANFORD UNIV	J A KURIEN	ARC	R E FIKES	NAG 2 1337	59
22	STANFORD UNIV	J TRIMBLE	ARC	L J LEIFER	NCC 2 5478	65
22	STANFORD UNIV	K TURNER	ARC	I KROO	NCC 2 5495	66
22	STANFORD UNIV	M G BUALAT	ARC	S ROCK	NCC 2 1154	64
22	STANFORD UNIV	M GERALD-YAMASAKI	ARC	H GARCIA-MOLINA	NCC 2 5278	64
22	STANFORD UNIV	N N MANSOUR	ARC	E F DARVE	NCC 2 5467	65
22	STANFORD UNIV	R MORRIS	ARC	S M ROCK	NAG 2 1464	59
22	STANFORD UNIV	P S MINER	LARC	D L DILL	NAS 1 98139	64
22	STATE UNIV OF NY - STONY BROOK	D WEST	GSFC	F SWETSY	NAG 5 8377	385
22	SYRACUSE UNIV	C COLES-HAMILTON	GRC	N AVAILABLE	NAS 3 00172	388
22	SYRACUSE UNIV	E J MASUOKA	GSFC	P K VARSHNEY	NAG 5 11227	388
22	TENNESSEE STATE UNIV	K A FREEMAN	ARC	W A SMITH	NAG 2 1419	464
22	TENNESSEE STATE UNIV	M E DUENAS	ARC	W A SMITH	NCC 2 1205	464
22	TENNESSEE STATE UNIV	S COLOMBANO	ARC	M S ZIEN-SABATTO	NAG 2 1530	464
22	TENNESSEE STATE UNIV	S P COLOMBANO	ARC	M S ZEIN-SABATTO	NAG 2 1473	464
22	TENNESSEE STATE UNIV	J HARRINGTON	GSFC	W A SMITH	NCC 5 96	464
22	TEXAS A&M UNIV	A SANCHEZ	JSC	J DENTON	NCC 9 146	480
22	TEXAS A&M UNIV-KINGSVILLE	W LOVE	MSFC	B SCHREUR	NAG 8 1650	481
22	TEXAS TECH UNIV	J FRANK	ARC	R WATSON	NAG 2 1560	482
22	THE UNIV OF CENTRAL FLORIDA	J PENIX	ARC	G H WALTON	NAG 2 1465	168
22	THE UNIV OF CENTRAL FLORIDA	C STEVENSON	KSC	D GOMEZ	NAG10 318	169
22	TOWSON STATE UNIV	W TRUSZKOWSKI	GSFC	B N NAG	NCC 5 488	253
22	UNIV HOUSTON-HOUSTON	J YAN	ARC	B CHAPMAN	NCC 2 5394	484
22	UNIV HOUSTON-HOUSTON	R P KEHOE	JSC	G VALIAS	NAG 9 1223	483
22	UNIV HOUSTON-HOUSTON	R SAVELY	JSC	B LOFTIN	NAG 9 985	483
22	UNIV OF AKRON	S M ARNOLD	GRC	A SALEEB	NCC 3 992	418
22	UNIV OF ALABAMA - BIRMINGHAM	K TUCKER	MSFC	G CHENG	NAS 8 02062	7
22	UNIV OF ALABAMA - HUNTSVILLE	S LAU	ARC	M BOTTS	NAS 2 00102	12
22	UNIV OF ALABAMA - HUNTSVILLE	S LAU	ARC	S GRAVES	NAS 2 01003	12
22	UNIV OF ALABAMA - HUNTSVILLE	J BEHNKE	GSFC	D GRAVES	NAG 5 9585	10
22	UNIV OF ALABAMA - HUNTSVILLE	J BEHNKE	GSFC	D GRAVES	NAG 5 11633	11
22	UNIV OF ALABAMA - HUNTSVILLE	K L MOE	GSFC	D GRAVES	NAG 5 10407	10
22	UNIV OF ALABAMA - HUNTSVILLE	K L MOE	GSFC	D GRAVES	NAG 5 12368	11
22	UNIV OF ARIZONA	S LAU	ARC	T MILSTER	NAS 2 00117	37
22	UNIV OF ARIZONA	P E HUNTER	GSFC	M V SYKES	NAG 5 10749	32
22	UNIV OF CALIFORNIA - BERKELEY	J BREDEKAMP	GSFC	G SMOOT	NAG 5 3941	69
22	UNIV OF CALIFORNIA - DAVIS	D KWAK	ARC	M HAFEZ	NCC 2 5387	81
22	UNIV OF CALIFORNIA - DAVIS	E TU	ARC	J J CHATTOT	NAG 2 1558	80
22	UNIV OF CALIFORNIA - DAVIS	S DAINI	ARC	J DONGARRA	NCC 2 5313	81
22	UNIV OF CALIFORNIA - DAVIS	W R VAN DALSEM	ARC	J J CHATTOT	NAG 2 1459	80
22	UNIV OF CALIFORNIA - IRVINE	J PENIX	ARC	D REDMIRE	NAG 2 1555	83
22	UNIV OF CALIFORNIA - LOS ANGELES	T J BARTH	ARC	T F CHAN	NAG 2 1238	86
22	UNIV OF CALIFORNIA - SAN DIEGO	C H SCHULBACK	ARC	F BERMAN	NGT 2 52251	104
22	UNIV OF CALIFORNIA - SANTA CRUZ	D L KAO	ARC	A PANG	NCC 2 1260	113
22	UNIV OF CHICAGO	D SPICER	GSFC	D OLSON	NAG 5 9016	204
22	UNIV OF COLORADO - BOULDER	D CAREK	GRC	E HANSEN	NAG 3 2643	123
22	UNIV OF COLORADO - BOULDER	G MUCKLOW	GSFC	E R HANSEN	NAG 5 8643	128
22	UNIV OF COLORADO - BOULDER	K L MOE	GSFC	R L WEAVER	NAG 5 11292	134
22	UNIV OF COLORADO - BOULDER	K MOE	GSFC	R L WEAVER	NAG 5 8399	127

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
22	UNIV OF CONNECTICUT	F MARTIN	JSC	M MOREAU	NAG 9 1243	145
22	UNIV OF DAYTON	W D IVANCIC	GRC	M ATIUZZAMAN	NAG 3 2318	420
22	UNIV OF DELAWARE	J RASH	GSFC	C SHEN	NAG 5 11232	149
22	UNIV OF FLORIDA	H PARTRIDGE	ARC	S SINNOTT	NCC 2 5403	173
22	UNIV OF HAWAII AT MANOA - HONOLULU	R OLIVERSEN	GSFC	R D JOSEPH	NAG 5 3370	190
22	UNIV OF HOUSTON - CLEAR LAKE	R T SAVELY	JSC	E T DICKERSON	NCC 9 30	487
22	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	K A FREEMEN	ARC	K NAHRSTEDT	NAG 2 1406	207
22	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R MORRIS	ARC	B J WAH	NCC 2 1230	211
22	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	C CARLISLE	GSFC	M FOLK	NAG 5 2040	208
22	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	G A SOFFEN	GSFC	P SAYLOR	NGT 5 84	212
22	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M S BURRELL	GSFC	R JOHNSON	NGT 5 138	212
22	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R ULLMAN	GSFC	M J FOLK	NCC 5 599	212
22	UNIV OF KENTUCKY	K MCGILL	GSFC	J HAYES	NAG 5 11732	229
22	UNIV OF MARYLAND - COLL PARK	H PARK	GSFC	C F MARTIN	NCC 5 353	269
22	UNIV OF MARYLAND - COLL PARK	J BREDEKAMP	GSFC	D C GOODRICH	NAG 5 4313	256
22	UNIV OF MARYLAND - COLL PARK	J LEMONIGNE	GSFC	J JAJA	NAG 5 6699	257
22	UNIV OF MARYLAND - COLL PARK	K MCGILL	GSFC	V BASILI	NAG 5 12494	266
22	UNIV OF MARYLAND - COLL PARK	P E HUNTER	GSFC	M G WOLFIRE	NAG 5 10751	262
22	UNIV OF MARYLAND - COLL PARK	P BOELINER	HQ	A MOSLEH	NASW 02011	268
22	UNIV OF MARYLAND BALTIMORE COUNTY	J C COUGHLAN	ARC	H KARGUPTA	NCC 2 1252	275
22	UNIV OF MARYLAND BALTIMORE COUNTY	A ROBERTS	GSFC	D S EBERT	NCC 5 361	275
22	UNIV OF MASSACHUSETTS - AMHERST	J BRESINA	ARC	S ZILBERSTEIN	NAG 2 1394	299
22	UNIV OF MASSACHUSETTS - AMHERST	J BRESINA	ARC	S ZILBERSTEIN	NGT 2 52276	301
22	UNIV OF MASSACHUSETTS - AMHERST	M LIVINGSTON	ARC	A DESHMUKH	NCC 2 1265	301
22	UNIV OF MASSACHUSETTS - AMHERST	M LIVINGSTON	ARC	A DESHMUKH	NCC 2 1348	301
22	UNIV OF MASSACHUSETTS - AMHERST	M LIVINGSTON	ARC	A DESHMUKH	NCC 2 1353	301
22	UNIV OF MASSACHUSETTS - AMHERST	R A MORRIS	ARC	S ZILBERSTEIN	NCC 2 1311	301
22	UNIV OF MASSACHUSETTS - AMHERST	R SAVELY	JSC	R A GRUPEN	NAG 9 1445	301
22	UNIV OF MASSACHUSETTS - AMHERST	R SAVELY	JSC	R GRUPEN	NGT 9 61	301
22	UNIV OF MEMPHIS	T R GOVINDAN	ARC	R KOZMA	NCC 2 1244	465
22	UNIV OF MINN	C S POTTER	ARC	V KUMAR	NCC 2 1231	322
22	UNIV OF MINN	M LOWRY	ARC	M HEIMDAHL	NCC 2 1335	322
22	UNIV OF MINN	R MORRIS	ARC	M HEIMDAHL	NCC 2 1240	322
22	UNIV OF MINN	K MCGILL	GSFC	M HEIMDAHL	NAG 5 11971	321
22	UNIV OF MINN	R W BUTLER	LARC	M E HEMDAHL	NAG 1 2242	318
22	U OF MONT	A PATTERSON-HINE	ARC	J HENRY	NCC 2 5397	336
22	U OF MONT	K P GOODEN	ARC	R NEMANI	NCC 2 1263	336
22	U OF MONT	K MCGILL	GSFC	D HENRY	NAG 5 11525	336
22	UNIV OF NEW MEXICO-ALBUQUERQUE	R MORRIS	ARC	M JAMSHIDI	NAG 2 1547	362
22	UNIV OF OKLAHOMA - NORMAN	W D IVANCIC	GRC	D ATIUZZAMAN	NAG 3 2528	425
22	UNIV OF PUERTO RICO - MAYAGUEZ	R TRAVIS	SSC	M ROSADO	NGT13 52746	551
22	UNIV OF SOUTH CAROLINA-COLUMBIA	R TRAVIS	SSC	J JENSEN	NGT13 52723	462
22	UNIV OF SOUTHERN CALIFORNIA	C J PLAUNT	ARC	M TAMBE	NAG 2 1489	114
22	UNIV OF SOUTHERN CALIFORNIA	L STONE	ARC	T W BERGER	NCC 2 1242	117
22	UNIV OF SOUTHERN CALIFORNIA	T R GOVINDAN	ARC	L ADLEMAN	NCC 2 1224	117
22	UNIV OF SOUTHERN CALIFORNIA	R T SAVELY	JSC	M J MATARIC	NAG 9 1444	117
22	UNIV OF TENNESSEE - KNOXVILLE	J R FISCHER	GSFC	J DONGARRA	NAG 5 8773	465
22	UNIV OF TEXAS - ARLINGTON	R BISWAS	ARC	S K DAS	NCC 2 5395	488
22	UNIV OF TEXAS - AUSTIN	K TUMER	ARC	J GHOSH	NCC 2 5482	493
22	UNIV OF TEXAS - EL PASO	J BENNETT	GSFC	M KOLITSKY	NCC 5 97	495
22	UNIV OF TEXAS - EL PASO	J L HARRINGTON	GSFC	H SCHULTE	NCC 5 655	496
22	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	P M JONES	ARC	J ZHANG	NCC 2 1234	486
22	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	R T SAVELY	JSC	H WANG	NAG 9 1247	486
22	UNIV OF TOLEDO	W K GERDES	LARC	A AETEH	NAG 1 2244	420
22	UNIV OF VIRGINIA	K MOE	GSFC	J FRENCH	NAG 5 9747	520
22	UNIV OF VIRGINIA	K MOE	GSFC	J C FRENCH	NAG 5 12025	521
22	UNIV OF VIRGINIA	L H ROSENBERG	GSFC	D B DUGAN	NAG 5 11953	521
22	UNIV OF VIRGINIA	B L DIVITO	LARC	J C KNIGHT	NAG 1 02101	517
22	UNIV OF VIRGINIA	C M HOLLOWAY	LARC	J C KNIGHT	NAG 1 02103	518
22	UNIV OF VIRGINIA	K J HAYHURST	LARC	J C KNIGHT	NAG 1 2290	517
22	UNIV OF WASHINGTON	R A MORRIS	ARC	D WELD	NAG 2 1538	529
22	UNIV OF WASHINGTON	J STEPHENS	GSFC	S HAUCK	NAS 5 00212	536
22	UNIV OF WASHINGTON	J STEPHENS	GSFC	S HAUCK	NAS 5 00213	536
22	UNIV OF WEST FLORIDA	D CLANCY	ARC	J M BRADSHAW	NCC 2 1283	178
22	UNIV OF WEST FLORIDA	J C COUGHLAN	ARC	C GLYMOUR	NCC 2 1295	178
22	UNIV OF WEST FLORIDA	J SKILES	ARC	C M TENG	NCC 2 1239	178

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
22	UNIV OF WEST FLORIDA	M E DUENAS	ARC	K M FORD	NCC 2 1191	178
22	UNIV OF WEST FLORIDA	M SHAFTO	ARC	A CANAS	NCC 2 1297	178
22	UNIV OF WEST FLORIDA	R L ALENA	ARC	J M BRADSHAW	NCC 2 1254	178
22	UNIV OF WISCONSIN - MADISON	W E JOHNSTON	ARC	M LIVNY	NCC 2 5323	547
22	UNIV OF WISCONSIN - MADISON	F THEO	MSFC	J SANTARIUS	NAG 8 1719	546
22	UNIV OF WYOMING	M LOWRY	ARC	J R COWLES	NAG 2 1570	549
22	UNIV OF WYOMING	D G SICKOREZ	JSC	R 3 GANTENBEIN	NGT 9 36	550
22	UTAH STATE UNIV	P E HUNTER	GSFC	T BOSE	NAG 5 10716	500
22	VA POLYTECH INST & ST UNIV	T L HOLST	ARC	R K KAPANIA	NCC 2 5433	526
22	VA POLYTECH INST & ST UNIV	J M SEATON	LARC	G J OGLE	NGT 1 52224	527
22	VALENCIA COMM COLL	G BUCKINGHAM	KSC	K WOODBERRY	NAG10 165	178
22	VANDERBILT UNIV	R MORRIS	ARC	G BISWAS	NCC 2 1238	469
22	VANDERBILT UNIV	R ARONOFF	JSC	C HACHEY	NAG 9 1273	468
22	VANDERBILT UNIV	R SAVELY	JSC	K KAWAMURA	NAG 9 1446	468
22	VANDERBILT UNIV	R T SAVELY	JSC	R A PETERS	NAG 9 1428	468
22	WEST VIRGINIA STATE COLL	K MCGILL	GSFC	C W SCHAFER	NAG 5 12269	539
22	WESTERN MICHIGAN UNIV	J L DUNGAN	ARC	C W EMERSON	NCC 2 1246	318
22	WINSTON-SALEM STATE UNIV	G J FOLLEN	GRC	D RADENSKI	NAG 3 2515	399
22	WRIGHT STATE UNIV	J TRIMBLE	ARC	V L SHALIN	NAG 2 1529	424
22	WRIGHT STATE UNIV	W J CLANCEY	ARC	V L SHALIN	NAG 2 1237	424
22	WRIGHT STATE UNIV	W J CLANCEY	ARC	V L SHALIN	NCC 2 1203	424
22	YALE UNIV	R MORRIS	ARC	P HUDAK	NCC 2 1229	148
29	ALABAMA A&M UNIV	R TILLEY	KSC	M ELSHAMY	NAG10 245	2
29	ARIZONA STATE UNIV	P W GOODE	LARC	M P MIGNOLET	NAG 1 2233	18
29	BOWIE STATE UNIV	J L HARRINGTON	GSFC	P A SINISKY	NAG 5 12553	237
29	BROWN UNIV	H L ATKINS	LARC	C W SHU	NCC 1 01035	455
29	BROWN UNIV	H L ATKINS	LARC	C SHA	NGT 1 01037	456
29	BROWN UNIV	M H CARPENTER	LARC	A KANESKY	NGT 1 01024	455
29	CALIFORNIA INST OF TECH	J J RENTHER	ARC	N A PIERRE	NCC 2 5431	48
29	CALIFORNIA INST OF TECH	J FISCHER	GSFC	T A PRINCE	NCC 5 626	48
29	CARNEGIE - MELLON UNIV	C H SCHULBACH	ARC	T C MOWRY	NAG 2 1230	432
29	CASE WESTERN RESERVE UNIV	C R MERCER	GRC	S H IZEN	NAG 3 2210	401
29	COLL OF WILLIAM AND MARY	P C SCHUTTE	LARC	S FEYOCK	NAG 1 2271	504
29	ELIZABETH CITY STATE UNIV	D C ROBINSON	GRC	D PENDHARKAR	NAG 3 2556	392
29	FLA INTERNATIONAL UNIV	R J MCKINNEY	KSC	G A ROIG	NAG10 268	161
29	FLORIDA A&M UNIV	T GUO	GRC	E G COLLINS	NAG 3 2193	162
29	FLORIDA A&M UNIV	R A HATHAWAY	LARC	F HAMILTON	NAG 1 02114	162
29	FLORIDA MEMORIAL COLL	R MC KINNEY	KSC	H HUISSO	NAG10 247	164
29	GEORGE MASON UNIV	J J RENDER	LARC	T ARCISZEWSKI	NAG 1 01030	505
29	GEORGIA INST OF TECH	C T RAMOS	GRC	I F AKYILDIZ	NAG 3 2580	181
29	GEORGIA INST OF TECH	P W GOODE	LARC	A J CALISE	NAG 1 2243	180
29	HOWARD UNIV	R M BUTTON	GRC	D A MOMOH	NAG 3 2429	153
29	JOHNS HOPKINS UNIV	J BREDEKAMP	GSFC	G MURPHY	NAG 5 8548	242
29	KENT STATE UNIV	L SHAW	GRC	S RYAN	NGT 3 52309	410
29	MASSACHUSETTS INST OF TECH	G FOLLEN	GRC	R HAIMES	NAG 3 2523	287
29	MASSACHUSETTS INST OF TECH	J FISCHER	GSFC	J MARSHALL	NCC 5 625	296
29	MT HOLYOKE COLL	C HOLLINGSWORTH	GSFC	J MORROW	NAG 5 10238	297
29	NEW JERSEY INST OF TECH	J LITT	GRC	D P DHAWAN	NAG 3 2475	347
29	NORTH CAROLINA STATE UNIV. - RALEIGH	J A WHITE	LARC	J R EDWARDS	NAG 1 02052	395
29	NORTHEASTERN UNIV	M S BURRELL	GSFC	M LEESER	NGT 5 122	297
29	OHIO UNIV	J M SEATON	LARC	R L WILLIAMS	NAG 1 2299	415
29	OHIO UNIV	J M SEATON	LARC	R L WILLIAMS	NAG 1 01094	415
29	OLD DOMINION UNIV	D P GARBER	LARC	M H DUNN	NAG 1 01068	512
29	OLD DOMINION UNIV	D R JONES	LARC	D A DRYER	NAG 1 2330	512
29	OLD DOMINION UNIV	J J REHDER	LARC	A K NOOR	NCC 1 01040	514
29	OLD DOMINION UNIV	R C SINGLETERRY JR	LARC	J H HEINBOCKEL	NCC 1 404	514
29	OLD DOMINION UNIV	S D YOUNG	LARC	D A JACOBS	NGT 1 01011	515
29	SAINT THOMAS UNIV	M MATEU	HQ	A VYNNE	NAG 5 12298	168
29	SAN JOSE STATE UNIV	J D SMITH	ARC	K M CORKER	NAG 2 1528	55
29	SOUTHERN UNIV & A&M COLL	G JERMAN	MSFC	J DYER	NCC 8 156	233
29	STILLMAN COLL	E S ORDONEZ	MSFC	H PRADO	NAG 8 1866	5
29	TEMPLE UNIV	B C DRAKE	GSFC	S K BISWAS	NAG 5 8649	448
29	TEXAS A&M UNIV-CORPUS CHRISTI	L M ARMENDARIZ	JSC	M MOORE	NAG 9 1401	481
29	UNIV OF AKRON	J R SCOTT	GRC	D I HAIHARAN	NAG 3 2182	416
29	UNIV OF CALIFORNIA - DAVIS	D KWAK	ARC	M HAFEZ	NCC 2 5426	82
29	UNIV OF CALIFORNIA - LOS ANGELES	J FISCHER	GSFC	C MECHOSO	NCC 5 624	94

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
29	UNIV OF CALIFORNIA - SAN DIEGO	M H NEW	ARC	V GALLINSKY	NCC 2 5448	103
29	UNIV OF DAYTON	W D MORRIS	LARC	C E EBELING	NAS 1 99148	420
29	UNIV OF HOUSTON - DOWNTOWN	J L HARRINGTON	GSFC	D A ALO	NAG 5 12467	487
29	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J FISCHER	GSFC	P E SAYLOR	NCC 5 615	212
29	UNIV OF MICHIGAN - ANN ARBOR	J FISCHER	GSFC	T GOMBOSI	NCC 5 614	315
29	UNIV OF NEW HAMPSHIRE - DURHAM	M MAIDEN	GSFC	B MOORE	NCC 5 304	346
29	UNIV OF TENNESSEE SPACE INST-TULLAHOMA	G KLOPFER	ARC	S VENKATESWARAN	NCC 2 5493	468
29	UNIV OF TOLEDO	J D STEGEMAN	GRC	D D JOHNSON	NAG 3 2594	421
29	UNIV OF VIRGINIA	P M GOODE	LARC	B W JOHNSON	NGT 1 01016	522
29	UNIV OF VIRGINIA	P W GOODE	LARC	C R ELKS	NGT 1 52237	522
29	UNIV OF VIRGINIA	B MERRITT	WFF	G WILLIAMS	NAG 5 10956	520
29	UNIV OF WASHINGTON	S LIANG	ARC	H QIAN	NCC 2 5463	536
29	UNIV OF WASHINGTON	M S BURRELL	GSFC	T QUINN	NGT 5 126	537
29	WASHINGTON STATE UNIV	B A BIEGEL	ARC	M A OSMAN	NCC 2 5346	539
29	WEST VIRGINIA UNIV	D S OSBURN	ARC	A C COGLEY	NCC 2 979	540
31	ALABAMA A&M UNIV	P SAKIMOTO	GSFC	A TAN	NAG 5 10202	1
31	ALABAMA A&M UNIV	R ARNOLD	MSFC	T L COLEMAN	NCC 8 140	3
31	ALMA COLL	M J MCGILL	GSFC	J H GIBSON	NAG 5 10118	304
31	ALMA COLL	M J MCGILL	GSFC	J H GIBSON	NAG 5 11817	304
31	ARIZONA STATE UNIV	R LAWRENCE	GSFC	P R BUSECK	NAG 5 9838	20
31	BETHEL COLL	M G MLYNCZAK	LARC	B P BEECKEN	NAG 1 02012	318
31	BOSTON UNIV	C S POTTER	ARC	R B MYNENI	NAG 2 1432	276
31	BOSTON UNIV	D TOLL	GSFC	R B MYNENI	NAS 5 96061	279
31	BOSTON UNIV	H OSEROFF	GSFC	W STRAHLER	NAS 5 31369	279
31	BOSTON UNIV	W WISCOMBE	GSFC	Y KNYZAKHIN	NAG 5 12292	278
31	BOSTON UNIV	J ARNOLD	MSFC	G D SALVUCCI	NAG 8 1522	279
31	BRIGHAM YOUNG UNIV	R J LAWRENCE	GSFC	D G LONG	NAG 5 9638	497
31	CALIFORNIA INST OF TECH	D E SMITH	GSFC	D O MUHLEMAN	NAG 5 12384	47
31	CALIFORNIA INST OF TECH	E HILSENATH	GSFC	Y L YUNG	NAG 5 7230	43
31	CALIFORNIA INST OF TECH	G STRINGFELLOW	GSFC	G A BLAKE	NAG 5 11423	46
31	CALIFORNIA INST OF TECH	J BERGSTRALH	GSFC	D P INGERSOLL	NAG 5 4191	41
31	CALIFORNIA INST OF TECH	J HILLMAN	GSFC	D L YUNG	NAG 5 6263	42
31	CALIFORNIA INST OF TECH	M CHOU	GSFC	Y L YUNG	NAG 5 7680	43
31	CALIFORNIA INST OF TECH	P J DECOLA	GSFC	D OKUMURA	NAG 5 3911	41
31	CALIFORNIA INST OF TECH	R J LAWRENCE	GSFC	P O WENNBURG	NAG 5 11157	46
31	CALIFORNIA INST OF TECH	R LAWRENCE	GSFC	D O WENNBURG	NAG 5 9307	44
31	CALIFORNIA INST OF TECH	G L MADDREA	LARC	Y L YUNG	NAG 1 02081	41
31	CALIFORNIA INST OF TECH	G L MADDREA	LARC	Y L YUNG	NAG 1 2151	41
31	CARNEGIE - MELLON UNIV	P HUNTER	GSFC	A F PTAK	NAG 5 8093	432
31	CHRISTOPHER NEWPORT UNIV	G W SACHSE	LARC	N S POUGATCHEV	NCC 1 02018	503
31	CITY UNIV OF NY CITY COLL	L TRAVIS	GSFC	N A PARKER	NCC 5 343	366
31	CITY UNIV OF NY CITY COLL	L TRAVIS	GSFC	N A PARKER	NCC 5 520	366
31	CITY UNIV OF NY CITY COLL	O W THIELE	GSFC	S GEDZELMAN	NAG 5 7827	366
31	CLEMSON UNIV - CLEMSON	J BOYCE	GSFC	D CLAYTON	NAG 5 8304	458
31	CLEMSON UNIV - CLEMSON	O W THIELE	GSFC	C W ULBRICH	NAG 5 7782	458
31	COLL OF CHARLESTON	P HUNTER	GSFC	J HAKKILA	NAG 5 10625	460
31	COLL OF WILLIAM AND MARY	W CHU	LARC	D BRENNER	NAS 1 00146	504
31	COLORADO STATE UNIV	A J NEGRI	GSFC	M T MONTGOMERY	NAG 5 11140	119
31	COLORADO STATE UNIV	A J NEGRI	GSFC	G L STEPHENS	NCC 5 288	121
31	COLORADO STATE UNIV	D LEWIS	GSFC	G STEPHENS	NAS 5 99237	120
31	COLORADO STATE UNIV	E F STOCKER	GSFC	C KUMMEROW	NAG 5 11816	120
31	COLORADO STATE UNIV	J R HERMAN	GSFC	J SLUSSER	NAG 5 11018	119
31	COLORADO STATE UNIV	M MISHCHENKO	GSFC	S M KREIDENWEIS	NAG 5 7783	118
31	COLORADO STATE UNIV	O W THIELE	GSFC	V N BRINGI	NAG 5 7717	118
31	COLORADO STATE UNIV	O W THIELE	GSFC	G L STEPHENS	NAG 5 7719	118
31	COLORADO STATE UNIV	R ADLER	GSFC	C D KUMMEROW	NAG 5 12273	120
31	COLORADO STATE UNIV	R J LAWRENCE	GSFC	S A RUTLEDGE	NAG 5 9642	119
31	COLORADO STATE UNIV	R J LAWRENCE	GSFC	D A RANDALL	NAG 5 9647	119
31	COLORADO STATE UNIV	R J LAWRENCE	GSFC	V CHANDRASEKAR	NAG 5 9655	119
31	COLORADO STATE UNIV	R J LAWRENCE	GSFC	R H JOHNSON	NAG 5 9665	119
31	COLORADO STATE UNIV	R J LAWRENCE	GSFC	W K BERG	NAG 5 10482	119
31	COLORADO STATE UNIV	R J LAWRENCE	GSFC	W H SCHUBERT	NAG 5 11010	119
31	COLORADO STATE UNIV	R L LAWRENCE	GSFC	C D KUMMEROW	NAG 5 11189	119
31	COLORADO STATE UNIV	R LAWRENCE	GSFC	D J DEMOTT	NAG 5 9308	118
31	COLORADO STATE UNIV	V V SALOMONSON	GSFC	C KUMMEROW	NAG 5 12105	120
31	COLORADO STATE UNIV	B A WIELICKI	LARC	D A	NAS 1 98125	120

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	COLORADO STATE UNIV	D S MCDUGAL	LARC	W COTTON	NAG 1 2045	118
31	COLORADO STATE UNIV	G G GIBSON	LARC	D A RANDALL	NAG 1 02008	118
31	COLORADO STATE UNIV	G GIBSON	LARC	G L STEPHENS	NAS 1 99103	120
31	COLORADO STATE UNIV	V DELNORE	LARC	G STEPHENS	NAG 1 2247	118
31	COLORADO STATE UNIV	T MILLER	MSFC	S Q KIDDER	NAS 8 97082	120
31	COLUMBIA UNIV	A LACIS	GSFC	L M DRUYAN	NCC 5 546	371
31	COLUMBIA UNIV	B CARLSON	GSFC	C HARRIS	NCC 5 549	371
31	COLUMBIA UNIV	D RIND	GSFC	M CHANDLER	NCC 5 505	371
31	COLUMBIA UNIV	M IMISHCHENKO	GSFC	G KUKLA	NAG 5 7687	368
31	COLUMBIA UNIV	R B STOTHERS	GSFC	C K CHU	NCC 5 485	371
31	COLUMBIA UNIV	R B STOTHERS	GSFC	C K CHU	NCC 5 547	371
31	COLUMBIA UNIV	R STOTHERS	GSFC	L M POLVANI	NCC 5 558	371
31	CONCORDIA COLL IN MOORHEAD	P R MAHAFFY	GSFC	H L MANNING	NAG 5 8626	318
31	CORNELL UNIV	J ARNOLD	MSFC	W BRUTSAERT	NAG 8 1518	376
31	CORNELL UNIV	S NASH-STEVENSON	MSFC	K H COOK	NGT 8 52897	378
31	DENISON UNIV	R BEEBE	GSFC	D E MICKELSON	NAG 5 4341	409
31	DREXEL UNIV	E HILSENATH	GSFC	D R BROOKS	NAG 5 8929	436
31	DREXEL UNIV	J L ROPER	LARC	A R BANDY	NCC 1 297	437
31	DREXEL UNIV	V E DELUORE	LARC	A R BANDY	NCC 1 409	437
31	DUKE UNIV	R ROOD	GSFC	P KABIBHATLA	NAG 5 3665	390
31	FLORIDA A&M UNIV	R LEE	KSC	F B GROSS	NAG10 264	163
31	FLORIDA STATE UNIV	A J KRUEGER	GSFC	X ZOU	NAG 5 9410	166
31	FLORIDA STATE UNIV	M HALL	GSFC	I NAVON	NAG 5 4873	165
31	FLORIDA STATE UNIV	O W THIELE	GSFC	S E NICHOLSON	NAG 5 7718	165
31	FLORIDA STATE UNIV	P K BHARTA	GSFC	X ZOU	NAG 5 11067	166
31	FLORIDA STATE UNIV	R ADLER	GSFC	G LIU	NAG 5 11889	166
31	FLORIDA STATE UNIV	R J LAWRENCE	GSFC	T N KRISHNAMURTI	NAG 5 9662	166
31	FLORIDA STATE UNIV	R J LAWRENCE	GSFC	H A COOPER	NAG 5 10001	166
31	FLORIDA STATE UNIV	W B ROSSOW	GSFC	G LIU	NAG 5 8647	166
31	FLORIDA STATE UNIV	J L RAPER, SR	LARC	H E FUELBERG	NCC 1 412	167
31	FLORIDA STATE UNIV	J R RAPER	LARC	T N KRISHNAURTI	NAG 1 2127	164
31	FLORIDA STATE UNIV	B LAPENTA	MSFC	X ZOU	NAG 8 1882	167
31	FLORIDA STATE UNIV	J ARNOLD	MSFC	T N KRISHNAMURTI	NAG 8 1537	166
31	FLORIDA STATE UNIV	J ARNOLD	MSFC	J J O'BRIEN	NCC 8 158	167
31	FLORIDA STATE UNIV	J E ARNOLD	MSFC	T N KRISHNAMURTI	NAG 8 1848	167
31	FLORIDA STATE UNIV	R MILLER	SSC	J J O'BRIEN	NAG13 02011	167
31	GEORGE MASON UNIV	G MADDREA	LARC	M SUMMERS	NAG 1 2316	505
31	GEORGE WASHINGTON UNIV	R J LAWRENCE	GSFC	R H LANG	NAG 5 9550	151
31	GEORGIA INST OF TECH	J BERGSTRALH	GSFC	D G STEFFES	NAG 5 4190	182
31	GEORGIA INST OF TECH	J C RIVERA	GSFC	D M CUNNOLD	NAS 5 00171	184
31	GEORGIA INST OF TECH	M I MISHCHENKO	GSFC	M CHIN	NAG 5 7682	182
31	GEORGIA INST OF TECH	M I MISHCHENKO	GSFC	M CHIN	NAG 5 12256	183
31	GEORGIA INST OF TECH	R MCPETERS	GSFC	P GINOUX	NAG 5 11063	183
31	GEORGIA INST OF TECH	S SCHUBERT	GSFC	R X BLACK	NAG 5 10374	182
31	GEORGIA INST OF TECH	W B ROSSOW	GSFC	J A CURRY	NAG 5 12545	183
31	GEORGIA INST OF TECH	Y SUD	GSFC	R DICKINSON	NAG 5 10209	182
31	GEORGIA INST OF TECH	G L MADDREA	LARC	D M CUNNOLD	NAS 1 18938	184
31	GEORGIA INST OF TECH	G L MADDREA	LARC	D M CUNNOLD	NAG 1 2202	180
31	GEORGIA INST OF TECH	J L RAPER	LARC	H W GUAN	NCC 1 375	184
31	GEORGIA INST OF TECH	J L RAPER, SR	LARC	R J WEBER	NCC 1 411	184
31	GEORGIA INST OF TECH	J L RAPER, SR	LARC	S T SANDHOLM	NCC 1 417	184
31	GEORGIA INST OF TECH	J L RAPER, SR	LARC	F L EISELE	NCC 1 421	184
31	GEORGIA INST OF TECH	J L ROPER	LARC	F L EISELE	NCC 1 301	184
31	GEORGIA INST OF TECH	J M HOELL	LARC	D D DAVIS	NCC 1 306	184
31	GEORGIA INST OF TECH	J M HOELL	LARC	S C LIU	NCC 1 317	184
31	GEORGIA INST OF TECH	J M HOELL	LARC	S T SANDHOLM	NCC 1 296	184
31	GEORGIA INST OF TECH	V E DELUORE	LARC	D D DAVIS	NCC 1 01024	184
31	HAMPTON UNIV	B A CAMPBELL	GSFC	J M RUSSELL	NAG 5 11409	508
31	HAMPTON UNIV	C JACKMAN	GSFC	D M RUSSELL	NAG 5 7001	508
31	HAMPTON UNIV	C JACKMAN	GSFC	J M RUSSELL	NAG 5 11065	508
31	HAMPTON UNIV	M I MISHCHENKO	GSFC	M MCCORMICK	NAG 5 8648	508
31	HAMPTON UNIV	G G GIBSON	LARC	N G LOEB	NAG 1 2318	507
31	HAMPTON UNIV	G G GIBSON	LARC	M P MCCORMICK	NAS 1 99108	509
31	HAMPTON UNIV	G L MADDREA	LARC	M P MCCORMICK	NAG 1 2170	507
31	HAMPTON UNIV	J FISHMAN	LARC	T H CHYBA	NAG 1 2224	507
31	HAMPTON UNIV	P MINNIS	LARC	M P MCCORMICK	NAG 1 2135	507

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	HAMPTON UNIV	P MINNIS	LARC	D P DUDA	NAG 1 02044	507
31	HAMPTON UNIV	R A HATHAWAY	LARC	D A TEMPLE	NCC 1 01059	509
31	HAMPTON UNIV	R L DUNCAN	LARC	P MCCORMICK	NAS 1 97042	509
31	HAMPTON UNIV	V E DELNORE	LARC	N G LOEB	NAG 1 01096	507
31	HAMPTON UNIV	V E DELNORE	LARC	N G LOEB	NAG 1 2206	507
31	HAMPTON UNIV	F J SCHMIDLIN	WFF	P MCCORMICK	NAG 5 5360	508
31	HARVARD UNIV	C P SCOFIELD	ARC	S C WOFSY	NAG 2 1310	280
31	HARVARD UNIV	R J LAWRENCE	GSFC	A P BARROS	NAG 5 9823	282
31	HARVARD UNIV	G L MADDREA	LARC	D J JACOB	NAG 1 2307	280
31	HARVARD UNIV	G L MADDREA	LARC	S C WOFSY	NAG 1 2025	280
31	HARVARD UNIV	J L RAPER, SR	LARC	D J JACOB	NAG 1 2328	280
31	HARVARD UNIV	J RAPER	LARC	D J JACOB	NAG 1 2126	280
31	HARVARD UNIV	L R POOLE	LARC	J G ANDERSON	NAG 1 01095	280
31	HOFSTRA UNIV	E LINDTSROM	GSFC	D WEISSMAN	NAG 5 11780	378
31	HOFSTRA UNIV	R MILLER	SSC	D E WEISSMAN	NAG13 02015	378
31	HOWARD UNIV	W HOEGY	GSFC	A THORPE	NCC 5 420	154
31	HOWARD UNIV	W HOEGY	GSFC	S T SMITH	NCC 5 424	154
31	HOWARD UNIV	W R HOEGY	GSFC	S T SMITH	NCC 5 556	154
31	IOWA STATE UNIV	A DOUGLASS	GSFC	D L STANFORD	NAG 5 7133	221
31	IOWA STATE UNIV	M RIENECKER	GSFC	T C CHEN	NAG 5 8293	221
31	IOWA STATE UNIV	M RIENECKER	GSFC	T CHEN	NAG 5 12428	221
31	IOWA STATE UNIV	S CHANDRA	GSFC	S L STANFORD	NAG 5 7271	221
31	IOWA STATE UNIV	S SCHUBERT	GSFC	T CHEN	NAG 5 7530	221
31	JACKSON STATE UNIV	J JENNER	JSC	P CROFT	NAG13 99013	323
31	JACKSON STATE UNIV	R MILLER	JSC	R REDDY	NAG13 99012	323
31	JOHNS HOPKINS UNIV	A C AIKIN	GSFC	J YEE	NAG 5 9988	244
31	JOHNS HOPKINS UNIV	A R DOUGLASS	GSFC	D WAUGH	NCC 5 500	252
31	JOHNS HOPKINS UNIV	B A CAMPBELL	GSFC	L PAXTON	NAG 5 11412	248
31	JOHNS HOPKINS UNIV	D ANDERSON	GSFC	A ARKING	NAG 5 11909	249
31	JOHNS HOPKINS UNIV	D BOGAN	GSFC	D F STROBEL	NAG 5 4168	239
31	JOHNS HOPKINS UNIV	D BOGAN	GSFC	B MAUK	NAG 5 11034	247
31	JOHNS HOPKINS UNIV	D J BOGAN	GSFC	R J VERVACK	NAG 5 11051	247
31	JOHNS HOPKINS UNIV	E HILSENATH	GSFC	S A LLOYD	NAG 5 7227	240
31	JOHNS HOPKINS UNIV	J F SPANN	GSFC	B J ANDERSON	NAG 5 10849	246
31	JOHNS HOPKINS UNIV	J F SPANN	GSFC	R B DECKER	NAG 5 10900	246
31	JOHNS HOPKINS UNIV	J SHARBER	GSFC	K LIOU	NAG 5 9078	242
31	JOHNS HOPKINS UNIV	J SHARBER	GSFC	H KU	NAG 5 9109	242
31	JOHNS HOPKINS UNIV	P E HUNTER	GSFC	A F PTAK	NAG 5 11193	247
31	JOHNS HOPKINS UNIV	R MCPETERS	GSFC	S A LLOYD	NAG 5 11029	247
31	JOHNS HOPKINS UNIV	R W STEWART	GSFC	D W WAUGH	NAG 5 7361	240
31	JOHNS HOPKINS UNIV	W LAU	GSFC	A ARKING	NAG 5 8572	242
31	JOHNS HOPKINS UNIV	G L MADDREA	LARC	D W WAUGH	NAG 1 2043	238
31	JOHNS HOPKINS UNIV	G L MADDREA	LARC	D W WAUGH	NAG 1 2194	238
31	JOHNS HOPKINS UNIV	L R POOLE	LARC	S A LLOYD	NAG 1 2270	238
31	KNOX COLL	J FISHMAN	LARC	L C BUSH	NAG 1 02004	199
31	MASSACHUSETTS INST OF TECH	N LIU	GRC	D A WAITZ	NAG 3 2503	286
31	MASSACHUSETTS INST OF TECH	A DOUGLASS	GSFC	D NEWELL	NAG 5 6710	288
31	MASSACHUSETTS INST OF TECH	D BOGAN	GSFC	J D RICHARDSON	NAG 5 8947	289
31	MASSACHUSETTS INST OF TECH	G SMITH	GSFC	T A HERRING	NAS 5 99007	294
31	MASSACHUSETTS INST OF TECH	J C SHIUE	GSFC	D STAELIN	NAG 5 7487	288
31	MASSACHUSETTS INST OF TECH	J C SHIUE	GSFC	D STAELIN	NAG 5 11390	292
31	MASSACHUSETTS INST OF TECH	J SHARBER	GSFC	T CHANG	NAG 5 9117	289
31	MASSACHUSETTS INST OF TECH	M J KURYLO	GSFC	R G PRINN	NAG 5 3974	287
31	MASSACHUSETTS INST OF TECH	P L DECOLA	GSFC	P STEINFELD	NAG 5 3977	287
31	MASSACHUSETTS INST OF TECH	R J LAWRENCE	GSFC	E R WILLIAMS	NAG 5 9637	290
31	MASSACHUSETTS INST OF TECH	R J LAWRENCE	GSFC	R L BRAS	NAG 5 9640	290
31	MASSACHUSETTS INST OF TECH	S NIEBUR	GSFC	Q HU	NAG 5 9080	289
31	MASSACHUSETTS INST OF TECH	W WILDES	GSFC	G CARRIGAN	NAS 5 99198	294
31	MASSACHUSETTS INST OF TECH	D L MODDREA	LARC	R E NEWELL	NAG 1 2306	284
31	MASSACHUSETTS INST OF TECH	G L MADDREA	LARC	R A PLUMB	NAG 1 2027	284
31	MASSACHUSETTS INST OF TECH	G L MADDREA	LARC	R G PRINN	NAG 1 2152	284
31	MASSACHUSETTS INST OF TECH	G MADDREA	LARC	R PLUMB	NAG 1 2203	284
31	MASSACHUSETTS INST OF TECH	J L RAPER	LARC	R E NEWELL	NAG 1 2173	284
31	MASSACHUSETTS INST OF TECH	V E DELNORE	LARC	R E NEWELL	NCC 1 415	295
31	MASSACHUSETTS INST OF TECH	J ARNOLD	MSFC	D ENTEKHABI	NAG 8 1524	293
31	MICHIGAN TECHNOLOGICAL UNIV	A J KRUEGER	GSFC	W ROSE	NAG 5 7272	306

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	MICHIGAN TECHNOLOGICAL UNIV	R MVPETERS	GSFC	G BLUTH	NAG 5 11062	307
31	MOSCOW INST OF PHYSICS & TECH	W L GROSS	LARC	M L KOGAN	NCC 1 01005	553
31	NEW MEXICO HIGHLANDS UNIV	L ARMENDARIZ	JSC	J R JUAREZ	NAG 9 1375	358
31	NEW MEXICO HIGHLANDS UNIV	L ARMENDARIZ	JSC	J R JUAREZ	NAG 9 1922	358
31	NEW MEXICO INST OF MINING & TECH	J HERMAN	GSFC	D R MINSCHWANER	NAG 5 7109	358
31	NEW MEXICO INST OF MINING & TECH	M J KURYLO	GSFC	K MINSCHWANNER	NAG 5 4139	358
31	NEW MEXICO STATE UNIV - LAS CRUCES	J BERGSTRALH	GSFC	D MARLEY	NAG 5 4987	359
31	NIAGARA UNIV	R BLAKESLEE	MSFC	W BOECK	NCC 8 182	380
31	NORFOLK STATE UNIV	J C BARNES	LARC	E S GILLMAN	NAG 1 2228	510
31	NORFOLK STATE UNIV	R A HATHAWAY	LARC	C COLEMAN	NAG 1 2226	510
31	NORTH CAROLINA STATE UNIV. - RALEIGH	F H PROCTOR	LARC	M L KAPLAN	NAG 1 02007	395
31	NORTH CAROLINA STATE UNIV. - RALEIGH	J ARNOLD	MSFC	R ABT	NCC 8 159	397
31	OHIO STATE UNIV	M J KURYLO	GSFC	F C DEELUCIA	NAG 5 3983	411
31	OHIO STATE UNIV	M S BURRELL	GSFC	J HOBGOOD	NGT 5 131	415
31	OLD DOMINION UNIV	M N ABEDIN	GSFC	R P JOSHI	NAG 1 01077	512
31	OLD DOMINION UNIV	G W SACHSE	LARC	D LOCKWOOD	NGT 1 52241	516
31	OLD DOMINION UNIV	R DEYOUNG	LARC	D H ELSAYED-ALII	NGT 1 01014	515
31	OREGON STATE UNIV	R M HABERLE	ARC	J R BARNES	NGT 2 52245	430
31	OREGON STATE UNIV	R M HABERLE	ARC	J R BARNES	NAG 2 1546	427
31	OREGON STATE UNIV	C RABER	GSFC	D H FREILICH	NAS 5 32965	430
31	OREGON STATE UNIV	D BOGAN	GSFC	J BARNES	NAG 5 11046	428
31	OREGON STATE UNIV	M I MISHCHENKO	GSFC	J A COAKLEY	NAG 5 7686	428
31	OREGON STATE UNIV	M MEYER	GSFC	B T SIMONEIT	NAG 5 9428	428
31	OREGON STATE UNIV	R A SCHIFFER	GSFC	G DALRYMPLE	NAG 5 8261	428
31	OREGON STATE UNIV	B A WIELICKI	LARC	J COAKLEY	NAS 1 98140	430
31	OREGON STATE UNIV	G GIBSON	LARC	J M COAKLEY	NAS 1 99104	430
31	PENN STATE UNIV. - UNIV. PARK	E P CONDON	ARC	W H BRUNE	NAG 2 1302	438
31	PENN STATE UNIV. - UNIV. PARK	E P CONDON	ARC	W H BRUNE	NAG 2 1453	439
31	PENN STATE UNIV. - UNIV. PARK	R E YOUNG	ARC	J F KASTINGS	NCC 2 5410	446
31	PENN STATE UNIV. - UNIV. PARK	J GLEASON	GSFC	W BRUNE	NAG 5 12426	444
31	PENN STATE UNIV. - UNIV. PARK	J L RAPER, SR	LARC	W H BRUNE	NCC 1 414	446
31	PENN STATE UNIV. - UNIV. PARK	J M HOELL	LARC	W H BRUNE	NCC 1 300	445
31	PRAIRIE VIEW A&M UNIV	A LEE	JSC	R WILKINS	NAG 9 1370	471
31	PRAIRIE VIEW A&M UNIV	J DAVIS	MSFC	T HUANG	NAG 8 1874	471
31	PRINCETON UNIV	O W THIELE	GSFC	J A SMITH	NAG 5 7744	349
31	PRINCETON UNIV	R J LAWRENCE	GSFC	E F WOOD	NAG 5 9891	350
31	PRINCETON UNIV	J ARNOLD	MSFC	E F WOOD	NAG 8 1517	352
31	PURDUE UNIV	K H BERGMAN	GSFC	D HARSHVARDHAN	NAG 5 3992	216
31	PURDUE UNIV	M I MISHCHENKO	GSFC	H HARSHVARDHAN	NAG 5 7727	216
31	PURDUE UNIV	R J LAWRENCE	GSFC	C A CLAYTON	NAG 5 9822	216
31	PURDUE UNIV	R KAKAR	GSFC	C A CLAYSON	NAG 5 3965	216
31	PURDUE UNIV	B L APENTA	MSFC	G W PETTY	NAG 8 1233	217
31	RICE UNIV	J BERGSTRALH	GSFC	D HILL	NAG 5 6432	472
31	ROCKY MOUNTAIN COLL	F ROBINSON	MSFC	S MCDANIEL	NAG 8 1890	335
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	D J BOGAN	GSFC	T MADEY	NAG 5 11045	355
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	P CRANE	GSFC	C L JOSEPH	NAG 5 11437	355
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R B STOTHERS	GSFC	A ROBOCK	NCC 5 553	356
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	R STOTHERS	GSFC	R AVISSAR	NCC 5 476	355
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	G L MADDREA	LARC	A ROBOCK	NAG 1 2154	353
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	P MINNIS	LARC	J A FRANCIS	NAG 1 2311	353
31	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J ARNOLD	MSFC	Y LIU	NAG 8 1513	355
31	SAINT ANSELM COLL	A J NEGRI	GSFC	D GUERRA	NCC 5 384	342
31	SAN FRANCISCO STATE UNIV	R S HIPSKIND	ARC	K L PAGAN	NCC 2 1128	54
31	SAN FRANCISCO STATE UNIV	S HIPSKIND	ARC	P FOSCHI	NCC 2 1278	54
31	SAN JOSE STATE UNIV	A TABAZADEH	ARC	P HAMILL	NCC 2 5498	58
31	SAN JOSE STATE UNIV	H B SINGH	ARC	P A HAMMILL	NCC 2 5347	57
31	SAN JOSE STATE UNIV	H SINGH	ARC	P HAMILL	NCC 2 1314	57
31	SAN JOSE STATE UNIV	P B RUSSELL	ARC	P A HAMILL	NCC 2 5450	57
31	SAN JOSE STATE UNIV	P BUI	ARC	J GOODMAN	NCC 2 1106	56
31	SAN JOSE STATE UNIV	P PILEWSKIE	ARC	P A HAMILL	NCC 2 5468	58
31	SAN JOSE STATE UNIV	P BUI	ARC	J GOODMAN	NCC 2 1045	56
31	SAN JOSE STATE UNIV	R E YOUNG	ARC	J L HOLLINGSWORTH	NCC 2 5451	58
31	SAN JOSE STATE UNIV	R M HABERLE	ARC	A C BRIDGER	NCC 2 5330	57
31	SAN JOSE STATE UNIV	R M HABERLE	ARC	J L HOLLINGSWORT	NCC 2 5336	57
31	SAN JOSE STATE UNIV	D BOGAN	GSFC	S RAFKIN	NAG 5 9751	55
31	SAN JOSE STATE UNIV	J M BOYCE	GSFC	S RAFKIN	NAG 5 11184	55

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	SAN JOSE STATE UNIV	G L MADDREA	LARC	P HAMILL	NAG 1 2205	55
31	SAN JOSE STATE UNIV	D QUATTROCHI	MSFC	R BORNSTEIN	NAG 8 1735	56
31	STANFORD UNIV	E CONDON	ARC	C T BOWMAN	NAG 2 1397	59
31	STANFORD UNIV	F PERI	LARC	R L BYER	NAS 1 00104	64
31	STATE UNIV OF NY - ALBANY	L PFISLER	ARC	M KRITZ	NCC 2 5380	383
31	STATE UNIV OF NY - ALBANY	L PFISTER	ARC	M KRITZ	NCC 2 5504	383
31	STATE UNIV OF NY - ALBANY	A NEGRI	GSFC	L BOSART	NAG 5 7469	382
31	STATE UNIV OF NY - ALBANY	R LAWRENCE	GSFC	J MOLINARI	NAG 5 11008	383
31	STATE UNIV OF NY - ALBANY	G L MADDREA	LARC	V MOHNEN	NAS 1 18942	383
31	STATE UNIV OF NY - STONY BROOK	A DOUGLASS	GSFC	D A GELLER	NAG 5 7134	385
31	STATE UNIV OF NY - STONY BROOK	B CARLSON	GSFC	M GELLER	NCC 5 342	387
31	STATE UNIV OF NY - STONY BROOK	M J KURYLO	GSFC	D VARANABI	NAG 5 3718	385
31	STATE UNIV OF NY - STONY BROOK	M J KURYLO	GSFC	P SOLOMON	NAG 5 4043	385
31	STATE UNIV OF NY - STONY BROOK	M J KURYLO	GSFC	R L DE ZAFRA	NAG 5 4071	385
31	STATE UNIV OF NY - STONY BROOK	R J LAWRENCE	GSFC	M ZHANG	NAG 5 10284	386
31	STATE UNIV OF NY - STONY BROOK	B A WIELICKI	LARC	R D CESS	NAS 1 98142	387
31	STATE UNIV OF NY - STONY BROOK	D S MCDUGAL	LARC	R A WALISER	NAG 1 2065	384
31	STATE UNIV OF NY - STONY BROOK	G L MADDREA	LARC	M A GELLER	NAG 1 2040	384
31	STATE UNIV OF NY - STONY BROOK	G L MADDREA	LARC	M A GELLER	NAG 1 2166	384
31	STATE UNIV OF NY COLL - PURCHASE	M HELFAND	GSFC	J TENENBAUM	NAG 5 9370	387
31	TAYLOR UNIV	R A GOLDBERG	GSFC	H D FOSS	NAG 5 12454	219
31	TEXAS A&M UNIV	P HWONG	GSFC	T T WILHEIT	NAS 5 32593	479
31	TEXAS A&M UNIV	R J LAWRENCE	GSFC	G R NORTH	NAG 5 9649	477
31	TEXAS A&M UNIV	R J LAWRENCE	GSFC	M I BIGGERSTAFF	NAG 5 9697	477
31	TEXAS A&M UNIV	R J LAWRENCE	GSFC	P YANG	NAG 5 11374	477
31	TEXAS A&M UNIV	R LAWRENCE	GSFC	T WILHEIT	NAG 5 9729	477
31	TEXAS A&M UNIV	R LAWRENCE	GSFC	M BOGGERSTAFF	NAG 5 11013	477
31	TEXAS A&M UNIV	S TSAY	GSFC	P YANG	NAG 5 12120	478
31	TEXAS A&M UNIV	W WISCOMBE	GSFC	P YANG	NAG 5 11935	477
31	TEXAS A&M UNIV	V E DELNORE	LARC	P YANG	NAG 1 02002	476
31	TEXAS TECH UNIV	G L MADDREA	LARC	G I GELLENE	NAG 1 2192	482
31	THE CATHOLIC UNIV OF AMERICA	D ORWIG	GSFC	D ST. CYR	NAG 5 10307	156
31	THE CATHOLIC UNIV OF AMERICA	T GULL	GSFC	S KRAEMER	NAG 5 4103	155
31	THE CATHOLIC UNIV OF AMERICA	W J WAGNER	GSFC	L OFMAN	NAG 5 11003	157
31	THE UNIV OF CENTRAL FLORIDA	A J NEGRI	GSFC	T KASPARIS	NAG 5 12263	168
31	THE UNIV OF CENTRAL FLORIDA	R J LAWRENCE	GSFC	W JONES	NAG 5 9548	168
31	UNIV HOUSTON-HOUSTON	R W LAWRENCE	GSFC	J R LAWRENCE	NAG 5 7840	482
31	UNIV OF ALABAMA - HUNTSVILLE	J R HERMAN	GSFC	S A CHRISTOPHER	NAG 5 7270	8
31	UNIV OF ALABAMA - HUNTSVILLE	R MCPETERS	GSFC	M NEWCHURCH	NAG 5 10965	10
31	UNIV OF ALABAMA - HUNTSVILLE	R MCPETERS	GSFC	M NEWCHURCH	NAG 5 11096	10
31	UNIV OF ALABAMA - HUNTSVILLE	S CHANDRA	GSFC	M NEWCHURCH	NAG 5 7269	8
31	UNIV OF ALABAMA - HUNTSVILLE	W B ROSSOW	GSFC	Q HAN	NAG 5 10134	10
31	UNIV OF ALABAMA - HUNTSVILLE	B A WIELICKI	LARC	R WELCH	NAS 1 98131	12
31	UNIV OF ALABAMA - HUNTSVILLE	G L MADDREA	LARC	M J NEWCHURCH	NAG 1 2026	8
31	UNIV OF ALABAMA - HUNTSVILLE	G L MADDREA	LARC	M J NEWCHURCH	NAG 1 2204	8
31	UNIV OF ALABAMA - UNIV	M MISHCHENKO	GSFC	Q HAN	NAG 5 7702	15
31	UNIV OF ALASKA - FAIRBANKS	R A GOLDBERBG	GSFC	S M BAILEY	NAG 5 11411	17
31	UNIV OF ARIZONA	R E YOUNG	ARC	A SHOWMAN	NCC 2 5518	38
31	UNIV OF ARIZONA	A J NEGRI	GSFC	S SOROOSHIAN	NAG 5 10174	31
31	UNIV OF ARIZONA	A J NEGRI	GSFC	S SOROOSHIAN	NAG 5 11381	34
31	UNIV OF ARIZONA	A J NEGRI	GSFC	B M HERMAN	NCC 5 355	38
31	UNIV OF ARIZONA	G STRINGFELLOW	GSFC	C K WALKER	NAG 5 9100	29
31	UNIV OF ARIZONA	H OSEROFF	GSFC	A HUETE	NAS 5 31364	37
31	UNIV OF ARIZONA	J BERGSTRALH	GSFC	M M LARSON	NAG 5 3791	25
31	UNIV OF ARIZONA	J BERGSTRALH	GSFC	S BOUGHER	NAG 5 7994	27
31	UNIV OF ARIZONA	J D SPINHIRNE	GSFC	D A REAGAN	NAG 5 12461	35
31	UNIV OF ARIZONA	J E RICHARDS	GSFC	S W BOUGHER	NAG 5 8843	28
31	UNIV OF ARIZONA	J GRANT	GSFC	E PIERAZZO	NAG 5 9112	29
31	UNIV OF ARIZONA	J JOINER	GSFC	E KURINSKI	NAG 5 11163	33
31	UNIV OF ARIZONA	J JOINER	GSFC	D FLITTNER	NAG 5 11188	33
31	UNIV OF ARIZONA	J SHARBER	GSFC	F L HERBERT	NAG 5 9079	29
31	UNIV OF ARIZONA	L STUART	GSFC	P N SLATER	NAS 5 31717	37
31	UNIV OF ARIZONA	M I MISHCHENKO	GSFC	K J THOME	NAG 5 8686	28
31	UNIV OF ARIZONA	M MISHCHENKO	GSFC	J A REAGAN	NAG 5 8117	27
31	UNIV OF ARIZONA	R D MCPETERS	GSFC	B M HERMAN	NAG 5 7257	26
31	UNIV OF ARIZONA	R J LAWRENCE	GSFC	S SOROOSHIAN	NAG 5 9549	30

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	UNIV OF ARIZONA	R RIND	GSFC	L L HOOD	NAG 5 7834	27
31	UNIV OF ARIZONA	T MORGAN	GSFC	U FINK	NAG 5 10961	33
31	UNIV OF ARIZONA	W HOEGY	GSFC	R LOUGHMAN	NAG 5 11195	33
31	UNIV OF ARIZONA	J MADURA	KSC	E KRIDER	NAG10 286	36
31	UNIV OF ARIZONA	J MADURA	KSC	E KRIDER	NAG10 302	36
31	UNIV OF ARIZONA	G GIBSON	LARC	J A REAGAN	NAS 1 99102	37
31	UNIV OF ARIZONA	G L MADDREA	LARC	L L HOOD	NAG 1 02017	25
31	UNIV OF ARIZONA	G L MADDREA JR	LARC	B M HERMAN	NAS 1 18939	37
31	UNIV OF ARIZONA	G L MADDREA	LARC	L L HOOD	NAG 1 2023	24
31	UNIV OF ARIZONA	J R HILL	LARC	B M HERMAN	NAS 1 99055	37
31	UNIV OF ARIZONA	V E DELNORE	LARC	B M HERMAN	NAG 1 2218	24
31	UNIV OF ARIZONA	W P CHU	LARC	B M HERMAN	NAG 1 01124	24
31	UNIV OF ARIZONA	J ARNOLD	MSFC	Z YANG	NAG 8 1520	36
31	UNIV OF ARIZONA	J ARNOLD	MSFC	S SOROOSHIAN	NAG 8 1523	36
31	UNIV OF ARIZONA	J ARNOLD	MSFC	W J SHUTTLEWORTH	NAG 8 1531	36
31	UNIV OF ARIZONA	J D ARNOLD	MSFC	D J BOCCIPPIO	NAG 8 1754	36
31	UNIV OF ARIZONA	T SEVER	MSFC	T P CULBERT	NCC 8 160	38
31	UNIV OF CALIFORNIA - BERKELEY	R S HIPSKIN	ARC	K A BOERING	NAG 2 1483	68
31	UNIV OF CALIFORNIA - BERKELEY	B MERRIT	GSFC	S BOGGS	NAG 5 5350	69
31	UNIV OF CALIFORNIA - BERKELEY	M MELLOTT	GSFC	T IMMEL	NAG 5 11055	73
31	UNIV OF CALIFORNIA - BERKELEY	P CRANE	GSFC	O H SIEGMUND	NAG 5 11394	73
31	UNIV OF CALIFORNIA - BERKELEY	W M FARRELL	GSFC	G T DELORY	NAG 5 9523	71
31	UNIV OF CALIFORNIA - BERKELEY	G L MADDREA	LARC	K A BOERING	NAG 1 02083	67
31	UNIV OF CALIFORNIA - BERKELEY	G L MADDREA	LARC	K A BOERING	NAG 1 2191	67
31	UNIV OF CALIFORNIA - BERKELEY	J HILL	LARC	R COHEN	NAS 1 99053	76
31	UNIV OF CALIFORNIA - DAVIS	R W LAWRENCE	GSFC	C E PUENTE	NAG 5 7441	80
31	UNIV OF CALIFORNIA - IRVINE	D STARR	GSFC	S C TYLER	NAG 5 9955	84
31	UNIV OF CALIFORNIA - IRVINE	M I MISHCHENKO	GSFC	M J PRATHER	NAG 5 8685	84
31	UNIV OF CALIFORNIA - IRVINE	M RIENECKER	GSFC	J FAMIGIETTI	NAG 5 12344	85
31	UNIV OF CALIFORNIA - IRVINE	G L MADDREA	LARC	M J PRATHER	NAG 1 2308	83
31	UNIV OF CALIFORNIA - IRVINE	J L RAPER, SR	LARC	M J PRATHER	NAG 1 01001	83
31	UNIV OF CALIFORNIA - IRVINE	J L RAPER, SR	LARC	E S SALTZMAN	NAG 1 01006	83
31	UNIV OF CALIFORNIA - IRVINE	J L RAPER, SR	LARC	D R BLAKE	NCC 1 413	85
31	UNIV OF CALIFORNIA - LOS ANGELES	D BOGAN	GSFC	R THORNE	NAG 5 11216	91
31	UNIV OF CALIFORNIA - LOS ANGELES	J BERGSTRALH	GSFC	P SCHUBERT	NAG 5 4117	87
31	UNIV OF CALIFORNIA - LOS ANGELES	J BERGSTRALH	GSFC	D M THORNE	NAG 5 6265	87
31	UNIV OF CALIFORNIA - LOS ANGELES	J F SPANN	GSFC	J RAEDER	NAG 5 10986	91
31	UNIV OF CALIFORNIA - LOS ANGELES	M ACUNA	GSFC	D G KIVELSON	NAG 5 10354	90
31	UNIV OF CALIFORNIA - LOS ANGELES	M ACUNA	GSFC	D G KIVELSON	NAG 5 12131	93
31	UNIV OF CALIFORNIA - LOS ANGELES	M I MISHCHENKO	GSFC	K LIOU	NAG 5 7738	88
31	UNIV OF CALIFORNIA - LOS ANGELES	M KING	GSFC	K N LIOU	NAG 5 9667	90
31	UNIV OF CALIFORNIA - LOS ANGELES	R CAHALAN	GSFC	J PAP	NAG 5 9207	89
31	UNIV OF CALIFORNIA - LOS ANGELES	S COHN	GSFC	M GHIL	NAG 5 9294	89
31	UNIV OF CALIFORNIA - LOS ANGELES	W LAU	GSFC	K N LIOU	NCC 5 385	94
31	UNIV OF CALIFORNIA - LOS ANGELES	W L GROSE	LARC	R P TURCO	NAG 1 2097	86
31	UNIV OF CALIFORNIA - SAN DIEGO	G SMITH	GSFC	J B MINSTER	NAS 5 99006	103
31	UNIV OF CALIFORNIA - SAN DIEGO	J R HERMAN	GSFC	D LUBIN	NAG 5 8252	98
31	UNIV OF CALIFORNIA - SAN DIEGO	J R HERMAN	GSFC	G MITCHELL	NAG 5 10644	100
31	UNIV OF CALIFORNIA - SAN DIEGO	J WATZIM	GSFC	F VALCRO	NAS 5 99120	103
31	UNIV OF CALIFORNIA - SAN DIEGO	M J KURYLO	GSFC	R F WEISS	NAG 5 4023	96
31	UNIV OF CALIFORNIA - SAN DIEGO	M REINECKER	GSFC	J O ROADS	NAG 5 8292	98
31	UNIV OF CALIFORNIA - SAN DIEGO	O W THIELE	GSFC	J O ROADS	NAG 5 4775	96
31	UNIV OF CALIFORNIA - SAN DIEGO	W J WAGNER	GSFC	B V JACKSON	NAG 5 11123	100
31	UNIV OF CALIFORNIA - SAN DIEGO	C LLYOD	JSC	A HARGENS	NAG 9 1425	102
31	UNIV OF CALIFORNIA - SAN DIEGO	B A WIELICKI	LARC	V RAMANATHAN	NAS 1 98141	102
31	UNIV OF CALIFORNIA - SAN DIEGO	D S MCDUGAL	LARC	F P VALERO	NAG 1 2044	96
31	UNIV OF CALIFORNIA - SAN DIEGO	J ARNOLD	MSFC	J ROADS	NAG 8 1516	102
31	UNIV OF CALIFORNIA - SAN DIEGO	P ROBERTSON	MSFC	J O ROADS	NAG 8 1875	102
31	UNIV OF CALIFORNIA - SANTA BARBARA	R CAHALAN	GSFC	C GAUTHIER	NAG 5 4629	106
31	UNIV OF CALIFORNIA - SANTA BARBARA	T BRAKE	GSFC	J M MELACK	NAS 5 31713	109
31	UNIV OF CALIFORNIA - SANTA CRUZ	S HOWARD	GSFC	D S VOGT	NAG 5 4445	111
31	UNIV OF CHICAGO	R LAWRENCEQ	GSFC	D ABBATT	NAG 5 9303	204
31	UNIV OF CHICAGO	W J WAGNER	GSFC	P C FRISCH	NAG 5 11005	205
31	UNIV OF COLORADO - BOULDER	A S ACKERMAN	ARC	O TOON	NGT 2 52264	139
31	UNIV OF COLORADO - BOULDER	C MCKAY	ARC	O B TOON	NGT 2 52287	140
31	UNIV OF COLORADO - BOULDER	C P SCOFIELD	ARC	H VOEMEL	NAG 2 1575	122

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	UNIV OF COLORADO - BOULDER	C P SCOFIELD	ARC	G J HOLLAND	NAG 2 1506	122
31	UNIV OF COLORADO - BOULDER	E P CONDON	ARC	O B TOON	NAG 2 1315	122
31	UNIV OF COLORADO - BOULDER	E P CONDON	ARC	D W TOOHEY	NAG 2 1307	122
31	UNIV OF COLORADO - BOULDER	E P CONDON	ARC	L M AVALLONE	NAG 2 1124	122
31	UNIV OF COLORADO - BOULDER	R E YOUNG	ARC	O B TOON	NCC 2 5401	139
31	UNIV OF COLORADO - BOULDER	R YOUNG	ARC	O B TOON	NCC 2 5519	139
31	UNIV OF COLORADO - BOULDER	S S WEGENER	ARC	P J WEBSTER	NAG 2 1445	122
31	UNIV OF COLORADO - BOULDER	A DOUGLASS	GSFC	D AVALLONE	NAG 5 6629	125
31	UNIV OF COLORADO - BOULDER	B A CAMPBELL	GSFC	T N WOODS	NAG 5 11408	134
31	UNIV OF COLORADO - BOULDER	C H JACKMAN	GSFC	G J ROTTMAN	NAS 5 97145	138
31	UNIV OF COLORADO - BOULDER	C JACKMAN	GSFC	S BAILEY	NAG 5 6683	125
31	UNIV OF COLORADO - BOULDER	C JACKMAN	GSFC	D ROTTMAN	NAG 5 6850	125
31	UNIV OF COLORADO - BOULDER	C JACKMAN	GSFC	G ROTTMAN	NAG 5 12194	136
31	UNIV OF COLORADO - BOULDER	C JACKSON	GSFC	G J ROTTMAN	NAG 5 11028	133
31	UNIV OF COLORADO - BOULDER	D A SENSKE	GSFC	G R STEWART	NAG 5 10970	133
31	UNIV OF COLORADO - BOULDER	D STARR	GSFC	D PINCUS	NAG 5 11022	133
31	UNIV OF COLORADO - BOULDER	E LINDSTROM	GSFC	O PERSSON	NAG 5 10790	132
31	UNIV OF COLORADO - BOULDER	E LINDSTROM	GSFC	W EMERY	NAG 5 10791	132
31	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	R E GRIMM	NAG 5 9779	130
31	UNIV OF COLORADO - BOULDER	J R CURRAN	GSFC	M L SALBY	NAG 5 8311	127
31	UNIV OF COLORADO - BOULDER	J SHARBER	GSFC	X LI	NAG 5 9421	129
31	UNIV OF COLORADO - BOULDER	J ZWALLY	GSFC	K STEFFEN	NAG 5 10966	132
31	UNIV OF COLORADO - BOULDER	M D KING	GSFC	M A TOLBERT	NAG 5 8127	127
31	UNIV OF COLORADO - BOULDER	M MISCHENKO	GSFC	O B TOON	NAG 5 8362	127
31	UNIV OF COLORADO - BOULDER	M MISCHENKO	GSFC	C E RANDALL	NAG 5 7784	126
31	UNIV OF COLORADO - BOULDER	P K BHARTIA	GSFC	O B TOON	NAG 5 11069	133
31	UNIV OF COLORADO - BOULDER	R B BEEBE	GSFC	D R LEONE	NAG 5 8923	128
31	UNIV OF COLORADO - BOULDER	R CAHALAN	GSFC	R PINCUS	NAG 5 11279	134
31	UNIV OF COLORADO - BOULDER	R J LAWRENCE	GSFC	C R WILLIAMS	NAG 5 9753	130
31	UNIV OF COLORADO - BOULDER	R LAWRENCE	GSFC	D A TOLBERT	NAG 5 9304	129
31	UNIV OF COLORADO - BOULDER	R LAWRENCE	GSFC	O TOON	NAG 5 10698	132
31	UNIV OF COLORADO - BOULDER	R MCPETERS	GSFC	E WEATHERHEAD	NAG 5 11205	133
31	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	K STEFFEN	NAG 5 9043	128
31	UNIV OF COLORADO - BOULDER	W WISCOMBE	GSFC	K EVANS	NAG 5 7679	126
31	UNIV OF COLORADO - BOULDER	W WISCOMBE	GSFC	R PINCUS	NAG 5 11294	134
31	UNIV OF COLORADO - BOULDER	W WISCOMBE	GSFC	K EVANS	NAG 5 11686	135
31	UNIV OF COLORADO - BOULDER	G L MADDREA	LARC	O B TOON	NAG 1 2165	121
31	UNIV OF COLORADO - BOULDER	G L MADDREA	LARC	C E RANDALL	NAG 1 2187	121
31	UNIV OF COLORADO - BOULDER	V E DELNORE	LARC	J A CURRY	NAG 1 01053	121
31	UNIV OF CONNECTICUT	R J LAWRENCE	GSFC	E N ANAGNOSTOU	NAG 5 11143	144
31	UNIV OF CONNECTICUT	R J LAWRENECE	GSFC	E N ANAGNOSTOU	NAG 5 9639	144
31	UNIV OF DELAWARE	E LINDSTROM	GSFC	X YAN	NAG 5 11773	149
31	UNIV OF DENVER	C P SCOFIELD	ARC	J M REEVES	NAG 2 1578	143
31	UNIV OF DENVER	C P SCOFIELD	ARC	J C WILSON	NAG 2 1297	143
31	UNIV OF DENVER	E CONDON	ARC	F MURCRAY	NAG 2 1391	143
31	UNIV OF DENVER	C P RINSLAND	LARC	F J MURCRAY	NCC 1 313	143
31	UNIV OF DENVER	C P RINSLAND	LARC	A GOLDMAN	NCC 1 365	143
31	UNIV OF DENVER	C P RINSLAND	LARC	A GOLDMAN	NCC 1 01061	143
31	UNIV OF FLORIDA	S HOWARD	GSFC	D GUSTAFSON	NAG 5 6378	171
31	UNIV OF FLORIDA	J ARNOLD	MSFC	J W JONES	NCC 8 157	173
31	UNIV OF HAWAII AT MANOA - HONOLULU	M MISCHENKO	GSFC	A D CLARKE	NAG 5 8118	191
31	UNIV OF HAWAII AT MANOA - HONOLULU	P DECOLA	GSFC	K HAMILTON	NAG 5 12214	196
31	UNIV OF HAWAII AT MANOA - HONOLULU	W T KASPRZAK	GSFC	T C OWEN	NAG 5 10133	194
31	UNIV OF HAWAII AT MANOA - HONOLULU	W T KASPRZAK	GSFC	T C OWEN	NAG 5 11138	195
31	UNIV OF HAWAII AT MANOA - HONOLULU	J L RAPER, SR	LARC	A D CLARKE	NCC 1 416	197
31	UNIV OF HAWAII AT MANOA - HONOLULU	J M HOELL	LARC	A D CLARKE	NCC 1 315	197
31	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	F HERREO	GSFC	G SWENSON	NAG 5 10754	210
31	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J F SPANN	GSFC	M E SCHESINGER	NAG 5 10942	210
31	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M MELLOTT	GSFC	G R SWENSON	NAG 5 8569	209
31	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R J LAWRENCE	GSFC	G M MCFARQUHAR	NAG 5 11389	210
31	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	G MADDREA	LARC	D J WUBBLES	NAG 1 2221	207
31	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J L RAPER	LARC	D WUEBBLER	NCC 1 309	211
31	UNIV OF IOWA	R ADLER	GSFC	W KRAJEWSKI	NAG 5 11969	225
31	UNIV OF IOWA	R J LAWRENCE	GSFC	W F KRAJEWSKI	NAG 5 9664	224
31	UNIV OF IOWA	G L MADDREA	LARC	G R CARMICHAEL	NAG 1 2305	223
31	UNIV OF IOWA	J L RAPER, SR	LARC	G R CARMICHAEL	NCC 1 422	225

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	UNIV OF KANSAS	J HILL	LARC	C ALLEN	NAS 1 99052	227
31	UNIV OF KENTUCKY	H PATRIDGE	ARC	M MENON	NCC 2 5386	229
31	UNIV OF MARYLAND - COLL PARK	A DOUGLASS	GSFC	D B CONSIDINE	NAG 5 6682	257
31	UNIV OF MARYLAND - COLL PARK	A F NEGRI	GSFC	D ZHANG	NAG 5 7842	257
31	UNIV OF MARYLAND - COLL PARK	D TOLL	GSFC	E VERMONTE	NAS 5 96062	267
31	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	I CSISZAR	NAG 5 12149	265
31	UNIV OF MARYLAND - COLL PARK	G STRINGFELLOW	GSFC	A HARRIS	NAG 5 9075	259
31	UNIV OF MARYLAND - COLL PARK	J FIORA	GSFC	D J LEWIS	NAG 5 8398	258
31	UNIV OF MARYLAND - COLL PARK	J HILLMAN	GSFC	R M KILLEN	NAG 5 12566	266
31	UNIV OF MARYLAND - COLL PARK	J SHARBER	GSFC	J F DRAKE	NAG 5 9108	259
31	UNIV OF MARYLAND - COLL PARK	M D HALL	GSFC	K E PICKERING	NAG 5 3678	255
31	UNIV OF MARYLAND - COLL PARK	M RIENECKER	GSFC	S NIGAM	NAG 5 8289	258
31	UNIV OF MARYLAND - COLL PARK	M RIENECKER	GSFC	R C WAJSOWICZ	NAG 5 12375	266
31	UNIV OF MARYLAND - COLL PARK	M RIENECKER	GSFC	S NIGAM	NAG 5 12417	266
31	UNIV OF MARYLAND - COLL PARK	R DEPAULA	GSFC	J BARAS	NAG 5 9150	259
31	UNIV OF MARYLAND - COLL PARK	R HARTLE	GSFC	F BAER	NCC 5 552	269
31	UNIV OF MARYLAND - COLL PARK	R J LAWRENCE	GSFC	B KEDEM	NAG 5 9827	261
31	UNIV OF MARYLAND - COLL PARK	R J LAWRENCE	GSFC	D ZHANG	NAG 5 10959	263
31	UNIV OF MARYLAND - COLL PARK	R W STEWART	GSFC	K PICKERING	NAG 5 7263	257
31	UNIV OF MARYLAND - COLL PARK	R W STEWART	GSFC	D CONSIDINE	NAG 5 7419	257
31	UNIV OF MARYLAND - COLL PARK	W J WAGNER	GSFC	F B MCDONALD	NAG 5 11054	263
31	UNIV OF MARYLAND - COLL PARK	G L MADDREA	LARC	R D HUDSON	NAG 1 2024	254
31	UNIV OF MARYLAND BALTIMORE	F SCHMIDLIN	WFF	W MCMILLAN	NAG 5 5339	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	A J NEGRI	GSFC	G I MOLNAR	NAG 5 10687	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	C JACKMAN	GSFC	D TANGBORN	NAG 5 6681	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	C JACKSON	GSFC	J PAP	NAG 5 11326	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	D STARR	GSFC	D PLATNICK	NAG 5 6996	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	J C RIVERA	GSFC	O TORRES	NAS 5 00173	275
31	UNIV OF MARYLAND BALTIMORE COUNTY	J C RIVERA	GSFC	A KRUEGER	NAS 5 01110	275
31	UNIV OF MARYLAND BALTIMORE COUNTY	J HARTLEY	GSFC	S JANZ	NAS 5 99141	275
31	UNIV OF MARYLAND BALTIMORE COUNTY	J SUSSKIND	GSFC	C BARNET	NAG 5 11653	274
31	UNIV OF MARYLAND BALTIMORE COUNTY	M KING	GSFC	S PLATNICK	NAG 5 11598	274
31	UNIV OF MARYLAND BALTIMORE COUNTY	O W THIELE	GSFC	E AMITAI	NAG 5 7909	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	O W THIELE	GSFC	B S FERRIER	NAG 5 8231	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	R AFZAL	GSFC	D CHRISTOU	NCC 5 339	275
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	W S OLSON	NAG 5 9698	272
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	J WANG	NAG 5 9699	272
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	J B HALVERSON	NAG 5 9718	272
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	T M RICKENBACH	NAG 5 9816	272
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	G M SKOFFRONICK-JACK	NAG 5 10347	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	G SKOFFRONICK-JACK	NAG 5 10969	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	P YANG	NAG 5 11020	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	J B HALVERSON	NAG 5 11115	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	A MARSHAK	NAG 5 11373	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	R J LAWRENCE	GSFC	J M PAP	NAG 5 11601	274
31	UNIV OF MARYLAND BALTIMORE COUNTY	R W LAWRENCE	GSFC	W S OLSON	NAG 5 8379	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	W WISCOMBE	GSFC	A MARSHAK	NAG 5 7563	271
31	UNIV OF MARYLAND BALTIMORE COUNTY	W WISCOMBE	GSFC	A MARSHAK	NAG 5 11206	273
31	UNIV OF MARYLAND BALTIMORE COUNTY	W WISCOMBE	GSFC	A MARSHAK	NAG 5 12238	274
31	UNIV OF MARYLAND BALTIMORE COUNTY	G G GIBSON	LARC	R M HOFF	NAS 1 99107	274
31	UNIV OF MARYLAND BALTIMORE COUNTY	G L MADDREA	LARC	W W MCMILLAN	NAG 1 2022	271
31	UNIV OF MASSACHUSETTS	D STARR	GSFC	R GAMACHE	NAG 5 9611	298
31	UNIV OF MASSACHUSETTS	J BREDEKAMP	GSFC	B REINISCH	NAG 5 8145	298
31	UNIV OF MIAMI	H OSEROFF	GSFC	R EVANS	NAS 5 31362	175
31	UNIV OF MIAMI	H OSEROFF	GSFC	H GORDON	NAS 5 31363	175
31	UNIV OF MIAMI	J HERMAN	GSFC	D M PROSPERO	NAG 5 7110	174
31	UNIV OF MIAMI	M I MISHCHENKO	GSFC	J M PROSPERO	NAG 5 7674	174
31	UNIV OF MIAMI	N MAYNARD	GSFC	J M PROSPERO	NAG 5 12103	175
31	UNIV OF MIAMI	R J LAWRENCE	GSFC	P J MINNETT	NAG 5 9739	175
31	UNIV OF MIAMI	R J LAWRENCE	GSFC	S S CHEN	NAG 5 10963	175
31	UNIV OF MIAMI	J L RAPER	LARC	D D RIEMER	NCC 1 01021	176
31	UNIV OF MICHIGAN - ANN ARBOR	A DA SILVA	GSFC	Q F STOUT	NCC 5 632	315
31	UNIV OF MICHIGAN - ANN ARBOR	C H JACKMAN	GSFC	W SKINNER	NAG 5 7474	309
31	UNIV OF MICHIGAN - ANN ARBOR	C H JACKMAN	GSFC	W R SKINNER	NAG 5 10812	311
31	UNIV OF MICHIGAN - ANN ARBOR	C JACKMAN	GSFC	W R SKINNER	NAG 5 11068	312
31	UNIV OF MICHIGAN - ANN ARBOR	D BOGAN	GSFC	D R COMBI	NAG 5 4381	309

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	UNIV OF MICHIGAN - ANN ARBOR	D BOGAN	GSFC	S K ATREYA	NAG 5 11004	312
31	UNIV OF MICHIGAN - ANN ARBOR	D J BOGAN	GSFC	J H WAITE	NAG 5 11031	312
31	UNIV OF MICHIGAN - ANN ARBOR	J F SPANN	GSFC	M W LIEMOHN	NAG 5 10850	311
31	UNIV OF MICHIGAN - ANN ARBOR	J RICHARDS	GSFC	G ARIGNAN	NAS 5 99174	314
31	UNIV OF MICHIGAN - ANN ARBOR	M I MISHCHENKO	GSFC	J PENNER	NAG 5 7681	310
31	UNIV OF MICHIGAN - ANN ARBOR	M I MISHCHENKO	GSFC	J PENNER	NAG 5 11674	313
31	UNIV OF MICHIGAN - ANN ARBOR	M S BURRELL	GSFC	L A FISK	NGT 5 124	316
31	UNIV OF MICHIGAN - ANN ARBOR	R BEEBE	GSFC	P K ATREYA	NAG 5 4589	309
31	UNIV OF MICHIGAN - ANN ARBOR	S WAY	GSFC	G CARIGNAN	NAS 5 32989	314
31	UNIV OF MICHIGAN - ANN ARBOR	W J WAGNER	GSFC	T H ZURBUCHEN	NAG 5 11000	312
31	UNIV OF MICHIGAN - ANN ARBOR	W T KASPRZAK	GSFC	S K ATREYA	NAG 5 8845	310
31	UNIV OF MICHIGAN - ANN ARBOR	W T KASPRZAK	GSFC	S K ATREYA	NAG 5 10138	311
31	UNIV OF MICHIGAN - ANN ARBOR	W T KASPRZAK	GSFC	A F NAGY	NAG 5 10181	311
31	UNIV OF MICHIGAN - ANN ARBOR	W T KASPRZAK	GSFC	S W BOUGHER	NAG 5 11414	312
31	UNIV OF MICHIGAN - ANN ARBOR	G L MADDREA	LARC	J E PENNER	NAG 1 2042	307
31	UNIV OF MICHIGAN - ANN ARBOR	G R MADDREA	LARC	M A CARROLL	NAG 1 2181	307
31	UNIV OF MINN	O W THIELE	GSFC	E FOUFOULA-GEORGI	NAG 5 7715	319
31	UNIV OF MINN	W R COFER	LARC	D Y PUI	NAG 1 01090	318
31	UNIV. OF NEVADA - DESERT RES. INST	R J LAWRENCE	GSFC	J HALALETT	NAG 5 7973	338
31	UNIV. OF NEVADA - DESERT RES. INST	R LAWRENCE	GSFC	D KINGSMILL	NAG 5 9716	338
31	UNIV. OF NEVADA - DESERT RES. INST	D S MCDUGAL	LARC	J HALLETT	NAG 1 2046	338
31	UNIV. OF NEVADA - DESERT RES. INST	V E DELNORE	LARC	J G HUDSON	NAG 1 2183	338
31	UNIV OF NEW HAMPSHIRE - DURHAM	D TOLL	GSFC	J CAMPBELL	NAS 5 96063	346
31	UNIV OF NEW HAMPSHIRE - DURHAM	O W THIELE	GSFC	C VOROSMARTY	NAG 5 4785	342
31	UNIV OF NEW HAMPSHIRE - DURHAM	G W SACHSE	LARC	K B BARTLETT	NCC 1 02023	346
31	UNIV OF NEW HAMPSHIRE - DURHAM	J L RAPER, SR	LARC	R W TALBOT	NCC 1 410	346
31	UNIV OF NEW HAMPSHIRE - DURHAM	J M HOELL	LARC	R W TALBOT	NCC 1 298	346
31	UNIV OF NEW MEXICO-ALBUQUERQUE	R J LAWRENCE	GSFC	E A RITCHIE-TYO	NAG 5 12364	363
31	UNIV OF NORTH DAKOTA	R J LAWRENCE	HQ	C A GRAINGER	NAG 5 9656	400
31	UNIV OF NORTH DAKOTA	F J MERCERET	KSC	D GRAINGER	NAG10 283	400
31	UNIV OF NORTH DAKOTA	J GERLACH	WFF	P KUCERA	NAG 5 5340	400
31	UNIV OF OREGON - EUGENE	I G NOLT	LARC	K PARK	NAG 1 2010	431
31	UNIV OF PITTSBURGH	J BERGSTRALH	GSFC	D JOHNSON	NAG 5 4116	450
31	UNIV OF PUERTO RICO - MAYAGUEZ	D DETROYE	GSFC	B G WEINER	NCC 5 215	551
31	UNIV OF PUERTO RICO - MAYAGUEZ	R A HATHAWAY	LARC	S CRUZPOL	NAG 1 02074	550
31	UNIV OF RHODE ISLAND	J L RAPER	LARC	B HEIKES	NCC 1 302	457
31	UNIV OF RHODE ISLAND	J L RAPER, SR	LARC	D W O'SULLIVAN	NCC 1 408	457
31	UNIV OF SOUTH FLORIDA	H OSEROFF	GSFC	K R CARDER	NAS 5 31716	177
31	UNIV OF SOUTHERN CALIFORNIA	D J BOGAN	GSFC	C WU	NAG 5 11042	116
31	UNIV OF TENNESSEE - KNOXVILLE	D JAN	JSC	G S SAYLER	NAG 9 1424	467
31	UNIV OF TEXAS - AUSTIN	D L CARTER	GSFC	R J EANES	NAG 5 11203	491
31	UNIV OF TEXAS - AUSTIN	G SMITH	GSFC	R SCHUTZ	NAS 5 99005	493
31	UNIV OF UTAH	S S WEGENER	ARC	G G MACE	NAG 2 1444	497
31	UNIV OF UTAH	J C DODGE	GSFC	E ZIPSER	NAG 5 8339	498
31	UNIV OF UTAH	R J LAWRENCE	GSFC	E J ZIPSER	NAG 5 9717	498
31	UNIV OF UTAH	R J LAWRENCE	GSFC	E J ZIPSER	NAG 5 10682	498
31	UNIV OF UTAH	D S MCDUGAL	LARC	S K KRUEGER	NAG 1 2048	497
31	UNIV OF UTAH	P MINNIS	LARC	X DONG	NAG 1 2250	497
31	UNIV OF UTAH	V E DELNORE	LARC	K SASSON	NAG 1 2083	497
31	UNIV OF UTAH	J ARNOLD	MSFC	E J ZIPSER	NAG 8 1797	499
31	UNIV OF VIRGINIA	J BERGSTRALH	GSFC	D E JOHNSON	NAG 5 4192	518
31	UNIV OF VIRGINIA	J R WANG	GSFC	J L HESLER	NAG 5 8749	519
31	UNIV OF VIRGINIA	M KING	GSFC	R J SWAP	NAG 5 7939	519
31	UNIV OF VIRGINIA	R J LAWRENCE	GSFC	J D FUENTES	NAG 5 9654	520
31	UNIV OF WASHINGTON	H BLODGET	GSFC	A R GILLESPIE	NAS 5 31372	536
31	UNIV OF WASHINGTON	M D KING	GSFC	P V HOBBS	NAG 5 7819	531
31	UNIV OF WASHINGTON	M D KING	GSFC	P V HOBBS	NAG 5 8801	531
31	UNIV OF WASHINGTON	M D KING	GSFC	P V HOBBS	NAG 5 9022	532
31	UNIV OF WASHINGTON	M D KING	GSFC	P V HOBBS	NAG 5 10745	533
31	UNIV OF WASHINGTON	M D KING	GSFC	P V HOBBS	NAG 5 11665	534
31	UNIV OF WASHINGTON	M D KING	GSFC	P V HOBBS	NCC 5 326	536
31	UNIV OF WASHINGTON	M I MISHCHENKO	GSFC	P V HOBBS	NAG 5 7675	531
31	UNIV OF WASHINGTON	M I MISHCHENKO	GSFC	D A HEGG	NAG 5 8684	531
31	UNIV OF WASHINGTON	M I MISHCHENKO	GSFC	D S COVERT	NAG 5 10404	533
31	UNIV OF WASHINGTON	M MISHCHENKO	GSFC	D S COVERT	NAG 5 8363	531
31	UNIV OF WASHINGTON	M RIENECKER	GSFC	D P LETTENMAIER	NAG 5 12374	535

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
31	UNIV OF WASHINGTON	O W THIELE	GSFC	J A NYSTUEN	NAG 5 7886	531
31	UNIV OF WASHINGTON	R J LAWRENCE	GSFC	S E YUTER	NAG 5 9720	532
31	UNIV OF WASHINGTON	R J LAWRENCE	GSFC	D LETTENMAIER	NAG 5 9830	532
31	UNIV OF WASHINGTON	R LAWRENCE	GSFC	C BRETHERTON	NAG 5 9657	532
31	UNIV OF WASHINGTON	R W LAWRENCE	GSFC	R A HOUZE	NAG 5 4795	529
31	UNIV OF WASHINGTON	R W LAWRENCE	GSFC	P V HOBBS	NAG 5 8109	531
31	UNIV OF WASHINGTON	W ABDALATI	GSFC	S MARTIN	NAG 5 11057	533
31	UNIV OF WASHINGTON	C A HOSTETLER	LARC	T L COVERT	NCC 1 402	536
31	UNIV OF WASHINGTON	D S MCDUGAL	LARC	C S BRETHERTON	NAG 1 2072	528
31	UNIV OF WASHINGTON	D S MCDUGAL	LARC	P V HOBBS	NAG 1 2079	528
31	UNIV OF WASHINGTON	G GIBSON	LARC	R J CHARLSON	NAS 1 99105	535
31	UNIV OF WASHINGTON	D SAMUELSON	MSFC	M B BAKER	NAG 8 1647	535
31	UNIV OF WASHINGTON	J H ADAMS	MSFC	R M WINGLEE	NCC 8 231	536
31	UNIV OF WISCONSIN - MADISON	A J NEGRI	GSFC	M H HITCHMAN	NCC 5 354	548
31	UNIV OF WISCONSIN - MADISON	D STARR	GSFC	D PINCUS	NAG 5 7661	543
31	UNIV OF WISCONSIN - MADISON	D TOLL	GSFC	P MENZEL	NAS 5 31367	547
31	UNIV OF WISCONSIN - MADISON	E KREINS	GSFC	H REVERCOMB	NAS 5 31375	547
31	UNIV OF WISCONSIN - MADISON	G SMITH	GSFC	C BENTLEY	NAS 5 99004	547
31	UNIV OF WISCONSIN - MADISON	J D SPINHIRNE	GSFC	E W ELORANTA	NAG 5 11449	545
31	UNIV OF WISCONSIN - MADISON	K H BERGMAN	GSFC	G WAHBA	NAG 5 3769	542
31	UNIV OF WISCONSIN - MADISON	P K BHARTIA	GSFC	G C REINSEL	NAG 5 9084	544
31	UNIV OF WISCONSIN - MADISON	R ATLAS	GSFC	D R JOHNSON	NAG 5 9295	544
31	UNIV OF WISCONSIN - MADISON	R J LAWRENCE	GSFC	J R MECIKALSKI	NAG 5 9673	544
31	UNIV OF WISCONSIN - MADISON	R J LAWRENCE	GSFC	G W PETTY	NAG 5 9894	544
31	UNIV OF WISCONSIN - MADISON	R J LAWRENCE	GSFC	G W PETTY	NAG 5 9999	544
31	UNIV OF WISCONSIN - MADISON	R J LAWRENCE	GSFC	G J TRIPOLI	NAG 5 12270	546
31	UNIV OF WISCONSIN - MADISON	W WISCOMBE	GSFC	R PINCUS	NAG 5 8639	543
31	UNIV OF WISCONSIN - MADISON	L TRAVIS	HQ	J A FOLEY	NCC 5 365	548
31	UNIV OF WISCONSIN - MADISON	A ROYAL	LARC	F A BEST	NAS 1 00070	547
31	UNIV OF WISCONSIN - MADISON	E V BROWELL	LARC	H E REVERCOMB	NAG 1 02057	541
31	UNIV OF WISCONSIN - MADISON	G GIBSON	LARC	S A ACKERMAN	NAS 1 99106	547
31	UNIV OF WISCONSIN - MADISON	G L MADDREA	LARC	M H HITCHMAN	NAG 1 2162	541
31	UNIV OF WISCONSIN - MADISON	J A GREEN	LARC	S ACKERMAN	NAG 1 2322	541
31	UNIV OF WISCONSIN - MADISON	J H CRAWFORD	LARC	M H HITCHMAN	NCC 1 01011	547
31	UNIV OF WISCONSIN - MADISON	R C HUFFMAN	LARC	N APPLICABLE	NAS 1 96004	547
31	UNIV OF WISCONSIN - MADISON	V E DELNORE	LARC	S A ACKERMAN	NAG 1 02020	541
31	UNIV OF WISCONSIN - MADISON	V E DELNORE	LARC	S A ACKERMAN	NAG 1 2073	541
31	UNIV OF WISCONSIN - MADISON	V PARSONS	LARC	H REVERCOMB	NAS 1 00072	547
31	UNIV OF WISCONSIN - MADISON	F R ROBERTSON	MSFC	G DIAK	NAG 8 1320	546
31	UNIV OF WYOMING	C P SCOFIELD	ARC	T DESHLER	NAG 2 1576	549
31	UNIV OF WYOMING	G L MADDREA	LARC	G VALI	NAS 1 18945	549
31	UTAH STATE UNIV	G SCHWEMMER	GSFC	T D WILKERSON	NCC 5 598	502
31	UTAH STATE UNIV	G JOHNSON	LARC	G E BINGHAM	NAS 1 02053	501
31	UTAH STATE UNIV	W A ROETTKER	LARC	G BINGHAM	NAS 1 00071	501
31	UTAH STATE UNIV	D QUATTROCHI	MSFC	R GILES	NAG 8 1750	501
31	UTAH STATE UNIV	W LAPENTA	MSFC	R R GILLIES	NCC 8 162	502
31	VA POLYTECH INST & ST UNIV	D F YOUNG	LARC	M P HAEFFELIN	NAG 1 2106	523
31	VA POLYTECH INST & ST UNIV	D F YOUNG	LARC	M A HAEFFELIN	NAG 1 01112	524
31	VA POLYTECH INST & ST UNIV	J M SEATON	LARC	J BURTON	NGT 1 52184	527
31	VA POLYTECH INST & ST UNIV	R B LEE III	LARC	G L SMITH	NCC 1 405	526
31	VA POLYTECH INST & ST UNIV	R B LEE	LARC	J R MAHAN	NAG 1 01125	524
31	WASHINGTON STATE UNIV	J C RIVERA	GSFC	G MOUNT	NAS 5 00177	539
31	WASHINGTON UNIV - ST. LOUIS	D BOGAN	GSFC	D FEGLEY	NAG 5 4564	329
31	WASHINGTON UNIV - ST. LOUIS	D BOGAN	GSFC	D FEGLEY	NAG 5 4565	329
31	WASHINGTON UNIV - ST. LOUIS	D BOGAN	GSFC	B FEGLEY	NAG 5 11037	332
31	WASHINGTON UNIV - ST. LOUIS	D BOGAN	GSFC	B FEGLEY	NAG 5 11050	332
31	WASHINGTON UNIV - ST. LOUIS	J BERGSTRALH	GSFC	D FEGLEY	NAG 5 6366	330
31	WELLESLEY COLL	D BOGAN	GSFC	D STARK	NAG 5 9059	302
31	WEST VIRGINIA UNIV	W L GROSE	LARC	R F TURCO	NAG 1 2096	539
31	YALE UNIV	M R SCHOEBERL	GSFC	S SHERWOOD	NAG 5 9839	147
32	ARIZONA STATE UNIV	S G EDDLEMON	ARC	R GREELEY	NCC 2 1109	22
32	ARIZONA STATE UNIV	D SENSKE	GSFC	P R CHRISTENSEN	NAG 5 11494	21
32	ARIZONA STATE UNIV	H V FREY	GSFC	J FINK	NAG 5 9070	20
32	ARIZONA STATE UNIV	P G ROGERS	GSFC	D R CHRISTENSEN	NAG 5 3628	19
32	ARIZONA STATE UNIV	P G ROGERS	GSFC	D FINK	NAG 5 3783	19
32	ARIZONA STATE UNIV	P ROGERS	GSFC	D GREELEY	NAG 5 3908	19

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
32	ARIZONA STATE UNIV	G MCKAY	JSC	P NILES	NGT 9 62	23
32	AUSTIN COLL-SHERMAN	H V FREY	GSFC	D R BAKER	NAG 5 10102	469
32	BIRMINGHAM SOUTHERN COLL	M MELLOTT	GSFC	D PONTIUS	NAG 5 11870	4
32	BLOOMSBURG UNIV	D SENSKE	GSFC	M K SHEPARD	NAG 5 11539	431
32	BOSTON UNIV	M MELLOTT	GSFC	D COKER	NAG 5 11790	278
32	BRIGHAM YOUNG UNIV	H V FREY	GSFC	D V ARNOLD	NAG 5 7711	497
32	BROCK UNIV	M BEHRENFELD	GSFC	D BRUCE	NAG 5 9875	552
32	BROWN UNIV	D G SENSKE	GSFC	P H SCHULTZ	NAG 5 3877	453
32	BROWN UNIV	D SENSKE	GSFC	C M PIETERS	NAG 5 10401	454
32	BROWN UNIV	D SENSKE	GSFC	P H SCHULTZ	NAG 5 11538	454
32	BROWN UNIV	J BOYCE	GSFC	J W HEAD	NAG 5 9780	454
32	BROWN UNIV	J BOYCE	GSFC	J W HEAD	NAG 5 12254	455
32	BROWN UNIV	J G GRANT	GSFC	C M PIETERS	NAG 5 3871	453
32	BROWN UNIV	J GRANT	GSFC	J F MUSTARD	NAG 5 8972	453
32	BROWN UNIV	J GRANT	GSFC	C PIETERS	NAG 5 9287	454
32	BROWN UNIV	JG GRANTS	GSFC	E PARMENTIER	NAG 5 3659	453
32	BROWN UNIV	P G ROGERS	GSFC	P H SCHULTZ	NAG 5 3872	453
32	BROWN UNIV	P G ROGERS	GSFC	D W HEAD	NAG 5 3933	453
32	BROWN UNIV	D MACKAY	JSC	C PIETERS	NGT 9 53	456
32	BROWN UNIV	J JONES	JSC	M MACANTA	NGT 9 63	456
32	BROWN UNIV	L KELLER	JSC	C PIETERS	NGT 9 66	456
32	CALIFORNIA INST OF TECH	B BETTS	GSFC	G BLAKE	NAG 5 9471	44
32	CALIFORNIA INST OF TECH	D SENSKE	GSFC	D J STEVENSON	NAG 5 10189	45
32	CALIFORNIA INST OF TECH	D SENSKE	GSFC	K A FARLEY	NAG 5 10470	45
32	CALIFORNIA INST OF TECH	H V FREY	GSFC	K E SIEH	NAG 5 10406	45
32	CALVIN COLL	H V FREY	GSFC	J A CLARK	NAG 5 10348	304
32	CENTRAL WASHINGTON UNIV	H V FREY	GSFC	M MILLER	NAG 5 7672	528
32	CLEMSON UNIV - CLEMSON	M MELLOTT	GSFC	D HYSELL	NAG 5 9267	458
32	COLUMBIA UNIV	H V FREY	GSFC	J K WEISSEL	NAG 5 8848	369
32	COLUMBIA UNIV	H V FREY	GSFC	C P STARK	NAG 5 9056	369
32	COLUMBIA UNIV	H V FREY	GSFC	R E BELL	NAG 5 9060	369
32	COLUMBIA UNIV	R KOSTER	GSFC	C P STARK	NAG 5 11799	370
32	COLUMBIA UNIV	V GRIFFIN	GSFC	R C WILSON	NAG 5 97164	371
32	CORNELL UNIV	D SENKSE	GSFC	J VERERKA	NAG 5 11514	376
32	CORNELL UNIV	D SENSKE	GSFC	J A BURNS	NAG 5 11480	375
32	CORNELL UNIV	D SENSKE	GSFC	P HELFENSTEIN	NAG 5 11492	375
32	CORNELL UNIV	D SENSKE	GSFC	P D NICHOLSON	NAG 5 11515	376
32	CORNELL UNIV	E T ENGMAN	GSFC	K H COOK	NAG 5 7497	373
32	CORNELL UNIV	H V FREY	GSFC	D L TURCOTTE	NAG 5 9067	374
32	CORNELL UNIV	H V FREY	GSFC	B L ISACKS	NAG 5 11424	375
32	CORNELL UNIV	J A GRANT	GSFC	D L TURCOTTE	NAG 5 9492	374
32	CORNELL UNIV	J G GRANT	GSFC	S W SQUYRES	NAG 5 4205	373
32	CORNELL UNIV	J GRANT	GSFC	B CAMPBELL	NAG 5 9034	374
32	CORNELL UNIV	J SPANN	GSFC	P M KINTNER	NAG 5 12089	376
32	CORNELL UNIV	M MELLOTT	GSFC	D L HYSELL	NAG 5 12164	376
32	CORNELL UNIV	M MELLOTT	GSFC	C E SEYLER	NAG 5 9199	374
32	CORNELL UNIV	P G ROGERS	GSFC	J VEVERKA	NAG 5 3626	373
32	CORNELL UNIV	P G ROGERS	GSFC	P HELFENSTEIN	NAG 5 3639	373
32	CORNELL UNIV	P ROGERS	GSFC	D A BURNS	NAG 5 3910	373
32	CORNELL UNIV	P ROGERS	GSFC	D F BELL	NAG 5 4333	373
32	DARTMOUTH COLL	H V FREY	GSFC	G BRAKENRIDGE	NAG 5 10953	341
32	DARTMOUTH COLL	H V FREY	GSFC	G BRAKENRIDGE	NAG 5 12325	341
32	DARTMOUTH COLL	J SHARBER	GSFC	R E DENTON	NAG 5 11825	341
32	EAST CAROLINA UNIV	R MILLER	SSC	D CORBETT	NAG13 02034	391
32	FLA INTERNATIONAL UNIV	G BYRNE	JSC	J GEBELEIN	NAG 9 1404	161
32	FLORIDA STATE UNIV	H V FREY	GSFC	J C CAIN	NAG 5 7577	165
32	GEORGE WASHINGTON UNIV	M MELLOTT	GSFC	G M KEATING	NAG 5 11834	151
32	GEORGIA SOUTHERN UNIV	D SENSKE	GSFC	M S KELLEY	NAG 5 11540	187
32	HAMPTON UNIV	M MELLOTT	GSFC	S M BAILEY	NAG 5 9171	508
32	HARVARD UNIV	H V FREY	GSFC	J BLOXHAM	NAG 5 7616	281
32	HARVARD UNIV	M MEYER	GSFC	D H KNOLL	NAG 5 3645	281
32	HOWARD UNIV	J L HARRINGTON	GSFC	D N THORPE	NCC 5 656	154
32	INDIANA UNIV - BLOOMINGTON	H V FREY	GSFC	M W HAMBURGER	NAG 5 7619	213
32	IOWA STATE UNIV	E T ENGMAN	GSFC	W J GUTOWSKI	NAG 5 7561	221
32	JOHNS HOPKINS UNIV	H V FREY	GSFC	R K RANEY	NAG 5 9296	243
32	JOHNS HOPKINS UNIV	J SPAN	GSFC	A LUI	NAG 5 10475	245

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
32	JOHNS HOPKINS UNIV	J SPANN	GSFC	D G SIBECK	NAG 5 10479	245
32	JOHNS HOPKINS UNIV	M MELLOTT	GSFC	J CARBARY	NAG 5 9240	243
32	LOUISIANA STATE UNIV - BATON ROUGE	H FREY	GSFC	O HUH	NAG 5 9245	231
32	MASSACHUSETTS INST OF TECH	D G SENSKE	GSFC	J WISDOM	NAG 5 3915	287
32	MASSACHUSETTS INST OF TECH	D SENSKE	GSFC	M T ZUBER	NAG 5 11650	292
32	MASSACHUSETTS INST OF TECH	E ENGMAN	GSFC	R BRASS	NAG 5 7475	288
32	MASSACHUSETTS INST OF TECH	E KREINS	GSFC	D H STACLIN	NAS 5 31376	294
32	MASSACHUSETTS INST OF TECH	H BRINTON	GSFC	D R ZUBER	NAG 5 4555	287
32	MASSACHUSETTS INST OF TECH	H V FREY	GSFC	A E NIELL	NAG 5 6063	288
32	MASSACHUSETTS INST OF TECH	H V FREY	GSFC	R E REILINGER	NAG 5 9057	289
32	MASSACHUSETTS INST OF TECH	H V FREY	GSFC	M T ZURBER	NAG 5 9143	290
32	MASSACHUSETTS INST OF TECH	H V FREY	GSFC	K X WHIPPLE	NAG 5 10389	291
32	MASSACHUSETTS INST OF TECH	H V FREY	GSFC	R L BRAS	NAG 5 10684	291
32	MASSACHUSETTS INST OF TECH	J G GRANT	GSFC	D G FORD	NAG 5 4047	287
32	MICHIGAN TECHNOLOGICAL UNIV	B CAMPBELL	GSFC	D FTACLAS	NAG 5 6310	306
32	MICHIGAN TECHNOLOGICAL UNIV	H V FREY	GSFC	G J BLUTH	NAG 5 7576	307
32	MICHIGAN TECHNOLOGICAL UNIV	M S BURRELL	GSFC	W I ROSE	NGT 5 76	307
32	MORGAN STATE UNIV	P TAYLOR	GSFC	E C HAMMOND	NAG 5 11229	253
32	NORTHWESTERN UNIV	H V FREY	GSFC	S STEIN	NAG 5 10306	200
32	OHIO STATE UNIV	H V FREY	GSFC	C K SHUM	NAG 5 7574	411
32	OHIO STATE UNIV	P TAYLOR	GSFC	R R VON FRESE	NAG 5 9883	412
32	OHIO STATE UNIV	B DAVIS	SSC	K BOYER	NAG13 00039	414
32	OHIO UNIV	H V FREY	GSFC	R R VON FRESE	NAG 5 7645	415
32	OREGON STATE UNIV	H V FREY	GSFC	C GOLDFINGER	NAG 5 11404	429
32	PENN STATE UNIV. - UNIV. PARK	E T ENGMAN	GSFC	J L EVANS	NAG 5 7547	441
32	PENN STATE UNIV. - UNIV. PARK	H V FREY	GSFC	D W BURBANK	NAG 5 9039	442
32	PENN STATE UNIV. - UNIV. PARK	M MELLOTT	GSFC	V PASKO	NAG 5 11832	444
32	PENN STATE UNIV. - UNIV. PARK	M S BURRELL	GSFC	R B ALLEY	NGT 5 118	447
32	POMONA COLL	J BOYCE	GSFC	E GROSFILS	NAG 5 9618	53
32	PRINCETON UNIV	C D PETERS-LIDARD	GSFC	E WOOD	NAG 5 11884	351
32	PRINCETON UNIV	E T ENGMAN	GSFC	J A SMITH	NAG 5 7544	349
32	PURDUE UNIV	J ARNOLD	MSFC	R OGLESBY	NAG 8 1515	217
32	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	E T ENGMAN	GSFC	D ROBINSON	NAG 5 7564	354
32	SAN JOSE STATE UNIV	H L D'ANTONI	ARC	P MESSINA	NCC 2 5402	57
32	SAN JOSE STATE UNIV	J GRANT	GSFC	D A MAROUF	NAG 5 4372	55
32	SOUTHERN ILLINOIS UNIV - CARBONDALE	H V FREY	GSFC	D RAVAT	NAG 5 7662	202
32	SOUTHERN ILLINOIS UNIV - CARBONDALE	P T TAYLOR	GSFC	D RAVAT	NAG 5 7771	202
32	SOUTHERN ILLINOIS UNIV - CARBONDALE	P TAYLOR	GSFC	D RAVAT	NAG 5 9832	203
32	SOUTHERN METHODIST UNIV	D A SENSKE	GSFC	V L HANSEN	NAG 5 9142	475
32	SOUTHERN METHODIST UNIV	J GRANT	GSFC	D L HANSEN	NAG 5 4562	475
32	STANFORD UNIV	D J DES MARAIS	ARC	D R LOWE	NCC 2 721	64
32	STANFORD UNIV	H V FREY	GSFC	H ZEBKER	NAG 5 3441	60
32	STANFORD UNIV	H V FREY	GSFC	H A ZEBKER	NAG 5 6148	60
32	STANFORD UNIV	H V FREY	GSFC	P SEGALL	NAG 5 6167	60
32	STANFORD UNIV	H V FREY	GSFC	H A ZEBKER	NAG 5 9040	61
32	STANFORD UNIV	M MELLOTT	GSFC	U S INAN	NAG 5 11821	63
32	STANFORD UNIV	P G ROGERS	GSFC	G TYLER	NAG 5 3906	60
32	STATE UNIV OF NY - ALBANY	H V FREY	GSFC	H MASSONE	NAG 5 9690	383
32	STATE UNIV OF NY - BINGHAMTON	H FREY	GSFC	S DICKMAN	NAG 5 9069	383
32	STATE UNIV OF NY - BUFFALO	J A GRANT	GSFC	T GREGG	NAG 5 9390	384
32	STATE UNIV OF NY - STONY BROOK	H V FREY	GSFC	W E HOLT	NAG 5 9053	385
32	STATE UNIV OF NY COLL	H V FREY	GSFC	M F SHERIDAN	NAG 5 7579	388
32	STATE UNIV OF NY COLL	H V FREY	GSFC	M BURSIK	NAG 5 7581	388
32	STATE UNIV OF NY COLL	H V FREY	GSFC	M I BURSIK	NAG 5 10648	388
32	STATE UNIV OF NY COLL	J G GRANT	GSFC	GREGG	NAG 5 4544	387
32	THE AMERICAN UNIV	P TAYLOR	GSFC	J KUTINA	NAG 5 10027	154
32	UNIV NACIONAL DE SAN AGUSTIN - AREQUIPA	D L CARTER	GSFC	N APPLICABLE	NAS 5 99121	553
32	UNIV OF ALABAMA - HUNTSVILLE	M MELLOTT	GSFC	P RICHARDS	NAG 5 9200	9
32	UNIV OF ALASKA - FAIRBANKS	H V FREY	GSFC	J T FREYMUELLER	NAG 5 7659	17
32	UNIV OF ALBUQUERQUE	E K STANSBERY	JSC	C B AGEE	NAG 9 1439	361
32	UNIV OF ALBUQUERQUE	E K STANSBERY	JSC	C B AGEE	NAG 9 1449	361
32	UNIV OF ARIZONA	D BOGAN	GSFC	J I LUNINE	NAG 5 8949	29
32	UNIV OF ARIZONA	D SENSKE	GSFC	E TURTLE	NAG 5 10166	31
32	UNIV OF ARIZONA	D SENSKE	GSFC	R GREENBERG	NAG 5 10167	31
32	UNIV OF ARIZONA	D SENSKE	GSFC	J I LUNINE	NAG 5 10294	31
32	UNIV OF ARIZONA	D SENSKE	GSFC	D KRING	NAG 5 10332	31

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
32	UNIV OF ARIZONA	D SENSKE	GSFC	R MALHOTRA	NAG 5 10346	31
32	UNIV OF ARIZONA	D SENSKE	GSFC	H J MELOSH	NAG 5 11493	34
32	UNIV OF ARIZONA	E ENGMAN	GSFC	W SHUTTLEWORTH	NAG 5 7554	27
32	UNIV OF ARIZONA	H V FREY	GSFC	V R BAKER	NAG 5 9293	30
32	UNIV OF ARIZONA	J GRANT	GSFC	L KESZTHELYI	NAG 5 9176	29
32	UNIV OF ARIZONA	M S BURRELL	GSFC	A S MCEWEN	NGT 5 114	38
32	UNIV OF ARIZONA	P G ROGERS	GSFC	R GREENBERG	NAG 5 3631	25
32	UNIV OF ARIZONA	P G ROGERS	GSFC	R G STROM	NAG 5 3914	25
32	UNIV OF ARIZONA	P ROGERS	GSFC	D H BROWN	NAG 5 3796	25
32	UNIV OF ARIZONA	P ROGERS	GSFC	H MELOSH	NAG 5 6543	26
32	UNIV OF ARIZONA	T MORGAN	GSFC	S LARSON	NAG 5 10543	32
32	UNIV OF CALIFORNIA - BERKELEY	C MCKAY	ARC	R G AMUNDSON	NGT 2 52290	77
32	UNIV OF CALIFORNIA - BERKELEY	H V FREY	GSFC	R BURGMANN	NAG 5 7580	70
32	UNIV OF CALIFORNIA - BERKELEY	H V FREY	GSFC	W E DIETRICH	NAG 5 9629	72
32	UNIV OF CALIFORNIA - BERKELEY	P TAYLOR	GSFC	M RICHARDS	NAG 5 9864	72
32	UNIV OF CALIFORNIA - DAVIS	R MCKELLIP	SSC	K W TATE	NAG13 99023	81
32	UNIV OF CALIFORNIA - LOS ANGELES	C P MCKAY	ARC	D A PAIGE	NGT 2 52289	94
32	UNIV OF CALIFORNIA - LOS ANGELES	E T ENGMAN	GSFC	L C SMITH	NAG 5 7555	87
32	UNIV OF CALIFORNIA - LOS ANGELES	E T ENGMAN	GSFC	Y XUE	NAG 5 9014	89
32	UNIV OF CALIFORNIA - LOS ANGELES	H V FREY	GSFC	D E ALSDORF	NAG 5 10685	91
32	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	M EL-ALAOUI	NAG 5 9255	89
32	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	P L PRITCHETT	NAG 5 11823	92
32	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	K K KHURANA	NAG 5 11859	92
32	UNIV OF CALIFORNIA - LOS ANGELES	J SPANN	GSFC	D SCHRIVER	NAG 5 10473	90
32	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	R M THORNE	NAG 5 11826	92
32	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	L R LYONS	NAG 5 11858	92
32	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	R L MCPHERRON	NAG 5 11898	92
32	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	R M THORNE	NAG 5 11922	92
32	UNIV OF CALIFORNIA - LOS ANGELES	M MELLOTT	GSFC	M ASHOUR-ABDALLA	NAG 5 11923	92
32	UNIV OF CALIFORNIA - LOS ANGELES	M MEYER	GSFC	D F KERRIDGE	NAG 5 8470	88
32	UNIV OF CALIFORNIA - LOS ANGELES	P G ROGERS	GSFC	G SCHUBERT	NAG 5 3863	87
32	UNIV OF CALIFORNIA - LOS ANGELES	P G ROGERS	GSFC	W M KAULA	NAG 5 3956	87
32	UNIV OF CALIFORNIA - LOS ANGELES	W ABDALATI	GSFC	G PELTZER	NAG 5 11102	91
32	UNIV OF CALIFORNIA - SAN DIEGO	B BILLS	GSFC	J A ORCUTT	NAG 5 11682	101
32	UNIV OF CALIFORNIA - SAN DIEGO	B CAMPBELL	GSFC	P L BADA	NAG 5 4938	96
32	UNIV OF CALIFORNIA - SAN DIEGO	D SENSKE	GSFC	C L JOHNSON	NAG 5 11563	101
32	UNIV OF CALIFORNIA - SAN DIEGO	D SENSKE	GSFC	C L JOHNSON	NAG 5 12281	102
32	UNIV OF CALIFORNIA - SAN DIEGO	H B FREY	GSFC	R L PARKER	NAG 5 7612	98
32	UNIV OF CALIFORNIA - SAN DIEGO	H V FREY	GSFC	D C AGNEW	NAG 5 6149	97
32	UNIV OF CALIFORNIA - SAN DIEGO	H V FREY	GSFC	C G CONSTABLE	NAG 5 7614	98
32	UNIV OF CALIFORNIA - SAN DIEGO	H V FREY	GSFC	D T SANDWELL	NAG 5 9623	99
32	UNIV OF CALIFORNIA - SAN DIEGO	H V FREY	GSFC	D C AGNEW	NCC 5 230	104
32	UNIV OF CALIFORNIA - SAN DIEGO	J SHARBER	GSFC	K B QUEST	NAG 5 11824	101
32	UNIV OF CALIFORNIA - SANTA BARBARA	D G SENSKE	GSFC	S J PEALE	NAG 5 3646	106
32	UNIV OF CALIFORNIA - SANTA BARBARA	H V FREY	GSFC	D E ALSDORF	NAG 5 9055	107
32	UNIV OF CALIFORNIA - SANTA BARBARA	H V FREY	GSFC	L K MERTES	NAG 5 9811	107
32	UNIV OF CALIFORNIA - SANTA BARBARA	H V FREY	GSFC	D W BURBANK	NAG 5 10520	108
32	UNIV OF CALIFORNIA - SANTA BARBARA	T BRAKKE	GSFC	D DOZLER	NAG 5 31710	109
32	UNIV OF CALIFORNIA - SANTA BARBARA	R MCKELLIP	JSC	O CHADWICK	NAG13 99025	109
32	UNIV OF CALIFORNIA - SANTA CRUZ	D SENSKE	GSFC	E ASPHAUG	NAG 5 10676	112
32	UNIV OF CALIFORNIA - SANTA CRUZ	D SENSKE	GSFC	D KORYCANSKY	NAG 5 11521	112
32	UNIV OF CINCINNATI	C T RAMOS	GRC	R BECK	NCC 3 981	419
32	UNIV OF COLORADO - BOULDER	C P MCKAY	ARC	B TOON	NGT 2 52279	139
32	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	M T MELLON	NAG 5 10155	130
32	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	B JAKOSKY	NAG 5 10413	131
32	UNIV OF COLORADO - BOULDER	E T ENGMAN	GSFC	A FREI	NAG 5 7543	126
32	UNIV OF COLORADO - BOULDER	H V FREY	GSFC	J M WAHR	NAG 5 7703	126
32	UNIV OF COLORADO - BOULDER	H V FREY	GSFC	J B RUNDLE	NAG 5 9448	129
32	UNIV OF COLORADO - BOULDER	H V FREY	GSFC	R G BILHAM	NAG 5 10418	131
32	UNIV OF COLORADO - BOULDER	H V FREY	GSFC	V GUPTA	NAG 5 10954	132
32	UNIV OF COLORADO - BOULDER	H V FREY	GSFC	S R NEREM	NAG 5 11192	133
32	UNIV OF COLORADO - BOULDER	J A GRANT	GSFC	R E GRIMM	NAG 5 9491	129
32	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	A R HENDRIX	NAG 5 9590	130
32	UNIV OF COLORADO - BOULDER	J GRANT	GSFC	M T MELLON	NAG 5 8910	128
32	UNIV OF COLORADO - BOULDER	J SCHARBER	GSFC	S SOLOMON	NAG 5 9201	129
32	UNIV OF COLORADO - BOULDER	J SHARBER	GSFC	M HORANYI	NAG 5 9172	129

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
32	UNIV OF COLORADO - BOULDER	J SPANN	GSFC	X LI	NAG 5 10474	131
32	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	J SU	NAG 5 11924	136
32	UNIV OF COLORADO - BOULDER	M WEI	GSFC	J MENNIS	NAG 5 12598	137
32	UNIV OF DELAWARE	D SENSKE	GSFC	B P GLASS	NAG 5 11522	149
32	UNIV OF FLORIDA	P ROGERS	HQ	D F DERMOTT	NAG 5 4531	171
32	UNIV OF GEORGIA	E T ENGMAN	GSFC	T L MOTE	NAG 5 8469	189
32	UNIV OF HAWAII AT MANOA - HONOLULU	D SENSKE	GSFC	P G LUCEY	NAG 5 11516	195
32	UNIV OF HAWAII AT MANOA - HONOLULU	H V FREY	GSFC	P J MOUGINIS-MARK	NAG 5 7578	191
32	UNIV OF HAWAII AT MANOA - HONOLULU	H V FREY	GSFC	P J MOUGINIS-MARK	NAG 5 9038	193
32	UNIV OF HAWAII AT MANOA - HONOLULU	J GRANT	GSFC	S K ROWLAND	NAG 5 7963	191
32	UNIV OF HAWAII AT MANOA - HONOLULU	J GRANT	GSFC	B HAWKE	NAG 5 8903	192
32	UNIV OF HAWAII AT MANOA - HONOLULU	P G ROGERS	GSFC	P G LUCEY	NAG 5 3766	190
32	UNIV OF HAWAII AT MANOA - HONOLULU	P G ROGERS	GSFC	E R HAWKE	NAG 5 3875	190
32	UNIV OF HAWAII AT MANOA - HONOLULU	P G ROGERS	GSFC	F P FANALE	NAG 5 4150	190
32	UNIV OF HAWAII AT MANOA - HONOLULU	P ROGERS	GSFC	T OWEN	NAG 5 6829	191
32	UNIV OF HAWAII AT MANOA - HONOLULU	R H THOMAS	GSFC	P MOUGINIS-MARK	NAG 5 4257	190
32	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	D JEWITT	NAG 5 11445	195
32	UNIV OF HOUSTON - DOWNTOWN	E K GIBSON	JSC	P A MORRIS-SMITH	NAG 9 1113	487
32	UNIV OF HOUSTON - DOWNTOWN	E K GIBSON	JSC	P A MORRIS-SMITH	NAG 9 1114	487
32	UNIV OF IDAHO - MOSCOW	D SENSKE	GSFC	S KATTENHORN	NAG 5 11495	198
32	UNIV OF IOWA	M MELLOTT	GSFC	C A KLETZING	NAG 5 11867	224
32	UNIV OF KANSAS	R MCKALLIP	SSC	M JAKUBAUSKAS	NAG13 99019	227
32	UNIV OF MARYLAND - COLL PARK	B F CHAO	GSFC	M HOFTON	NAG 5 11654	264
32	UNIV OF MARYLAND - COLL PARK	H V FREY	GSFC	G SUN	NAG 5 10388	262
32	UNIV OF MARYLAND - COLL PARK	H V FREY	GSFC	C M BIRKETT	NAG 5 11700	264
32	UNIV OF MARYLAND - COLL PARK	S B LUTHCKE	GSFC	M HOFTON	NAG 5 12112	265
32	UNIV OF MARYLAND BALTIMORE COUNTY	H V FREY	GSFC	E C PAVLIS	NAG 5 9054	272
32	UNIV OF MARYLAND BALTIMORE COUNTY	H V FREY	GSFC	M H BULMER	NAG 5 12199	274
32	UNIV OF MASSACHUSETTS - AMHERST	H V FREY	GSFC	C C DUNCAN	NAG 5 10649	300
32	UNIV OF MASSACHUSETTS - AMHERST	P ROGERS	GSFC	D E MCGILL	NAG 5 4373	299
32	UNIV OF MASSACHUSETTS - AMHERST	P ROGERS	GSFC	G MCGILL	NAG 5 4999	299
32	UNIV OF MEMPHIS	H V FREY	GSFC	M ELLIS	NAG 5 7617	465
32	UNIV OF MIAMI	H V FREY	GSFC	T H DIXON	NAG 5 9066	174
32	UNIV OF MIAMI	H V FREY	GSFC	T H DIXON	NAG 5 9068	174
32	UNIV OF MICHIGAN - ANN ARBOR	H V FREY	GSFC	K SARABANDI	NAG 5 8930	310
32	UNIV OF MICHIGAN - ANN ARBOR	H V FREY	GSFC	C DOBSON	NAG 5 11406	312
32	UNIV OF MICHIGAN - ANN ARBOR	M MELLOTT	GSFC	J U KOZYRA	NAG 5 11831	313
32	UNIV OF MINN	D SENKE	GSFC	D L KOHLSTEDT	NAG 5 10509	320
32	UNIV OF MINN	E T ENGMAN	GSFC	M PERSON	NAG 5 7599	319
32	UNIV OF MINN	J SHARBER	GSFC	N LIN	NAG 5 11856	321
32	UNIV OF MINN	J SHARBER	GSFC	R L LYSAK	NAG 5 11868	321
32	UNIV OF MINN	M MELLOTT	GSFC	R LYSAK	NAG 5 9254	320
32	UNIV OF MINN	J ARNOLD	MSFC	E FOUFOULA-GEORGIOU	NAG 8 1519	321
32	UNIV OF MINN	C HILL	SSC	M E BAUER	NAG13 99002	321
32	UNIV OF MISSISSIPPI - MEDICAL CTR	H V FREY	GSFC	J K JOHNSON	NAG 5 7671	325
32	UNIV OF MISSISSIPPI - UNIV	N SOVIK	SSC	G EASSON	NAG13 00037	325
32	UNIV OF MISSOURI - COLUMBIA	H V FREY	GSFC	M LIU	NAG 5 9145	326
32	U OF MONT	E K GIBSON	JSC	N C HINMAN	NAG 9 1112	336
32	UNIV OF NEBRASKA - LINCOLN	F HORZZ	JSC	D R ALEXANDER	NAG 9 1310	337
32	UNIV. OF NEVADA - DESERT RES. INST	D SENSKE	GSFC	G M MARION	NAG 5 10445	338
32	UNIV OF NEVADA - RENO	D A SENSKE	GSFC	R A SCHULTZ	NAG 5 10926	339
32	UNIV OF NEVADA - RENO	D A SENSKE	GSFC	R A SCHULTZ	NAG 5 11447	339
32	UNIV OF NEVADA - RENO	D SENKE	GSFC	W CALVIN	NAG 5 10290	339
32	UNIV OF NEVADA - RENO	D SENSKE	GSFC	W CALVIN	NAG 5 11491	339
32	UNIV OF NEVADA - RENO	J A GRANT	GSFC	W CALVIN	NAG 5 9298	339
32	UNIV OF NEVADA - RENO	J A GRANT	GSFC	G M MARION	NAG 5 9467	339
32	UNIV OF NEW HAMPSHIRE - DURHAM	J SPANN	GSFC	K LYNCH	NAG 5 10472	344
32	UNIV OF NEW HAMPSHIRE - DURHAM	M MELLOTT	GSFC	R L KAUFMANN	NAG 5 11820	345
32	UNIV OF NEW MEXICO-ALBUQUERQUE	D SENSKE	GSFC	H NEWSOM	NAG 5 8804	362
32	UNIV OF NEW MEXICO-ALBUQUERQUE	D SENSKE	GSFC	H E NEWSOM	NAG 5 11496	363
32	UNIV OF NEW MEXICO-ALBUQUERQUE	E K GIBSON	JSC	J J PAPIKE	NAG 9 1111	364
32	UNIV OF NEW MEXICO-ALBUQUERQUE	J H JONES	JSC	C D HERD	NGT 9 31	364
32	UNIV OF PITTSBURGH	D SENSKE	GSFC	B W HAPKE	NAG 5 10222	451
32	UNIV OF PITTSBURGH	H V FREY	GSFC	M S RAMSEY	NAG 5 9438	450
32	UNIV OF PITTSBURGH	H V FREY	GSFC	M S RAMSEY	NAG 5 9439	450
32	UNIV OF PITTSBURGH	J A GRANT	GSFC	D A CROWN	NAG 5 9466	451

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
32	UNIV OF PITTSBURGH	M S BURRELL	GSFC	D A CROWN	NGT 5 125	451
32	UNIV OF PITTSBURGH	P G ROGERS	GSFC	S W HAPKE	NAG 5 3723	450
32	UNIV OF PUERTO RICO - MAYAGUEZ	H FREY	GSFC	G MATTIOLI	NAG 5 6031	550
32	UNIV OF TENNESSEE - KNOXVILLE	T L ROUSH, ARC	ARC	J E MOERSCH	NCC 2 1187	467
32	UNIV OF TEXAS - AUSTIN	F HERBERT	GSFC	B TAPLEY	NAG 5 9163	490
32	UNIV OF TEXAS - AUSTIN	H V FREY	GSFC	R R EM	NAG 5 5171	489
32	UNIV OF TEXAS - AUSTIN	H V FREY	GSFC	J G PAINE	NAG 5 7582	489
32	UNIV OF TEXAS - AUSTIN	H V FREY	GSFC	J C GIBEAUT	NAG 5 7660	489
32	UNIV OF TEXAS - AUSTIN	H V FREY	GSFC	J C CARTER	NAG 5 7693	489
32	UNIV OF TEXAS - AUSTIN	H V FREY	GSFC	C R WILSON	NAG 5 8798	489
32	UNIV OF TEXAS - AUSTIN	B DAVIS	SSC	B TAPLEY	NAG13 02049	492
32	UNIV OF TEXAS - EL PASO	D MENCHAN	GSFC	D SCHULZ-MAKUCH	NAG 5 9542	495
32	UNIV OF TEXAS - EL PASO	J SPANN	GSFC	R LOPEZ	NAG 5 10507	495
32	UNIV OF UTAH	E LINDSTROM	GSFC	R L BRUHN	NAG 5 10136	498
32	UNIV OF VIRGINIA	D SENSKE	GSFC	R E JOHNSON	NAG 5 10173	520
32	UNIV OF VIRGINIA	J G GRANT	GSFC	A D HOWARD	NAG 5 3931	518
32	UNIV OF VIRGINIA	P G ROGERS	GSFC	R E JOHNSON	NAG 5 3633	518
32	UNIV OF VIRGINIA	P ROGERS	GSFC	D A BARAGIOLA	NAG 5 4332	518
32	UNIV OF WASHINGTON	D SENSKE	GSFC	D CATLING	NAG 5 11499	534
32	UNIV OF WASHINGTON	E T ENGMAN	GSFC	L TSANG	NAG 5 7495	530
32	UNIV OF WASHINGTON	E T ENGMAN	GSFC	W J PLANT	NAG 5 7550	530
32	UNIV OF WASHINGTON	H FREY	GSFC	D LETTENMAIER	NAG 5 6505	530
32	UNIV OF WASHINGTON	H V FREY	GSFC	A GILLESPIE	NAG 5 6067	530
32	UNIV OF WASHINGTON	H V FREY	GSFC	D R MONTGOMERY	NAG 5 10342	533
32	UNIV OF WISCONSIN - MADISON	H V FREY	GSFC	P MENZEL	NAG 5 9688	544
32	UTAH STATE UNIV	E T ENGMAN	GSFC	D G TARBOTON	NAG 5 7597	500
32	WASHINGTON STATE UNIV	D SENSKE	GSFC	D HUDSON	NAG 5 10462	538
32	WASHINGTON STATE UNIV	J G GRANT	GSFC	D HUDSON	NAG 5 4035	538
32	WASHINGTON UNIV - ST. LOUIS	B CAMPBELL	GSFC	D FEGLEY	NAG 5 6125	330
32	WASHINGTON UNIV - ST. LOUIS	D SENSKE	GSFC	R E ARVIDSON	NAG 5 10190	331
32	WASHINGTON UNIV - ST. LOUIS	D SENSKE	GSFC	W B MCKINNON	NAG 5 11517	332
32	WASHINGTON UNIV - ST. LOUIS	H V FREY	GSFC	R E ARVIDSON	NAG 5 7613	330
32	WASHINGTON UNIV - ST. LOUIS	J GRANT	GSFC	B L JOLLIFF	NAG 5 8905	331
32	WASHINGTON UNIV - ST. LOUIS	P G ROGERS	GSFC	W B MCKINNON	NAG 5 3657	329
32	WASHINGTON UNIV - ST. LOUIS	P ROGERS	GSFC	D J PHILLIPS	NAG 5 4448	329
32	WELLESLEY COLL	J G GRANT	GSFC	R G FRENCH	NAG 5 4046	302
33	CALIFORNIA INST OF TECH	S LONG	WFF	T WU	NAG 5 5338	42
33	CLEMSON UNIV - CLEMSON	L BLIVEN	WFF	J SAYLOR	NAG 5 5384	458
33	COLORADO STATE UNIV	S HAKKINEN	GSFC	C MATSUMOTO	NAG 5 12275	120
33	COLUMBIA UNIV	J A MARRA	GSFC	J A BISHOP	NAG 5 6450	368
33	DARTMOUTH COLL	C DEL CASTILLO	SSC	D R LYNCH	NAG13 00041	342
33	FLORIDA STATE UNIV	E LINDSTROM	GSFC	D NOF	NAG 5 10860	166
33	FLORIDA STATE UNIV	E LINDSTROM	GSFC	J J O'BRIEN	NAG 5 7254	165
33	FLORIDA STATE UNIV	M RIENECKER	GSFC	W WEWAR	NAG 5 8291	165
33	FLORIDA STATE UNIV	W ESAIAS	GSFC	R L IVERSON	NAG 5 7618	165
33	GEORGE MASON UNIV	M RIENECKER	GSFC	P S SCHOPF	NCC 5 522	506
33	JOHNS HOPKINS UNIV	S R LONG	GSFC	O PHILLIPS	NAG 5 5047	240
33	JOHNS HOPKINS UNIV	S R LONG	GSFC	E GROSS	NAG 5 5314	240
33	JOHNS HOPKINS UNIV	S J KATZBERG	LARC	M S ASHER	NAG 1 2257	238
33	JOHNS HOPKINS UNIV	R MILLER	SSC	D R THOMPSON	NAG13 00045	251
33	MASSACHUSETTS INST OF TECH	C TREES	GSFC	M FELLOWS	NAG 5 12490	293
33	MASSACHUSETTS INST OF TECH	E LINDSTROM	GSFC	P RIZZOLI	NAG 5 11746	292
33	MISSISSIPPI STATE UNIV	D POWE	SSC	L RITCHIE	NAS13 98033	324
33	NY UNIV	M RIENECKER	GSFC	R KLEEMAN	NAG 5 12427	379
33	NORTH CAROLINA STATE UNIV. - RALEIGH	C A TREES	GSFC	D KAMYKOWSKI	NAG 5 6586	396
33	OHIO STATE UNIV	W ABDALATI	GSFC	C V DER VEEN	NAG 5 10978	413
33	OHIO STATE UNIV	W ABDALATI	GSFC	K JEZEK	NAG 5 11383	413
33	OHIO STATE UNIV	W ABDALATI	GSFC	C K SHUM	NAG 5 12585	413
33	OLD DOMINION UNIV	J MARRA	GSFC	G F COTA	NAG 5 10528	513
33	OREGON STATE UNIV	M FLYNN	ARC	G P KLINKHAMMER	NCC 2 5515	430
33	OREGON STATE UNIV	M T FLYNN	ARC	G P KLINKHAMMER	NCC 2 5427	430
33	OREGON STATE UNIV	H OSEROFF	GSFC	M R ABBOTT	NAS 5 31360	430
33	OREGON STATE UNIV	J A MARRA	GSFC	M R ABBOTT	NAG 5 4947	427
33	OREGON STATE UNIV	J MARRA	GSFC	K S SHIFRIN	NAG 5 10623	428
33	OREGON STATE UNIV	J MARRA	GSFC	E BOSS	NAG 5 11148	429
33	OREGON STATE UNIV	R RAY	GSFC	G D EGBERT	NAG 5 9159	428

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
33	OREGON STATE UNIV	S HAKKINEN	GSFC	R P MATANO	NAG 5 12378	429
33	PRINCETON UNIV	C TREES	GSFC	J SARMIENTO	NAG 5 12544	351
33	PRINCETON UNIV	S HAKKINEN	GSFC	G PHILANDER	NAG 5 12387	351
33	SALISBURY STATE UNIV	T MOISAN	WFF	T JONES	NAG 5 5342	253
33	SAN DIEGO STATE UNIV	C R CRANE	GSFC	J L MUELLER	NAS 5 00199	54
33	SAN DIEGO STATE UNIV	C R MCCLAIN	GSFC	C C TREES	NAS 5 00202	54
33	STANFORD UNIV	J MARRA	GSFC	K ARRIGO	NAG 5 11264	62
33	STATE UNIV OF NY - STONY BROOK	E LINDSTROM	GSFC	D WALISER	NAG 5 11033	386
33	TEXAS A&M UNIV	E LINDSTROM	GSFC	W NOWLIN	NAG 5 10829	477
33	TEXAS A&M UNIV	W ABDALATI	GSFC	S STOESSEL	NAG 5 10641	477
33	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	C R MCCLAIN	GSFC	L W HARDING	NAS 5 00195	254
33	UNIV OF ARIZONA	C R MCCCLAIN	GSFC	J ZALEWSKI	NAS 5 00197	37
33	UNIV OF CALIFORNIA - IRVINE	S R LONG	GSFC	J N YANG	NAG 5 5149	84
33	UNIV OF CALIFORNIA - LOS ANGELES	C TREES	GSFC	N GRUBER	NAG 5 12528	93
33	UNIV OF CALIFORNIA - SAN DIEGO	C KOBLINSKY	GSFC	P P NIILER	NAG 5 8351	98
33	UNIV OF CALIFORNIA - SAN DIEGO	C R MCCAIN	GSFC	R FROUIN	NAS 5 00194	102
33	UNIV OF CALIFORNIA - SAN DIEGO	C R MCCLAIN	GSFC	B G MITCHELL	NAS 5 01002	103
33	UNIV OF CALIFORNIA - SAN DIEGO	E LINDSTROM	GSFC	W WHITE	NAG 5 7096	97
33	UNIV OF CALIFORNIA - SAN DIEGO	E LINDSTROM	GSFC	D STAMMER	NAG 5 11765	101
33	UNIV OF CALIFORNIA - SAN DIEGO	G A SOFFEN	GSFC	B G MITCHELL	NGT 5 106	104
33	UNIV OF CALIFORNIA - SAN DIEGO	J MARRA	GSFC	R KEELING	NAG 5 10737	100
33	UNIV OF CALIFORNIA - SAN DIEGO	S HAKKINEN	GSFC	S G LLEWELLYN SMITH	NAG 5 12388	102
33	UNIV OF CALIFORNIA - SAN DIEGO	S LONG	WFF	D HUANG	NAG 5 5386	97
33	UNIV OF CALIFORNIA - SANTA BARBARA	C R MCCLAIN	GSFC	S MARITORENA	NAS 5 00196	109
33	UNIV OF CALIFORNIA - SANTA BARBARA	C R MCCLAIN	GSFC	D A SIEGEL	NAS 5 00200	109
33	UNIV OF CALIFORNIA - SANTA BARBARA	C R MCCLAIN	GSFC	D A SIEGEL	NAS 5 00201	109
33	UNIV OF CALIFORNIA - SANTA BARBARA	H OSEROFF	GSFC	Z WAN	NAS 5 31370	109
33	UNIV OF CALIFORNIA - SANTA CRUZ	W ABDALATI	GSFC	S TULACZYK	NAG 5 12574	113
33	UNIV OF DELAWARE	S K RUNCO	JSC	V KLEMAS	NAG 9 989	150
33	UNIV OF KANSAS	W ABDALATI	GSFC	P KANAGARATNAM	NAG 5 12588	227
33	UNIV OF MAINE - ORONO	J MARRA	GSFC	A THOMAS	NAG 5 10620	236
33	UNIV OF MARYLAND - COLL PARK	C R MCCLAIN	GSFC	A SUBRAMANIAM	NAS 5 00192	267
33	UNIV OF MARYLAND - COLL PARK	E LINDSTROM	GSFC	R WAJSOWICZ	NAG 5 3960	255
33	UNIV OF MARYLAND - COLL PARK	E LINDSTROM	GSFC	R MURTUGUDDE	NAG 5 10981	263
33	UNIV OF MARYLAND - COLL PARK	M RIENECKER	GSFC	R WAJSOWICZ	NAG 5 11291	264
33	UNIV OF MARYLAND - COLL PARK	S HAKKINEN	GSFC	R MURTUGUDDE	NAG 5 12376	266
33	UNIV OF MARYLAND - COLL PARK	G FLETCHERT	SSC	A SUBRAMANIAM	NAG13 02009	267
33	UNIV OF MARYLAND BALTIMORE COUNTY	C R MCCLAIN	GSFC	M WANG	NAS 5 00203	275
33	UNIV OF MIAMI	E LINDSTROM	GSFC	H GRABER	NAG 5 11864	175
33	UNIV OF MIAMI	H OSEROFF	GSFC	O B BROWN	NAS 5 31361	175
33	UNIV OF MIAMI	J DODGE	GSFC	R EVANS	NAG 5 10588	175
33	UNIV OF PUERTO RICO - MAYAGUEZ	C W WRIGHT	WFF	E WEIL	NAG 5 5302	550
33	UNIV OF PUGET SOUND	W ABDALATI	GSFC	A THORNDIKE	NAG 5 11836	528
33	UNIV OF RHODE ISLAND	J MARRA	GSFC	J YODER	NAG 5 10555	457
33	UNIV OF RHODE ISLAND	M MAIDEN	GSFC	P CORNILLON	NCC 5 307	457
33	UNIV OF SOUTH FLORIDA	G S HAYNE	GSFC	G T MITCHUM	NAG 5 5202	176
33	UNIV OF SOUTH FLORIDA	J MARRA	GSFC	C CHU	NAG 5 10738	176
33	UNIV OF SOUTH FLORIDA	J YODER	GSFC	P COBLE	NAG 5 6301	176
33	UNIV OF SOUTHERN MISSISSIPPI	J MARRA	GSFC	S E LOHRENZ	NAG 5 9770	325
33	UNIV OF WASHINGTON	A ANDERSON	GSFC	D L HARTMANN	NAG 5 10624	533
33	UNIV OF WASHINGTON	J A CURRAN	GSFC	D HARTMANN	NAG 5 6101	530
33	UNIV OF WASHINGTON	J MARRA	GSFC	S RISER	NAG 5 11079	534
33	UTAH STATE UNIV	M FLYNN	ARC	L POWERS	NCC 2 5514	501
33	WEST VIRGINIA UNIV	B R LONG	WFF	Y XU	NAG 5 5364	540
33	WOODS HOLE OCEANOGRAPHIC INST	C R MCCLAIN	GSFC	J R MORRISON	NAS 5 00198	303
33	WOODS HOLE OCEANOGRAPHIC INST	C TREES	GSFC	S C DONEY	NAG 5 12488	303
33	WOODS HOLE OCEANOGRAPHIC INST	J COMISO	GSFC	J YANG	NAG 5 7348	302
33	WOODS HOLE OCEANOGRAPHIC INST	J MARRA	GSFC	D M GLOVER	NAG 5 9858	302
33	WOODS HOLE OCEANOGRAPHIC INST	M RIENECKER	GSFC	L YU	NCC 5 441	303
39	ALABAMA A&M UNIV	R HOOVER	MSFC	M G TADROS	NAG 8 1624	2
39	ALABAMA A&M UNIV	S NASH-STEVENSON	MSFC	W MCALLISTER	NGT 8 52918	3
39	ARIZONA STATE UNIV	D ANDERSON	GSFC	P BUSECK	NAG 5 11552	21
39	ARIZONA STATE UNIV	H BLODGET	GSFC	P CHRISTENSEN	NAS 5 31371	22
39	ARIZONA STATE UNIV	M WEI	GSFC	J R ARROWSMITH	NGT 5 30221	23
39	AUBURN UNIV	D DEERING	GSFC	K MCNABB	NCC 5 333	4
39	AUBURN UNIV	J R ARNOLD	MSFC	U HATCH	NCC 8 151	4

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	BOISE STATE UNIV	E ENGMAN	GSFC	P DAWSON	NAG 5 7537	197
39	BOSTON UNIV	D E WICKLAND	GSFC	X LI	NAG 5 7217	276
39	BOSTON UNIV	D E WICKLAND	GSFC	M FRIEDL	NAG 5 7218	276
39	BOSTON UNIV	D L WILLIAMS	GSFC	C WOODCOCK	NAG 5 3439	276
39	BOSTON UNIV	D WICKLAND	GSFC	C SCHAAF	NAG 5 11263	278
39	BOSTON UNIV	DODGE	GSFC	R MYNENI	NAG 5 9547	277
39	BOSTON UNIV	E T ENGMAN	GSFC	M A FRIEDL	NAG 5 8584	277
39	BOSTON UNIV	G C GUTMAN	GSFC	D K KAUFMANN	NAG 5 6214	276
39	BOSTON UNIV	G GUTMAN	GSFC	G SALVUCCI	NAG 5 11338	278
39	BOSTON UNIV	M WEI	GSFC	R MYNENI	NGT 5 30223	279
39	BOSTON UNIV	P R HOUSER	GSFC	G D SALVUCCI	NAG 5 11695	278
39	BOWIE STATE UNIV	E MIDDLETON	GSFC	W T LAWRENCE	NCC 5 507	238
39	BOWIE STATE UNIV	M L IMHOFF	GSFC	W LAWRENCE	NAG 5 6476	237
39	BOWIE STATE UNIV	M L IMHOFF	GSFC	W LAWRENCE	NAG 5 7669	237
39	BOWIE STATE UNIV	M L IMHOFF	GSFC	W LAWRENCE	NAG 5 10034	237
39	BOWIE STATE UNIV	M L IMHOFF	GSFC	W LAWRENCE	NAG 5 11450	237
39	BOWLING GREEN STATE UNIV	T M SCOTT	GRC	D K VINCENT	NAG 3 2443	400
39	BRANDEIS UNIV	C W LLOYD	JSC	J R LACKNER	NAG 9 1263	279
39	BRIGHAM YOUNG UNIV	E LINDSTROM	GSFC	D LONG	NAG 5 8746	497
39	BRIGHAM YOUNG UNIV	J DODGE	GSFC	D LONG	NAG 5 9625	497
39	BROWN UNIV	G GUTMAN	GSFC	J F MUSTARD	NAG 5 11145	454
39	BROWN UNIV	S G UNGAR	GSFC	J F MUSTARD	NCC 5 487	455
39	BUCKNELL UNIV	E T ENGMAN	GSFC	R D CRAGO	NAG 5 8679	431
39	BUCKNELL UNIV	E T ENGMAN	GSFC	R D CRAGO	NAG 5 8699	431
39	BUCKNELL UNIV	M F JASINSKI	GSFC	R D CRAGO	NAG 5 10129	431
39	CALIFORNIA INST OF TECH	D ANDERSON	GSFC	R FLAGAN	NAG 5 11549	46
39	CALIFORNIA INST OF TECH	D WICKLAND	GSFC	J R ANDERSON	NAG 5 9462	44
39	CALIFORNIA INST OF TECH	D WICKLAND	GSFC	P WENNBERG	NAG 5 12247	47
39	CALIFORNIA INST OF TECH	M KURYLO	GSFC	M OKAMURA	NAG 5 11657	47
39	CALIFORNIA INST OF TECH	M WEI	GSFC	M SIMONS	NAG 5 12564	48
39	CALIFORNIA INST OF TECH	M Y WEI	GSFC	B C MURRAY	NGT 5 30138	48
39	CALIFORNIA INST OF TECH	P DECOLA	GSFC	P WENNBERG	NAG 5 8922	44
39	CALIFORNIA INST OF TECH	P DECOLA	GSFC	P WENNBERG	NAG 5 11739	47
39	CALIFORNIA INST OF TECH	P HOUSER	GSFC	Y L YUNG	NAG 5 9487	44
39	CALIFORNIA POLYTECH STATE U-SAN LUIS	M WEI	GSFC	M A MOLINE	NAG 5 8674	49
39	CALIFORNIA STATE UNIV - LONG BEACH	A J TUYAHOV	GSFC	C T LEE	NAG 5 9310	50
39	CALIFORNIA STATE UNIV - LONG BEACH	B MEESON	GSFC	E AMBOS	NCC 5 329	50
39	CALIFORNIA STATE UNIV - MONTEREY BAY	J C COUGHLAN	ARC	S E ALEXANDER	NCC 2 1186	51
39	CALIFORNIA STATE UNIV - MONTEREY BAY	A JANETOS	GSFC	L PIERCE	NAG 5 6529	51
39	CALIFORNIA STATE UNIV - MONTEREY BAY	R MCKELLIP	SSC	L F JOHNSON	NAG13 99020	51
39	CARNEGIE - MELLON UNIV	C FARMER	JSC	D HERSHBERGER	NAG 9 1242	434
39	CASE WESTERN RESERVE UNIV	W HVANCIC	GRC	J ISHAC	NAG 3 2391	401
39	CITY UNIV OF NY CITY COLL	M KURYLO	GSFC	P M SOLOMON	NAG 5 11690	366
39	CLARK UNIV	S S WEGENER	ARC	S HERWITZ	NCC 2 1270	280
39	CLARK UNIV	M WEI	GSFC	B L TURNER	NGT 5 97	280
39	CLARK UNIV	M WEI	GSFC	B L TURNER	NGT 5 30197	280
39	CLARK UNIV	M WEI	GSFC	B L TURNER	NGT 5 30217	280
39	CLARK UNIV	M Y WEI	GSFC	J GEOGHEGAN	NAG 5 8559	280
39	CLARK UNIV	M Y WEI	GSFC	B L TURNER	NGT 5 30147	280
39	CLARK UNIV	M Y WEI	GSFC	B L TUNNER	NGT 5 30153	280
39	COLORADO STATE UNIV	D ANDERSON	GSFC	G L STEPHENS	NAG 5 11475	119
39	COLORADO STATE UNIV	D ANDERSON	GSFC	P J DEMOTT	NAG 5 11476	120
39	COLORADO STATE UNIV	D ANDERSON	GSFC	W R COTTON	NAG 5 11507	120
39	COLORADO STATE UNIV	D W DEERING	GSFC	A DENNING	NCC 5 284	121
39	COLORADO STATE UNIV	G C GUTMAN	GSFC	D OJIMA	NAG 5 4646	118
39	COLORADO STATE UNIV	G GUTMAN	GSFC	D OJIMA	NAG 5 11073	119
39	COLORADO STATE UNIV	J C DODGE	GSFC	P L STEPHENS	NAG 5 6637	118
39	COLORADO STATE UNIV	J RANSON	GSFC	D OJIMA	NAG 5 6228	118
39	COLORADO STATE UNIV	M WEI	GSFC	R CONANT	NAG 5 10593	119
39	COLORADO STATE UNIV	M WEI	GSFC	S A RUTLEDGE	NGT 5 30218	121
39	COLORADO STATE UNIV	M WEI	GSFC	V CHANDRAEKAR	NGT 5 30421	121
39	COLORADO STATE UNIV	P DECOLA	GSFC	A DENNING	NCC 5 621	121
39	COLORADO STATE UNIV	P R HOUSER	GSFC	R A PIELKE	NAG 5 11370	119
39	COLORADO STATE UNIV	P R HOUSER	GSFC	G LISTON	NAG 5 11710	120
39	COLORADO STATE UNIV	P R HOUSER	GSFC	D RANDALL	NAG 5 11737	120
39	COLORADO STATE UNIV	C DEL CASTILLO	SSC	I BURKE	NAG13 02005	120

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	COLUMBIA UNIV	D ANDERSON	GSFC	B CAIRNS	NAG 5 11530	370
39	COLUMBIA UNIV	D L PIERCE	GSFC	B CAIRNS	NAG 5 5275	368
39	COLUMBIA UNIV	D RIND	GSFC	M A CANE	NAG 5 7044	368
39	COLUMBIA UNIV	J MARRA	GSFC	T TAKAHASHI	NAG 5 6877	368
39	COLUMBIA UNIV	J MARRA	GSFC	O ANDERSON	NAG 5 11215	370
39	COLUMBIA UNIV	J MARRA	GSFC	T TAKAHASHI	NAG 5 11357	370
39	COLUMBIA UNIV	M WEI	GSFC	D L WITTER	NAG 5 8675	369
39	COLUMBIA UNIV	M WEI	GSFC	A SOBEL	NAG 5 10607	370
39	COLUMBIA UNIV	M WEI	GSFC	W MENKE	NGT 5 30374	371
39	COLUMBIA UNIV	M WEI	GSFC	D MARTINSON	NGT 5 30391	371
39	COLUMBIA UNIV	M WEI	GSFC	M CANE	NGT 5 50323	372
39	COLUMBIA UNIV	M Y WEI	GSFC	T TAKAHASHI	NGT 5 30167	371
39	COLUMBIA UNIV	P R HOUSER	GSFC	M STIEGLITZ	NAG 5 9759	369
39	COLUMBIA UNIV	P R HOUSER	GSFC	S MENON	NAG 5 11697	370
39	COLUMBIA UNIV	Q BARKER	GSFC	R S CHEN	NAS 5 98162	371
39	COLUMBIA UNIV	R KOSTER	GSFC	M STIEGLITZ	NCC 5 218	371
39	COLUMBIA UNIV	R KOSTER	GSFC	M STIEGLITZ	NCC 5 510	371
39	COLUMBIA UNIV	S GOGINENI	GSFC	D G MARTINSON	NAG 5 6876	368
39	COLUMBIA UNIV	S GOGINENI	GSFC	S S JACOBS	NAG 5 7461	368
39	COLUMBIA UNIV	S GOGINENI	GSFC	D MARTINSON	NAG 5 7922	369
39	COLUMBIA UNIV	W ABDALATI	GSFC	X YUAN	NAG 5 12586	370
39	CORNELL UNIV	D DEERING	GSFC	E FERNANDES	NCC 5 298	377
39	CORNELL UNIV	J BOYCE	GSFC	R J SULLIVAN	NAG 5 9794	375
39	CORNELL UNIV	J CAMPBELL	GSFC	B MONGER	NAG 5 8188	374
39	CORNELL UNIV	J JODER	GSFC	G CHARLES	NAG 5 6273	373
39	CORNELL UNIV	J MARRA	GSFC	B MONGER	NAG 5 10848	375
39	CORNELL UNIV	M WEI	GSFC	L O HEDIN	NGT 5 30210	378
39	DARTMOUTH COLL	P HOUSER	GSFC	R BRAKENRIDGE	NAG 5 9470	341
39	DREXEL UNIV	R MILLER	SSC	M PIASECKI	NAG13 00040	436
39	DUKE UNIV	B W MEESON	GSFC	R B JACKSON	NAG 5 12497	390
39	DUKE UNIV	E T ENGMAN	GSFC	S ROJSTACZER	NAG 5 8533	390
39	DUKE UNIV	J MARRA	GSFC	R T BARBER	NAG 5 9348	390
39	DUKE UNIV	M S BURRELL	GSFC	B SCHESSINGER	NGT 5 69	391
39	DUKE UNIV	M WEI	GSFC	J REYNOLDS	NGT 5 30355	391
39	DUKE UNIV	P DECOLA	GSFC	P KASIBHATLA	NAG 5 9605	390
39	DUKE UNIV	P HOUSER	GSFC	R AVISSAR	NAG 5 11401	390
39	DUKE UNIV	P R HOUSER	GSFC	R AVISSAR	NAG 5 11400	390
39	DUKE UNIV	P R HOUSER	GSFC	J ALBERTSON	NAG 5 11680	390
39	DUKE UNIV	Y SUD	GSFC	R AVISSAR	NAG 5 11402	390
39	DUKE UNIV	A NURRIDIN	HQ	R T BARBER	NGT 5 50224	391
39	ELIZABETH CITY STATE UNIV	B MEESON	GSFC	L HAYDEN	NAG 5 9371	392
39	ELIZABETH CITY STATE UNIV	B MEESON	GSFC	L B HAYDEN	NAG 5 9372	392
39	FLA INTERNATIONAL UNIV	J W CAMPBELL	GSFC	L L RICHARDSON	NAG 5 8156	161
39	FLORIDA STATE UNIV	D E WICKLAND	GSFC	E A SMITH	NAG 5 7302	165
39	FLORIDA STATE UNIV	D E WICKLAND	GSFC	E A SMITH	NAG 5 9866	166
39	FLORIDA STATE UNIV	D W DEERING	GSFC	E A SMITH	NCC 5 292	167
39	FLORIDA STATE UNIV	D WICKLAND	GSFC	E SMITH	NAG 5 6258	165
39	FLORIDA STATE UNIV	E LINDSTROM	GSFC	W DEWAR	NAG 5 7630	165
39	FLORIDA STATE UNIV	E LINDSTROM	GSFC	J J O'BRIEN	NAG 5 8327	166
39	FLORIDA STATE UNIV	E LINDSTROM	GSFC	J O'BRIEN	NAG 5 12487	166
39	FLORIDA STATE UNIV	E T ENGMAN	GSFC	S E NICHOLSON	NAG 5 8598	166
39	FLORIDA STATE UNIV	J C DODGE	GSFC	H J COOPER	NAG 5 6665	165
39	FLORIDA STATE UNIV	J C DODGE	GSFC	P G ELLINGSON	NAG 5 12097	166
39	FLORIDA STATE UNIV	M WEI	GSFC	S E NICHOLSON	NGT 5 30186	167
39	FLORIDA STATE UNIV	M Y WEI	GSFC	J J OBRIEN	NGT 5 30158	167
39	FLORIDA STATE UNIV	M Y WEI	GSFC	D NOF	NGT 5 30164	167
39	GEORGE MASON UNIV	A T CHANG	GSFC	L CHIU	NAG 5 10879	506
39	GEORGE MASON UNIV	A T CHANG	GSFC	L CHIU	NAG 5 11346	506
39	GEORGE MASON UNIV	J A WEINMAN	GSFC	L CHIU	NAG 5 9636	505
39	GEORGE MASON UNIV	W GRAHAM	SSC	M KAFATOS	NAG13 01009	506
39	GEORGIA INST OF TECH	A J TUYAHOV	GSFC	W L CHAMEIDES	NAG 5 9868	182
39	GEORGIA INST OF TECH	E T ENGMAN	GSFC	C D PETERS-LIDARD	NAG 5 8698	182
39	GEORGIA INST OF TECH	M KURYLO	GSFC	P H WINE	NAG 5 8931	182
39	GEORGIA INST OF TECH	M WEI	GSFC	W L CHAMEIDES	NGT 5 50330	186
39	GEORGIA INST OF TECH	M Y WEI	GSFC	R E DICKINSON	NAG 5 8880	182
39	GEORGIA INST OF TECH	P DECOLA	GSFC	M CHIN	NAG 5 11479	183

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	GEORGIA INST OF TECH	P R HOUSER	GSFC	R FU	NAG 5 11671	183
39	GEORGIA INST OF TECH	R TRAVIS	SSC	K MAXWELL	NGT13 52742	187
39	HAMPTON UNIV	D ANDERSON	GSFC	D WANG	NAG 5 11477	509
39	HARVARD UNIV	D ANDERSON	GSFC	J ANDERSON	NAG 5 11547	282
39	HARVARD UNIV	D ANDERSON	GSFC	J ANDERSON	NAG 5 11548	283
39	HARVARD UNIV	D ANDERSON	GSFC	S C WOFYSY	NAG 5 11638	283
39	HARVARD UNIV	D E WICKLAND	GSFC	S C WORSY	NAG 5 7534	281
39	HARVARD UNIV	D W DEERING	GSFC	S C WOFYSY	NCC 5 341	283
39	HARVARD UNIV	D W DEERING	GSFC	S C WOFYSY	NCC 5 590	283
39	HARVARD UNIV	M WEI	GSFC	S C WOFYSY	NGT 5 30205	283
39	HARVARD UNIV	M WEI	GSFC	J ANDERSON	NGT 5 30336	284
39	HARVARD UNIV	M Y WEI	GSFC	S C WOFYSY	NGT 5 30152	283
39	HARVARD UNIV	P DECOLA	GSFC	D J JACOB	NAG 5 9643	282
39	HARVARD UNIV	P DECOLA	GSFC	M MCELROY	NAG 5 11431	282
39	HARVARD UNIV	R CURRAN	GSFC	J ANDERSON	NAG 5 8779	282
39	HERITAGE COLL	D TRAVIS	SSC	D FALCO	NAG13 02057	528
39	IDAHO STATE UNIV	W TURNER	GSFC	K T WEBER	NAG 5 10982	198
39	IDAHO STATE UNIV	W TURNER	GSFC	K T WEBER	NAG 5 12301	198
39	INDIANA UNIV - BLOOMINGTON	D DEERING	GSFC	E MORAN	NCC 5 334	214
39	IOWA STATE UNIV	M WEI	GSFC	T CHEN	NGT 5 30419	222
39	IOWA STATE UNIV	E K GIBSON	JSC	P A BAZLINSKI	NAG 9 1115	221
39	JAMES MADISON UNIV	N KHAZENIE	GSFC	J BARNES	NAG 5 6166	510
39	JOHNS HOPKINS UNIV	K H BERGMAN	GSFC	M B PARLANGE	NAG 5 9426	243
39	JOHNS HOPKINS UNIV	M WEI	GSFC	D WAUGH	NGT 5 50328	252
39	JOHNS HOPKINS UNIV	P E HUNTER	GSFC	A SZALAY	NAG 5 8590	242
39	JOHNS HOPKINS UNIV	W ABDALATI	GSFC	R RANEY	NAG 5 11829	248
39	KANSAS STATE UNIV	G GUTMAN	GSFC	L JOHNSON	NAG 5 11337	226
39	KENT STATE UNIV	T SCOTT	GRC	D MUNRO-STASIUK	NAG 3 2416	409
39	KENT STATE UNIV	M WEI	GSFC	D L WITTER	NAG 5 11266	409
39	LOUISIANA STATE UNIV - BATON ROUGE	C MCKAY	ARC	F A RAINEY	NCC 2 5469	232
39	LOUISIANA STATE UNIV - BATON ROUGE	R TRAVIS	SSC	B S GOODWIN	NGT13 52743	232
39	MASSACHUSETTS INST OF TECH	E LINDSTROM	GSFC	P RIZZOLI	NAG 5 7194	288
39	MASSACHUSETTS INST OF TECH	E LINDSTROM	GSFC	C WUNSCH	NAG 5 7857	288
39	MASSACHUSETTS INST OF TECH	E LINDSTROM	GSFC	P RIZZOLI	NAG 5 10793	291
39	MASSACHUSETTS INST OF TECH	E LINDSTROM	GSFC	C WUNSCH	NAG 5 11933	292
39	MASSACHUSETTS INST OF TECH	E T ENGMAN	GSFC	E B ELTAHIR	NAG 5 8617	289
39	MASSACHUSETTS INST OF TECH	E T ENGMAN	GSFC	D MCLAUGHLIN	NCC 5 416	295
39	MASSACHUSETTS INST OF TECH	J MARRA	GSFC	J MARSHALL	NCC 5 244	295
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	E ELTAHIR	NAG 5 7525	288
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	K X WHIPPLE	NGT 5 30188	296
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	J MARSHALL	NGT 5 30189	296
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	D ENTEKHABI	NGT 5 30190	296
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	R L BRAS	NGT 5 30212	296
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	B TROUT	NGT 5 30334	296
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	C WUNSCH	NGT 5 30337	296
39	MASSACHUSETTS INST OF TECH	M WEI	GSFC	R BRAS	NGT 5 30339	296
39	MASSACHUSETTS INST OF TECH	P DECOLA	GSFC	M MOLINA	NAG 5 8887	289
39	MASSACHUSETTS INST OF TECH	P L DECOLA	GSFC	R G PRINN	NAG 5 12099	292
39	MASSACHUSETTS INST OF TECH	P R HOUSER	GSFC	D ENTEKHABI	NAG 5 11602	292
39	MASSACHUSETTS INST OF TECH	P R HOUSER	GSFC	D B MCLAUGHLIN	NAG 5 11721	292
39	MIAMI UNIV	T M SCOTT	GRC	J MILLARD	NAG 3 2436	410
39	MICHIGAN STATE UNIV	A C JANETOS	GSFC	J LIU	NAG 5 8317	304
39	MICHIGAN STATE UNIV	A JANETOS	GSFC	D SKOLE	NAG 5 6538	304
39	MICHIGAN STATE UNIV	D DEERING	GSFC	D SKOLE	NCC 5 291	306
39	MICHIGAN STATE UNIV	D WILLIAMS	GSFC	D SKOLE	NAG 5 4810	304
39	MICHIGAN STATE UNIV	G GUTMAN	GSFC	R WALKER	NAG 5 9232	305
39	MICHIGAN STATE UNIV	G GUTMAN	GSFC	D L SKOLE	NAG 5 11740	305
39	MICHIGAN STATE UNIV	M WEI	GSFC	J MESSINA	NAG 5 12617	305
39	MICHIGAN STATE UNIV	M WEI	GSFC	D J CAMPBELL	NGT 5 30340	306
39	MICHIGAN STATE UNIV	M Y WEI	GSFC	J LIU	NGT 5 30166	306
39	MICHIGAN STATE UNIV	G GUTMAN	HQ	J QI	NAG 5 9286	305
39	MICHIGAN STATE UNIV	A JOYCE	SSC	P SORRANO	NGT13 52715	306
39	MICHIGAN TECHNOLOGICAL UNIV	S GOGINENI	GSFC	D PILANT	NAG 5 7051	306
39	MISSISSIPPI STATE UNIV	R MCKELLIP	SSC	S ROBERTS	NAG13 99018	324
39	MONTANA STATE UNIV	G GUTMAN	GSFC	A HANSEN	NAG 5 9300	333
39	MONTANA STATE UNIV	G GUTMAN	GSFC	A HANSEN	NAG 5 9806	333

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	MONTANA STATE UNIV	G GUTMAN	GSFC	A HANSEN	NAG 5 11158	334
39	MONTANA TECH OF THE U OF MONT	N KHAZENIE	GSFC	T MOON	NAG 5 9139	335
39	MT HOLYOKE COLL	M Y WEI	GSFC	J L BUBIER	NAG 5 8635	297
39	NEW MEXICO HIGHLANDS UNIV	K KRISHEN	JSC	J CAIBACA	NAG 9 1374	358
39	NEW MEXICO HIGHLANDS UNIV	L M ARMEDARIZ	JSC	J C'DE BACA	NAG 9 1139	358
39	NEW MEXICO HIGHLANDS UNIV	L M ARMENDARIZ	JSC	J C DE BACA	NAG 9 1393	358
39	NEW MEXICO INST OF MINING & TECH	D WICKLAND	GSFC	E E SMALL	NAG 5 9328	358
39	NEW MEXICO INST OF MINING & TECH	F K GIBSON	JSC	T L KIEFT	NAG 9 1106	359
39	NEW MEXICO STATE UNIV - LAS CRUCES	C E WADE	ARC	E E SERRANO	NAG 2 1334	359
39	NEW MEXICO STATE UNIV - LAS CRUCES	A RODRIGUEZ	GSFC	B BLEVINS	NAS 5 02087	360
39	NY UNIV	M REINECKER	GSFC	R KLEEMAN	NAG 5 9871	379
39	NORFOLK STATE UNIV	N KHAZENIE	GSFC	W J RODRIGUEZ	NAG 5 6298	510
39	NORFOLK STATE UNIV	N KHAZENIE	GSFC	W J RODRIQUEZ	NAG 5 9374	511
39	NORTH CAROLINA STATE UNIV. - RALEIGH	G GUTMAN	GSFC	S WALSH	NAG 5 11830	396
39	NORTH CAROLINA STATE UNIV. - RALEIGH	J MARRA	GSFC	J MORRISON	NAG 5 8865	396
39	NORTH CAROLINA STATE UNIV. - RALEIGH	M WEI	GSFC	J M MORRISON	NGT 5 30192	397
39	NORTH CAROLINA STATE UNIV. - RALEIGH	D JAN	JSC	C KIM	NAG 9 1423	396
39	NORTH DAKOTA STATE UNIV	A PEEK	SSC	J NOWATZKI	NAG13 02007	399
39	OHIO STATE UNIV	T M SCOTT	GRC	J K KLEIN	NAG 3 2410	410
39	OHIO STATE UNIV	T M SCOTT	GRC	D L MORRISON	NAG 3 2412	410
39	OHIO STATE UNIV	T M SCOTT	GRC	S DAVIS	NAG 3 2428	410
39	OHIO STATE UNIV	D L WILLIAMS	GSFC	C MERRY	NAG 5 7685	411
39	OHIO STATE UNIV	E LIDSTROM	GSFC	K N BERLINER	NAG 5 8455	412
39	OHIO STATE UNIV	E LINDSTROM	GSFC	K C JEZEK	NAG 5 8608	412
39	OHIO STATE UNIV	E LINDSTROM	GSFC	C DER VEEN	NAG 5 8632	412
39	OHIO STATE UNIV	K PARTINGTON	GSFC	C K SHUM	NAG 5 9335	412
39	OHIO STATE UNIV	P HOUSER	GSFC	D BROMWICH	NAG 5 9596	412
39	OHIO STATE UNIV	P R HOUSER	GSFC	C J VAN DER VEEN	NAG 5 11749	413
39	OHIO STATE UNIV	R KAKAR	GSFC	D BROMWICH	NAG 5 9518	412
39	OHIO STATE UNIV	S GOGINENI	GSFC	E S MOSLEY-THOMPSON	NAG 5 6817	411
39	OHIO STATE UNIV	S GOGINENI	GSFC	K C JEZEK	NAG 5 7286	411
39	OHIO STATE UNIV	S GOGINENI	GSFC	D H BROMWICH	NAG 5 7750	411
39	OHIO STATE UNIV	S GOGINENI	GSFC	R R FORSTER	NAG 5 7848	411
39	OHIO STATE UNIV	W ABDALATI	GSFC	K JEZEK	NAG 5 9538	412
39	OHIO STATE UNIV	W ABDALATI	GSFC	D BROMWICH	NAG 5 11794	413
39	OHIO STATE UNIV	W ABDALATI	GSFC	D BROMWICH	NAG 5 12407	413
39	OHIO STATE UNIV	S GOGINENI	HQ	D BROMWICH	NAG 5 6001	411
39	OKLAHOMA STATE UNIV	D E WICKLAND	GSFC	S J STADLER	NAG 5 7451	425
39	OKLAHOMA STATE UNIV	R MCKELLIP	SSC	G JOHSON	NCC13 02002	425
39	OLD DOMINION UNIV	N KHAZENIE	GSFC	E SMITH	NAG 5 4515	513
39	OREGON STATE UNIV	C TREES	GSFC	W PEGAU	NAG 5 12404	429
39	OREGON STATE UNIV	D ANDERSON	GSFC	C H TWOHY	NAG 5 11534	429
39	OREGON STATE UNIV	D E WICKLAND	GSFC	R H WARING	NAG 5 7506	427
39	OREGON STATE UNIV	D E WICKLAND	GSFC	M H UNSWORTH	NAG 5 7531	427
39	OREGON STATE UNIV	D E WICKLAND	GSFC	B LAW	NAG 5 7551	428
39	OREGON STATE UNIV	D E WICKLAND	GSFC	W B COHEN	NAG 5 7856	428
39	OREGON STATE UNIV	E T ENGMAN	GSFC	L MAHRT	NAG 5 8601	428
39	OREGON STATE UNIV	G C GUTMAN	GSFC	D E HARMON	NAG 5 6242	427
39	OREGON STATE UNIV	G GUTMAN	GSFC	O N KRANKINA	NAG 5 9677	428
39	OREGON STATE UNIV	G GUTMAN	GSFC	O KRANKINA	NAG 5 11250	429
39	OREGON STATE UNIV	J DODGE	GSFC	M R ABBOTT	NAG 5 8969	428
39	OREGON STATE UNIV	J MARRA	GSFC	M R ABBOTT	NAG 5 11125	429
39	OREGON STATE UNIV	M WEI	GSFC	R P DICK	NGT 5 96	430
39	OREGON STATE UNIV	M WEI	GSFC	B MATE	NGT 5 30185	430
39	OREGON STATE UNIV	M WEI	GSFC	W B COHEN	NGT 5 30214	430
39	OREGON STATE UNIV	P R HOUSER	GSFC	L MAHRT	NAG 5 11586	429
39	OREGON STATE UNIV	D WICKLAND	HQ	B E LAW	NAG 5 8315	428
39	PENN STATE UNIV. - UNIV. PARK	D ANDERSON	GSFC	J VERLINDE	NAG 5 11472	444
39	PENN STATE UNIV. - UNIV. PARK	D L WILLIAMS	GSFC	W L MYERS	NAG 5 10541	443
39	PENN STATE UNIV. - UNIV. PARK	E ENGMAN	GSFC	K DAVIS	NAG 5 10050	443
39	PENN STATE UNIV. - UNIV. PARK	E T ENGMAN	GSFC	D MILLER	NAG 5 8738	442
39	PENN STATE UNIV. - UNIV. PARK	J A MARRA	GSFC	R NAJJAR	NAG 5 6389	441
39	PENN STATE UNIV. - UNIV. PARK	J CAMPBELL	GSFC	R NAJJAR	NAG 5 6451	441
39	PENN STATE UNIV. - UNIV. PARK	M WEI	GSFC	E J BARRON	NAG 5 4553	440
39	PENN STATE UNIV. - UNIV. PARK	M WEI	GSFC	S BRANTLEY	NGT 5 30193	447
39	PENN STATE UNIV. - UNIV. PARK	M WEI	GSFC	J VERLINDE	NGT 5 30208	447

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	PENN STATE UNIV. - UNIV. PARK	M WEI	GSFC	D PEUQUET	NGT 5 30224	447
39	PENN STATE UNIV. - UNIV. PARK	M WEI	GSFC	G JENKINS	NGT 5 30420	447
39	PENN STATE UNIV. - UNIV. PARK	M Y WEI	GSFC	A P BARROS	NAG 5 6656	441
39	PENN STATE UNIV. - UNIV. PARK	M Y WEI	GSFC	R B ALLEY	NGT 5 30171	447
39	PENN STATE UNIV. - UNIV. PARK	N MAYNARD	GSFC	D A MILLER	NAG 5 12242	444
39	PENN STATE UNIV. - UNIV. PARK	P R HOUSER	GSFC	D R STAUFFER	NAG 5 8735	442
39	PENN STATE UNIV. - UNIV. PARK	S GOGINENI	GSFC	R ALLEY	NAG 5 7776	441
39	PRINCETON UNIV	C TREES	GSFC	J SARMIENTO	NAG 5 12398	351
39	PRINCETON UNIV	D E WICKLAND	GSFC	E F WOOD	NAG 5 7297	349
39	PRINCETON UNIV	G ASRAR	GSFC	J L SARMIENTO	NAG 5 6591	349
39	PRINCETON UNIV	J DODGE	GSFC	E WOOD	NAG 5 9414	350
39	PRINCETON UNIV	J DODGE	GSFC	E WOOD	NAG 5 9635	350
39	PRINCETON UNIV	M WEI	GSFC	L RUSSELL	NAG 5 8676	350
39	PRINCETON UNIV	M WEI	GSFC	D MAUZERALL	NAG 5 12542	351
39	PRINCETON UNIV	M WEI	GSFC	G PHILANDER	NGT 5 30333	352
39	PRINCETON UNIV	M WEI	GSFC	A DOBSON	NGT 5 30341	352
39	PRINCETON UNIV	M WEI	GSFC	J SARMIENTO	NGT 5 30356	352
39	PRINCETON UNIV	M WEI	GSFC	E F WOOD	NGT 5 50333	352
39	PRINCETON UNIV	M Y WEI	GSFC	G PHILANDER	NGT 5 30134	352
39	PRINCETON UNIV	M Y WEI	GSFC	H LEVY	NGT 5 30137	352
39	PRINCETON UNIV	P DECOLA	GSFC	D L MAUZERALL	NAG 5 9810	350
39	PRINCETON UNIV	P HOUSER	GSFC	E WOOD	NAG 5 9486	350
39	PRINCETON UNIV	P R HOUSER	GSFC	E F WOOD	NAG 5 11610	351
39	PURDUE UNIV	E LINDSTROM	GSFC	J GARRISON	NAG 5 11747	216
39	PURDUE UNIV	M WEI	GSFC	J GARRISON	NAG 5 12551	217
39	PURDUE UNIV	M Y WEI	GSFC	P B SHEPSON	NGT 5 30163	218
39	PURDUE UNIV	R MCKELLIP	SSC	C J JOHANNSEN	NAG13 00001	218
39	ROCHESTER INST OF TECH	B L MARKHAM	GSFC	J SCHOTT	NAG 5 11298	382
39	ROCHESTER INST OF TECH	T D GUBBELS	GSFC	A VODECEK	NAG 5 10051	382
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	E LINSTROM	GSFC	D HAIDVOGEL	NAG 5 9847	354
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	E T ENGMAN	GSFC	R AVISSAR	NAG 5 8213	354
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J MARRA	GSFC	Y GAO	NAG 5 9340	354
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J MARRA	GSFC	M J BEHRENFELD	NAG 5 9787	354
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	J MARRA	GSFC	P G FALKONSKI	NAG 5 11345	355
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	K BERGMAN	GSFC	A ROBECK	NAG 5 9792	354
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	P R HOUSER	GSFC	R AVISSAR	NAG 5 9746	354
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	P R HOUSER	GSFC	D A ROBINSON	NAG 5 11403	355
39	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	P R HOUSER	GSFC	J R MILLER	NAG 5 11720	355
39	RUTGERS STATE UNIV OF NJ COOK CAMPUS	K BERGMAN	GSFC	R AVISSAR	NAG 5 9359	356
39	RUTGERS STATE UNIV OF NJ NEW BRUNS	J MARRA	GSFC	P G FALKOWSKI	NAG 5 11356	356
39	RUTGERS STATE UNIV OF NJ NEW BRUNS	P R HOUSER	GSFC	J A FRANCIS	NAG 5 11585	356
39	SALISH KOOTENAI COLL	B MEESON	GSFC	J M GOBERT	NAG 5 9368	335
39	SALISH KOOTENAI COLL	N K HAZENIE	GSFC	T S OLSON	NAG 5 9102	335
39	SAN DIEGO STATE UNIV	C TREES	GSFC	J MUELLER	NAG 5 12401	53
39	SAN DIEGO STATE UNIV	G GUTMAN	GSFC	J FRANKLIN	NAG 5 9301	53
39	SAN DIEGO STATE UNIV	G GUTMAN	GSFC	A HOPE	NAG 5 11141	53
39	SAN DIEGO STATE UNIV	M WEI	GSFC	A S HOPE	NGT 5 30335	54
39	SAN DIEGO STATE UNIV	M Y WEI	GSFC	R MELLORS	NAG 5 8560	53
39	SAN DIEGO STATE UNIV	R MCKELLIP	JSC	D STOW	NAG13 99017	53
39	SAN FRANCISCO STATE UNIV	J W CAMPBELL	GSFC	D H ROBINSON	NAG 5 8013	54
39	SAN FRANCISCO STATE UNIV	J W MARRA	GSFC	D H ROBINSON	NAG 5 7511	54
39	SAN JOSE STATE UNIV	H L D'ANTONIO	ARC	E F METZGER	NCC 2 5476	58
39	SAN JOSE STATE UNIV	V VANDERBILT	ARC	P A HAMILL	NCC 2 1132	56
39	SOUTH DAKOTA SCH OF MINES & TECH	K BLANDING	GSFC	P R ZIMMERMAN	NGT 5 30402	462
39	SOUTH DAKOTA SCH OF MINES & TECH	N KHAZENIE	GSFC	L A VIERLING	NAG 5 8973	462
39	SOUTH DAKOTA SCH OF MINES & TECH	R MCKELLIP	JSC	M PRICE	NAG13 99021	462
39	SOUTH DAKOTA SCH OF MINES & TECH	J ARNOLD	MSFC	S O FAREWELL	NAG 8 1447	462
39	SOUTH DAKOTA STATE UNIV	B L MARKHAM	GSFC	D HELDER	NAG 5 11351	463
39	SOUTH DAKOTA STATE UNIV	DL WILLIAMS	GSFC	D HELDER	NAG 5 3540	463
39	SOUTH DAKOTA STATE UNIV	S UNGAR	GSFC	D HELDER	NCC 5 472	463
39	SOUTHEASTERN UNIV	D MENCHAN	GSFC	G GRANTHAM	NAG 5 12500	154
39	SOUTHERN ILLINOIS UNIV - CARBONDALE	M WEI	GSFC	N PINTER	NGT 5 50321	203
39	ST UN NY COL-ENV SCI & FORESTRY	N SOVIK	SSC	P HOPKINS	NCC13 98001	382
39	STANFORD UNIV	J MARRA	GSFC	K ARRIGO	NAG 5 8866	61
39	STANFORD UNIV	M L IMHOFF	GSFC	M L IMHOFF	NAG 5 8563	61
39	STANFORD UNIV	M L IMHOFF	GSFC	P EHRlich	NAG 5 9760	62

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	STANFORD UNIV	M WEI	GSFC	M Z JACOBSON	NAG 5 8645	61
39	STANFORD UNIV	M WEI	GSFC	P MATSON	NGT 5 30204	66
39	STANFORD UNIV	M WEI	GSFC	P M VITOUSEK	NGT 5 30216	66
39	STANFORD UNIV	M WEI	GSFC	H ZEBKER	NGT 5 30342	66
39	STANFORD UNIV	M WEI	GSFC	G W ERNST	NGT 5 30360	66
39	STANFORD UNIV	M Y WEI	GSFC	K SETO	NAG 5 10534	62
39	STANFORD UNIV	R H THOMAS	GSFC	D ZEBKER	NAG 5 3732	60
39	STANFORD UNIV	W ABDALATI	GSFC	H ZEBKER	NAG 5 9853	62
39	STANFORD UNIV	A KELLEY	MSFC	F CHANG	NCC 8 197	66
39	STATE U NY COLL OF ENVIR SCI & FORESTRY	N SOVIK	SSC	P HOPKINS	NAG13 01003	382
39	STATE UNIV OF NY - ALBANY	A J TUYAHOV	GSFC	P F HOPKINS	NAG 5 9676	383
39	STATE UNIV OF NY - ALBANY	D W DEERING	GSFC	D R FRITZJARRALD	NCC 5 283	383
39	STATE UNIV OF NY - BUFFALO	G GUTMAN	GSFC	M SULTAN	NAG 5 12409	384
39	STATE UNIV OF NY - BUFFALO	M BECKER	GSFC	M BECKER	NAG 5 10608	384
39	STATE UNIV OF NY - STONY BROOK	D WICKLAND	GSFC	M LERDAU	NAG 5 6601	385
39	STATE UNIV OF NY - STONY BROOK	M WEI	GSFC	D WALISER	NGT 5 50322	387
39	STATE UNIV OF NY - STONY BROOK	P DECOLA	GSFC	M A GELLER	NAG 5 9786	386
39	STATE UNIV OF NY - STONY BROOK	P DECOLA	GSFC	M GELLER	NAG 5 11615	386
39	TEXAS A&M UNIV	D K HALL	GSFC	A KLEIN	NAG 5 9455	476
39	TEXAS A&M UNIV	D K HALL	GSFC	A KLEIN	NAG 5 10877	477
39	TEXAS A&M UNIV	D K HALL	GSFC	A KLEIN	NAG 5 11847	477
39	TEXAS A&M UNIV	G GUTMAN	GSFC	R LACEY	NAG 5 11144	477
39	TEXAS A&M UNIV	J CAMPBELL	GSFC	W D NOWLIN	NAG 5 6446	476
39	TEXAS A&M UNIV	K BERGMAN	GSFC	P CHANG	NAG 5 9409	476
39	TEXAS A&M UNIV	M WEI	GSFC	T BOUTTON	NGT 5 30211	480
39	TEXAS A&M UNIV	M WEI	GSFC	C MUNSTER	NGT 5 30408	480
39	TEXAS A&M UNIV	M Y WEI	GSFC	R ZHANG	NAG 5 8706	476
39	TEXAS A&M UNIV	P R HOUSER	GSFC	B P MOHANTY	NAG 5 11375	477
39	TEXAS A&M UNIV	P R HOUSER	GSFC	A CAHILL	NAG 5 11681	477
39	TEXAS A&M UNIV	P R HOUSER	GSFC	B P MOHANTY	NAG 5 11702	477
39	TEXAS A&M UNIV	S GOGINENI	GSFC	A STOESEL	NAG 5 7751	476
39	THE SCRIPPS RES INST (TSRI) -LA JOLLA	F E HOGE	GSFC	M VERNET	NAG 5 5191	67
39	THE SCRIPPS RES INST (TSRI) -LA JOLLA	J DODGE	GSFC	J J SIMPSON	NAG 5 9604	67
39	THE UNIV OF CENTRAL FLORIDA	J W QUINN	KSC	D R REINHART	NAG10 301	169
39	THE UNIV OF CENTRAL FLORIDA	J W QUINN	KSC	C GEIGER	NAG10 312	169
39	THE UNIV OF CENTRAL FLORIDA	J W QUINN	KSC	D L GEIGER	NAG10 313	169
39	THE UNIV OF CENTRAL FLORIDA	M COLLINS	KSC	D C COOPER	NCC10 35	169
39	TULANE UNIV	R TRAVIS	JSC	B MCKEE	NGT13 52722	234
39	TUSKEGEE UNIV	C TERRELL	MSFC	N O EGREFOR	NCC 8 234	6
39	U OF ARKANSAS MAIN CAMP-FAYETTEVILLE	J BOYCE	GSFC	P BENOIT	NAG 5 9496	40
39	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	A C JANETOS	GSFC	P R FISHER	NAG 5 6249	253
39	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	G GUTMAN	GSFC	T FISHER	NAG 5 11083	254
39	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	J HARDING	GSFC	L HARDING	NAG 5 6286	254
39	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	J MARRA	GSFC	R G HOOD	NAG 5 6387	254
39	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	J W CAMPBELL	GSFC	L W HARDING	NAG 5 7602	254
39	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	S G UNGAR	GSFC	P A TOWNSEND	NCC 5 493	254
39	UNIV HOUSTON-HOUSTON	E K GIBSON	JSC	H S CHAFETZ	NAG 9 1103	483
39	UNIV OF AKRON	T M SCOTT	GRC	D SIEBERT	NAG 3 2444	416
39	UNIV OF ALABAMA - BIRMINGHAM	E PAYLOR	GSFC	L DELUCAS	NAG 5 8786	7
39	UNIV OF ALABAMA - BIRMINGHAM	E PAYLOR	GSFC	L DELUCAS	NAG 5 11267	7
39	UNIV OF ALABAMA - HUNTSVILLE	D L PIERCE	GSFC	J DIMMOCK	NAG 5 5273	8
39	UNIV OF ALABAMA - HUNTSVILLE	M WEI	GSFC	D CECIL	NAG 5 12563	11
39	UNIV OF ALABAMA - HUNTSVILLE	P R HOUSER	GSFC	R M WELCH	NAG 5 11941	11
39	UNIV OF ALABAMA - HUNTSVILLE	R J OLIVERSEN	GSFC	W PACIESAS	NAG 5 9045	9
39	UNIV OF ALABAMA - HUNTSVILLE	T BRAKE	GSFC	R WELCH	NAG 5 31718	13
39	UNIV OF ALABAMA - HUNTSVILLE	R GREENWOOD	MSFC	R MCNIDER	NCC 8 141	13
39	UNIV OF ALASKA - FAIRBANKS	C S POTTER	ARC	A MCGUIRE	NAG 2 1534	16
39	UNIV OF ALASKA - FAIRBANKS	A JANETOS	GSFC	D MCGUIRE	NAG 5 6275	16
39	UNIV OF ALASKA - FAIRBANKS	C TREES	GSFC	L MCNUTT	NAG 5 12411	18
39	UNIV OF ALASKA - FAIRBANKS	D E WICKLAND	GSFC	A D MCGUIRE	NAG 5 9859	17
39	UNIV OF ALASKA - FAIRBANKS	D WICKLAND	GSFC	C L WILLIAMS	NAG 5 7507	16
39	UNIV OF ALASKA - FAIRBANKS	E LINDSTROM	GSFC	S R OKKONEN	NAG 5 7603	17
39	UNIV OF ALASKA - FAIRBANKS	E T ENGMAN	GSFC	S LI	NAG 5 8614	17
39	UNIV OF ALASKA - FAIRBANKS	G GUTMAN	GSFC	C WILLIAMS	NAG 5 9315	17
39	UNIV OF ALASKA - FAIRBANKS	G GUTMAN	GSFC	D MCGUIRE	NAG 5 11142	17
39	UNIV OF ALASKA - FAIRBANKS	M WEI	GSFC	S F CHAPIN	NGT 5 50324	18

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF ALASKA - FAIRBANKS	P J ONDRUS	GSFC	N AVAILBLE	NAS 5 98129	18
39	UNIV OF ALASKA - FAIRBANKS	P R HOUSER	GSFC	L D HINZMAN	NAG 5 11822	18
39	UNIV OF ALASKA - FAIRBANKS	S K HALL	GSFC	C S BENSON	NCC 5 379	18
39	UNIV OF ARIZONA	A TUYAHOV	GSFC	D YOUNG	NAG 5 8157	27
39	UNIV OF ARIZONA	A TUYAHOV	GSFC	S E MARSH	NAG 5 8341	28
39	UNIV OF ARIZONA	A TUYAHOV	GSFC	C F HUTCHINSON	NAG 5 9174	29
39	UNIV OF ARIZONA	A TUYAHOV	GSFC	S E MARSH	NAG 5 11957	35
39	UNIV OF ARIZONA	B L MARKHAM	GSFC	K THOME	NAG 5 11339	34
39	UNIV OF ARIZONA	D E WICKLAND	GSFC	K E SCHAUDT	NAG 5 7249	26
39	UNIV OF ARIZONA	D L WILLIAMS	GSFC	C J THOME	NAG 5 3436	25
39	UNIV OF ARIZONA	D W DEERING	GSFC	A R HUETE	NAG 5 11316	34
39	UNIV OF ARIZONA	D W DEERING	GSFC	A R HUETE	NCC 5 603	38
39	UNIV OF ARIZONA	E T ENGMAN	GSFC	J W SHUTTLEWORTH	NAG 5 8214	28
39	UNIV OF ARIZONA	E WOOD	GSFC	S SOROOSHIAN	NAG 5 8503	28
39	UNIV OF ARIZONA	E Y WOOD	GSFC	S SOROOSHAIN	NAG 5 3640	25
39	UNIV OF ARIZONA	J KAYE	GSFC	S SOROOSHIAN	NAG 5 12152	35
39	UNIV OF ARIZONA	J PRIVETTE	GSFC	A HAUTE	NAG 5 8660	28
39	UNIV OF ARIZONA	M WEI	GSFC	M W WALLENDORF	NAG 5 10007	30
39	UNIV OF ARIZONA	M Y WEI	GSFC	C HUTCHINSON	NGT 5 30140	38
39	UNIV OF ARIZONA	M Y WEI	GSFC	C E GLASS	NGT 5 30148	39
39	UNIV OF ARIZONA	P R HOUSER	GSFC	W SHUTTLEWORTH	NAG 5 9796	30
39	UNIV OF ARIZONA	R SCHIEFFER	GSFC	S ROROOSHIAN	NAG 5 8502	28
39	UNIV OF ARIZONA	S G UNGAR	GSFC	S F BIGGAR	NCC 5 460	38
39	UNIV OF ARIZONA	S G UNGER	GSFC	A R HUETE	NCC 5 478	38
39	UNIV OF ARIZONA	S GOGINENI	GSFC	R BALES	NAG 5 6779	26
39	UNIV OF ARIZONA	C DEL CASTILLO	SSC	E P GLENN	NAG13 02001	37
39	UNIV OF ARIZONA	R HARRIS	SSC	C F HUTCHINSON	NAG13 02004	37
39	UNIV OF CALIFORNIA - BERKELEY	_ WEI	GSFC	K BOERING	NGT 5 30424	78
39	UNIV OF CALIFORNIA - BERKELEY	D E WICKLAND	GSFC	D BALDOCCHI	NAG 5 8510	70
39	UNIV OF CALIFORNIA - BERKELEY	D E WICKLAND	GSFC	W SILVER	NCC 5 352	77
39	UNIV OF CALIFORNIA - BERKELEY	D WICKLAND	GSFC	I FUNG	NAG 5 9514	71
39	UNIV OF CALIFORNIA - BERKELEY	D WICKLAND	GSFC	D BALDOCCHI	NAG 5 11651	74
39	UNIV OF CALIFORNIA - BERKELEY	G GUTMAN	GSFC	P GONG	NAG 5 9231	71
39	UNIV OF CALIFORNIA - BERKELEY	M KURYLO	GSFC	A GOLDSTEIN	NAG 5 11910	74
39	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	N KELLY	NAG 5 12541	75
39	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	T L BENNING	NGT 5 30183	78
39	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	R C COHEN	NGT 5 30219	78
39	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	I CHAPELA	NGT 5 30351	78
39	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	D M KAMMEN	NGT 5 30361	78
39	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	W SILVER	NGT 5 50331	79
39	UNIV OF CALIFORNIA - BERKELEY	M Y WEI	GSFC	W L SILVER	NGT 5 30141	77
39	UNIV OF CALIFORNIA - BERKELEY	M Y WEI	GSFC	F S CHAPIN	NGT 5 50216	79
39	UNIV OF CALIFORNIA - BERKELEY	N KHAZENIE	GSFC	A GOULD	NAG 5 9317	71
39	UNIV OF CALIFORNIA - BERKELEY	P T HOUSER	GSFC	X LIANG	NAG 5 8737	70
39	UNIV OF CALIFORNIA - BERKELEY	S G UNGAR	GSFC	P GONG	NCC 5 492	77
39	UNIV OF CALIFORNIA - BERKELEY	W ABDALATI	GSFC	X LIANG	NAG 5 10673	72
39	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	O E GRANGER	NGT 5 50223	79
39	UNIV OF CALIFORNIA - DAVIS	D E WICKLAND	GSFC	S USTIN	NAG 5 9360	80
39	UNIV OF CALIFORNIA - DAVIS	M WEI	GSFC	C ANASTASIO	NGT 5 30187	82
39	UNIV OF CALIFORNIA - DAVIS	M WEI	GSFC	S USTIN	NGT 5 30352	82
39	UNIV OF CALIFORNIA - DAVIS	D L JAN	HQ	S D COLLINS	NAG 9 1048	81
39	UNIV OF CALIFORNIA - IRVINE	D DEERING	GSFC	S TRUMBORE	NCC 5 336	85
39	UNIV OF CALIFORNIA - IRVINE	D W DEERING	GSFC	M L GOULDEN	NCC 5 280	85
39	UNIV OF CALIFORNIA - IRVINE	D WICKLAND	GSFC	S TRUMBORE	NAG 5 7301	84
39	UNIV OF CALIFORNIA - IRVINE	M KURYLO	GSFC	D R BLAKE	NAG 5 8935	84
39	UNIV OF CALIFORNIA - IRVINE	M RIENECKER	GSFC	J S FAMIGLIETTI	NAG 5 11646	84
39	UNIV OF CALIFORNIA - IRVINE	M W WEI	GSFC	R J CICERONE	NGT 5 50325	86
39	UNIV OF CALIFORNIA - IRVINE	M WEI	GSFC	ZENDER	NAG 5 10546	84
39	UNIV OF CALIFORNIA - IRVINE	M WEI	GSFC	G MAGNUSDOTTIR	NGT 5 30203	85
39	UNIV OF CALIFORNIA - IRVINE	P DECOLA	GSFC	S TYLER	NAG 5 11429	84
39	UNIV OF CALIFORNIA - IRVINE	P R HOUSER	GSFC	J S FAMIGLIETTI	NAG 5 11718	84
39	UNIV OF CALIFORNIA - IRVINE	P R HOUSER	GSFC	J S FAMIGLIETTI	NAG 5 11753	85
39	UNIV OF CALIFORNIA - IRVINE	A NURRIDIN	HQ	R J RICE	NGT 5 50226	86
39	UNIV OF CALIFORNIA - LOS ANGELES	E LINDSTROM	GSFC	J MCWILLIAMS	NAG 5 9860	90
39	UNIV OF CALIFORNIA - LOS ANGELES	K BERGMAN	GSFC	D J NEELIN	NAG 5 9358	90
39	UNIV OF CALIFORNIA - LOS ANGELES	M JACKSON	GSFC	J KIM	NAG 5 11363	91

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF CALIFORNIA - LOS ANGELES	M WEI	GSFC	A ELDERING	NAG 5 8812	89
39	UNIV OF CALIFORNIA - LOS ANGELES	M WEI	GSFC	L SMITH	NGT 5 30338	94
39	UNIV OF CALIFORNIA - LOS ANGELES	M WEI	GSFC	R TURCO	NGT 5 50332	95
39	UNIV OF CALIFORNIA - LOS ANGELES	P R HOUSER	GSFC	Y XUE	NAG 5 9713	90
39	UNIV OF CALIFORNIA - LOS ANGELES	E STANSBERY	JSC	K D MCKEEGAN	NAS 9 02036	93
39	UNIV OF CALIFORNIA - RIVERSIDE	E T ENGMAN	GSFC	B P MOHANTY	NAG 5 8682	95
39	UNIV OF CALIFORNIA - SAN DIEGO	C TREES	GSFC	D STRAMSKI	NAG 5 12397	102
39	UNIV OF CALIFORNIA - SAN DIEGO	D ANDERSON	GSFC	F P VALERO	NAG 5 11637	101
39	UNIV OF CALIFORNIA - SAN DIEGO	D E WICKLAND	GSFC	C KEELING	NAG 5 11217	101
39	UNIV OF CALIFORNIA - SAN DIEGO	D E WICKLANDS	GSFC	R F KEELING	NAG 5 7637	98
39	UNIV OF CALIFORNIA - SAN DIEGO	E LINDSTORM	GSFC	D MILLER	NAG 5 6497	97
39	UNIV OF CALIFORNIA - SAN DIEGO	E LINDSTROM	GSFC	P NILER	NAG 5 8322	98
39	UNIV OF CALIFORNIA - SAN DIEGO	E LINDSTROM	GSFC	D STAMMER	NAG 5 8623	98
39	UNIV OF CALIFORNIA - SAN DIEGO	E LINDSTROM	GSFC	D STAMMER	NAG 5 8901	99
39	UNIV OF CALIFORNIA - SAN DIEGO	E LINSTROM	GSFC	A MILLER	NAG 5 9788	100
39	UNIV OF CALIFORNIA - SAN DIEGO	E PAYLOR	GSFC	J ROADS	NAG 5 8780	99
39	UNIV OF CALIFORNIA - SAN DIEGO	J A YODER	GSFC	R FROUIN	NAG 5 6202	97
39	UNIV OF CALIFORNIA - SAN DIEGO	J CAMPBELL	GSFC	R F KEELING	NAG 5 6668	97
39	UNIV OF CALIFORNIA - SAN DIEGO	J DODGE	GSFC	J J SIMPSON	NAG 5 9721	100
39	UNIV OF CALIFORNIA - SAN DIEGO	J W CAMPBELL	GSFC	D STRAMSKI	NAG 5 7100	97
39	UNIV OF CALIFORNIA - SAN DIEGO	J YODER	GSFC	B MITCHELL	NAG 5 6559	97
39	UNIV OF CALIFORNIA - SAN DIEGO	M WEI	GSFC	K BARBEAU	NAG 5 12535	102
39	UNIV OF CALIFORNIA - SAN DIEGO	P DECOLA	GSFC	R F WEISS	NAG 5 8180	98
39	UNIV OF CALIFORNIA - SAN DIEGO	P R HOUSER	GSFC	J ROADS	NAG 5 11599	101
39	UNIV OF CALIFORNIA - SAN DIEGO	P R HOUSER	GSFC	A VOGELMANN	NAG 5 11716	101
39	UNIV OF CALIFORNIA - SAN DIEGO	P R HOUSER	GSFC	J NORRIS	NAG 5 11731	101
39	UNIV OF CALIFORNIA - SAN DIEGO	P R HOUSER	GSFC	J ROADS	NAG 5 11738	101
39	UNIV OF CALIFORNIA - SANTA BARBARA	G A SHELTON	ARC	D A ROBERTS	NAG 2 1140	105
39	UNIV OF CALIFORNIA - SANTA BARBARA	A J TUYAHOV	GSFC	D C CLARKE	NAG 5 3620	106
39	UNIV OF CALIFORNIA - SANTA BARBARA	A TUYAHOV	GSFC	J E ESTES	NAG 5 10457	108
39	UNIV OF CALIFORNIA - SANTA BARBARA	C TREES	GSFC	N NELSON	NAG 5 12400	108
39	UNIV OF CALIFORNIA - SANTA BARBARA	D DEERING	GSFC	J MELACK	NCC 5 281	109
39	UNIV OF CALIFORNIA - SANTA BARBARA	D W DEERING	GSFC	O A CHADWICK	NCC 5 282	109
39	UNIV OF CALIFORNIA - SANTA BARBARA	D W DEERING	GSFC	D A ROBERTS	NCC 5 589	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	E KRIENS	GSFC	C GAUTIER	NAS 5 31374	109
39	UNIV OF CALIFORNIA - SANTA BARBARA	E LINDSTROM	GSFC	J C DOZIER	NAG 5 9844	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	E T ENGMAN	GSFC	T DUNNE	NAG 5 8396	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	E T ENGMAN	GSFC	J SHI	NAG 5 8616	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	J A MARRA	GSFC	R C SMITH	NAG 5 6434	106
39	UNIV OF CALIFORNIA - SANTA BARBARA	J MARRA	GSFC	D A SIEGEL	NAG 5 9818	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	J W CAMPBELL	GSFC	D A SIEGEL	NAG 5 8319	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	J YODER	GSFC	D SIEGEL	NAG 5 6288	106
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	MERTES	NGT 5 30173	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	D A SIEGEL	NGT 5 30194	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	K C CLARKE	NGT 5 30201	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	T DUNNE	NGT 5 30225	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	T DUNNE	NGT 5 30332	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	O CHADWICK	NGT 5 30357	110
39	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	D A ROBERTS	NGT 5 50327	111
39	UNIV OF CALIFORNIA - SANTA BARBARA	M Y WEI	GSFC	N M MAHOWALD	NAG 5 8680	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	N KHAZENIE	GSFC	C GAUTIER	NAG 5 4963	106
39	UNIV OF CALIFORNIA - SANTA BARBARA	P DECOLA	GSFC	N M MAHOWALD	NAG 5 9671	107
39	UNIV OF CALIFORNIA - SANTA BARBARA	P R HOUSER	GSFC	J SHI	NAG 5 11709	108
39	UNIV OF CALIFORNIA - SANTA BARBARA	S G UNGAR	GSFC	D A ROBERTS	NCC 5 496	109
39	UNIV OF CALIFORNIA - SANTA BARBARA	S GOGINENI	GSFC	J C DOZIER	NAG 5 4814	106
39	UNIV OF CALIFORNIA - SANTA BARBARA	T JANETOS	GSFC	T DUNNE	NAG 5 6120	106
39	UNIV OF CALIFORNIA - SANTA BARBARA	W ABDALATI	GSFC	J SHI	NAG 5 10671	108
39	UNIV OF CALIFORNIA - SANTA CRUZ	D DESMARAIS	ARC	G H RAU	NCC 2 5456	113
39	UNIV OF CALIFORNIA - SANTA CRUZ	D J DES MARAIS	ARC	G H RAU	NCC 2 5339	113
39	UNIV OF CALIFORNIA - SANTA CRUZ	J MARRA	GSFC	R KUDELA	NAG 5 8855	111
39	UNIV OF CALIFORNIA - SANTA CRUZ	J W MARRA	GSFC	R KUDELA	NAG 5 8750	111
39	UNIV OF CALIFORNIA - SANTA CRUZ	M Y WEI	GSFC	R S ANDERSON	NGT 5 30112	114
39	UNIV OF CALIFORNIA - SANTA CRUZ	W ABDALATI	GSFC	S TULACZK	NAG 5 12379	112
39	UNIV OF CHICAGO	E G STANSBERY	JSC	A J TUZZOLINO	NAG 9 1306	205
39	UNIV OF CINCINNATI	T SCOTT	GRC	D BECK	NAG 3 2437	418
39	UNIV OF CINCINNATI	P R HOUSER	GSFC	S ISLAM	NAG 5 11684	419

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF COLORADO - BOULDER	A	GSFC	K STEFFEN	NAG 5 10857	132
39	UNIV OF COLORADO - BOULDER	A C JANETOS	GSFC	D A WESSMAN	NAG 5 6134	124
39	UNIV OF COLORADO - BOULDER	D ANDERSEN	GSFC	J A CURRY	NAG 5 11506	135
39	UNIV OF COLORADO - BOULDER	D ANDERSON	GSFC	L M AVALLONE	NAG 5 11473	134
39	UNIV OF COLORADO - BOULDER	D ANDERSON	GSFC	O B TOON	NAG 5 11474	134
39	UNIV OF COLORADO - BOULDER	D ANDERSON	GSFC	K F EVANS	NAG 5 11501	135
39	UNIV OF COLORADO - BOULDER	D C WICKLAND	GSFC	G P ASNER	NAG 5 8320	127
39	UNIV OF COLORADO - BOULDER	D L WILLIAMS	GSFC	A GOETZ	NAG 5 3437	123
39	UNIV OF COLORADO - BOULDER	D L WILLIAMS	GSFC	T SCAMBOS	NAG 5 3438	123
39	UNIV OF COLORADO - BOULDER	E LINDSTROM	GSFC	J STROEVE	NAG 5 9602	130
39	UNIV OF COLORADO - BOULDER	E LINDSTROM	GSFC	J MASLANIK	NAG 5 9861	130
39	UNIV OF COLORADO - BOULDER	G C GUTMIN	GSFC	D WEBB	NAG 5 6051	124
39	UNIV OF COLORADO - BOULDER	G GUTMAN	GSFC	C WESSMAN	NAG 5 11238	133
39	UNIV OF COLORADO - BOULDER	J C DODGE	GSFC	D EMERY	NAG 5 6521	125
39	UNIV OF COLORADO - BOULDER	J C DODGE	GSFC	D L ARMSTRONG	NAG 5 6636	125
39	UNIV OF COLORADO - BOULDER	J C DODGE	GSFC	W EMERY	NAG 5 10288	131
39	UNIV OF COLORADO - BOULDER	J DODGE	GSFC	P J WEBSTER	NAG 5 9404	129
39	UNIV OF COLORADO - BOULDER	J DODGE	GSFC	R ARMSTRONG	NAG 5 9412	129
39	UNIV OF COLORADO - BOULDER	J DODGE	GSFC	G R SCHARFEN	NAG 5 9722	130
39	UNIV OF COLORADO - BOULDER	J L PRIVETTE	GSFC	N KHATIB	NGT 5 93	140
39	UNIV OF COLORADO - BOULDER	J ZWALLY	GSFC	K STEFFEN	NAG 5 12260	137
39	UNIV OF COLORADO - BOULDER	L MILAN	GSFC	J GILLE	NAS 5 97046	138
39	UNIV OF COLORADO - BOULDER	M WEI	GSFC	L M AVALLONE	NGT 5 30209	140
39	UNIV OF COLORADO - BOULDER	M WEI	GSFC	G ASNER	NGT 5 30348	140
39	UNIV OF COLORADO - BOULDER	M WEI	GSFC	M A TOLBERT	NGT 5 30363	140
39	UNIV OF COLORADO - BOULDER	M WEI	GSFC	J WAHR	NGT 5 50320	142
39	UNIV OF COLORADO - BOULDER	M Y WEI	GSFC	G ASNER	NAG 5 8709	128
39	UNIV OF COLORADO - BOULDER	M Y WEI	GSFC	M TOLBERT	NGT 5 30136	140
39	UNIV OF COLORADO - BOULDER	M Y WEI	GSFC	B TOON	NGT 5 30155	140
39	UNIV OF COLORADO - BOULDER	P HAUSER	GSFC	M SERREZE	NAG 5 9568	130
39	UNIV OF COLORADO - BOULDER	P HOUSER	GSFC	J WAHR	NAG 5 9450	129
39	UNIV OF COLORADO - BOULDER	P R HOUSER	GSFC	T ZHANG	NAG 5 8615	128
39	UNIV OF COLORADO - BOULDER	P R HOUSER	GSFC	R L ARMSTRONG	NAG 5 11512	135
39	UNIV OF COLORADO - BOULDER	Q A BARKER	GSFC	R G BARRY	NAS 5 98070	138
39	UNIV OF COLORADO - BOULDER	R THOMAS	GSFC	D STEFFEN	NAG 5 4248	124
39	UNIV OF COLORADO - BOULDER	S G UNGAR	GSFC	A F GOETZ	NCC 5 458	139
39	UNIV OF COLORADO - BOULDER	S G UNGAR	GSFC	G P ASNER	NCC 5 480	139
39	UNIV OF COLORADO - BOULDER	S G UNGAR	GSFC	G P ASNER	NCC 5 481	139
39	UNIV OF COLORADO - BOULDER	S GOGINENI	GSFC	R G BARRY	NAG 5 4440	124
39	UNIV OF COLORADO - BOULDER	S GOGINENI	GSFC	A LYNCH	NAG 5 6820	125
39	UNIV OF COLORADO - BOULDER	S GOGINENI	GSFC	J WAHR	NAG 5 6875	125
39	UNIV OF COLORADO - BOULDER	S GOGINENI	GSFC	T A SCAMBOS	NAG 5 7760	126
39	UNIV OF COLORADO - BOULDER	T GUBBELS	GSFC	A GOETZ	NAG 5 11659	135
39	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	J STROEVE	NAG 5 10600	132
39	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	K STEFFEN	NAG 5 11612	135
39	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	K STEFFEN	NAG 5 12075	136
39	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	J WAHR	NAG 5 12380	137
39	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	K STEFFAN	NAG 5 12381	137
39	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	J CASSANO	NAG 5 12533	137
39	UNIV OF COLORADO - BOULDER	B A WIELICKI	LARC	E C	NAG 1 01081	121
39	UNIV OF COLORADO - BOULDER	B A WIELICKI	LARC	E C WEATHERHEAD	NCC 1 01048	138
39	UNIV OF COLORADO - BOULDER	D L PIERCE	WFF	W EMERY	NAG 5 5274	124
39	UNIV OF CONNECTICUT	J W MARRA	GSFC	C ROESLER	NAG 5 7654	144
39	UNIV OF CONNECTICUT	M Y WEI	GSFC	E N ANAGOSTOU	NAG 5 8636	144
39	UNIV OF CONNECTICUT	P R HOUSER	GSFC	E N ANAGOSTOU	NAG 5 11527	144
39	UNIV OF DELAWARE	E LINDSTROM	GSFC	X YAN	NAG 5 7949	149
39	UNIV OF DELAWARE	P R HOUSER	GSFC	D J LEATHERS	NAG 5 11452	149
39	UNIV OF DENVER	D ANDERSON	GSFC	J M REEVES	NAG 5 11531	143
39	UNIV OF DENVER	D ANDERSON	GSFC	J C WILSON	NAG 5 11533	143
39	UNIV OF FLORIDA	G GUTMAN	GSFC	M W BINFORD	NAG 5 9331	171
39	UNIV OF FLORIDA	M WEI	GSFC	J JACOBS	NAG 5 10567	172
39	UNIV OF FLORIDA	M WEI	GSFC	E SCHUUR	NAG 5 12565	172
39	UNIV OF FLORIDA	N MAYNARD	GSFC	D WOOD	NAG 5 3772	171
39	UNIV OF GEORGIA	P R HOUSER	GSFC	T L MOTE	NAG 5 11592	189
39	UNIV OF GEORGIA	E K GIBSON	JSC	C S ROMANEK	NAG 9 1110	189
39	UNIV OF GEORGIA	G CARTER	SSC	C L NEELY	NAG13 02003	189

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF HAWAII AT MANOA - HONOLULU	D L PIERCE	GSFC	M ATKINSON	NAG 5 5276	191
39	UNIV OF HAWAII AT MANOA - HONOLULU	D L WILLIAMS	GSFC	FLYNN	NAG 5 3451	190
39	UNIV OF HAWAII AT MANOA - HONOLULU	E D PAYLOR	GSFC	P J MOUGINIS-MARK	NAG 5 8920	192
39	UNIV OF HAWAII AT MANOA - HONOLULU	E LINDSTROM	GSFC	J MCCREARY	NAG 5 10045	194
39	UNIV OF HAWAII AT MANOA - HONOLULU	E PAYLOR	GSFC	G J FRYER	NAG 5 8745	192
39	UNIV OF HAWAII AT MANOA - HONOLULU	E PAYLOR	GSFC	K F CHEUNG	NAG 5 8748	192
39	UNIV OF HAWAII AT MANOA - HONOLULU	E PAYLOR	GSFC	M BEVIS	NAG 5 8757	192
39	UNIV OF HAWAII AT MANOA - HONOLULU	E PAYLOR	GSFC	S BUSINGER	NAG 5 9580	193
39	UNIV OF HAWAII AT MANOA - HONOLULU	J DODGE	GSFC	L FLYNN	NAG 5 9413	193
39	UNIV OF HAWAII AT MANOA - HONOLULU	J MARRA	GSFC	R R BIDIGARE	NAG 5 9757	193
39	UNIV OF HAWAII AT MANOA - HONOLULU	J W CAMPBELL	GSFC	M J ATKINSON	NAG 5 7513	191
39	UNIV OF HAWAII AT MANOA - HONOLULU	M WEI	GSFC	B POPP	NGT 5 30207	197
39	UNIV OF HAWAII AT MANOA - HONOLULU	M WEI	GSFC	P MOUGINIS-MARK	NGT 5 50319	197
39	UNIV OF HAWAII AT MANOA - HONOLULU	N KHAZENIE	GSFC	L P FLYNN	NAG 5 7730	191
39	UNIV OF HAWAII AT MANOA - HONOLULU	S G UNGAR	GSFC	L P FLYNN	NCC 5 461	197
39	UNIV OF HAWAII AT MANOA - HONOLULU	J DODGE	HQ	T NIELSEN	NAG 5 9252	193
39	UNIV OF IDAHO - MOSCOW	N KHAZENIE	GSFC	M R ODELL	NAG 5 9052	198
39	UNIV OF IDAHO - MOSCOW	P HOUSER	GSFC	R QUALLS	NAG 5 9876	198
39	UNIV OF IDAHO - MOSCOW	P R HOUSER	GSFC	R J QUALLS	NAG 5 9846	198
39	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	E T ENGMAN	GSFC	P KUMAR	NAG 5 8555	209
39	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M WEI	GSFC	D WUEBBLES	NGT 5 50326	212
39	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	P R HOUSER	GSFC	G M MCFARQUHAR	NAG 5 11756	210
39	UNIV OF IOWA	E T ENGMAN	GSFC	A BRADLEY	NAG 5 8873	224
39	UNIV OF IOWA	M WEI	GSFC	G CARMICHAEL	NGT 5 30199	225
39	UNIV OF IOWA	P R HOUSER	GSFC	W EICHINGER	NAG 5 11688	224
39	UNIV OF KANSAS	E LINDSTROM	GSFC	S GOGINENI	NAG 5 8758	226
39	UNIV OF KANSAS	E LINDSTROM	GSFC	S GOGINENI	NAG 5 9840	226
39	UNIV OF KANSAS	M Y WEI	GSFC	G S PRASAD	NGT 5 50219	228
39	UNIV OF KANSAS	R THOMAS	GSFC	D A BRAATEN	NAG 5 7053	226
39	UNIV OF KANSAS	W ABDALATI	GSFC	S GOGINENI	NAG 5 11788	226
39	UNIV OF KANSAS	B DAVIS	SSC	K P PRICE	NAG13 01008	227
39	UNIV OF MAINE - ORONO	A JANETOS	GSFC	S SADER	NAG 5 6041	235
39	UNIV OF MAINE - ORONO	C TREES	GSFC	L KARP-BOSS	NAG 5 12393	236
39	UNIV OF MAINE - ORONO	E LINDSTROM	GSFC	G HAMILTON	NAG 5 10035	236
39	UNIV OF MAINE - ORONO	G GUTMAN	GSFC	S A SADER	NAG 5 8712	236
39	UNIV OF MAINE - ORONO	J A MARRA	GSFC	A C THOMAS	NAG 5 6558	235
39	UNIV OF MAINE - ORONO	J MARRA	GSFC	A THOMAS	NAG 5 6604	235
39	UNIV OF MAINE - ORONO	J MARRA	GSFC	M PERRY	NAG 5 9959	236
39	UNIV OF MAINE - ORONO	J ZWALLY	GSFC	G S HAMILTON	NAG 5 9913	236
39	UNIV OF MAINE - ORONO	M BEHRENFELD	GSFC	E BOSS	NAG 5 12385	236
39	UNIV OF MAINE - ORONO	M WEI	GSFC	L M MAYER	NGT 5 30353	236
39	UNIV OF MAINE - ORONO	A JANETOS	HQ	R RINDFUSS	NAG 5 6002	235
39	UNIV OF MARYLAND - COLL PARK	A C JANETOS	GSFC	R DEFRIES	NAG 5 8177	258
39	UNIV OF MARYLAND - COLL PARK	A J BUSSALACCHI	GSFC	C BIRKETT	NAG 5 11699	264
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	J R TOWNSHEND	NAG 5 4056	256
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	S D PRINCE	NAG 5 7425	257
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	C O JUSTICE	NAG 5 9892	261
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	C O JUSTICE	NAG 5 9893	261
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	C J TUCKER	NAG 5 10235	261
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	D R TOWNSEND	NAG 5 10527	262
39	UNIV OF MARYLAND - COLL PARK	C J TUCKER	GSFC	C JUSTICE	NAG 5 11672	264
39	UNIV OF MARYLAND - COLL PARK	D E WICKLAND	GSFC	S D PRINCE	NAG 5 6421	256
39	UNIV OF MARYLAND - COLL PARK	D E WICKLAND	GSFC	R E DEFRIES	NAG 5 6970	257
39	UNIV OF MARYLAND - COLL PARK	D E WICKLAND	GSFC	S N GOWARD	NAG 5 7587	257
39	UNIV OF MARYLAND - COLL PARK	D E WICKLAND	GSFC	S D PRINCE	NAG 5 8121	258
39	UNIV OF MARYLAND - COLL PARK	D E WICKLAND	GSFC	S LIANG	NAG 5 8179	258
39	UNIV OF MARYLAND - COLL PARK	D E WICKLAND	GSFC	S PRINCE	NAG 5 10859	262
39	UNIV OF MARYLAND - COLL PARK	D L WILLIAMS	GSFC	S N GOWARD	NAG 5 3454	255
39	UNIV OF MARYLAND - COLL PARK	D L WILLIAMS	GSFC	S GOWARD	NCC 5 408	269
39	UNIV OF MARYLAND - COLL PARK	D L WILLIAMS	GSFC	S N GOWARD	NCC 5 648	269
39	UNIV OF MARYLAND - COLL PARK	D WICKLAND	GSFC	K KASISCHKE	NAG 5 9440	260
39	UNIV OF MARYLAND - COLL PARK	D WICKLAND	GSFC	E KASISCHKE	NAG 5 11786	265
39	UNIV OF MARYLAND - COLL PARK	E J MASUOKA	GSFC	D ROY	NAG 5 12414	266
39	UNIV OF MARYLAND - COLL PARK	E J MASUOKA	GSFC	R A SOHLBERG	NCC 5 650	269
39	UNIV OF MARYLAND - COLL PARK	E LINDSTROM	GSFC	R MURTUGUDDE	NAG 5 8263	258
39	UNIV OF MARYLAND - COLL PARK	E LINDSTROM	GSFC	A BUSALACCHI	NAG 5 12246	266

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF MARYLAND - COLL PARK	E T ENGMAN	GSFC	R T PINKER	NAG 5 8366	258
39	UNIV OF MARYLAND - COLL PARK	G C GUTMAN	GSFC	S PRINCE	NAG 5 4811	256
39	UNIV OF MARYLAND - COLL PARK	G C GUTMAN	GSFC	D DEFRIES	NAG 5 6004	256
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	N LAPORTE	NAG 5 9319	259
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	S D PRINCE	NAG 5 9329	260
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	J R TOWNSHEND	NAG 5 9337	260
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	G SUN	NAG 5 9338	260
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	R DEFRIES	NAG 5 9339	260
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	C JUSTICE	NAG 5 10858	262
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	L ZHANQUING	NAG 5 10898	263
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	N BOCKSTAEEL	NAG 5 11149	263
39	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	R DEFRIES	NAG 5 11161	263
39	UNIV OF MARYLAND - COLL PARK	G J COLLATZ	GSFC	L BOUNOUA	NAG 5 10090	261
39	UNIV OF MARYLAND - COLL PARK	H OSEROFF	GSFC	C JUSTICE	NAG 5 31365	267
39	UNIV OF MARYLAND - COLL PARK	J DODGE	GSFC	P ELLINGSON	NAG 5 6483	256
39	UNIV OF MARYLAND - COLL PARK	J DODGE	GSFC	P PINKER	NAG 5 6667	257
39	UNIV OF MARYLAND - COLL PARK	J DODGE	GSFC	R DUBAYAH	NAG 5 9411	260
39	UNIV OF MARYLAND - COLL PARK	J DODGE	GSFC	R DEFRIES	NAG 5 9620	260
39	UNIV OF MARYLAND - COLL PARK	J G COLLATZ	GSFC	L BOUNOUA	NAG 5 8230	258
39	UNIV OF MARYLAND - COLL PARK	J MARRA	GSFC	A SUBRAMANIAN	NAG 5 11274	263
39	UNIV OF MARYLAND - COLL PARK	J ROBINSON	GSFC	R DUBAYAH	NAG 5 97160	267
39	UNIV OF MARYLAND - COLL PARK	J W CAMPBELL	GSFC	R MURTUGUDDE	NAG 5 8595	258
39	UNIV OF MARYLAND - COLL PARK	K J RANSON	GSFC	G SUN	NAG 5 8764	259
39	UNIV OF MARYLAND - COLL PARK	M RIENECKER	GSFC	E KALNAY	NAG 5 8528	258
39	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	A DESSLER	NAG 5 8936	259
39	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	R DUBAYAH	NGT 5 99	270
39	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	E RUSSEK-COHEN	NGT 5 100	270
39	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	F BAER	NGT 5 30196	270
39	UNIV OF MARYLAND - COLL PARK	M Y WEI	GSFC	A VERNEKAR	NGT 5 30142	270
39	UNIV OF MARYLAND - COLL PARK	M Y WEI	GSFC	K PICKERING	NGT 5 50217	270
39	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	A DESSLER	NAG 5 9632	260
39	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	K E PICKERING	NAG 5 9672	260
39	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	A PICKERING	NAG 5 11956	265
39	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	A DESSLER	NAG 5 12073	265
39	UNIV OF MARYLAND - COLL PARK	P HOUSER	GSFC	R DUBAYAH	NAG 5 9447	260
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	R DUBAYAH	NAG 5 9809	261
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	R T PINKER	NAG 5 9916	261
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	E BERBERY	NAG 5 11577	264
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	K L BRUBAKER	NAG 5 11600	264
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	C BIRKETT	NAG 5 11698	264
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	C BIRKETT	NAG 5 11939	265
39	UNIV OF MARYLAND - COLL PARK	P R HOUSER	GSFC	C BIRKETT	NAG 5 12130	265
39	UNIV OF MARYLAND - COLL PARK	R C HARRISS	GSFC	D TOWNSHEND	NCC 5 190	268
39	UNIV OF MARYLAND - COLL PARK	R CURAN	GSFC	R T PINKER	NAG 5 9634	260
39	UNIV OF MARYLAND - COLL PARK	S G UNGAR	GSFC	S LIANG	NCC 5 462	269
39	UNIV OF MARYLAND - COLL PARK	S GOGINENI	GSFC	M FAHNESTOCK	NAG 5 7058	257
39	UNIV OF MARYLAND - COLL PARK	W J WAGNER	GSFC	M R KUNDU	NAG 5 8192	258
39	UNIV OF MARYLAND - COLL PARK	J JENNER	SSC	S GOWARD	NAG13 98001	267
39	UNIV OF MARYLAND - COLL PARK	T M STANLEY	SSC	S J GOETZ	NAG13 02010	267
39	UNIV OF MARYLAND BALTIMORE COUNTY	E R KREINS	GSFC	L L STROW	NAG 5 31378	275
39	UNIV OF MARYLAND BALTIMORE COUNTY	G GUTMAN	GSFC	Y SOHN	NAG 5 9645	272
39	UNIV OF MARYLAND BALTIMORE COUNTY	J DODGE	GSFC	A MEHTA	NAG 5 9707	272
39	UNIV OF MARYLAND BALTIMORE COUNTY	J DODGE	GSFC	S PAWSON	NAG 5 12162	274
39	UNIV OF MARYLAND BALTIMORE COUNTY	M KURYLO	GSFC	J M SIROTA	NAG 5 9588	272
39	UNIV OF MARYLAND BALTIMORE COUNTY	P R HOUSER	GSFC	L OREOPOULOS	NAG 5 11631	274
39	UNIV OF MARYLAND BALTIMORE COUNTY	P R HOUSER	GSFC	W NI	NAG 5 11798	274
39	UNIV OF MARYLAND BALTIMORE COUNTY	P R HOUSER	GSFC	S YANG	NAG 5 12064	274
39	UNIV OF MASSACHUSETTS - AMHERST	M KURYLO	GSFC	A PARRISH	NAG 5 9652	300
39	UNIV OF MASSACHUSETTS - AMHERST	N KHAZENIE	GSFC	M STERNHEIM	NAG 5 6161	299
39	UNIV OF MASSACHUSETTS - AMHERST	M N ABEDIN	LARC	S K YNGVESSON	NAG 5 101058	301
39	UNIV OF MASSACHUSETTS-DARTHMOUTH	D R KAHLE	GSFC	B J ROTHSCHILD	NAG 5 9752	302
39	UNIV OF MASSACHUSETTS-DARTHMOUTH	J MARRA	GSFC	J J BISAGNI	NAG 5 6605	302
39	UNIV OF MASSACHUSETTS-DARTHMOUTH	M GIARDINO	SSC	W S BROWN	NAG13 02042	302
39	UNIV OF MIAMI	A R TUYAHOV	GSFC	T DIXON	NAG 5 9627	174
39	UNIV OF MIAMI	D ANDERSON	GSFC	B A ALBRETCH	NAG 5 11508	175
39	UNIV OF MIAMI	J C DODGE	GSFC	P J MINNETT	NAG 5 6577	174

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF MIAMI	J MARRA	GSFC	R H EVANS	NAG 5 8864	174
39	UNIV OF MIAMI	J MARRA	GSFC	D BOGUCKI	NAG 5 11392	175
39	UNIV OF MIAMI	M RIENECKER	GSFC	G HALIWELL	NAG 5 8229	174
39	UNIV OF MICHIGAN - ANN ARBOR	D E WICKLAND	GSFC	K SARABANDI	NAG 5 4939	309
39	UNIV OF MICHIGAN - ANN ARBOR	D W DEERING	GSFC	M C DOBSON	NCC 5 296	315
39	UNIV OF MICHIGAN - ANN ARBOR	G GUTMAN	GSFC	K BERGEN	NAG 5 11084	312
39	UNIV OF MICHIGAN - ANN ARBOR	G GUTMAN	GSFC	D BROWN	NAG 5 11271	312
39	UNIV OF MICHIGAN - ANN ARBOR	G GUTMAN	GSFC	K BERGEN	NAG 5 11748	313
39	UNIV OF MICHIGAN - ANN ARBOR	J RANSON	GSFC	D G BROWN	NAG 5 8630	310
39	UNIV OF MICHIGAN - ANN ARBOR	J RANSON	GSFC	D G BROWN	NAG 5 8719	310
39	UNIV OF MICHIGAN - ANN ARBOR	M WEI	GSFC	J PENNER	NGT 5 30359	316
39	UNIV OF MICHIGAN - ANN ARBOR	M Y WEI	GSFC	C OLSON	NGT 5 30172	316
39	UNIV OF MICHIGAN - ANN ARBOR	P E O'NEILL	GSFC	A ENGLAND	NAG 5 10036	311
39	UNIV OF MICHIGAN - ANN ARBOR	P R HOUSER	GSFC	A W ENGLAND	NAG 5 11580	313
39	UNIV OF MICHIGAN - ANN ARBOR	P T HOUSER	GSFC	A W ENGLAND	NAG 5 8661	310
39	UNIV OF MICHIGAN - ANN ARBOR	E G STANSBERY	JSC	P O SIETZER	NAG 9 1373	314
39	UNIV OF MICHIGAN - ANN ARBOR	R MCKELLIP	SSC	M DOBSON	NAG13 99024	314
39	UNIV OF MINN	D E WICKLAND	GSFC	P B REICH	NAG 5 7917	319
39	UNIV OF MINN	G GUTMAN	GSFC	J PASTOR	NAG 5 9312	320
39	UNIV OF MINN	G GUTMAN	GSFC	P BOLSTAD	NAG 5 11130	320
39	UNIV OF MINN	M KURYLO	GSFC	R W CARR	NAG 5 8869	319
39	UNIV OF MINN	M Y WEI	GSFC	E FOUFOULA-GEORGI	NAG 5 6191	319
39	UNIV OF MINN	M Y WEI	GSFC	S HOBBIE	NGT 5 30111	322
39	UNIV OF MINN	P R HOUSER	GSFC	F FORTE-AGEL	NAG 5 11801	321
39	UNIV OF MINN	R MCKELLIP	SSC	M BAUER	NAG13 99022	321
39	UNIV OF MISSOURI - COLUMBIA	E LINDSTROM	GSFC	C K WIKLE	NAG 5 8344	326
39	UNIV OF MISSOURI - COLUMBIA	W ABDALATI	GSFC	C DAVIS	NAG 5 11081	327
39	UNIV OF MISSOURI - COLUMBIA	R MCKELLIP	JSC	D BLANCHARD	NAG13 99014	327
39	UNIV OF MISSOURI - COLUMBIA	R MCKELLIP	SSC	D D HIPPLE	NAG13 00006	327
39	U OF MONT	C S POTTER	ARC	J S KIMBALL	NAG 2 1531	335
39	U OF MONT	B MEESON	GSFC	W R SNYDER	NAG 5 9062	335
39	U OF MONT	D E WICKLAND	GSFC	S W RUNNING	NCC 5 382	336
39	U OF MONT	E G ENGMAN	GSFC	S W RUNNING	NAG 5 8599	335
39	U OF MONT	G GUTMAN	GSFC	R NEMANI	NAG 5 9332	335
39	U OF MONT	G GUTMAN	GSFC	J KIMBALL	NAG 5 9333	336
39	U OF MONT	H OSEROFF	GSFC	S W RUNNING	NAG 5 31368	336
39	U OF MONT	M WEI	GSFC	S RUNNING	NGT 5 50329	336
39	U OF MONT	W TURNER	GSFC	S W RUNNING	NAG 5 12540	336
39	U OF MONT	W TURNER	GSFC	R VAN DEN POL	NAG 5 12624	336
39	U OF MONT	C HALL	SSC	R NEMANI	NAG13 02002	336
39	UNIV OF NEBRASKA - LINCOLN	D C WICKLAND	GSFC	E WALTER-SHEA	NAG 5 6990	337
39	UNIV. OF NEVADA - DESERT RES. INST	S G UNGAR	GSFC	K C MCGWIRE	NCC 5 486	338
39	UNIV. OF NEVADA - DESERT RES. INST	S GOGINENI	GSFC	G L DANA	NAG 5 7870	338
39	UNIV OF NEVADA - RENO	D SENSKE	GSFC	R A SCHULTZ	NAG 5 9001	339
39	UNIV OF NEVADA - RENO	E LINDSTROM	GSFC	W M CALVIN	NAG 5 9127	339
39	UNIV OF NEVADA - RENO	M WEI	GSFC	S TYLER	NGT 5 30385	340
39	UNIV OF NEVADA - RENO	S G UNGAR	GSFC	R J WATTERS	NAG 5 9498	339
39	UNIV OF NEW HAMPSHIRE - DURHAM	A C JANETOS	GSFC	B MOORE	NAG 5 6137	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	A C JANETOS	GSFC	C LI	NAG 5 7631	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	C TREES	GSFC	M DOWELL	NAG 5 12402	345
39	UNIV OF NEW HAMPSHIRE - DURHAM	D DEERING	GSFC	B MOORE III	NAG 5 8828	344
39	UNIV OF NEW HAMPSHIRE - DURHAM	D E WICKLAND	GSFC	S FROLKING	NAG 5 6623	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	D E WICKLAND	GSFC	S FROLKING	NAG 5 7095	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	D E WICKLAND	GSFC	P CRILL	NCC 5 357	346
39	UNIV OF NEW HAMPSHIRE - DURHAM	D W DEERING	GSFC	B MOORE	NCC 5 338	346
39	UNIV OF NEW HAMPSHIRE - DURHAM	D WICKLAND	GSFC	C LI	NAG 5 6453	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	D WICKLAND	GSFC	D BARTLETT	NCC 5 226	346
39	UNIV OF NEW HAMPSHIRE - DURHAM	D WICKLAND	GSFC	M DUCKEY	NCC 5 587	346
39	UNIV OF NEW HAMPSHIRE - DURHAM	D WICKLAND	GSFC	P CRILL	NCC 5 608	347
39	UNIV OF NEW HAMPSHIRE - DURHAM	E A LINDSTROM	GSFC	W S BROWN	NAG 5 6289	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	E T ENGMAN	GSFC	C J VOROSMARTY	NAG 5 8683	344
39	UNIV OF NEW HAMPSHIRE - DURHAM	G Q GUTMAN	GSFC	X XIAO	NAG 5 11160	345
39	UNIV OF NEW HAMPSHIRE - DURHAM	J A YODER	GSFC	C VOROSMARTY	NAG 5 6452	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	M WEI	GSFC	D BARTLETT	NAG 5 12369	345
39	UNIV OF NEW HAMPSHIRE - DURHAM	P HOUSER	GSFC	C VOROSMARTY	NAG 5 9617	344
39	UNIV OF NEW HAMPSHIRE - DURHAM	P R HOUSER	GSFC	C VOROSMARTY	NAG 5 11750	345

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF NEW HAMPSHIRE - DURHAM	P T HOUSER	GSFC	C J VOROSMARTY	NAG 5 8443	343
39	UNIV OF NEW HAMPSHIRE - DURHAM	S G UNGAR	GSFC	M E MARTIN	NCC 5 477	346
39	UNIV OF NEW HAMPSHIRE - DURHAM	W ABDALATI	GSFC	M FAHNESTOCK	NAG 5 12408	346
39	UNIV OF NEW MEXICO-ALBUQUERQUE	A C JANETOS	GSFC	C N DAHM	NAG 5 6999	362
39	UNIV OF NEW MEXICO-ALBUQUERQUE	A PEEK	SSC	S A MORAIN	NCC13 98002	364
39	UNIV OF NORTH ALABAMA	N KHAZENIE	GSFC	W R STRONG	NAG 5 9085	16
39	UNIV OF NORTH CAROLINA - CHAPEL HILL	D DEERING	GSFC	R BILSBORROW	NCC 5 295	398
39	UNIV OF NORTH CAROLINA - CHAPEL HILL	D E WICKLAND	GSFC	S C WHALEN	NAG 5 6278	398
39	UNIV OF NORTH CAROLINA - CHAPEL HILL	D W DEERING	GSFC	C S MARTENS	NCC 5 337	398
39	UNIV OF NORTH CAROLINA - CHAPEL HILL	G GUTMAN	GSFC	R RINDFUSS	NAG 5 11290	398
39	UNIV OF NORTH CAROLINA - CHAPEL HILL	P DECOLA	GSFC	R E MILLER	NAG 5 8924	398
39	UNIV OF NORTH CAROLINA AT WILMINGTON	J W CAMPBELL	GSFC	S D EMSLIE	NAG 5 8114	399
39	UNIV OF NORTH DAKOTA	C YUHAS	GSFC	M POELLET	NCC 5 503	400
39	UNIV OF NORTH DAKOTA	D ANDERSON	GSFC	M POELLOT	NAG 5 11509	400
39	UNIV OF NORTH DAKOTA	D E WICKLAND	GSFC	C A GRAINGER	NAG 5 7950	400
39	UNIV OF NORTH DAKOTA	J J COLLIER	GSFC	G A SEIELSTAD	NAG 5 3616	399
39	UNIV OF NORTH DAKOTA	B A SPIERING	SSC	G A SEIESTAD	NAG13 01006	400
39	UNIV OF NORTH DAKOTA	J ANDERSON	SSC	G SEIELSTAD	NAG13 02047	400
39	UNIV OF OKLAHOMA - NORMAN	M Y WEI	GSFC	K CRAWWORD	NGT 5 30151	426
39	UNIV OF PENNSYLVANIA	M Y WEI	GSFC	H DAI	NGT 5 30165	449
39	UNIV OF PITTSBURGH	N KHAZENIE	GSFC	A I PANAH	NAG 5 9051	450
39	UNIV OF PUERTO RICO - MAYAGUEZ	J W CAMBELL	GSFC	J CORREDOR	NAG 5 7198	550
39	UNIV OF PUERTO RICO - MAYAGUEZ	M WEI	GSFC	A J CRUZ	NGT 5 30364	551
39	UNIV OF PUERTO RICO-RIO PIEDRAS	N KHAZENIE	GSFC	I L APONTE-AVELLANE	NAG 5 9050	551
39	UNIV OF RHODE ISLAND	E LINDSTROM	GSFC	L ROTHSTEIN	NAG 5 12283	457
39	UNIV OF RHODE ISLAND	E T ENGMAN	GSFC	Y WANG	NAG 5 8739	457
39	UNIV OF RHODE ISLAND	J CAMPBELL	GSFC	J A YODER	NAG 5 6645	456
39	UNIV OF RHODE ISLAND	J DODGE	GSFC	P CORNILLON	NAG 5 9633	457
39	UNIV OF RHODE ISLAND	J DODGE	GSFC	J YODER	NAG 5 9724	457
39	UNIV OF RHODE ISLAND	J YODER	GSFC	P M STEGMANN	NAG 5 6560	456
39	UNIV OF RHODE ISLAND	M WEI	GSFC	Y WANG	NAG 5 8829	457
39	UNIV OF SAN DIEGO	M MAIDEN	GSFC	J J SIMPSON	NCC 5 308	114
39	UNIV OF SOUTH ALABAMA	R ARNOLD	MSFC	M CARPENTER	NCC 8 161	16
39	UNIV OF SOUTH CAROLINA-COLUMBIA	D WICKLAND	GSFC	V LAKSHMI	NAG 5 9233	461
39	UNIV OF SOUTH CAROLINA-COLUMBIA	E T ENGMAN	GSFC	V LAKSHMI	NAG 5 8875	461
39	UNIV OF SOUTH CAROLINA-COLUMBIA	P R HOUSER	GSFC	V LAKSHMI	NAG 5 11526	461
39	UNIV OF SOUTH CAROLINA-COLUMBIA	P T HOUSER	GSFC	V LAKSHMI	NAG 5 8837	461
39	UNIV OF SOUTH FLORIDA	D L WILLIAMS	GSFC	KARGER	NAG 5 3446	176
39	UNIV OF SOUTH FLORIDA	J DODGE	GSFC	F E MULLER-KARGER	NAG 5 8175	176
39	UNIV OF SOUTH FLORIDA	J DODGE	GSFC	F MULLER-KARGER	NAG 5 10532	176
39	UNIV OF SOUTH FLORIDA	J MARRA	GSFC	F MULLER-KARGER	NAG 5 6448	176
39	UNIV OF SOUTH FLORIDA	J MARRA	GSFC	J WALSH	NAG 5 6449	176
39	UNIV OF SOUTH FLORIDA	M WEI	GSFC	F MULLER-KARGER	NGT 5 30354	177
39	UNIV OF SOUTH FLORIDA	M Y WEI	GSFC	G T MITHCHUM	NGT 5 30143	177
39	UNIV OF SOUTH FLORIDA	G BYRNE	JSC	S ANDREFOUET	NAG 9 1431	177
39	UNIV OF SOUTHERN CALIFORNIA	C TREES	GSFC	M STRAMSKA	NAG 5 12396	116
39	UNIV OF SOUTHERN CALIFORNIA	J MARRA	GSFC	D CAPONE	NAG 5 8884	115
39	UNIV OF SOUTHERN CALIFORNIA	J MARRA	GSFC	R ITURRIAGA	NAG 5 9740	116
39	UNIV OF SOUTHERN CALIFORNIA	J MARRA	GSFC	D BOGUCKI	NAG 5 11218	116
39	UNIV OF SOUTHERN MAINE	N KHAZENIE	GSFC	S M LOCKE	NAG 5 9128	236
39	UNIV OF SOUTHERN MISSISSIPPI	M THOMAS	SSC	W HAWKINS	NAG13 01005	326
39	UNIV OF TENNESSEE - CHATTANOOGA	B MEESON	GSFC	T L PATTY	NAG 5 9031	465
39	UNIV OF TENNESSEE - KNOXVILLE	B V GUYNES	MSFC	G J BUNICK	NAG 8 1568	467
39	UNIV OF TEXAS - AUSTIN	M RIENECKER	GSFC	J S FAMIGLIETTI	NAG 5 8290	489
39	UNIV OF TEXAS - AUSTIN	M WEI	GSFC	J S FAMIGLIETTI	NGT 5 30162	493
39	UNIV OF TEXAS - AUSTIN	P R HOUSER	GSFC	J S FAMIGLIETTI	NAG 5 8611	489
39	UNIV OF TEXAS - AUSTIN	P R HOUSER	GSFC	D P CHAMBERS	NAG 5 11636	491
39	UNIV OF TEXAS - AUSTIN	R FITZGERALD	GSFC	B TAPLEY	NAS 5 97213	493
39	UNIV OF TEXAS - AUSTIN	S G UNGAR	GSFC	W A WHITE	NCC 5 463	493
39	UNIV OF TEXAS - AUSTIN	S GOGINENI	GSFC	D D BLANKENSHIP	NAG 5 7910	489
39	UNIV OF TOLEDO	T M SCOTT	GRC	D P CZAJKOWSKI	NAG 3 2409	420
39	UNIV OF TOLEDO	D E WICKLAND	GSFC	K P CZAJKOWSKI	NAG 5 8052	421
39	UNIV OF TOLEDO	M Y WEI	GSFC	K P CZAJKOWSKI	NAG 5 8671	422
39	UNIV OF UTAH	D ANDERSON	GSFC	G MACE	NAG 5 11478	498
39	UNIV OF UTAH	D ANDERSON	GSFC	K SASSEN	NAG 5 11503	498
39	UNIV OF UTAH	D ANDERSON	GSFC	S K KRUEGER	NAG 5 11504	498

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF UTAH	D ANDERSON	GSFC	E ZIPSER	NAG 5 11532	498
39	UNIV OF UTAH	D DEERING	GSFC	J EHLERINGER	NCC 5 297	499
39	UNIV OF UTAH	D E WICKLAND	GSFC	J R EHLERINGER	NAG 5 7447	498
39	UNIV OF UTAH	D Q ANDESRON	GSFC	T J GARRETT	NAG 5 11505	498
39	UNIV OF UTAH	D WICKLAND	GSFC	J EHLERINGER	NAG 5 12080	498
39	UNIV OF UTAH	D WICKLAND	GSFC	J EHLERINGER	NAG 5 12230	499
39	UNIV OF UTAH	J C DODGE	GSFC	K JEZEK	NAG 5 8550	498
39	UNIV OF UTAH	M WEI	GSFC	R FORSTER	NAG 5 12552	499
39	UNIV OF UTAH	M WEI	GSFC	R R FORSTER	NGT 5 30184	499
39	UNIV OF UTAH	M WEI	GSFC	J R EHLERINGER	NGT 5 30202	499
39	UNIV OF UTAH	S GOGINENI	GSFC	R FORESTER	NAG 5 7871	498
39	UNIV OF VERMONT	V C VANDERBILT	ARC	G P LIVINGSTON	NCC 2 5399	502
39	UNIV OF VIRGINIA	A C JANETOS	GSFC	P DESANKER	NAG 5 6384	518
39	UNIV OF VIRGINIA	A C JANETOS	GSFC	C O JUSTICE	NAG 5 8162	519
39	UNIV OF VIRGINIA	C J TUCKER	GSFC	C O JUSTICE	NAG 5 11341	521
39	UNIV OF VIRGINIA	D E WICKLAND	GSFC	H H SHUGART	NAG 5 7956	519
39	UNIV OF VIRGINIA	D E WICKLAND	GSFC	H H SHUGART	NAG 5 9357	520
39	UNIV OF VIRGINIA	D WICKLAND	GSFC	C O JUSTICE	NAG 5 7862	519
39	UNIV OF VIRGINIA	G GUTMAN	GSFC	P V DESANKER	NAG 5 9289	520
39	UNIV OF VIRGINIA	J GRANT	GSFC	A HOWARD	NAG 5 8902	519
39	UNIV OF VIRGINIA	J PRIVETTE	GSFC	R J SWAPP	NAG 5 7266	519
39	UNIV OF VIRGINIA	J PRIVETTE	GSFC	R J SWAPP	NAG 5 10985	520
39	UNIV OF VIRGINIA	M WEI	GSFC	R SWAP	NAG 5 10606	520
39	UNIV OF VIRGINIA	M Y WEI	GSFC	J D ALBERTSON	NAG 5 8670	519
39	UNIV OF WASHINGTON	A C JANETOS	GSFC	J RICHEY	NAG 5 4712	529
39	UNIV OF WASHINGTON	A T CHANG	GSFC	L TSANG	NAG 5 4739	529
39	UNIV OF WASHINGTON	A T CHANG	GSFC	L TSANG	NAG 5 9835	532
39	UNIV OF WASHINGTON	A T CHANG	GSFC	L TSANG	NAG 5 11359	534
39	UNIV OF WASHINGTON	D W DEERING	GSFC	J E RICHEY	NCC 5 345	536
39	UNIV OF WASHINGTON	E LINDSTROM	GSFC	A T JESSUP	NAG 5 7526	530
39	UNIV OF WASHINGTON	E LINDSTROM	GSFC	K KELLY	NAG 5 8296	531
39	UNIV OF WASHINGTON	E LINDSTROM	GSFC	H STERN	NAG 5 9854	532
39	UNIV OF WASHINGTON	E LINDSTROM	GSFC	K KELLY	NAG 5 12539	535
39	UNIV OF WASHINGTON	J A WEINMAN	GSFC	J D SAHR	NAG 5 11372	534
39	UNIV OF WASHINGTON	J A WEINMAN	GSFC	R HOUZE	NCC 5 584	536
39	UNIV OF WASHINGTON	J DODGE	GSFC	R LINDSAY	NAG 5 6493	530
39	UNIV OF WASHINGTON	J DODGE	GSFC	D LETTENMAIER	NAG 5 9416	532
39	UNIV OF WASHINGTON	J W MARRA	GSFC	B FROST	NAG 5 7604	531
39	UNIV OF WASHINGTON	J ZWALLY	GSFC	C F RAYMOND	NAG 5 9906	532
39	UNIV OF WASHINGTON	K PATRINGTON	GSFC	D A ROTHROCK	NAG 5 9334	532
39	UNIV OF WASHINGTON	M WEI	GSFC	J DECOSMO	NAG 5 12410	535
39	UNIV OF WASHINGTON	M WEI	GSFC	S R EMERSON	NGT 5 30213	537
39	UNIV OF WASHINGTON	M WEI	GSFC	D P LETTENMAIER	NGT 5 30220	537
39	UNIV OF WASHINGTON	M WEI	GSFC	T HINCKLEY	NGT 5 30343	537
39	UNIV OF WASHINGTON	M WEI	GSFC	S WARREN	NGT 5 50334	538
39	UNIV OF WASHINGTON	M Y WEI	GSFC	J E RICHEY	NGT 5 30149	537
39	UNIV OF WASHINGTON	M Y WEI	GSFC	T M HINCKLEY	NGT 5 30157	537
39	UNIV OF WASHINGTON	M Y WEI	GSFC	J E RICHEY	NGT 5 30161	537
39	UNIV OF WASHINGTON	P HOUSER	GSFC	D LETTENMAIER	NAG 5 9454	532
39	UNIV OF WASHINGTON	P R HOUSER	GSFC	D LETTENMAIER	NAG 5 11622	534
39	UNIV OF WASHINGTON	P R HOUSER	GSFC	D P LETTENMAIER	NAG 5 11632	534
39	UNIV OF WASHINGTON	P R HOUSER	GSFC	R A HOUZE	NAG 5 11685	534
39	UNIV OF WASHINGTON	P R HOUSER	GSFC	A SCHWEIGER	NAG 5 11800	534
39	UNIV OF WASHINGTON	P R HOUSER	GSFC	D P LETTENMAIER	NAG 5 12548	535
39	UNIV OF WASHINGTON	S GOGINENI	GSFC	D A ROTHROCK	NAG 5 4375	529
39	UNIV OF WASHINGTON	S GOGINENI	GSFC	A SCHWEIGER	NAG 5 7847	531
39	UNIV OF WASHINGTON	J R BLOCKER	MSFC	M BAKER	NAG 8 1512	535
39	UNIV OF WISCONSIN - MADISON	D ANDERSON	GSFC	S A ACKERMAN	NAG 5 11529	545
39	UNIV OF WISCONSIN - MADISON	D DEERING	GSFC	J FOLEY	NCC 5 335	548
39	UNIV OF WISCONSIN - MADISON	D E WICKLAND	GSFC	J FOLEY	NAG 5 7214	542
39	UNIV OF WISCONSIN - MADISON	D E WICKLAND	GSFC	S T GOWER	NAG 5 8069	543
39	UNIV OF WISCONSIN - MADISON	D L PIERCE	GSFC	S ACKERMAN	NAG 5 5272	542
39	UNIV OF WISCONSIN - MADISON	D W DEERING	GSFC	J M NORMAN	NCC 5 294	547
39	UNIV OF WISCONSIN - MADISON	D WICKLAND	GSFC	J FOLEY	NAG 5 9452	544
39	UNIV OF WISCONSIN - MADISON	E KREINS	GSFC	W L SMITH	NAS 5 31377	547
39	UNIV OF WISCONSIN - MADISON	E T ENGMAN	GSFC	D MACKAY	NAG 5 8554	543

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
39	UNIV OF WISCONSIN - MADISON	E T ENGMAN	GSFC	J A FOLEY	NAG 5 8597	543
39	UNIV OF WISCONSIN - MADISON	G GUTMAN	GSFC	M COE	NAG 5 11085	545
39	UNIV OF WISCONSIN - MADISON	J DODGE	GSFC	A HUANG	NAG 5 9389	544
39	UNIV OF WISCONSIN - MADISON	J DODGE	GSFC	G DIAK	NAG 5 9436	544
39	UNIV OF WISCONSIN - MADISON	M WEI	GSFC	J MECIKALSKI	NAG 5 12536	546
39	UNIV OF WISCONSIN - MADISON	M Y WEI	GSFC	H F WANG	NGT 5 30146	548
39	UNIV OF WISCONSIN - MADISON	M Y WEI	GSFC	W BRINKMANN	NGT 5 30160	548
39	UNIV OF WISCONSIN - MADISON	N KHAZENIE	GSFC	S S LIMAYE	NAG 5 9028	544
39	UNIV OF WISCONSIN - MADISON	S GOGINENI	GSFC	J R KEY	NAG 5 8625	543
39	UNIV OF WYOMING	D E WICKLAND	GSFC	E HUNT	NAG 5 3861	549
39	UNIV OF WYOMING	M WEI	GSFC	W REINER	NGT 5 30350	550
39	UTAH STATE UNIV	P R HOUSER	GSFC	C NEALE	NAG 5 11673	500
39	UTAH STATE UNIV	P R HOUSER	GSFC	L HIPPS	NAG 5 11687	500
39	UTAH STATE UNIV	K DAUES	JSC	B G BUGBEE	NAG 9 1397	501
39	UTAH STATE UNIV	J F DOWDY	MSFC	F BAKER	NGT 8 52866	502
39	UTAH STATE UNIV	S PEARSON	MSFC	J R DENNISON	NAS 8 98221	501
39	VA POLYTECH INST & ST UNIV	M WEI	GSFC	R WYNNE	NAG 5 10548	525
39	VA POLYTECH INST & ST UNIV	M WEI	GSFC	R H WYNNE	NGT 5 30198	527
39	VALPARISO UNIV	J C DODGE	GSFC	G A MORRIS	NAG 5 8490	220
39	WEST CHESTER UNIV OF PA	N KHAZENIE	GSFC	R M BUSCH	NAG 5 6080	453
39	WEST VIRGINIA UNIV	J POE	MSFC	T MELOY	NAG 8 1494	540
39	WHEELING JESUIT UNIV	M Y WEI	GSFC	R J MEYERS	NAG 5 8628	540
39	WOODS HOLE OCEANOGRAPHIC INST	C TREES	GSFC	L TRAYKOVSKI	NAG 5 12403	303
39	WOODS HOLE OCEANOGRAPHIC INST	E LINDSTROM	GSFC	R A KRISHFIELD	NAG 5 7770	302
39	WOODS HOLE OCEANOGRAPHIC INST	J MARRA	GSFC	D J MCGILLICUDDY	NAG 5 6455	302
39	WOODS HOLE OCEANOGRAPHIC INST	J MARRA	GSFC	H SOSIK	NAG 5 8868	302
39	WOODS HOLE OCEANOGRAPHIC INST	J W CAMPBELL	GSFC	H M SOSIK	NAG 5 7445	302
39	WOODS HOLE OCEANOGRAPHIC INST	M WEI	GSFC	H SOSIK	NGT 5 30206	303
39	WOODS HOLE OCEANOGRAPHIC INST	M WEI	GSFC	D M GLOVER	NGT 5 30362	303
39	YALE UNIV	G GUTMAN	GSFC	R SMITH	NAG 5 9316	147
39	YALE UNIV	J DODGE	GSFC	M ASHTON	NAG 5 9437	147
39	YALE UNIV	P DECOLA	GSFC	S SHERWOOD	NAG 5 12056	147
41	ALABAMA A&M UNIV	JR PRUITT	MSFC	R B LAL	NCC 8 211	3
41	ALABAMA A&M UNIV	L CHOU	MSFC	G S LIAW	NAG 8 1626	2
41	ARIZONA STATE UNIV	A CHAIT	GRC	K D SQUIRES	NAG 3 2081	19
41	ARIZONA STATE UNIV	C D WIESEMAN	LARC	A CHATTOPADYAY	NAG 1 1988	18
41	ARIZONA STATE UNIV	D R AMBUR	LARC	A CHATTOPADHYAY	NAG 1 2283	19
41	ARIZONA STATE UNIV	W A SILVA	LARC	A CHATIPHADYAJ	NAG 1 02010	19
41	BETHUNE - COOKMAN COLL	S DUTCZAK	KSC	G W BECKLES	NAG10 195	160
41	BOWLING GREEN STATE UNIV	J L DOLCE	GRC	S BALLARD	NAS 3 99202	401
41	CALIFORNIA INST OF TECH	J H STARNES	GSFC	W G KNAUSS	NAG 1 1975	40
41	CALIFORNIA INST OF TECH	D R AMBUR	LARC	W G KNAUS	NAG 1 02029	41
41	CALIFORNIA POLYTECH STATE U-SAN LUIS	D A WARDWELL	ARC	D W HALL	NCC 2 5508	50
41	CALIFORNIA POLYTECH STATE U-SAN LUIS	J ZUK	ARC	D W HALL	NCC 2 5392	49
41	CALIFORNIA POLYTECH STATE U-SAN LUIS	L TOBIAS	ARC	S HOCKADAY	NAG 2 1386	49
41	CALIFORNIA POLYTECH STATE U-SAN LUIS	M TISCHER	ARC	D J BIEZAD	NCC 2 1149	49
41	CALIFORNIA POLYTECH STATE U-SAN LUIS	M D MOORE	LARC	D HALL	NAG 1 01099	49
41	CALIFORNIA ST. POLYTECH U-POMONA	K GUPTA	DFRC	W E MORTENSEN	NAG 4 171	50
41	CALIFORNIA ST. UNIV.-SAN BERNADINO	D GUPTA	DFRC	D USHER	NAG 4 225	50
41	CALIFORNIA STATE UNIV - FRESNO	J BRADEN	DFRC	S MAHANTY	NAG 4 153	50
41	CALIFORNIA STATE UNIV - FRESNO	K GUPTA	DFRC	S MAHANTY	NAG 4 172	50
41	CALIFORNIA STATE UNIV - FRESNO	L HUDSON	DFRC	N BENGIAMIN	NAG 4 207	50
41	CALIFORNIA STATE UNIV - LOS ANGELES	K GUPTA	DFRC	M MIRMIRANI	NAG 4 224	51
41	CALIFORNIA STATE UNIV - LOS ANGELES	K GUPTA	DFRC	C WU	NAG 4 174	51
41	CALIFORNIA STATE UNIV - LOS ANGELES	K GUPTA	DFRC	M MIRMIRANI	NAG 4 175	51
41	CARNEGIE - MELLON UNIV	M B TISCHER	ARC	W C MESSNER	NAG 2 1441	432
41	CARNEGIE - MELLON UNIV	R T BIEDRON	LARC	O GHATTAS	NAG 1 2090	432
41	CASE WESTERN RESERVE UNIV	B M STEINETZ	GRC	J CRAWLEY	NCC 3 976	404
41	CASE WESTERN RESERVE UNIV	B STEINETZ	GRC	S M PHILLIPS	NCC 3 892	403
41	CASE WESTERN RESERVE UNIV	D NG	GRC	D HAZONY	NAG 3 2243	401
41	CASE WESTERN RESERVE UNIV	M G POTAPCZUK	GRC	J D ALEXANDER	NAG 3 2581	401
41	CHRISTOPHER NEWPORT UNIV	R C SINGLETERRY	LARC	K CHANG	NCC 1 01028	503
41	CHRISTOPHER NEWPORT UNIV	R R ANTCLIFF	LARC	E B WARD	NCC 1 02041	503
41	CHRISTOPHER NEWPORT UNIV	T E PINELLI	LARC	R CATON	NAG 1 2219	503
41	CITY UNIV OF NY CITY COLL	D O DAVIS	GRC	Y ANDREOPOULOS	NAG 3 2163	365
41	CITY UNIV OF NY CITY COLL	K J BREISACHER	GRC	P P HO	NAG 3 2074	365

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	CITY UNIV OF NY CITY COLL	S M JOSHI	LARC	K SOBEL	NAG 1 2028	365
41	CLARK ATLANTA UNIV	J A SEIDEL	GRC	J A FABUNMI	NAS 3 02104	179
41	CLARKSON UNIV	C C CHAMIS	GRC	D MINNETYAN	NAG 3 2393	367
41	CLARKSON UNIV	C C CHAMIS	GRC	D MINNETYAN	NAG 3 2394	367
41	CLARKSON UNIV	C C CHAMIS	GRC	D MINNETYAN	NAG 3 2609	367
41	CLARKSON UNIV	C S YAO	LARC	M N GLAUSER	NGT 1 52214	367
41	CLARKSON UNIV	J JUANG	LARC	R F SCHMIT	NGT 1 52222	367
41	CLEVELAND STATE UNIV	G Y BAAKLINI	GRC	J HEMANN	NAG 3 2672	406
41	CLEVELAND STATE UNIV	G Y BAAKLINI	GRC	J HEMANN	NAG 3 2683	406
41	CLEVELAND STATE UNIV	G Y BAAKLINI	GRC	J HEMANN	NAG 3 2684	406
41	CLEVELAND STATE UNIV	J J RUSICK	GRC	R GORLA	NAG 3 2745	406
41	CLEVELAND STATE UNIV	N	GRC	D SIMON	NAG 3 2699	406
41	CLEVELAND STATE UNIV	W MORALES	GRC	J E GATICA	NCC 3 876	408
41	COLL OF WILLIAM AND MARY	D J JOBSON	LARC	Z RAHMAD	NCC 1 01030	504
41	COLL OF WILLIAM AND MARY	J H STARNES, JR.	LARC	D M MANOS	NCC 1 356	504
41	COLL OF WILLIAM AND MARY	J SOBIESKI	LARC	R K KINCAID	NAG 1 2320	504
41	COLL OF WILLIAM AND MARY	N M ALEXANDROV	LARC	R M LEWIS	NCC 1 02029	504
41	COLL OF WILLIAM AND MARY	R A HATHAWAY	LARC	M HINDERS	NGT 1 01010	504
41	CORNELL UNIV	R HARMAN	GSFC	D PSIAKI	NAG 5 9612	374
41	CORNELL UNIV	R R HARMAN	GSFC	D PSIAKI	NAG 5 11919	376
41	CORNELL UNIV	S KANT	GSFC	M L PSIAKI	NAG 5 11819	376
41	CUYAHOGA COMM COLL	F H YARRIS	GRC	R L MOSS	NAG 3 1778	408
41	DARTMOUTH COLL	D D MOERDER	LARC	M Q PHAN	NCC 1 01045	342
41	DELFT UNIV OF TECH-NETHERLANDS	J H STARNES	LARC	J ARBOCZ	NAG 1 2129	552
41	DREXEL UNIV	M G POTAPCZUK	GRC	D A RUFF	NAG 3 2295	436
41	DREXEL UNIV	R R TACINA	GRC	K J CHOI	NAG 3 2212	436
41	DREXEL UNIV	C M BELCASTRO	LARC	B C CHANG	NAG 1 01118	436
41	DREXEL UNIV	C M BELCASTRO	LARC	A C LAU	NCC 1 278	436
41	DUKE UNIV	D ECOX	LARC	K C HALL	NAG 1 01062	389
41	DUKE UNIV	R H CABELL	LARC	R L CLARK	NAG 1 01014	389
41	EAST CAROLINA UNIV	S E MASSENBERG	LARC	L TISE	NCC 1 01027	391
41	EMBRY-RIDDLE AERONAUTICAL UNIV	B J HOLMES	LARC	S HAMPTON	NCA 1 133	160
41	EMBRY-RIDDLE AERONAUTICAL UNIV	J R BURLEY	LARC	S HAMPTON	NCA 1 01003	160
41	EMBRY-RIDDLE AERONAUTICAL UNIV	L J GLAAB	LARC	R L NEWMAN	NAG 1 02087	160
41	ESTRELLA MOUNTAIN COMM COLL	M RODAN	DFRC	M A REYES	NAG 4 234	23
41	FAYETTEVILLE STATE UNIV	S MASSENBERG	LARC	I EDWARDS	NAG 1 2227	392
41	FLA INTERNATIONAL UNIV	M G POTAPCZUK	GRC	M A EBADIAN	NAS 3 02065	162
41	FLA INTERNATIONAL UNIV	J NUNEZ	KSC	G ROIG	NAG10 309	161
41	FLORIDA A&M UNIV	G K YAMAUCHI	ARC	A KROTHAPALLI	NCC 2 1221	163
41	FLORIDA A&M UNIV	J C ROSS	ARC	A KROTHAPALLI	NCC 2 956	163
41	FLORIDA A&M UNIV	K GUPTA	DFRC	M ABDUDLLAH	NAG 4 164	162
41	FLORIDA A&M UNIV	K K GUPTA	DFRC	M M ABDULLAH	NGT 4 52430	163
41	FLORIDA A&M UNIV	S A GORTON	LARC	F S ALVI	NAG 1 01057	162
41	FLORIDA A&M UNIV	S A GORTON	LARC	F S ALVI	NAG 1 02059	162
41	FLORIDA A&M UNIV	W SELLERS	LARC	J JOHNSON	NCC 1 252	163
41	FLORIDA ATLANTIC UNIV	A ENVIA	GRC	S GLEGG	NAG 3 2702	163
41	FLORIDA STATE UNIV	E ENVIA	GRC	C TAM	NAG 3 2327	165
41	FLORIDA STATE UNIV	F FARASSAT	LARC	M Y HUSSAINI	NAG 1 01031	164
41	FLORIDA STATE UNIV	M K NORUM	LARC	A KROTHAPALLI	NAG 1 2078	164
41	FLORIDA STATE UNIV	R H THOMAS	LARC	C TAM	NAG 1 02045	167
41	FLORIDA STATE UNIV	R R ANTCLIFF	LARC	C K TAM	NAG 1 2145	164
41	FLORIDA STATE UNIV	T A ZANG	LARC	M Y HUSSAINI	NCC 1 02025	167
41	FLORIDA STATE UNIV	W R WATSON	LARC	C K TAM	NCC 1 01026	167
41	GEORGE MASON UNIV	K ROTH	ARC	G DONOHUE	NAG 2 1565	505
41	GEORGE MASON UNIV	J DORBAND	GSFC	D MOROWITZ	NAG 5 12343	506
41	GEORGE MASON UNIV	J R BURLEY	LARC	G DONOHUE	NCA 1 01004	506
41	GEORGE WASHINGTON UNIV	D W BANKSE	DFRC	R C BLANCHARD	NCC 4 156	152
41	GEORGE WASHINGTON UNIV	D ASATO	GSFC	S A SARKANI	NCC 5 436	152
41	GEORGE WASHINGTON UNIV	C A POWELL	LARC	M K MYERS	NCC 1 374	152
41	GEORGE WASHINGTON UNIV	E WAGGONER	LARC	J L WHITESIDES	NCC 1 384	152
41	GEORGE WASHINGTON UNIV	G S DISKIN	LARC	A D CUTLER	NCC 1 370	152
41	GEORGE WASHINGTON UNIV	J G BATTERSON	LARC	V KLEIN	NCC 1 326	152
41	GEORGE WASHINGTON UNIV	M D MOORE	LARC	R R SANDUSKY	NCC 1 387	152
41	GEORGE WASHINGTON UNIV	R L YANG	LARC	J L WHITESIDES	NCC 1 47	152
41	GEORGIA INST OF TECH	C I STATLER	ARC	D GOLDSMAN	NAG 2 1291	181
41	GEORGIA INST OF TECH	E A PALMER	ARC	C M MITCHELL	NCC 2 961	185

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	GEORGIA INST OF TECH	M E LIVINGSTON	ARC	D N MAVRIS	NCC 2 1193	185
41	GEORGIA INST OF TECH	M J AHOSMIS	ARC	S M RUFFIN	NGT 2 52266	186
41	GEORGIA INST OF TECH	M S WHALLEY	ARC	J P PRASAD	NAG 2 1418	181
41	GEORGIA INST OF TECH	N N MANSOUR	ARC	B ZINN	NAG 2 1488	181
41	GEORGIA INST OF TECH	P KOLOZIEJ	ARC	R OLDS	NCC 2 5332	185
41	GEORGIA INST OF TECH	V BATTISTE	ARC	A B PRITCHETT	NAG 2 1314	181
41	GEORGIA INST OF TECH	Y H YU	ARC	D P SCHRAGE	NGT 2 52274	186
41	GEORGIA INST OF TECH	Y H YU	ARC	D C SCHRAGE	NCC 2 945	185
41	GEORGIA INST OF TECH	D P HWANG	GRC	D MENON	NAG 3 2653	182
41	GEORGIA INST OF TECH	D THURMAN	GRC	D N MAVRIS	NAG 3 2586	182
41	GEORGIA INST OF TECH	F J MONTEGANI	GRC	D MAVRIS	NGT 3 52384	186
41	GEORGIA INST OF TECH	F J MONTEGANI	GRC	D MARVIS	NGT 3 52385	186
41	GEORGIA INST OF TECH	J E BRIDGE	GRC	K K AHUJA	NAS 3 02110	184
41	GEORGIA INST OF TECH	J M LUCERO	GRC	D G MCGEE	NAG 3 2500	181
41	GEORGIA INST OF TECH	K L SUDER	GRC	D MAVRIS	NAG 3 2649	182
41	GEORGIA INST OF TECH	K T PHAM	GRC	C TAM	NAS 3 02126	184
41	GEORGIA INST OF TECH	K T PHAM	GRC	B T ZINN	NCC 3 982	185
41	GEORGIA INST OF TECH	N H SAIYED	GRC	D K AHULA	NAG 3 2352	181
41	GEORGIA INST OF TECH	N LIU	GRC	S MENON	NAG 3 2660	182
41	GEORGIA INST OF TECH	A C TRUJILLO	LARC	A R PRITCHETT	NAG 1 01055	180
41	GEORGIA INST OF TECH	B A CAMPBELL	LARC	R J ENGLAR	NAG 1 02075	180
41	GEORGIA INST OF TECH	C M MEYERS	LARC	R E MCKINLEY	NAS 3 00179	184
41	GEORGIA INST OF TECH	G C HORNER	LARC	C S LYNCH	NAG 1 02015	180
41	GEORGIA INST OF TECH	G S JONES	LARC	R J ENGLAR	NCC 1 02031	185
41	GEORGIA INST OF TECH	L R CLARK	LARC	K K AHUJA	NAS 1 00087	183
41	GEORGIA INST OF TECH	M A MOTTER	LARC	A J CALISE	NAG 1 01117	180
41	GEORGIA INST OF TECH	M D MOORE	LARC	S KONDOR	NAG 1 02093	181
41	GEORGIA INST OF TECH	M D MOORE	LARC	D N MAVRIS	NAG 1 2149	180
41	GEORGIA INST OF TECH	R A LEPSCH	LARC	J R OLDS	NGT 1 52163	186
41	GEORGIA INST OF TECH	R D BRAUN	LARC	J R OLDS	NGT 1 02012	185
41	GEORGIA INST OF TECH	R E MCKINLEY	LARC	D N MAVRIS	NGT 1 02005	185
41	GEORGIA INST OF TECH	R E MCKINLEY	LARC	D N MAVRIS	NGT 1 02006	185
41	GEORGIA INST OF TECH	R E MCKINLEY	LARC	D N MAVRIS	NAG 1 02023	180
41	GEORGIA INST OF TECH	R R ANTCLIFF	LARC	K K AHUJA	NAG 1 2146	180
41	GEORGIA INST OF TECH	W T HODGES123	LARC	R J ENGLAR	NAG 1 2169	180
41	GEORGIA INST OF TECH	J F DOWDY	MSFC	J R OLDS	NGT 8 52854	187
41	GEORGIA INST OF TECH	J J HUTT	MSFC	J R OLDS	NAG 8 1597	183
41	HAMPTON UNIV	R C STRAWN	ARC	H HU	NAG 2 1331	507
41	HAMPTON UNIV	D W LAM	GRC	D GILLINSKY	NAG 3 2495	508
41	HAMPTON UNIV	I M BLANKSON	GRC	M GILLINSKY	NAG 3 2422	507
41	HAMPTON UNIV	D R SCHRYER	LARC	A AKYURTLU	NAG 1 2223	507
41	HAMPTON UNIV	R A HATHAWAY	LARC	D J DEPRIEST	NCC 1 02015	509
41	HAMPTON UNIV	R A HATHAWAY	LARC	H DAVIS	NCC 1 02020	509
41	HAMPTON UNIV	R A THOMPSON	LARC	D J DEPRIEST	NAG 1 01075	507
41	HAMPTON UNIV	R A THOMPSON	LARC	D J DEPRIEST	NAG 1 02030	507
41	HOWARD UNIV	R R ANTCLIFF	LARC	S T SMITH	NAG 1 2148	153
41	ILLINOIS INST OF TECH	J DIDION	GSFC	J S YAGOOBI	NAG 5 12370	199
41	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	D PALAC	GRC	D NALIM	NAG 3 2762	213
41	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	M LIOU	GRC	D HSU	NAG 3 2399	213
41	IOWA STATE UNIV	U B MEHTA	ARC	J C TANNEHILL	NCC 2 5379	222
41	IOWA STATE UNIV	U B MEHTA	ARC	J C TANNEHILL	NCC 2 5517	222
41	IOWA STATE UNIV	K GUPTA	DFRC	F R CHAVEZ	NGT 4 52433	222
41	IOWA STATE UNIV	M G POTAPCZUK	GRC	A ROTHMAYER	NAG 3 2342	220
41	IOWA STATE UNIV	M G POTAPCZUK	GRC	A P ROTHMAYER	NAG 3 2571	221
41	IOWA STATE UNIV	M G POTAPCZUK	GRC	A P ROTHMAYER	NAG 3 2731	221
41	IOWA STATE UNIV	R L BARTON	JSC	L M LILJEGREN	NAG 9 1184	221
41	IOWA STATE UNIV	P A GNOFFO	LARC	G R INGER	NCC 1 02016	222
41	IOWA STATE UNIV	S M JOSHI	LARC	A G KELKAR	NCC 1 01038	222
41	IOWA STATE UNIV	S M JOSHI	LARC	A G KELKAR	NCC 1 01039	222
41	IOWA STATE UNIV	S NASH-STEVENSON	MSFC	P LU	NGT 8 52895	222
41	JACKSON STATE UNIV	W LOVE	MSFC	H R SHIH	NAG 8 1867	323
41	JAMES MADISON UNIV	J A WOODS-VEDELER	LARC	J R BLANDINO	NAG 1 01093	510
41	JAMES MADISON UNIV	T B GATSKI	LARC	C D PRUETT	NAG 1 02033	510
41	JOHNS HOPKINS UNIV	H D PERKINS	GRC	P WALTRUP	NAG 3 2569	239
41	JOHNS HOPKINS UNIV	T D SMITH	GRC	T RICE	NAG 3 2333	239
41	JOHNS HOPKINS UNIV	T D SMITH	GRC	T RICE	NAG 3 2460	239

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	JOHNS HOPKINS UNIV	D VITABLANO	GSFC	W MOOS	NAS 5 30403	251
41	JOHNS HOPKINS UNIV	J BRISTOW	GSFC	P A STADTER	NAG 5 8655	242
41	JOHNS HOPKINS UNIV	J BRISTOW	GSFC	P STADTER	NAG 5 8741	242
41	JOHNS HOPKINS UNIV	J BRISTOW	GSFC	P STADTER	NAG 5 9872	243
41	JOHNS HOPKINS UNIV	S P HUGHES	GSFC	P A STADTER	NAG 5 10562	245
41	JOHNS HOPKINS UNIV	T GRUNER	GSFC	H FORD	NAG 5 8862	242
41	JOHNS HOPKINS UNIV	V W JONES	GSFC	S M KRIMIGIS	NAG 5 11060	247
41	JOHNS HOPKINS UNIV	R R ARTCLIFF	LARC	P S LEES	NAG 1 2329	238
41	JOHNSON C. SMITH UNIV	D M BLANKSON	GRC	D E MILLER	NAG 3 2300	392
41	MARY WASHINGTON COLL	J C YU	LARC	C P BRITCHER	NCC 1 394	510
41	MASSACHUSETTS INST OF TECH	K BILIMORIA	ARC	E FERON	NCC 2 1209	295
41	MASSACHUSETTS INST OF TECH	L A MEYN	ARC	J P CLARKE	NAG 2 1515	286
41	MASSACHUSETTS INST OF TECH	L A MEYN	ARC	J P CLARKE	NAG 2 1548	286
41	MASSACHUSETTS INST OF TECH	L TOBIAS	ARC	E FERON	NCC 2 1147	295
41	MASSACHUSETTS INST OF TECH	L TOBIAS	ARC	J P CLARKE	NAG 2 1554	286
41	MASSACHUSETTS INST OF TECH	M B TISCHER	ARC	E FERON	NAG 2 1482	285
41	MASSACHUSETTS INST OF TECH	M TISCHER	ARC	E FERON	NAG 2 1552	286
41	MASSACHUSETTS INST OF TECH	S C LOZITO	ARC	J K KUCHAR	NAG 2 1425	285
41	MASSACHUSETTS INST OF TECH	T TOBIAS	ARC	J P CLARKE	NAG 2 1272	285
41	MASSACHUSETTS INST OF TECH	A REEHORST	GRC	R J HANSMAN	NAG 3 2178	286
41	MASSACHUSETTS INST OF TECH	G L STEFKO	GRC	D S TAN	NAG 3 2321	286
41	MASSACHUSETTS INST OF TECH	G SKOCH	GRC	D S TAN	NAG 3 2732	287
41	MASSACHUSETTS INST OF TECH	G WELCH	GRC	D M GREITZER	NAG 3 2678	287
41	MASSACHUSETTS INST OF TECH	J J ADAMCZYK	GRC	C S TAN	NAG 3 2078	286
41	MASSACHUSETTS INST OF TECH	K L SUDER	GRC	C S TAN	NAG 3 2101	286
41	MASSACHUSETTS INST OF TECH	K SUDER	GRC	D S TAN	NAG 3 2767	287
41	MASSACHUSETTS INST OF TECH	L POVINELLI	GRC	I A WATZ	NCC 3 632	295
41	MASSACHUSETTS INST OF TECH	M BRIGHT	GRC	J PADUANO	NAG 3 2052	286
41	MASSACHUSETTS INST OF TECH	N S LIU	GRC	I A WAITZ	NAS 3 01153	294
41	MASSACHUSETTS INST OF TECH	S PAI	GRC	D M DARMOFAL	NAG 3 2320	286
41	MASSACHUSETTS INST OF TECH	R CARPENTER	GSFC	D MILLER	NAG 5 12195	292
41	MASSACHUSETTS INST OF TECH	R J OLIVERSEN	GSFC	V M KASPI	NAG 5 9120	289
41	MASSACHUSETTS INST OF TECH	R J OLIVERSEN	GSFC	D CHAKRABARTY	NAG 5 9185	290
41	MASSACHUSETTS INST OF TECH	R OLIVERSEN	GSFC	D CHARKRABARTY	NAG 5 9164	290
41	MASSACHUSETTS INST OF TECH	R OLIVERSEN	GSFC	D CHARKRABARTY	NAG 5 9184	290
41	MASSACHUSETTS INST OF TECH	R OLIVERSEN	GSFC	S RAPPAPORT	NAG 5 9189	290
41	MASSACHUSETTS INST OF TECH	R OLIVERSEN	GSFC	G ALLEN	NAG 5 9211	290
41	MASSACHUSETTS INST OF TECH	R OLIVERSEN	GSFC	G ALLEN	NAG 5 9235	290
41	MASSACHUSETTS INST OF TECH	B J WOOLFORD	JSC	D J NEWMAN	NAG 9 1089	294
41	MASSACHUSETTS INST OF TECH	B A SINGER	LARC	K WILLCOX	NGT 1 02016	296
41	MASSACHUSETTS INST OF TECH	H K WILKIE	LARC	C CESNIK	NAG 1 01102	284
41	MASSACHUSETTS INST OF TECH	J L THOMAS	LARC	D L DARMOTAL	NAG 1 2275	284
41	MASSACHUSETTS INST OF TECH	J L THOMAS	LARC	D L DARMOFAL	NAG 1 02037	285
41	MASSACHUSETTS INST OF TECH	K L BIBB	LARC	J PERAIRE	NAG 1 2122	284
41	MASSACHUSETTS INST OF TECH	M L WILBUR	LARC	C E CESNIK	NCC 1 323	295
41	MASSACHUSETTS INST OF TECH	P G MAGHAMI	LARC	D W MILLER	NAG 1 01025	284
41	MASSACHUSETTS INST OF TECH	R BARNYDT	LARC	R J HANSMAN	NAG 1 02006	285
41	MASSACHUSETTS INST OF TECH	R E YACKOVETSKY	LARC	R J HANSMAN	NAG 1 02038	285
41	MASSACHUSETTS INST OF TECH	R H THOMAS	LARC	Z S SPAKOVSKY	NAS 1 02044	294
41	MASSACHUSETTS INST OF TECH	W T JONES	LARC	R HAIMES	NAG 1 02040	285
41	MASSACHUSETTS INST OF TECH	S NASH-STEVENSON	MSFC	M MARTINEZ-SANCHEZ	NGT 8 52892	297
41	MICHIGAN STATE UNIV	D DAVIS	GRC	T SHIH	NAG 3 2234	304
41	MICHIGAN STATE UNIV	Y CHOO	GRC	T SHIH	NAG 3 2576	304
41	MICHIGAN STATE UNIV	W A SILVA	LARC	B F FEENY	NAG 1 01048	304
41	MICHIGAN STATE UNIV	W M HUMPHREYS, JR.	LARC	L M HUDY	NGT 1 52216	306
41	MICHIGAN TECHNOLOGICAL UNIV	P PENKO	GRC	D YANG	NAG 3 2759	306
41	MICHIGAN TECHNOLOGICAL UNIV	R R TACINA	GRC	S L YANG	NAG 3 2088	306
41	MISSISSIPPI STATE UNIV	R C STRAWN	ARC	D L WHITFIELD	NAG 2 1232	324
41	MISSISSIPPI STATE UNIV	D L HUFF	GRC	J M JANUS	NAG 3 1699	324
41	MISSISSIPPI STATE UNIV	E MCFARLAND	GRC	J CHEN	NAS 3 00181	324
41	MISSISSIPPI STATE UNIV	Y K CHOO	GRC	D THOMPSON	NAG 3 2562	324
41	MISSISSIPPI STATE UNIV	D J BAKER	LARC	M RAIS-BHANI	NAG 1 2038	324
41	MISSISSIPPI STATE UNIV	D J BAKER	LARC	M RAIS-ROHANI	NAG 1 02099	324
41	MONTANA STATE UNIV	P KOLODZIEJ	ARC	D CAIRNS	NCC 2 1181	334
41	MONTANA STATE UNIV	J HARRISON	LARC	V H SCHMIDT	NGT 1 01012	335
41	NEW MEXICO STATE UNIV - LAS CRUCES	D BUSHMAN	DFRC	S B HOTTMAN	NAG 4 231	359

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	NEW MEXICO STATE UNIV - LAS CRUCES	R S NOCK	WFF	N APPLICABLE	NAS 5 98009	361
41	NORFOLK STATE UNIV	K GUPTA	DFRC	D HULBERT	NAG 4 165	510
41	NORFOLK STATE UNIV	E J PRIOR	LARC	J A JACOBS	NAG 1 02060	510
41	NORFOLK STATE UNIV	R A HATHAWAY	LARC	P TUCKER-HOGAN	NAG 1 2230	510
41	NORFOLK STATE UNIV	R HATHAWAY	LARC	E WILSON	NAG 1 01127	510
41	NORFOLK STATE UNIV	R HATHAWAY	LARC	P E MCNEIL	NCC 1 01057	511
41	NORTH CAROLINA A&T STATE UNIV	S LOZITO	ARC	C NTUEN	NAG 2 1469	393
41	NORTH CAROLINA A&T STATE UNIV	J BRADEN	DFRC	S CHANDRA	NAG 4 152	393
41	NORTH CAROLINA A&T STATE UNIV	K GUPTA	DFRC	D D SONG	NAG 4 211	393
41	NORTH CAROLINA A&T STATE UNIV	K GUPTA	DFRC	S CHANDRA	NGT 4 52409	394
41	NORTH CAROLINA A&T STATE UNIV	R K BOGUE	DFRC	D HOMAIFAR	NCC 4 105	394
41	NORTH CAROLINA A&T STATE UNIV	R A HATHAWAY	LARC	J D MONROE	NCC 1 01058	394
41	NORTH CAROLINA A&T STATE UNIV	R S CALLOWAY	LARC	F FERGUSON	NAG 1 2225	392
41	NORTH CAROLINA A&T STATE UNIV	W WHIGGLOW, JR.	LARC	E O DOSE	NCC 1 255	394
41	NORTH CAROLINA A&T STATE UNIV	A BEAM	MSFC	N	NAG 8 1646	393
41	NORTH CAROLINA A&T STATE UNIV	W LOVE	MSFC	S WANG	NAG 8 1865	393
41	NORTH CAROLINA STATE UNIV. - RALEIGH	C J STEFFEN	GRC	J R EDWARDS	NAG 3 2658	395
41	NORTH CAROLINA STATE UNIV. - RALEIGH	A C TRUJILLO	LARC	D B KABER	NAG 1 01002	394
41	NORTH CAROLINA STATE UNIV. - RALEIGH	A E WASHBURN	LARC	N CHOKANI	NCC 1 01008	397
41	NORTH CAROLINA STATE UNIV. - RALEIGH	C L STREETT	LARC	S C TSYNKOV	NAG 1 01064	394
41	NORTH CAROLINA STATE UNIV. - RALEIGH	D E COX	LARC	L SILVERBERG	NGT 1 01007	397
41	NORTH CAROLINA STATE UNIV. - RALEIGH	D L RANEY	LARC	N E CHOKANI	NAG 1 01069	394
41	NORTH CAROLINA STATE UNIV. - RALEIGH	E B JACKSON	LARC	C E HALL	NCC 1 02040	397
41	NORTH CAROLINA STATE UNIV. - RALEIGH	H H HAMILTON	LARC	F R DEJARNETTE	NCC 1 407	396
41	NORTH CAROLINA STATE UNIV. - RALEIGH	P C MURPHY	LARC	F WU	NAG 1 01119	395
41	NORTH CAROLINA STATE UNIV. - RALEIGH	P H JOHNSTON	LARC	F G YUAN	NAS 1 01082	396
41	NORTH CAROLINA STATE UNIV. - RALEIGH	R A THOMPSON	LARC	F R DEJARNETTE	NAG 1 02031	395
41	NORTH CAROLINA STATE UNIV. - RALEIGH	R HATHAWAY	LARC	F R DEKARMETTE	NGT 1 02032	397
41	NORTH DAKOTA STATE UNIV	K K GUPTA	DFRC	Y XU	NGT 4 52424	399
41	NORTHERN ARIZONA UNIV	C TUNG	ARC	E P DUQUE	NCC 2 5429	24
41	OHIO STATE UNIV	J E BRIDGES	GRC	M SAMIMY	NAS 3 02116	414
41	OHIO STATE UNIV	S J SCHNEIDER	GRC	I V ADAMOVICH	NAG 3 2788	411
41	OHIO UNIV	B BREAM	GRC	J RANKIN	NAG 3 2612	415
41	OHIO UNIV	R M HUESCHEN	LARC	J M RANKIN	NCC 1 351	416
41	OKLAHOMA STATE UNIV	K GUPTA	DFRC	A ARENA	NGT 4 52412	425
41	OKLAHOMA STATE UNIV	K K GUPTA	DFRC	D S ARENA	NAG 4 216	424
41	OKLAHOMA STATE UNIV	K K GUPTA	DFRC	D S ARENA	NGT 4 52425	425
41	OKLAHOMA STATE UNIV	M GOLIGHTLY	JSC	S MCKEEVER	NAG 9 1332	425
41	OKLAHOMA STATE UNIV	T S GATES	LARC	S ROY	NAG 1 02016	424
41	OLD DOMINION UNIV	A G PRICE	LARC	R L ASH	NCC 1 369	514
41	OLD DOMINION UNIV	D B SHAFER	LARC	S ZOHORIOD	NGT 1 01029	516
41	OLD DOMINION UNIV	D B SHAFER	LARC	P HIX	NGT 1 52235	516
41	OLD DOMINION UNIV	D B SHAFER	LARC	M SCERBO	NGT 1 52236	516
41	OLD DOMINION UNIV	D E REUBUSH	LARC	S W TIWARI	NAG 1 2266	512
41	OLD DOMINION UNIV	D R AMBUR	LARC	R PRABHAKARAN	NCC 1 389	514
41	OLD DOMINION UNIV	E J JOHNSON	LARC	P KACHROO	NAG 1 2278	512
41	OLD DOMINION UNIV	E J JOHNSON	LARC	P J KAUFFMANN	NAG 1 01097	513
41	OLD DOMINION UNIV	E J PRIOR	LARC	R L ASHE	NCC 1 02027	515
41	OLD DOMINION UNIV	H L ATKINS	LARC	F HU	NAG 1 01044	512
41	OLD DOMINION UNIV	H W JARRETT	LARC	M L SANDY	NAG 1 01047	512
41	OLD DOMINION UNIV	J H STARNES, JR	LARC	A K NOOR	NAG 1 01028	512
41	OLD DOMINION UNIV	J L BURT	LARC	M SCERBO	NGT 1 01030	516
41	OLD DOMINION UNIV	J L BURT	LARC	M D LEE	NGT 1 01001	515
41	OLD DOMINION UNIV	J SOBIESKI	LARC	D T NGUYEN	NGT 1 52210	516
41	OLD DOMINION UNIV	K A LATORELLA	LARC	J C BLISS	NGT 1 01020	515
41	OLD DOMINION UNIV	L L GREEN	LARC	R UNAL	NCC 1 02044	515
41	OLD DOMINION UNIV	N J GROOW	LARC	C P BRITCHER	NGT 1 52171	516
41	OLD DOMINION UNIV	P A NEWMAN	LARC	A C TAYLOR	NCC 1 01015	514
41	OLD DOMINION UNIV	R A LEPSCH	LARC	R UNAL	NAG 1 01086	513
41	OLD DOMINION UNIV	R HATHAWAY	LARC	E WILSON	NAG 1 01121	513
41	OLD DOMINION UNIV	R P WESTON	LARC	H P BAO	NAG 1 02096	513
41	OLD DOMINION UNIV	S A COOKE	LARC	M L SANDY	NCA 1 188	514
41	OLD DOMINION UNIV	S E MASSENBERG	LARC	S N TIWARI	NCC 1 349	514
41	OLD DOMINION UNIV	T B GATSKI	LARC	C E GROSCH	NAG 1 01012	512
41	OLD DOMINION UNIV	T B GATSKI	LARC	C E GROSCH	NAG 1 02005	513
41	OLD DOMINION UNIV	W R WATSON	LARC	D T NGUYEN	NAG 1 01033	512

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	OLD DOMINION UNIV	W T FREEMAN	LARC	H P BAO	NAG 1 2195	511
41	PENN STATE UNIV. - UNIV. PARK	Y H YU	ARC	F C SMITH	NCC 2 943	446
41	PENN STATE UNIV. - UNIV. PARK	C T CHANG	GRC	D A SANTAVICCA	NAG 3 2659	440
41	PENN STATE UNIV. - UNIV. PARK	J ELDRIDGE	GRC	D SINGH	NCC 3 767	446
41	PENN STATE UNIV. - UNIV. PARK	J J TRUDELL	GRC	H HOFMANN	NAS 3 02111	445
41	PENN STATE UNIV. - UNIV. PARK	J LITT	GRC	K R REICHARD	NAG 3 2778	440
41	PENN STATE UNIV. - UNIV. PARK	K L BREISACHER	GRC	V G YANG	NAG 3 2151	439
41	PENN STATE UNIV. - UNIV. PARK	M D DAHL	GRC	P J MORRIS	NAG 3 2328	439
41	PENN STATE UNIV. - UNIV. PARK	T GUO	GRC	A RAY	NAG 3 2448	439
41	PENN STATE UNIV. - UNIV. PARK	AWKERR	GSFC	E C SMITH	NGT 2 52275	447
41	PENN STATE UNIV. - UNIV. PARK	H E JONES	LARC	K S BRENTNER	NCC 1 406	446
41	PENN STATE UNIV. - UNIV. PARK	M G BALLEEN	LARC	S T KIEMARA	NGT 1 01018	447
41	PENN STATE UNIV. - UNIV. PARK	M R KHORRAMI	LARC	P J MORRIS	NAG 1 01009	438
41	PENN STATE UNIV. - UNIV. PARK	R D BUEHRLE	LARC	V W SPARROW	NCC 1 382	446
41	PENN STATE UNIV. - UNIV. PARK	R R ANTOLIFF	LARC	P J MORRIS	NAG 1 2147	438
41	PENN STATE UNIV. - UNIV. PARK	T NORUM	LARC	P K MCLAUGHLIN	NGT 1 52191	447
41	PENN STATE UNIV. - UNIV. PARK	J C MCARTHUR	MSFC	S PAL	NAS 8 40890	445
41	PENN STATE UNIV. - UNIV. PARK	M C SMITH	MSFC	G GARMIRE	NAS 8 01128	445
41	PRAIRIE VIEW A&M UNIV	D GUPTA	DFRC	D K KIRBY	NAG 4 210	471
41	PRAIRIE VIEW A&M UNIV	E COX	DFRC	R WILKINS	NAG 4 148	471
41	PRAIRIE VIEW A&M UNIV	K KLOESEL	DFRC	D M AKUJUOBI	NAG 4 233	471
41	PRINCETON UNIV	M B TISCHER	ARC	H C CURTIS	NAG 2 1400	348
41	PRINCETON UNIV	M TISCHER	ARC	H C CURTISS	NAG 2 1579	349
41	PRINCETON UNIV	S E CLIFF	ARC	T J BAKER	NAG 2 1327	348
41	PRINCETON UNIV	M RABINOWITZ	GRC	D L DRYER	NAG 3 2473	349
41	PRINCETON UNIV	R HARMAN	GSFC	N KASDIN	NAG 5 9748	350
41	PRINCETON UNIV	P G MAGHAMI	LARC	M Q PHAN	NAG 1 2291	348
41	PRINCETON UNIV	T R SUTTER	LARC	I A AKSAY	NCC 1 02037	352
41	PURDUE UNIV	N PALUMBO	DFRC	D E ANDERSON	NAG 4 227	216
41	PURDUE UNIV	D H BUFFUM	GRC	S FLEETER	NAG 3 1730	215
41	PURDUE UNIV	E MCFARLAND	GRC	D FLEETER	NAG 3 2536	215
41	PURDUE UNIV	F MONTEGANI	GRC	J P SULLIVAN	NGT 3 52382	218
41	PURDUE UNIV	I BLANKSON	GRC	S MURTHY	NAG 3 2413	215
41	PURDUE UNIV	J R SCOTT	GRC	A S LYRINTZIS	NAG 3 2095	215
41	PURDUE UNIV	M THARP	GRC	S MURTHY	NAG 3 2532	215
41	PURDUE UNIV	S R THOMAS	GRC	S MURTHY	NAG 3 2217	215
41	PURDUE UNIV	S THOMAS	GRC	S FRANKEL	NAG 3 2681	215
41	PURDUE UNIV	T BENCIC	GRC	D P SULLIVAN	NAG 3 2635	215
41	PURDUE UNIV	D FOLTA	GSFC	K C HOWELL	NAG 5 11839	217
41	PURDUE UNIV	R CARPENTER	GSFC	J L GARRISON	NAG 5 12065	217
41	PURDUE UNIV	C H CAMPBELL	JSC	S P SCHNEIDER	NAG 9 1385	218
41	PURDUE UNIV	D W BARTLETT	LARC	G L ROTH	NGT 1 52198	218
41	PURDUE UNIV	J H STARNES	LARC	H KIM	NAG 1 02064	215
41	PURDUE UNIV	S A BERRY	LARC	S P SCHNEIDER	NAG 1 01027	214
41	PURDUE UNIV	S A BERRY	LARC	S P SCHNEIDER	NAG 1 02047	215
41	PURDUE UNIV	S L PADULA	LARC	W A CROSSLEY	NAG 1 01115	214
41	PURDUE UNIV	S L PADULA	LARC	W A CROSSLEY	NCC 1 01042	218
41	PURDUE UNIV	A REEB	MSFC	W ANDERSON	NAG 8 1856	217
41	PURDUE UNIV	H TRINH	MSFC	W ANDERSON	NAG 8 1876	217
41	PURDUE UNIV	R UNGER	MSFC	S H COLLICOTT	NAG 8 1869	217
41	PURDUE UNIV	R UNGER	MSFC	W E ANDERSON	NAG 8 1870	217
41	PURDUE UNIV	R E FIELD	SSC	D HEISTER	NAG13 00008	218
41	PURDUE UNIV	R FIELD	SSC	D D HEISTER	NAG13 02037	218
41	PURDUE UNIV	W ST CYR	SSC	D ANDERSON	NAG13 02038	218
41	RENSSELAER POLYTECH INST	J SOBIESKI	LARC	P HAJELA	NAG 1 2089	380
41	RICE UNIV	G W BOURLAND	JSC	T E TEZDUYAR	NAG 9 1435	474
41	RICE UNIV	R R ANTOLIFF	LARC	S S COLLIS	NAG 1 2134	472
41	SAINT LOUIS UNIV	T B GATSKI	LARC	W D THACKER	NAG 1 02027	326
41	SAINT LOUIS UNIV	T B GATSKI	LARC	W D THACKER	NCC 1 01003	326
41	SAN JOSE STATE UNIV	I C STATLER	ARC	K CORKER	NAG 2 1435	55
41	SAN JOSE STATE UNIV	M B TISCHER	ARC	K P JORDAN	NCC 2 1097	56
41	SAN JOSE STATE UNIV	M TISCHER	ARC	K JORDAN	NCC 2 1365	57
41	SAN JOSE STATE UNIV	S LOZITO	ARC	K CORKER	NAG 2 1550	55
41	SANTA CLARA UNIV	K LUU	GSFC	C A KITTS	NAG 5 9736	58
41	SHAW UNIV	R HATHAWAY	LARC	P PIERCE RAMSEY	NAG 1 01126	398
41	SOUTHERN ILLINOIS UNIV - CARBONDALE	R TRIPATHI	LARC	J SCOTT	NGT 1 01026	203

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	SOUTHERN METHODIST UNIV	D G JOHNSON	LARC	Z CELIK-BUTLER	NAS 1 01104	475
41	SOUTHERN UNIV & A&M COLL	L DAVIS	DFRC	D F MENSAH	NAG 4 232	233
41	SPELMAN COLL	Q NGUYEN	GRC	D CHEN	NAG 3 2486	188
41	SPELMAN COLL	Q NGUYEN	GRC	D C CHEN	NCC 3 758	189
41	STANFORD UNIV	D KWAK	ARC	S K LELE	NAG 2 1373	59
41	STANFORD UNIV	G A RAICHE	ARC	R K HANSON	NCC 2 5377	65
41	STANFORD UNIV	L TOBIAS	ARC	C TOMLIN	NAG 2 1564	59
41	STANFORD UNIV	N MANSOUR	ARC	C F EDWARDS	NAG 2 1539	59
41	STANFORD UNIV	N MANSOUR	ARC	T J HUGHES	NCC 2 5457	65
41	STANFORD UNIV	N N MANSOUR	ARC	C T BOWMAN	NAG 2 1219	59
41	STANFORD UNIV	P KOLODZIEJ	ARC	B CANTWELL	NCC 2 5335	64
41	STANFORD UNIV	R D MEHTA	ARC	S M ROCK	NGT 2 52267	66
41	STANFORD UNIV	R M MIRAFLORE	ARC	P A DURBIN	NAG 2 1557	59
41	STANFORD UNIV	U B MANTA	ARC	R W MACCORMICK	NCC 2 5444	65
41	STANFORD UNIV	J O BRISTOW	GSFC	R BYER	NAG 5 8802	61
41	STANFORD UNIV	K LUU	GSFC	DEBRA	NAG 5 9737	61
41	STANFORD UNIV	R BRAUN	LARC	R TWIGGS	NGT 1 02021	66
41	STANFORD UNIV	R R ANTCLIFF	LARC	I KROO	NAG 1 2144	59
41	STATE UNIV OF NY - BINGHAMTON	C M BELCASTRO	LARC	N E WU	NCC 1 02009	383
41	STATE UNIV OF NY - BINGHAMTON	C M BELCASTRO	LARC	N WU	NCC 1 336	383
41	STATE UNIV OF NY - BUFFALO	C TUNG	ARC	G LEE	NAG 2 1429	383
41	STATE UNIV OF NY - BUFFALO	J SOBIESKI	LARC	K E LEWIS	NGT 1 52185	384
41	STATE UNIV OF NY COLL	D A QUINN	GSFC	J CRASSIDIS	NAG 5 11331	388
41	STATE UNIV OF NY COLL	R HARMAN	GSFC	J CRASSIDIS	NAG 5 12179	388
41	SYRACUSE UNIV	D A POVINELLI	GRC	D LAGRAFF	NAG 3 2419	388
41	TEXAS A&M UNIV	K GUPTA	DFRC	D SMITH	NGT 4 52432	480
41	TEXAS A&M UNIV	D A POVINELLI	GRC	D GIRIMAJI	NAG 3 2721	476
41	TEXAS A&M UNIV	D ASHPIS	GRC	I SCHOBELI	NCC 3 793	479
41	TEXAS A&M UNIV	G T MONTAGUE	GRC	B D PALAZZOLO	NCC 3 762	479
41	TEXAS A&M UNIV	L MARKLEY	GSFC	D L JUNKINS	NCC 5 448	480
41	TEXAS A&M UNIV	A L STRAHAN	JSC	D T WARD	NAG 9 1396	478
41	TEXAS A&M UNIV	D L EICHBLATT	JSC	G L MARTINEZ	NAS 9 02063	479
41	TEXAS A&M UNIV	H W LANE	JSC	D BOYLE	NCC 9 150	480
41	TEXAS A&M UNIV	S G LABBE	JSC	J L MARTINEZ	NAS 9 97002	479
41	TEXAS A&M UNIV	S R MONDAY	JSC	J L VALASEK	NAG 9 1231	478
41	TEXAS A&M UNIV	B A SINGER	LARC	S GIRIMAJI	NAG 1 01005	476
41	TEXAS A&M UNIV	M J WALSH	LARC	O K REDINIOTIS	NAG 1 01015	476
41	TEXAS A&M UNIV	M J WALSH	LARC	O K REDINIOTIS	NAG 1 02069	476
41	TEXAS A&M UNIV	T R SUTTER	LARC	D C LAGODAS	NCC 1 02038	479
41	THE CATHOLIC UNIV OF AMERICA	R MOGFORD	ARC	R PARASURAMAN	NCC 2 1247	159
41	THE CATHOLIC UNIV OF AMERICA	D J WING	LARC	R PARASUROMA	NGT 1 01028	160
41	TULANE UNIV	A M CALOMINO	GRC	D A RUBINSTEIN	NAG 3 2689	234
41	TULANE UNIV	J G SMITH	LARC	D C DEKEKEE	NAG 1 02070	234
41	TUSKEGEE UNIV	K A NORLIN	DFRC	S FIRASAT ALI	NAG 4 169	5
41	TUSKEGEE UNIV	K GUPTA	DFRC	S F ALI	NAG 4 226	6
41	TUSKEGEE UNIV	K NORLIN	DFRC	D ALI	NAG 4 203	6
41	TUSKEGEE UNIV	M W KEHOE	DFRC	H A AGLAN	NAG 4 201	6
41	TUSKEGEE UNIV	N LIU	GRC	D A IBRAHIM	NAG 3 2667	5
41	UNIV OF AKRON	E ENVIA	GRC	S SAWYER	NAG 3 2537	417
41	UNIV OF AKRON	J SCOTT	GRC	K KREIDER	NCC 3 765	417
41	UNIV OF AKRON	S M ARNOLD	GRC	A F SALEEB	NCC 3 808	418
41	UNIV OF AKRON	J H STARNES, JR	LARC	B R PIPES	NCC 1 02002	417
41	UNIV OF ALABAMA - BIRMINGHAM	S LIDE	MSFC	L J DELUCAS	NCC 8 126	7
41	UNIV OF ALABAMA - HUNTSVILLE	B A SINGER	LARC	K FRENDI	NAG 1 01008	8
41	UNIV OF ALABAMA - HUNTSVILLE	G W JOHNSON	MSFC	R FORK	NAG 8 1815	12
41	UNIV OF ALABAMA - HUNTSVILLE	J DOWDY	MSFC	S WU	NGT 8 52882	14
41	UNIV OF ALABAMA - HUNTSVILLE	J R PRUITT	MSFC	C R KARR	NCC 8 213	14
41	UNIV OF ALABAMA - HUNTSVILLE	S RUSSELL	MSFC	G WORKMAN	NAG 8 1548	12
41	UNIV OF ALABAMA - UNIV	K KRISHNAKUMAR	ARC	C KARR	NCC 2 1326	15
41	UNIV OF ARIZONA	G A RAICHE	ARC	K R SRIDHAR	NCC 2 5385	37
41	UNIV OF ARIZONA	J E FINN	ARC	K R SRIDHAR	NGT 2 52268	38
41	UNIV OF ARIZONA	D E ASHPIS	GRC	A TUMIN	NCC 3 991	38
41	UNIV OF ARIZONA	J M BOYCE	GSFC	A L SPRAGUE	NAG 5 11166	33
41	UNIV OF ARIZONA	M GREENHOUSE	GSFC	G RIEKE	NAG 5 12318	35
41	UNIV OF ARIZONA	B A SINGER	LARC	H F FASEL	NGT 1 52206	38
41	UNIV OF ARIZONA	D R AMBUR	LARC	E MADENCI	NAG 1 2317	24

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	UNIV OF ARIZONA	J H STARNES	LARC	E MADENCI	NAG 1 2041	24
41	UNIV OF ARKANSAS - LITTLE ROCK	A JOYCE	SSC	C MEADORS	NGT13 52718	40
41	UNIV OF CALIFORNIA - BERKELEY	D A DURSTON	ARC	O SAVAS	NCC 2 5461	76
41	UNIV OF CALIFORNIA - BERKELEY	F CARADONNA	ARC	O SAVAS	NCC 2 5388	76
41	UNIV OF CALIFORNIA - BERKELEY	F X CARADONNA	ARC	O SAVAS	NCC 2 5507	77
41	UNIV OF CALIFORNIA - BERKELEY	L TOBIAS	ARC	S S SASTRY	NAG 2 1567	68
41	UNIV OF CALIFORNIA - BERKELEY	P F WERCINSKI	ARC	G T CHAPMAN	NCC 2 5334	76
41	UNIV OF CALIFORNIA - BERKELEY	R R TACINA	GRC	R DIBBLE	NAG 3 2103	68
41	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	CHARLES	NGT 5 50061	78
41	UNIV OF CALIFORNIA - DAVIS	D KWAK	ARC	M HAFEZ	NCC 2 1011	81
41	UNIV OF CALIFORNIA - DAVIS	D T TRAN	ARC	R A	NCC 2 5425	81
41	UNIV OF CALIFORNIA - DAVIS	K G BURLET	ARC	M HAFEZ	NCC 2 5512	82
41	UNIV OF CALIFORNIA - DAVIS	L S SROUE	ARC	R A HESS	NCC 2 1131	81
41	UNIV OF CALIFORNIA - DAVIS	M B TISCHER	ARC	R HESS	NCC 2 1183	81
41	UNIV OF CALIFORNIA - DAVIS	M V FULTON	ARC	C P VANDAM	NCC 2 5406	81
41	UNIV OF CALIFORNIA - DAVIS	R STRAWN	ARC	C P VAN DAM	NCC 2 5485	82
41	UNIV OF CALIFORNIA - DAVIS	D W BANKS	DFRC	C VAN DAM	NCC 4 151	82
41	UNIV OF CALIFORNIA - DAVIS	D W BANKS	DFRC	D VANDAM	NCC 4 155	82
41	UNIV OF CALIFORNIA - DAVIS	K R SACKSTEDER	GRC	Z A MUNIR	NCC 3 872	82
41	UNIV OF CALIFORNIA - DAVIS	C M FREMAUX	LARC	C P VAN DAM	NCC 1 01007	81
41	UNIV OF CALIFORNIA - DAVIS	C M FREMAUX	LARC	C P VAN DAM	NCC 1 02028	81
41	UNIV OF CALIFORNIA - DAVIS	J B DAVIDSON	LARC	R A HESS	NCC 1 02010	81
41	UNIV OF CALIFORNIA - DAVIS	P A GELHAUSEN	LARC	C P VAN-DAM	NAG 1 2215	79
41	UNIV OF CALIFORNIA - DAVIS	P A GELHAUSEN	LARC	C P VAN DAM	NAG 1 01045	79
41	UNIV OF CALIFORNIA - IRVINE	C O LEE	DFRC	K D MEASE	NAG 4 217	84
41	UNIV OF CALIFORNIA - IRVINE	D M SCHUSTER	LARC	F LIU	NAG 1 02050	83
41	UNIV OF CALIFORNIA - IRVINE	J M SEINER	LARC	D PAPAMOSCHOU	NAG 1 2104	83
41	UNIV OF CALIFORNIA - LOS ANGELES	L TOBIAS	ARC	J L SPEYER	NAG 2 1484	86
41	UNIV OF CALIFORNIA - LOS ANGELES	G L SPEYER	DFRC	J L SPEYER	NAS 4 00051	93
41	UNIV OF CALIFORNIA - LOS ANGELES	J BRIDGES	GRC	J B FREUND	NAG 3 2344	86
41	UNIV OF CALIFORNIA - LOS ANGELES	A RUSSO	GSFC	R J STRANGEWAY	NAS 5 00247	93
41	UNIV OF CALIFORNIA - LOS ANGELES	G A SOFFEN	GSFC	J L SPEYER	NGT 5 112	94
41	UNIV OF CALIFORNIA - LOS ANGELES	J CARPENTER	GSFC	J SPEYER	NAG 5 8694	89
41	UNIV OF CALIFORNIA - LOS ANGELES	R CARPENTER	GSFC	J L SPEYER	NAG 5 11384	91
41	UNIV OF CALIFORNIA - LOS ANGELES	I S RAJU	LARC	S N ATLURI	NAG 1 02043	86
41	UNIV OF CALIFORNIA - LOS ANGELES	J S RAJA	LARC	S N ATTURE	NAG 1 01082	86
41	UNIV OF CALIFORNIA - LOS ANGELES	R G BRYANT	LARC	G CARMEN	NGT 1 01039	94
41	UNIV OF CALIFORNIA - SAN DIEGO	S M CASNER	ARC	E L HUTCHINS	NAG 2 1313	96
41	UNIV OF CALIFORNIA - SAN DIEGO	K K GUPTA	DFRC	R D CALLAFON	NGT 4 52429	104
41	UNIV OF CALIFORNIA - SAN DIEGO	S P HUGHES	GSFC	P E GILL	NAG 5 12312	102
41	UNIV OF CALIFORNIA - SAN DIEGO	T B GATSKI	LARC	S SARKA	NAG 1 02028	96
41	UNIV OF CALIFORNIA - SANTA BARBARA	K K GUPTA	DFRC	H T YANG	NGT 4 52427	110
41	UNIV OF CALIFORNIA - SANTA BARBARA	K K GUPTA	DFRC	H YANG	NGT 4 52428	110
41	UNIV OF CALIFORNIA - SANTA BARBARA	K K KUPTA	DFRC	H T YANG	NGT 4 52423	110
41	UNIV OF CALIFORNIA - SANTA BARBARA	K GUPTA	SSC	J C BRUCH	NGT 4 52407	110
41	UNIV OF CINCINNATI	T J DAVIS	ARC	G L SLATER	NCC 2 1139	419
41	UNIV OF CINCINNATI	T J DAVIS	ARC	G L SLATER	NAG 2 1581	418
41	UNIV OF CINCINNATI	C QUINN	GRC	E J GUTMARK	NAS 3 02130	419
41	UNIV OF CINCINNATI	L S HULTGREN	GRC	E J GUTMARK	NAS 3 02113	419
41	UNIV OF CINCINNATI	R R TACINA	GRC	S JENG	NAG 3 2462	419
41	UNIV OF CINCINNATI	D FOLTA	GSFC	T WILLIAMS	NAG 5 10384	419
41	UNIV OF COLORADO - BOULDER	F J MONTEGANO	GRC	D KLAUS	NGT 3 52386	140
41	UNIV OF COLORADO - BOULDER	J LEITNER	GSFC	P AXELRAD	NAG 5 8697	128
41	UNIV OF COLORADO - BOULDER	M S BURRELL	GSFC	D BAKER	NGT 5 132	140
41	UNIV OF COLORADO - BOULDER	M S BURRELL	GSFC	R NEREM	NGT 5 133	140
41	UNIV OF COLORADO - BOULDER	R J CARPENTER	GSFC	P AXELRAD	NAG 5 12495	137
41	UNIV OF COLORADO - BOULDER	C PARRA	JSC	L PETERSON	NCC 9 65	139
41	UNIV OF COLORADO - BOULDER	D HARM	JSC	K STROUD	NAG 9 1438	138
41	UNIV OF COLORADO - BOULDER	R WHEELER	KSC	D HOEHN	NGT10 52624	142
41	UNIV OF COLORADO - BOULDER	K SUTTON	LARC	C AXELROD	NAG 1 02046	122
41	UNIV OF COLORADO - BOULDER	M R KHORRANI	LARC	O V VASILYEV	NAG 1 02116	122
41	UNIV OF COLORADO - BOULDER	P G COEN	LARC	C FARHAT	NAG 1 02118	122
41	UNIV OF COLORADO - BOULDER	S J KATZBERG	LARC	M J ARMATYS	NGT 1 52182	139
41	UNIV OF COLORADO AT COL SPRINGS	T F ROMER	ARC	P J GORDOR	NCC 2 1176	143
41	UNIV OF CONNECTICUT	J H ROBINSON	LARC	K D MURPHY	NAG 1 01113	144
41	UNIV OF FLORIDA	G H KLOPTER	ARC	R T HAITKA	NAG 2 1179	171

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	UNIV OF FLORIDA	M HYATT	GRC	D SHYY	NCC 3 994	173
41	UNIV OF FLORIDA	R FERNANDEZ	GRC	C SEGAL	NAG 3 2553	171
41	UNIV OF FLORIDA	K BLANDING	GSFC	S DERMOTT	NGT 5 50031	174
41	UNIV OF FLORIDA	A E WASHBURN	LARC	M SHEPLAK	NCC 1 01060	173
41	UNIV OF FLORIDA	D H RUDY	LARC	R MEI	NAG 1 2092	170
41	UNIV OF FLORIDA	D R AMBUR	LARC	B V SANKAR	NAG 1 02104	171
41	UNIV OF FLORIDA	J H STARNES	LARC	R T HAFTKA	NAG 1 02042	170
41	UNIV OF FLORIDA	J H STARNES, JR.	LARC	R T HAFTKA	NAG 1 2177	170
41	UNIV OF FLORIDA	K K TEDJOJONO	LARC	M SHEPHERD	NGT 1 52233	173
41	UNIV OF FLORIDA	K K TEDJOJUWONS	LARC	M SHEPLAK	NGT 1 01022	173
41	UNIV OF FLORIDA	M A MOTTER	LARC	J C PRINCIPE	NAG 1 02068	170
41	UNIV OF FLORIDA	M R WASZAK	LARC	P G IFJU	NCC 1 397	173
41	UNIV OF FLORIDA	M R WASZAK	LARC	P G IFJU	NCC 1 02004	173
41	UNIV OF FLORIDA	R R ANTELIFF	LARC	M SHEPLAK	NAG 1 2133	170
41	UNIV OF FLORIDA	S A GORTON	LARC	R MITTAL	NAG 1 01024	170
41	UNIV OF FLORIDA	S A GORTON	LARC	L N CATTAFESTA	NAG 1 2249	170
41	UNIV OF FLORIDA	W A SILVA	LARC	A J KURDILA	NAG 1 2198	170
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	E R MCFARLAND	GRC	K D LEE	NAG 3 2314	208
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	H E ADDY	GRC	M BRAGG	NCC 3 852	211
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J E BRIDGES	GRC	J FREUND	NAG 3 2662	208
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M G POTAPCZUK	GRC	E LOTH	NAG 3 2623	208
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	T H BOND	GRC	M B BRAGG	NAG 3 2135	207
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D FOLTA	GSFC	V COVERSTONE	NAG 5 12132	210
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	S P HUGHES	GSFC	V COVERSTONE	NAG 5 12228	210
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R BURTON	JSC	M BRAGG	NAG 9 1371	211
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	B J BOLAND	LARC	D A WIEGMANN	NAG 1 01026	207
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	L J PRINZEL	LARC	C WICKENS	NAG 1 02071	207
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R E MCKINLEY	LARC	W J MAHER	NAG 1 01114	207
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	V K CRISP	LARC	D A WIEGMANN	NAG 1 02032	207
41	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	S NASH-STEVENSON	MSFC	V COVERSTONE	NGT 8 52912	213
41	UNIV OF IOWA	L J GLAAB	LARC	T SCHNELL	NAG 1 02097	223
41	UNIV OF KANSAS	M MEYER	GRC	R TAGHAVI	NGT 3 52361	227
41	UNIV OF KANSAS	J M BRANDON	LARC	C E LAN	NAG 1 01011	226
41	UNIV OF KENTUCKY	D E ASHPIS	GRC	P G HVANG	NAG 3 2099	228
41	UNIV OF KENTUCKY	D E ASHPIS	GRC	G HUANG	NCC 3 590	230
41	UNIV OF KENTUCKY	E R MCFARLAND	GRC	D CAPICE	NAG 3 2695	229
41	UNIV OF KENTUCKY	R A HATHAWAY	LARC	S W SMETH	NGT 1 01006	230
41	UNIV OF MARYLAND - COLL PARK	M B TISCHER	ARC	R CELI	NAG 2 1407	254
41	UNIV OF MARYLAND - COLL PARK	P KOLODZIEJ	ARC	M J LEWIS	NCC 2 1129	268
41	UNIV OF MARYLAND - COLL PARK	R A STRAWN	ARC	F SCHMITZ	NAG 2 1405	254
41	UNIV OF MARYLAND - COLL PARK	W A DECKER	ARC	F H SCHMITZ	NAG 2 1549	254
41	UNIV OF MARYLAND - COLL PARK	W WARMBRODT	ARC	F HARRIS	NCC 2 1146	268
41	UNIV OF MARYLAND - COLL PARK	W WARMBRODT	ARC	I CHOPRA	NAG 2 1577	255
41	UNIV OF MARYLAND - COLL PARK	Y YU	ARC	CHOPRA	NGT 2 52273	269
41	UNIV OF MARYLAND - COLL PARK	D T PALAC	GRC	D J LEWIS	NAG 3 2480	255
41	UNIV OF MARYLAND - COLL PARK	M HYATT	GRC	D LEWIS	NCC 3 989	268
41	UNIV OF MARYLAND - COLL PARK	R R TACINA	GRC	A K GUPTA	NAG 3 2337	255
41	UNIV OF MARYLAND - COLL PARK	D FOLTA	GSFC	P KRISHNAPRASAD	NAG 5 10819	262
41	UNIV OF MARYLAND - COLL PARK	G SOFFEN	GSFC	D PINES	NGT 5 107	270
41	UNIV OF MARYLAND - COLL PARK	J TOH	GSFC	B SHAPIRO	NAG 5 10563	262
41	UNIV OF MARYLAND - COLL PARK	M CONCHA	GSFC	M J LEWIS	NAG 5 9890	261
41	UNIV OF MARYLAND - COLL PARK	M S BURRELL	GSFC	M GAVRILAS	NAG 5 9151	259
41	UNIV OF MARYLAND - COLL PARK	S STRARIN	GSFC	R SANNER	NAG 5 11313	264
41	UNIV OF MARYLAND - COLL PARK	T STENGLE	GSFC	E M ATKINS	NAG 5 9961	261
41	UNIV OF MARYLAND - COLL PARK	T STENGLE	GSFC	W FOURNEY	NAS 5 99211	267
41	UNIV OF MARYLAND - COLL PARK	A S POTOTZKY	LARC	I CHOPRA	NAG 1 01084	254
41	UNIV OF MARYLAND - COLL PARK	C L STREETT	LARC	U PIOMELLI	NAG 1 2285	254
41	UNIV OF MASSACHUSETTS - AMHERST	M E LIVINGSTON	ARC	A DASCHMULCH	NCC 2 1180	301
41	UNIV OF MASSACHUSETTS - AMHERST	A REEHORST	GRC	S SEKELSEY	NAS 3 00121	301
41	UNIV OF MICHIGAN - ANN ARBOR	W WARMBRODT	ARC	P P FRIEDMAN	NGT 2 52269	315
41	UNIV OF MICHIGAN - ANN ARBOR	K K GUPTA	DFRC	D S BERNSTEIN	NGT 4 52421	316
41	UNIV OF MICHIGAN - ANN ARBOR	K K GUPTA	DFRC	P FRIEDMAN	NGT 4 52426	316
41	UNIV OF MICHIGAN - ANN ARBOR	W MORALES	GRC	P P FRIEDMAN	NAG 3 2582	308
41	UNIV OF MICHIGAN - ANN ARBOR	J A LEITNER	GSFC	D HYLAND	NAG 5 10336	311
41	UNIV OF MICHIGAN - ANN ARBOR	M L WILBUR	LARC	C E CESNIK	NCC 1 02045	314
41	UNIV OF MICHIGAN - ANN ARBOR	S NASH-STEVENSON	MSFC	I BOYD	NGT 8 52900	317

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	UNIV OF MINN	J E ROBINSON	ARC	Y J ZHAO	NAG 2 1470	318
41	UNIV OF MINN	J OLEJNICZAK	ARC	G V CANDLER	NCC 2 5393	322
41	UNIV OF MINN	M S WHALLEY	ARC	Y J ZHAO	NAG 2 1428	318
41	UNIV OF MINN	S R MUNDY	JSC	G J BALAS	NAG 9 1222	321
41	UNIV OF MINN	C M BELCASTRO	LARC	G J BALAS	NCC 1 337	321
41	UNIV OF MISSOURI - COLUMBIA	S OLESON	GRC	C KLUEVER	NAG 3 2670	326
41	UNIV OF MISSOURI - COLUMBIA	T B GATSKI	LARC	O VASILYEV	NGT 1 01017	327
41	UNIV OF MISSOURI - COLUMBIA	T B GATSKI	LARC	O VASILYEV	NGT 1 52239	327
41	UNIV OF MISSOURI - ROLLA	I Y TUMER	ARC	R B STONE	NCC 2 5423	328
41	UNIV OF MISSOURI - ROLLA	I Y TUMER	ARC	D A MCADAMS	NCC 2 5490	328
41	UNIV OF MISSOURI - ROLLA	C C WEY	GRC	P D WHITEFIELD	NAG 3 2185	328
41	UNIV OF MISSOURI - ROLLA	D KOCH	GRC	W EVERSMAN	NAG 3 2718	328
41	UNIV OF MISSOURI - ROLLA	D THURMAN	GRC	D W RIGGINS	NAG 3 2608	328
41	UNIV OF MISSOURI - ROLLA	E ENVIA	GRC	W EVERSMAN	NAG 3 2340	328
41	UNIV OF MISSOURI - ROLLA	J J TOTAH	GSFC	S N BALAKRISHNAN	NCC 2 5419	328
41	UNIV OF MISSOURI - ROLLA	C R MCCLINTON	LARC	D W RIGGINS	NAG 1 01122	327
41	UNIV OF NEW HAMPSHIRE - DURHAM	V V SALOMONSON	GSFC	B MOORE	NAG 5 12252	345
41	UNIV OF NEW MEXICO-ALBUQUERQUE	D T ELLERBY	ARC	R LOEHMAN	NAG 2 1553	362
41	UNIV OF NEW MEXICO-ALBUQUERQUE	J GOODRICH	GRC	T HAGSTROM	NAG 3 2626	362
41	UNIV OF NEW MEXICO-ALBUQUERQUE	J W GOODRICH	GRC	D HAGSTROM	NAG 3 2692	362
41	UNIV OF NEW MEXICO-ALBUQUERQUE	J GAMBINO	GSFC	M OSINSKI	NAG 5 10372	363
41	UNIV OF NEW MEXICO-ALBUQUERQUE	R C SINGLETERRY	LARC	A PRINJA	NCC 1 02008	364
41	UNIV OF NEW MEXICO-ALBUQUERQUE	R D JOSLIN	LARC	C R TRUMAN	NAG 1 2018	361
41	UNIV OF NORTH CAROLINA - CHAPEL HILL	J SMITH, JR	LARC	NOT AVAILABLE	NAG 1 01061	398
41	UNIV OF NOTRE DAME	J C ROSS	ARC	F O THOMAS	NCC 2 1014	220
41	UNIV OF NOTRE DAME	D ASHPIS	GRC	P C CORKE	NCC 3 775	220
41	UNIV OF NOTRE DAME	D E ASHIPS	GRC	D C CORKE	NCC 3 935	220
41	UNIV OF NOTRE DAME	J R SCOTT	GRC	D ATASSI	NCC 3 770	220
41	UNIV OF NOTRE DAME	J B ANDERS	LARC	R C NELSON	NCC 1 395	220
41	UNIV OF NOTRE DAME	J B ANDERS	LARC	F O THOMAS	NCC 1 01054	220
41	UNIV OF NOTRE DAME	K W KINZIE	LARC	T C CORKE	NAG 1 01020	219
41	UNIV OF NOTRE DAME	K W KINZIE	LARC	T C CORKE	NAG 1 02045	219
41	UNIV OF NOTRE DAME	M CHOUDHARI	LARC	T C CORKE	NGT 1 02003	220
41	UNIV OF OREGON - EUGENE	T H BOND	GRC	R MAURO	NCC 3 880	431
41	UNIV OF OTAGO	I BARSHI	ARC	D O'HARE	NAG 2 1395	552
41	UNIV OF RHODE ISLAND	J LEI	GRC	O GREGORY	NAG 3 2208	456
41	UNIV OF SOUTH CAROLINA-COLUMBIA	G C HORNER	LARC	W A SCRIVENS	NAG 1 02117	461
41	UNIV OF SOUTH FLORIDA	J A DIGGS	KSC	R E HENNING	NAG10 204	177
41	UNIV OF SOUTHERN CALIFORNIA	J R CURZ	LARC	P B LISSAMAN	NAG 1 1996	114
41	UNIV OF SOUTHERN COLORADO	A E MOTLEY	LARC	L M GARRETT	NGT 1 52209	143
41	UNIV OF TENNESSEE - KNOXVILLE	F CARDONNA	ARC	J STEINHOFF	NCC 2 5265	467
41	UNIV OF TENNESSEE SPACE INST-TULLAHOMA	R FERNANDEZ	GRC	D L MERKLE	NAG 3 2680	467
41	UNIV OF TEXAS - AUSTIN	G S SOFFEN	GSFC	B D TAPLEY	NGT 5 72	493
41	UNIV OF TEXAS - AUSTIN	J R CARPENTER	GSFC	E LIGHTSEY	NAG 5 11278	491
41	UNIV OF TEXAS - AUSTIN	M S BURRELL	GSFC	G LIGHTSEY	NGT 5 136	493
41	UNIV OF TEXAS - AUSTIN	M S BURRELL	GSFC	G F CAREY	NGT 5 139	493
41	UNIV OF TEXAS - AUSTIN	M S BURRELL	GSFC	C OCAMPO	NGT 5 141	493
41	UNIV OF TEXAS - AUSTIN	R CARPENTER	GSFC	R H BISHOP	NAG 5 9829	490
41	UNIV OF TEXAS - AUSTIN	R CARPENTER	GSFC	G LIGHTSEY	NAG 5 11949	491
41	UNIV OF TEXAS - AUSTIN	T A TOLAY	LARC	W T FOWLER	NGT 1 52147	493
41	UNIV OF TEXAS - AUSTIN	W A SILVA	LARC	E J POWERS	NAG 1 01109	488
41	UNIV OF TEXAS - EL PASO	A R ROCHA	JSC	C FERREGUT	NAG 9 1099	495
41	UNIV OF TEXAS AT SAN ANTONIO	C CHAMIS	GRC	R D MANTEUFEL	NAG 3 2297	496
41	UNIV OF TOLEDO	A J STRAZISAR	GRC	T G KEITH	NAG 3 2673	421
41	UNIV OF TOLEDO	E ENVIA	GRC	T G KEITH	NAG 3 2502	420
41	UNIV OF TOLEDO	G J FOLLEN	GRC	A A AFJEH	NAG 3 2508	421
41	UNIV OF TOLEDO	J ADMACZYK	GRC	T G KEITH	NAG 3 2505	420
41	UNIV OF TOLEDO	M D HATHAWAY	GRC	T G KEITH	NAG 3 2507	421
41	UNIV OF TOLEDO	N LIU	GRC	T G KEITH	NCC 3 925	423
41	UNIV OF TOLEDO	O MEHMED	GRC	T KEITH	NCC 3 605	423
41	UNIV OF VIRGINIA	C E GLASS	GSFC	J C MCDANIEL JR	NGT 1 52247	522
41	UNIV OF VIRGINIA	C E GLASS	LARC	J C MCDANIEL	NAG 1 01051	517
41	UNIV OF VIRGINIA	C E GLASS	LARC	J C MCDANIEL	NGT 1 01031	522
41	UNIV OF VIRGINIA	C E GLASS	LARC	J C MCDANIEL	NGT 1 02007	522
41	UNIV OF VIRGINIA	C MOORE	LARC	H N WADLEY	NAG 1 1964	517
41	UNIV OF VIRGINIA	D D MOERDER	LARC	N NAJ-HARERI	NAG 1 01120	517

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
41	UNIV OF VIRGINIA	D E REUBUSH	LARC	J C MACDANIEL	NAG 1 02019	517
41	UNIV OF VIRGINIA	D E REUBUSH	LARC	J C MCDANIEL	NAG 1 2131	517
41	UNIV OF VIRGINIA	D R AMBUR	LARC	C O HORGAN	NCC 1 02019	522
41	UNIV OF VIRGINIA	S M JOSHI	LARC	G TAO	NCC 1 02006	522
41	UNIV OF VIRGINIA	S M JOSHI	LARC	G TAO	NCC 1 342	522
41	UNIV OF WALES	K K GUPTA	ARC	O C ZIENKIEWICZ	NAGW 2127	552
41	UNIV OF WASHINGTON	K LUU	GSFC	M CAMPPELL	NAG 5 9250	532
41	UNIV OF WASHINGTON	C D WIESEMAN	LARC	E LIVNE	NAG 1 01029	528
41	UNIV OF WASHINGTON	D R AMBUR	LARC	T A ANDERSON	NCC 1 02034	536
41	UNIV OF WASHINGTON	A MARTIN	MSFC	J SLOUGH	NAG 8 1849	535
41	UNIV OF WEST FLORIDA	J DEMAIO	ARC	N SURI	NAG 2 1226	177
41	UNIV OF WEST FLORIDA	W K GERDEN	LARC	A K RAV	NAG 1 2236	177
41	UNIV OF WISCONSIN - MADISON	V V SALOMONSON	GSFC	S A ACKERMAN	NAG 5 12258	546
41	UNIV OF WYOMING	D M DRIVER	ARC	J W NAUGHTON	NCC 2 5315	549
41	UNIV OF WYOMING	S A WHITMORE	DFRC	D W NAUGHTON	NAG 4 208	549
41	UNIV OF WYOMING	F J CHEN	LARC	D R SMITH	NAG 1 01063	549
41	UTAH STATE UNIV	K LUU	GSFC	R FULLMER	NAG 5 9290	500
41	VA POLYTECH INST & ST UNIV	D A WARDWELL	ARC	A MYKLEBUST	NAG 2 1521	525
41	VA POLYTECH INST & ST UNIV	T NAUMONICE	ARC	A MYKLEBUST	NAG 2 1486	525
41	VA POLYTECH INST & ST UNIV	T T BUI	DFRC	J A SCHETZ	NAG 4 218	525
41	VA POLYTECH INST & ST UNIV	E ENVIA	GRC	W J DEVENPORT	NAG 3 2710	525
41	VA POLYTECH INST & ST UNIV	L A POVINELLI	GRC	R L SIMPSON	NAG 3 2733	525
41	VA POLYTECH INST & ST UNIV	L J HEIDELBERG	GRC	D A BURDISSO	NAG 3 2694	525
41	VA POLYTECH INST & ST UNIV	D FOLTA	GSFC	D HALL	NAG 5 12119	526
41	VA POLYTECH INST & ST UNIV	D QUINN	GSFC	C HALL	NAG 5 11315	526
41	VA POLYTECH INST & ST UNIV	K LUU	GSFC	C HALL	NAG 5 9291	525
41	VA POLYTECH INST & ST UNIV	S HUGHES	GSFC	C HALL	NAG 5 10818	526
41	VA POLYTECH INST & ST UNIV	A E WASHBURN	LARC	D P TELIONES	NGT 1 01035	527
41	VA POLYTECH INST & ST UNIV	C L BURLEY	LARC	W J DAVENPORT	NAG 1 2272	523
41	VA POLYTECH INST & ST UNIV	D E REUBUSH	LARC	J A SCHETZ	NAG 1 02108	525
41	VA POLYTECH INST & ST UNIV	D R AMBUR	LARC	M W HYER	NAG 1 2298	523
41	VA POLYTECH INST & ST UNIV	D R AMBUR	LARC	E R JOHNSON	NCC 1 398	526
41	VA POLYTECH INST & ST UNIV	E J SIOCHI	LARC	T LONG	NGT 1 01033	527
41	VA POLYTECH INST & ST UNIV	G C HORNER	LARC	H H ROBERTSHAW	NAG 1 02111	525
41	VA POLYTECH INST & ST UNIV	H E JONES	LARC	D D BOYD	NCC 1 367	526
41	VA POLYTECH INST & ST UNIV	H E JONES	LARC	R W BARNWELL	NCC 1 02014	526
41	VA POLYTECH INST & ST UNIV	J H MORRISON	LARC	B GROSSMAN	NAG 1 02025	524
41	VA POLYTECH INST & ST UNIV	M D MOORE	LARC	J MARCHMAN	NAG 1 01100	524
41	VA POLYTECH INST & ST UNIV	M R KHORRAMI	LARC	R A BURDISSO	NAG 1 02084	524
41	VA POLYTECH INST & ST UNIV	M R WAZAK	LARC	L MEIROVITCH	NCC 1 346	526
41	VA POLYTECH INST & ST UNIV	R A HATHAWAY	LARC	S M PROCTOR	NAG 1 02024	524
41	VA POLYTECH INST & ST UNIV	R B OITNOTT	LARC	E R JOHNSON	NAG 1 01123	524
41	VA POLYTECH INST & ST UNIV	R H THOMAS	LARC	J J KELLEY	NGT 1 01002	526
41	VA POLYTECH INST & ST UNIV	R L BOITNOTT	LARC	E R JOHNSON	NAG 1 2309	523
41	VA POLYTECH INST & ST UNIV	S A COOKE	LARC	A A TRANI	NCA 1 01002	526
41	VA POLYTECH INST & ST UNIV	S A RIZZI	LARC	M E JOHNSON	NCC 1 01029	526
41	VA POLYTECH INST & ST UNIV	W A SILVA	LARC	L LEBESCU	NAG 1 01007	523
41	VA POLYTECH INST & ST UNIV	W A SILVA	LARC	LIBRESCU	NAG 1 02011	524
41	VANDERBILT UNIV	D L RANEY	LARC	K D FRAMPTOM	NCC 1 01018	468
41	VANDERBILT UNIV	T A ZHANG	LARC	S MAHADEVAN	NCC 1 01031	469
41	VIRGINIA COMMONWEALTH UNIV	D E ASHPIS	GRC	D J DORNEY	NCC 3 645	528
41	WASHINGTON UNIV - ST. LOUIS	R W CLAUS	GRC	D L LEVINE	NCC 3 777	332
41	WASHINGTON UNIV - ST. LOUIS	B MERRITT	GSFC	P HINK	NAG 5 5215	330
41	WAYNE STATE UNIV	P C JORGENSEN	GRC	S YU	NAG 3 2313	317
41	WAYNE STATE UNIV	P C JORGENSEN	GRC	S YU	NAG 3 2542	317
41	WAYNE STATE UNIV	P JORGENSEN	GRC	S YU	NCC 3 960	318
41	WAYNE STATE UNIV	R R ANTCLIFF	LARC	G W AUNER	NAG 1 02105	317
41	WEST VIRGINIA UNIV	W F BROOKS	ARC	M R NAPOLITANO	NAG 2 1158	540
41	WEST VIRGINIA UNIV	M BRENNER	DFRC	Y XU	NGT 4 52431	540
41	WESTERN MICHIGAN UNIV	S CHANG	GRC	W W LIOU	NAG 3 2529	318
41	WESTERN MICHIGAN UNIV	J N MOSS	LARC	W W LIOU	NAG 1 01023	318
41	WICHITA STATE UNIV	T H BOND	GRC	D ELLIS	NAG 3 2137	228
41	WICHITA STATE UNIV	T H BOND	GRC	D ELLIS	NCA 3 111	228
41	WICHITA STATE UNIV	T P RATVASKY	GRC	M PAPADAKIS	NCC 3 624	228
41	WICHITA STATE UNIV	W E RICKS	LARC	H WILLIFORD	NCA 1 106	228
41	YALE UNIV	A NURRIDIN	HQ	K GIBBLE	NGT 5 50067	148

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
42	AUBURN UNIV	D R KRUP	MSFC	A S HODEL	NAG 8 1806	3
42	BOSTON UNIV	D J BOGAN	GSFC	M MENDILLO	NAG 5 11165	278
42	BOWIE STATE UNIV	M S BURRELL	GSFC	N T WAKIM	NAG 5 9544	237
42	CALIFORNIA POLYTECH STATE U-SAN LUIS	L G LEMKE	ARC	D W HALL	NCC 2 5464	49
42	CALIFORNIA POLYTECH STATE U-SAN LUIS	J W PAULSON	LARC	D J DETURRIS	NCC 1 02012	49
42	CALIFORNIA POLYTECH STATE U-SAN LUIS	T A TALAY	LARC	D DETURRIS	NAG 1 2327	49
42	CAPITOL COLL	E CHANG	GSFC	P D SMIT	NAG 5 12463	238
42	CASE WESTERN RESERVE UNIV	P DOTY	MSFC	J I ALEXANDER	NAG 8 1727	402
42	CHRISTIAN BROTHERS COLL	E WONG	GRC	D SANTI	NAG 3 2454	463
42	CORNELL UNIV	B L EDWARDS	GSFC	M L PSIAKI	NCC 5 563	377
42	CORNELL UNIV	L COX	GSFC	M CAMPBELL	NAG 5 12231	376
42	GEORGE WASHINGTON UNIV	K L BRINKLEY	LARC	P A COOPER	NCC 1 01017	152
42	GEORGE WASHINGTON UNIV	R W BUCHAN	LARC	R H TOLSON	NCC 1 331	152
42	GEORGIA INST OF TECH	H S WRIGHT	LARC	J R OLDS	NAG 1 02088	180
42	HARVARD UNIV	F PERI	GSFC	J ANDERSON	NAS 5 02037	283
42	JOHNS HOPKINS UNIV	C KREBS	GSFC	D FORD	NAS 5 32865	251
42	JOHNS HOPKINS UNIV	G H MUCKLOW	GSFC	P A STADTER	NAG 5 8665	242
42	JOHNS HOPKINS UNIV	J BREDEDAMP	GSFC	A S SZALAY	NAG 5 8347	241
42	JOHNS HOPKINS UNIV	C M MC ARTHUR	MSFC	P J WALTRUP	NAG 8 1648	251
42	MASSACHUSETTS INST OF TECH	M SHIRLEY	ARC	N LEVESON	NAG 2 1543	286
42	MASSACHUSETTS INST OF TECH	S SCHNEIDER	GRC	D H EPSTEIN	NAG 3 2506	286
42	MASSACHUSETTS INST OF TECH	D E SMITH	GSFC	G H PETTENGHILL	NAG 5 11575	292
42	MASSACHUSETTS INST OF TECH	D MARGOLIES	GSFC	W MAYER	NAS 5 02094	294
42	MASSACHUSETTS INST OF TECH	G MOSIER	GSFC	D W MILLER	NAG 5 7839	288
42	MASSACHUSETTS INST OF TECH	N J DENNEHY	GSFC	D P HOW	NAG 5 10440	291
42	MASSACHUSETTS INST OF TECH	S MILLER DORNEY	MSFC	R HAIMES	NAG 8 1872	293
42	NORTH CAROLINA STATE UNIV. - RALEIGH	E M QUEEN	LARC	G O WALBERG	NAG 1 2222	394
42	NORTH CAROLINA STATE UNIV. - RALEIGH	E M QUEEN	LARC	G D WALBERG	NAG 1 01111	395
42	NORTHERN ARIZONA UNIV	D J BOGAN	GSFC	R YELLE	NAG 5 11078	24
42	OHIO UNIV	D R KRUPP	MSFC	J J ZHU	NAG 8 1789	415
42	OLD DOMINION UNIV	A A MOORE	LARC	R UNAL	NGT 1 52245	516
42	PENN STATE UNIV. - UNIV. PARK	B D REED	GRC	D KUO	NAG 3 2501	439
42	PENN STATE UNIV. - UNIV. PARK	B D REED	GRC	D A LEVIN	NAG 3 2590	439
42	PENN STATE UNIV. - UNIV. PARK	J H RUFF	MSFC	R J SANTORO	NAG 8 1844	445
42	POLYTECH UNIV - BROOKLYN	J A LEITNER	GSFC	V KAPILA	NAG 5 11365	380
42	PRINCETON UNIV	F L MARKLEY	GSFC	J KASDIN	NAG 5 10933	350
42	PURDUE UNIV	J A LEITNER	GSFC	J L GARRISON	NAG 5 10747	216
42	PURDUE UNIV	B WOOLFORD	JSC	B S CALDWELL	NAG 9 1292	217
42	PURDUE UNIV	J ANTOL	LARC	J L GARRISON	NAG 1 01083	214
42	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	L KALUZIENSKI	GSFC	J P HUGHES	NGT 5 50376	356
42	SAN JOSE STATE UNIV	G S HUBBARD	ARC	N IBRAHIM	NCC 2 1294	56
42	SANTA CLARA UNIV	P KOLODZIEJ	ARC	C A KITTS	NCC 2 1195	58
42	STANFORD UNIV	G ZILLAC	ARC	B J CANTWELL	NCC 2 1300	64
42	STANFORD UNIV	M T FLYNN	ARC	M REINHARD	NCC 2 1175	64
42	STANFORD UNIV	D M VENTO	GRC	B J CANTWELL	NAG 3 2615	60
42	STANFORD UNIV	S P HUGHES	GSFC	R L BYER	NAG 5 10719	62
42	TEXAS A&M UNIV	J A LEITNER	GSFC	K T ALFRIEND	NAG 5 11349	477
42	TEXAS A&M UNIV	E M BRADEN	JSC	S R VADALI	NAG 9 1239	478
42	TEXAS A&M UNIV	J W BELL	JSC	J L CRASSIDIS	NAG 9 1188	478
42	TEXAS A&M UNIV	L G HORTA	LARC	J L JUNKINS	NCC 1 386	479
42	UNIV HOUSTON-HOUSTON	J W BELL	JSC	J T WILLIAMS	NAG 9 1293	483
42	UNIV OF ALABAMA - HUNTSVILLE	C C LAPENTA	MSFC	S J GRAVES	NCC 8 180	13
42	UNIV OF ARIZONA	E P SMITH	GSFC	M MEYER	NAG 5 9325	30
42	UNIV OF ARIZONA	D MCKAY	JSC	D SARID	NAG 9 1307	36
42	UNIV OF CALIFORNIA - BERKELEY	M H ACUNA	GSFC	R LIN	NAG 5 9305	71
42	UNIV OF CALIFORNIA - LOS ANGELES	R CARPENTER	GSFC	J L SPEYER	NAG 5 8879	89
42	UNIV OF COLORADO - BOULDER	J A LEITNER	GSFC	P AXELROD	NAG 5 11421	134
42	UNIV OF COLORADO - BOULDER	J A LEITNER	GSFC	P AXELRAD	NCC 5 564	139
42	UNIV OF COLORADO - BOULDER	V GRIFFIN	GSFC	G ROTTMAN	NAS 5 97045	138
42	UNIV OF COLORADO - BOULDER	C MOORE	LARC	A BETY	NAG 1 01074	121
42	UNIV OF COLORADO - BOULDER	W K BELVIN	LARC	K C PARK	NAG 1 02009	122
42	UNIV OF COLORADO - BOULDER	W K BELVIN	LARC	M M MIKULAS	NCC 1 01046	138
42	UNIV OF COLORADO - BOULDER	W K BELVIN	LARC	T O MANN	NGT 1 01023	139
42	UNIV OF CONNECTICUT	W K BELVIN	LARC	K D MURPHY	NGT 1 01025	145
42	UNIV OF DENVER	G D OLSEN	MSFC	J E WILLIAMSEN	NCC 8 176	143
42	UNIV OF FLORIDA	L W GRIFFIN	MSFC	W SHYY	NAG 8 1729	172

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
42	UNIV OF GEORGIA	H HASAN	GSFC	P C STANCIL	NAG 5 11453	189
42	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J P RIEHL	GRC	B CONWAY	NAG 3 2791	208
42	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M C HICKS	GRC	J D BUCKMASTER	NAG 3 2516	208
42	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D G SICKOREZ	JSC	S R WHITE	NGT 9 33	213
42	UNIV OF MARYLAND - COLL PARK	M SHIRLEY	ARC	A MOSLEH	NAG 2 1536	254
42	UNIV OF MARYLAND - COLL PARK	D E JAMISON	GSFC	D R BASILI	NCC 5 464	269
42	UNIV OF MARYLAND - COLL PARK	L H ROSENBERG	GSFC	D SMIDTS	NAG 5 11952	265
42	UNIV OF MARYLAND - COLL PARK	M S BURRELL	GSFC	D SHAPIRO	NGT 5 116	270
42	UNIV OF MARYLAND - COLL PARK	B WOOLFORD	JSC	D L AKIN	NAG 9 1180	267
42	UNIV OF MARYLAND BALTIMORE COUNTY	A D SIMPSON	GSFC	S A BASS	NAG 5 12227	274
42	UNIV OF MICHIGAN - ANN ARBOR	G SOULAS	GRC	I D BOYD	NAG 3 2497	308
42	UNIV OF MICHIGAN - ANN ARBOR	F R CHANG-DIAZ	JSC	B E GILCHRIST	NAG 9 1167	314
42	UNIV OF MICHIGAN - ANN ARBOR	J L BALATICE	MSFC	B GILCHRIST	NAS 8 99128	314
42	UNIV OF MICHIGAN - ANN ARBOR	K J WELZYN	MSFC	G E GILCHRIST	NAS 8 99127	314
42	UNIV OF MINN	R TREVINO	JSC	V KOSCHEYER	NAG 9 1218	321
42	UNIV OF MISSOURI - COLUMBIA	J M HANSON	MSFC	C A KLUEVER	NAG 8 1741	327
42	UNIV OF MISSOURI - ROLLA	J A LEITNER	GSFC	H J PERNICKA	NAG 5 12589	328
42	UNIV OF NEW MEXICO-ALBUQUERQUE	G THOMAS	JSC	J BRINKER	NAG 9 1324	364
42	UNIV OF PITTSBURGH	P I CARAWAY	LARC	L HUMMEL	NAS 8 97111	451
42	UNIV OF SOUTH FLORIDA	M L BLOSSER	LARC	R T HAFTA	NAG 1 01046	176
42	UNIV OF SOUTHERN CALIFORNIA	C CASTELLANO	ARC	G BEKEY	NAS 8 97115	117
42	UNIV OF SOUTHERN CALIFORNIA	E ROBINSON	ARC	K DOZIER	NAS 2 00091	117
42	UNIV OF TEXAS - AUSTIN	E L CHRISTIANSEN	JSC	E P FAHRENTHOLD	NAG 9 1244	492
42	UNIV OF TEXAS - AUSTIN	E M BRADEN	JSC	R BISHOP	NAG 9 1225	492
42	UNIV OF TEXAS - AUSTIN	G C BLACKBURN	JSC	G E LIGHTSEY	NAG 9 1187	491
42	UNIV OF TEXAS - AUSTIN	G L CONDON	JSC	C OCAMPO	NAG 9 1441	492
42	UNIV OF TEXAS - AUSTIN	J W BELL	JSC	G LIGHTSEY	NAG 9 1189	491
42	UNIV OF TEXAS - AUSTIN	T CRANE	JSC	R BISHOP	NAG 9 1323	492
42	UNIV OF WASHINGTON	E P SMITH	GSFC	B MARGON	NAG 5 9324	532
42	UNIV OF WISCONSIN - MADISON	R SPAGNUOLO	GSFC	J W PERCIVAL	NAG 5 7026	542
42	UTAH STATE UNIV	M A EDEN	JSC	C SWANSON	NAS 9 02002	501
42	UTAH STATE UNIV	M D VANEK	LARC	J ULWICK	NAS 1 20467	501
42	VA POLYTECH INST & ST UNIV	W K WILKIE	LARC	D J INMAN	NAG 1 01104	524
42	WASHINGTON UNIV - ST. LOUIS	D E SMITH	GSFC	R PHILLIPS	NAG 5 11574	332
43	ALABAMA A&M UNIV	J HINES	ARC	V HATZIMANIKATIS	NAG 2 1527	1
43	BOWIE STATE UNIV	A CARDENAS	ARC	B BRADEN	NAG 2 1572	236
43	CASE WESTERN RESERVE UNIV	G W HUNTER	GRC	C LUI	NCC 3 679	403
43	CASE WESTERN RESERVE UNIV	G W HUNTER	GRC	C C LIU	NCC 3 772	403
43	CASE WESTERN RESERVE UNIV	G W HUNTER	GRC	C LIU	NCC 3 944	404
43	CASE WESTERN RESERVE UNIV	G W HUNTER	GRC	C LIU	NCC 3 983	404
43	CASE WESTERN RESERVE UNIV	H HUNTER	GRC	C C LIU	NCC 3 893	403
43	CASE WESTERN RESERVE UNIV	J D WRBANEK	GRC	C LIU	NCC 3 927	404
43	CLARK ATLANTA UNIV	R LAWRENCE	GRC	D OKHIO	NAG 3 2292	178
43	CLEVELAND STATE UNIV	S R LEVINE	GRC	J MASNOVI	NCC 3 759	407
43	CLEVELAND STATE UNIV	W MORALES	GRC	J E GATICA	NCC 3 971	408
43	CORNELL UNIV	H K NAHRA	GRC	D KOCH	NGT 3 52362	378
43	CORNELL UNIV	P DOTY	MSFC	N ZABARAS	NAG 8 1671	377
43	FSK UNIV	G HUNTER	GRC	D E COLLINS	NAG 3 2298	463
43	GEORGETOWN UNIV	D RISIN	JSC	J M JESSUP	NAG 9 1366	152
43	GEORGIA INST OF TECH	E WEISER	LARC	W H REES	NGT 1 52225	186
43	HARVARD UNIV	S D BAI	MSFC	I F SILVERA	NAG 8 1822	283
43	HOWARD UNIV	H L BELVIN	LARC	W E COLLINS	NAG 1 2019	153
43	JOHNS HOPKINS UNIV	D RISIN	KSC	J L HARDEN	NAG 9 1345	251
43	NORTHWESTERN UNIV	J HINES	ARC	V HATZIMANIKATI	NAG 2 1522	199
43	OHIO STATE UNIV	F J MONTEGANI	GRC	P K DUTTA	NGT 3 52363	414
43	PENN STATE UNIV. - UNIV. PARK	J H AGUI	GRC	D E SCHIFFER	NAG 3 2546	439
43	PENN STATE UNIV. - UNIV. PARK	B BULLARD	MSFC	V YANG	NAG 8 1877	445
43	PENN STATE UNIV. - UNIV. PARK	K TUCKER	MSFC	R J SANTORO	NAG 8 1792	444
43	POLYTECH UNIV - BROOKLYN	C TALLEY	MSFC	A S MEYERSON	NAG 8 1455	380
43	PRAIRIE VIEW A&M UNIV	A BEAM	MSFC	Z HAQUE	NAG 8 1644	471
43	RENSSELAER POLYTECH INST	J SKARDA	GRC	P C WAGNER	NAG 3 2383	380
43	RUTGERS STATE UNIV OF NJ NEW BRUNS	V KLOERIS	JSC	J L KOKINI	NAG 9 1318	356
43	TUSKEGEE UNIV	M COLLINS	KSC	N VAHDAT	NAG10 253	6
43	UNIV HOUSTON-HOUSTON	B FILES	JSC	C A MITCHELL	NAG 9 1305	483
43	UNIV OF ALABAMA - HUNTSVILLE	S NASH-STEVENSON	MSFC	R CERRO	NGT 8 52908	14
43	UNIV OF ARIZONA	R S BAIRD	JSC	K R SRIDHAR	NAG 9 1175	36

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
43	UNIV OF CALIFORNIA - DAVIS	F P CHIARAMONTE	GRC	B L POWELL	NAG 3 2153	80
43	UNIV OF CALIFORNIA - SANTA BARBARA	B S SINGH	GRC	L G LEAL	NAG 3 2115	105
43	UNIV OF COLORADO - BOULDER	B S SINGH	GRC	R H DAVIS	NAG 3 2116	122
43	UNIV OF DELAWARE	B S SINGH	GRC	E W KALER	NAG 3 1955	148
43	UNIV OF FLORIDA	C BLACK	KSC	G B HOFLUND	NGT10 52633	174
43	UNIV OF FLORIDA	M LONERGAN	KSC	C SEGAL	NAG10 285	172
43	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	F J MONTEGANI	GRC	J S MOORE	NGT 3 52345	212
43	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R S OKOJIE	GRC	I ADESIDA	NAG 3 2747	208
43	UNIV OF MICHIGAN - ANN ARBOR	F J MONTEGANI	GRC	A ATREYA	NGT 3 52365	316
43	UNIV OF NEVADA - RENO	D RISIN	JSC	G ALMEIDA-PORADA	NAG 9 1340	339
43	UNIV OF ROCHESTER	G A SOFFEN	GSFC	R H HEIST	NGT 5 104	389
43	UNIV OF TEXAS - ARLINGTON	S K KAHNG	LARC	S P JOSHI	NAG 1 01017	488
43	UNIV OF TEXAS - EL PASO	B REED	GRC	D KYPUROS	NAG 3 2773	495
43	UNIV OF TOLEDO	M RABINOWITZ	GRC	K L DEWITT	NAG 3 2338	420
43	UNIV OF WASHINGTON	D RISIN	JSC	A FOLCH	NAG 9 1343	535
43	VANDERBILT UNIV	J E FINN	ARC	M D LEVAN	NCC 2 1127	469
43	VANDERBILT UNIV	J E FINN	ARC	M D LEVAN	NCC 2 5384	469
43	VANDERBILT UNIV	A NURRIDIN	HQ	R BAYUZICK	NGT 5 50209	469
43	VIRGINIA COMMONWEALTH UNIV	J S HARRISON	LARC	G E WNEK	NAG 1 2302	527
43	YALE UNIV	B S SINGH	GRC	D E ROSNER	NAG 3 1951	146
43	YALE UNIV	B SINGH	GRC	M LOEWENBERG	NAG 3 1935	146
44	LOUISIANA STATE UNIV - BATON ROUGE	S NASH-STEVENSON	MSFC	K ALSHIBLI	NGT 8 52919	232
44	POLYTECH UNIV - BROOKLYN	J DOWDY	MSFC	F LIN	NGT 8 52879	380
44	SALISH KOOTENAI COLL	P SAKIMOTO	GSFC	T S OLSON	NAG 5 10144	335
44	UNIV OF NEW MEXICO-ALBUQUERQUE	S NASH-STEVENSON	MSFC	T ROSS	NGT 8 52915	364
44	UNIV OF VIRGINIA	S M ARNOLD	GRC	M PINDERA	NAG 3 2524	518
44	VANDERBILT UNIV	S NASH-STEVENSON	MSFC	S MAHADEVAN	NGT 8 52907	469
45	ALABAMA A&M UNIV	D J LARKIN	GRC	D ILA	NAG 3 2302	1
45	ALABAMA A&M UNIV	J MONTENEGRO	MSFC	A BOND	NAG 8 1497	1
45	ARIZONA STATE UNIV	T X NGUYEN	LARC	C BALANIS	NAG 1 1781	18
45	ARIZONA STATE UNIV	T X NGUYEN	LARC	C BALANIS	NCC 1 01051	22
45	AUBURN UNIV	F B BECK	LARC	M L WALLER	NGT 1 52205	4
45	AUBURN UNIV	M DESHPANDE	LARC	M E BAGINSKI	NGT 1 02015	4
45	AUBURN UNIV	D K HALL	MSFC	S A MERRYMAN	NAS 8 98249	3
45	AUBURN UNIV	S NASH-STEVENSON	MSFC	A S HODEL	NGT 8 52904	4
45	BRIGHAM YOUNG UNIV	R D SAKAHARA	DFRC	M D RICE	NAG 4 215	497
45	BRIGHAM YOUNG UNIV	R D SAKAHARA	DFRC	M D RICE	NAG 4 220	497
45	BROWN UNIV	F J MONTEGANI	GRC	G P CRAWFORD	NGT 3 52369	456
45	BUCKNELL UNIV	J DORBAND	GSFC	M F ABURDENE	NAG 5 10821	432
45	CASE WESTERN RESERVE UNIV	K BHASIN	GRC	F L MERAT	NAG 3 2578	401
45	CASE WESTERN RESERVE UNIV	K BHASIN	GRC	F L MERAT	NAG 3 2799	402
45	CASE WESTERN RESERVE UNIV	L G MATUS	GRC	M MEHREGANY	NAG 3 2204	401
45	CASE WESTERN RESERVE UNIV	L G MATUS	GRC	M MEHREGANY	NCA 3 201	402
45	CITY UNIV OF NY CITY COLL	A LACIS	GSFC	F MOSHAIR	NCC 5 427	366
45	CITY UNIV OF NY CITY COLL	B CARLSON	GSFC	B GROSS	NAG 5 11813	366
45	CITY UNIV OF NY CITY COLL	H SHAW	GSFC	N SCHEINBERG	NAG 5 7160	366
45	CLEMSON UNIV - CLEMSON	J F DOWDY	MSFC	J N GOWDY	NGT 8 52858	460
45	CLEVELAND STATE UNIV	F J MONTEGANI	GRC	Z GAO	NGT 3 52387	408
45	CLEVELAND STATE UNIV	J F SOEDER	GRC	Z GAO	NCC 3 699	407
45	CLEVELAND STATE UNIV	J F SOEDER	GRC	Z GAO	NCC 3 931	408
45	CLEVELAND STATE UNIV	R E JONES	GRC	P P CHU	NAG 3 2040	405
45	CLEVELAND STATE UNIV	R KERCZEWSKI	GRC	V K KONANGI	NCC 3 764	407
45	CLEVELAND STATE UNIV	R R ROMANOFKY	GRC	F XIONG	NAG 3 2531	406
45	CLEVELAND STATE UNIV	S G BAILEY	GRC	D G NEHEMANN	NCC 3 883	408
45	CLEVELAND STATE UNIV	T M WALLETT	GRC	V K KONANGI	NCC 3 595	407
45	CLEVELAND STATE UNIV	K CHUN	GSFC	F XIONG	NAG 3 2619	406
45	EMBRY-RIDDLE AERONAUTICAL UNIV	P G NEUDECK	GRC	A HELFRICK	NCC 3 685	161
45	FLORIDA A&M UNIV	F MCKENZIE	KSC	B A HARVEY	NAG10 289	163
45	FLORIDA ATLANTIC UNIV	T P BIZON	GRC	W E GLENN	NAG 3 2023	163
45	GEORGE WASHINGTON UNIV	M DUTTA	GSFC	M ZAGHLOUL	NAG 5 11343	151
45	GEORGIA INST OF TECH	C T RAMOS	GRC	D F AKYILDIZ	NAG 3 2585	181
45	GEORGIA INST OF TECH	G E PONCHAK	GRC	D M TENTZERIS	NAG 3 2329	181
45	GEORGIA INST OF TECH	G E PONCHAK	GRC	D PAPAPOLYMEROU	NCC 3 900	185
45	GEORGIA INST OF TECH	S D HARRAH	LARC	G GIMMESTAD	NAS 1 99073	184
45	GEORGIA INST OF TECH	T S DANIELS	LARC	G HOPKINS	NAS 1 02056	183
45	HAMPTON UNIV	F B BECK	LARC	A O OLADIPUPO	NCC 1 366	509

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
45	HOWARD UNIV	D F NOGA	GRC	D RUBAAI	NAG 3 2287	153
45	HOWARD UNIV	J L DOLCE	GRC	J A MOMOH	NAG 3 1978	153
45	HOWARD UNIV	M D KANKAM	GRC	A RUBAAI	NCC 3 571	154
45	HOWARD UNIV	R M BUTTON	GRC	D A MOMOH	NAG 3 2621	153
45	HOWARD UNIV	A SHARMA	GSFC	D MOHAMMAD	NAG 5 11118	153
45	IOWA STATE UNIV	W P WINFREE	LARC	S S UPDA	NAG 1 01040	220
45	JOHNS HOPKINS UNIV	E WEBB	GSFC	P EISENREICH	NAG 5 10778	246
45	JOHNS HOPKINS UNIV	F SELDON- JONES	GSFC	J KANG	NAS 5 00166	251
45	JOHNS HOPKINS UNIV	H SHAW	GSFC	J B KHURGIN	NAG 5 11332	247
45	JOHNS HOPKINS UNIV	P J LUERS	GSFC	M G DARRIN	NAG 5 10464	245
45	JOHNS HOPKINS UNIV	P LUERS	GSFC	R F CONDE	NAG 5 9456	243
45	JOHNS HOPKINS UNIV	P LUERS	GSFC	B ANDREWS	NAG 5 10234	244
45	JOHNS HOPKINS UNIV	P LUERS	GSFC	M DARRIN	NAG 5 12209	249
45	JOHNS HOPKINS UNIV	W S HEAPS	GSFC	B BOONE	NAG 5 11845	248
45	JOHNS HOPKINS UNIV	M E BEATTY, III	LARC	M A DARRIN	NCC 1 01019	251
45	JOHNS HOPKINS UNIV	Q A SHAMS	LARC	P D SCHWARTZ	NAG 1 01059	238
45	JOHNS HOPKINS UNIV	D C VANDEMARK	WFF	D R THOMPSON	NAG 5 5301	240
45	MANCHESTER COLL	C HUNG	GRC	G W CLARK	NCC 3 873	214
45	MICHIGAN TECHNOLOGICAL UNIV	M S BURRELL	GSFC	E ROTHWELL	NGT 5 120	307
45	MORGAN STATE UNIV	B MOTT	GSFC	C J SCOTT	NAG 5 7136	252
45	MORGAN STATE UNIV	D NGUYEN	GSFC	C WHITE	NAG 5 10913	253
45	MORGAN STATE UNIV	J PIEDMEIER	GSFC	C WHITE	NCC 5 565	253
45	MORGAN STATE UNIV	J PIEMEIER	GSFC	C T JOHNSON-BEY	NAG 5 11837	253
45	NEW JERSEY INST OF TECH	E WONG	GRC	D P DHAWAN	NAG 3 2459	347
45	NEW MEXICO STATE UNIV - LAS CRUCES	W ST. CYR	SSC	E G CONLEY	NAG13 02046	360
45	NORTH CAROLINA A&T STATE UNIV	A CARDENAS, ARC	ARC	R M SALAMI	NAG 2 6028	393
45	NORTH CAROLINA A&T STATE UNIV	G FUJIKAWA	GRC	D DOGAN	NAG 3 2584	393
45	NORTH CAROLINA A&T STATE UNIV	P CORONADO	GSFC	A WALKER	NAG 5 7158	393
45	NORTHWESTERN UNIV	M S BURRELL	GSFC	P KUMAR	NGT 5 90	202
45	OHIO NORTHERN UNIV	R BUTTON	GRC	F L GRISMORE	NAG 3 2544	410
45	OHIO STATE UNIV	E B CLARK	GRC	S A RINGEL	NCC 3 899	414
45	OHIO STATE UNIV	E CLARK	GRC	S A RINGEL	NCC 3 974	414
45	OHIO STATE UNIV	R S OKOJIE	GRC	L BRILLSON	NCC 3 949	414
45	OHIO STATE UNIV	F PERI	GSFC	J T JOHNSON	NAS 5 02001	414
45	OHIO UNIV	P E POINSATTE	GRC	T A SKIDMORE	NAG 3 2385	415
45	OHIO UNIV	P POINSATTE	GRC	T SKIDMORE	NAG 3 2575	415
45	OHIO UNIV	R W WILLS	LARC	J M RANKIN	NAG 1 2036	415
45	OKLAHOMA STATE UNIV	D NGO	GRC	M ATIQUZZAMAN	NCC 3 903	425
45	OLD DOMINION UNIV	M D DESHBANDE	LARC	R P JOSHI	NAG 1 01071	512
45	OLD DOMINION UNIV	R J DEYOUNG	LARC	H SAYID ELE	NGT 1 52211	516
45	OLD DOMINION UNIV	R S ROGOWSKI	LARC	S ALBIN	NCC 1 02026	515
45	OLD DOMINION UNIV	T X NGUYEN	LARC	C F BUNTING	NCC 1 01032	514
45	OLD DOMINION UNIV	T X NGUYEN	LARC	L VAHALA	NGT 1 01013	515
45	OREGON STATE UNIV	G ADAMOVSKY	GRC	T K PLANT	NAG 3 2463	427
45	PENN STATE UNIV. - UNIV. PARK	A AHUMADA	ARC	O I CAMPS	NCC 2 1331	446
45	PENN STATE UNIV. - UNIV. PARK	B KENNY	GRC	H HOFMANN	NAG 3 2598	439
45	PENN STATE UNIV. - UNIV. PARK	G V BROWN	GRC	D HOFMANN	NAG 3 2603	439
45	PENN STATE UNIV. - UNIV. PARK	S G BAILEY	GRC	C R WRONSKI	NAG 3 2795	440
45	PENN STATE UNIV. - UNIV. PARK	P V DEINS-JONES	GSFC	T N JACKSON	NAG 5 12257	444
45	PURDUE UNIV	K CHUN	GRC	D S LEHNERT	NAG 3 2550	215
45	RICE UNIV	B BIEGEL	ARC	J KONO	NCC 2 1279	474
45	RICE UNIV	T R GOVINDAN	ARC	J KONO	NCC 2 5458	474
45	RICE UNIV	D L JAN	JPL	F K TITTLE	NAG 9 1049	474
45	STANFORD UNIV	J E HOLLANSWORTH	GRC	P ENGE	NAG 3 2812	60
45	STANFORD UNIV	K BHASIN	GRC	A FOX	NAG 3 2579	60
45	STANFORD UNIV	M S BURRELL	GSFC	U UMRAN	NGT 5 92	66
45	STATE UNIV OF NY - ALBANY	P NEUDECK	GRC	D DUDLEY	NCC 3 891	383
45	TEXAS A&M UNIV	R LEE	GRC	D CHANG	NAG 3 2551	476
45	TEXAS A&M UNIV	R GARCIA	JSC	P ENJETI	NAG 9 1390	478
45	TEXAS A&M UNIV-KINGSVILLE	K L HAMES	JSC	S W PARK	NAG 9 1093	481
45	TEXAS TECH UNIV	L R PINERO	GRC	E A O'HAIR	NAG 3 2005	482
45	TUSKEGEE UNIV	S A ALTEROVITZ	GRC	K K DAS	NAG 3 2127	5
45	U OF ARKANSAS MAIN CAMP-FAYETTEVILLE	J W JOHNSON	LARC	M EL-SHENAWEE	NAG 1 02021	40
45	UNIV OF AKRON	H NGUYEN	GRC	O C UGWEJE	NCC 3 828	418
45	UNIV OF AKRON	R J ACOSTA	GRC	O C UGWEJE	NAG 3 2279	416
45	UNIV OF AKRON	T B MILLER	GRC	T T HARTLEY	NCC 3 998	418

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
45	UNIV OF ALABAMA - HUNTSVILLE	D J LARKIN	GRC	D A GEORGE	NAG 3 2285	8
45	UNIV OF ALABAMA - HUNTSVILLE	K MCCALL	MSFC	Y B SHTESSEL	NAG 8 1787	12
45	UNIV OF CALIFORNIA - SANTA BARBARA	T R GOVINDAN	ARC	M W WU	NCC 2 5368	109
45	UNIV OF CALIFORNIA - SANTA BARBARA	T DOIRON	GSFC	M SHERWIN	NAG 5 10299	108
45	UNIV OF CINCINNATI	G E PONCHAK	GRC	K P ROENKER	NAG 3 2487	419
45	UNIV OF COLORADO - BOULDER	H NGUYEN	GRC	Y LEE	NCC 3 773	139
45	UNIV OF COLORADO - BOULDER	R Q LEE	GRC	Z POPOVIC	NAG 3 2587	123
45	UNIV OF COLORADO - BOULDER	W HEAPS	GSFC	J L HALL	NAG 5 10368	131
45	UNIV OF DAYTON	F A MIRANDA	GRC	G SUBRAMANYAN	NCC 3 882	420
45	UNIV OF DAYTON	F MIRANDA	GRC	G SUBRAMANYAM	NCC 3 771	420
45	UNIV OF FLORIDA	M A MOTTER	LARC	J C PRINCIPE	NAG 1 2188	170
45	UNIV OF FLORIDA	S K KAHNG	LARC	M SHEPLAK	NAG 1 01098	170
45	UNIV OF HAWAII AT MANOA - HONOLULU	P H YEHLER	GSFC	M FOSSORIER	NAG 5 7383	191
45	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	K S CHUN	GRC	U MADHOW	NAG 3 2263	208
45	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	R R ROMANOFSKY	GRC	D BERNHARD	NAG 3 2555	208
45	UNIV OF KANSAS	K BHASIN	GRC	G	NAS 3 00162	227
45	UNIV OF MARYLAND - COLL PARK	J W BAGWELL	GRC	J S BARAS	NCC 3 528	268
45	UNIV OF MASSACHUSETTS - AMHERST	D LEVINE	GSFC	K CARVER	NAS 5 99133	301
45	UNIV OF MASSACHUSETTS - AMHERST	T A DOIRON	GSFC	K CARVER	NAG 5 9630	299
45	UNIV OF MASSACHUSETTS - AMHERST	T DOIRON	GSFC	K CARVER	NAG 5 10699	300
45	UNIV OF MICHIGAN - ANN ARBOR	D MONTEGANI	GRC	D PAVLIDIS	NGT 3 52372	316
45	UNIV OF MICHIGAN - ANN ARBOR	G E PONCHAK	GRC	P BHATTACHARYA	NAG 3 2530	308
45	UNIV OF MICHIGAN - ANN ARBOR	G E PONCHAK	GRC	L P KATEHI	NCC 3 790	315
45	UNIV OF MICHIGAN - ANN ARBOR	G E PONCHAK	GRC	L P KATEHI	NCC 3 837	315
45	UNIV OF MICHIGAN - ANN ARBOR	G PONCHAK	GRC	P BHATTACHARYA	NAG 3 2330	308
45	UNIV OF MICHIGAN - ANN ARBOR	C M PRINCIPE	GSFC	C RUF	NAG 5 9762	311
45	UNIV OF MICHIGAN - ANN ARBOR	C PRINCIPE	GSFC	C RUF	NAG 5 11609	313
45	UNIV OF MICHIGAN - ANN ARBOR	J W JOHNSON	LARC	C S RUF	NAG 1 01032	307
45	UNIV OF MICHIGAN - ANN ARBOR	S NASH-STEVENSON	MSFC	B GILCHRIST	NGT 8 52889	317
45	UNIV OF MICHIGAN - ANN ARBOR	S NASH-STEVESON	MSFC	B GILCHRIST	NGT 8 52917	317
45	UNIV OF MICHIGAN - ANN ARBOR	D C VANDEMARK	WFF	K SARABANDI	NAG 5 5304	309
45	UNIV OF MINN	B H KENNY	GRC	P MOHAN	NAG 3 2468	318
45	UNIV OF MINN	R M BUTTON	GRC	N MOHAN	NCC 3 811	322
45	UNIV OF MINN	T T PETERSON	GRC	N MOHAN	NCC 3 857	322
45	UNIV OF NEBRASKA - LINCOLN	M L BLOXXER	LARC	K D COLE	NAG 1 01087	336
45	UNIV OF NEW MEXICO-ALBUQUERQUE	R L CATALDO	GRC	M EL-GENK	NAG 3 2543	362
45	UNIV OF NEW MEXICO-ALBUQUERQUE	K KRISHEN	JSC	M SHAHINPOOR	NAG 9 995	364
45	UNIV OF PUERTO RICO HUMACAO U COL	R ACOSTA	GRC	J C CERSOSIMO	NAG 3 2636	551
45	UNIV OF ROCHESTER	C R MCCREIGHT	ARC	W J FORREST	NAG 2 1280	388
45	UNIV OF SOUTH FLORIDA	A HEPP	GRC	D MOREL	NAG 3 2614	176
45	UNIV OF SOUTHERN CALIFORNIA	M MEYAPPAN	ARC	C ZHOU	NCC 2 5454	117
45	UNIV OF SOUTHERN CALIFORNIA	J POUCH	GRC	A LEVI	NAG 3 2559	114
45	UNIV OF TEXAS - AUSTIN	F ADAMS	KSC	R ZOWARKA	NAG10 288	492
45	UNIV OF TEXAS - EL PASO	LOWRY	ARC	P J TELLER	NAG 2 1138	494
45	UNIV OF TEXAS - EL PASO	A HEPP	GRC	G B LUSH	NAG 3 2303	495
45	UNIV OF TOLEDO	F R BEACH	GRC	T G KEITH	NCC 3 924	423
45	UNIV OF TOLEDO	G E PONCHAK	GRC	V J KAPOOR	NCC 3 881	423
45	UNIV OF TOLEDO	R BEACH	GRC	T G KEITH	NCC 3 916	423
45	UNIV OF TOLEDO	R L PATTERSON	GRC	V J KAPOOR	NAG 3 2565	421
45	UNIV OF VIRGINIA	G MUCKLOW	GSFC	T CROWE	NAG 5 8663	519
45	UNIV OF WEST FLORIDA	A R GROSS	HQ	D STILL	NAG 2 1332	178
45	UNIV OF WISCONSIN - MADISON	J PANEK	GSFC	R PAULOS	NAS 5 02089	547
45	VA POLYTECH INST & ST UNIV	R S ROGOWSKI	LARC	A WANG	NAG 1 01018	524
45	VANDERBILT UNIV	G A SOFFEN	GSFC	R D SCHRIMPF	NGT 5 105	469
45	VIRGINIA COMMONWEALTH UNIV	Q A SHAMS	LARC	J H TUCKER	NAG 1 01042	527
45	WAYNE STATE UNIV	D B SNYDER	GRC	J R WOODYARD	NAG 3 2801	317
45	WAYNE STATE UNIV	D BRINKER	GRC	P WOODYARD	NAG 3 2180	317
45	WRIGHT STATE UNIV	J FREEMAN	GRC	D C LOOK	NAG 3 2637	424
46	ALABAMA A&M UNIV	A CHOW	MSFC	Z T DENG	NAG 8 1804	2
46	ALABAMA A&M UNIV	A CHOW	MSFC	K X HO	NAG 8 1808	2
46	ALABAMA A&M UNIV	G MYERS	MSFC	A SHARMA	NAG 8 1614	2
46	ARIZONA STATE UNIV	D R AMBUR	LARC	A CHATTOPADHYAY	NGT 1 02013	23
46	AUBURN UNIV	J TRUDELL	GRC	D GOWAYED	NAG 3 2597	3
46	AUBURN UNIV	K R SACKSTEDER	GRC	D W MACKOWSKI	NCC 3 864	4
46	AUBURN UNIV	J F DOWDY	MSFC	G T FLOWERS	NGT 8 52851	4
46	AUBURN UNIV	J F DOWDY	MSFC	P D JONES	NGT 8 52870	4

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
46	CALIFORNIA INST OF TECH	F P CHIARAMONTE	GRC	J F BRADY	NAG 3 2166	41
46	CALIFORNIA POLYTECH STATE U-SAN LUIS	J MURRAY	DFRC	J D MELLO	NAG 4 228	49
46	CARNEGIE - MELLON UNIV	M H SIMS	ARC	M HEBERT	NGT 2 52232	435
46	CARNEGIE - MELLON UNIV	R DEL ROSARIO	GRC	J H GRIFFIN	NAS 3 27735	434
46	CARNEGIE - MELLON UNIV	D LAVERY	HQ	T KANADE	NAG 9 1090	434
46	CARNEGIE - MELLON UNIV	C CULBERT	JSC	W WHITTAKER	NAG 9 1276	434
46	CARNEGIE - MELLON UNIV	C FARMER	JSC	R SIMMONS	NAG 9 1327	434
46	CARNEGIE - MELLON UNIV	D LAVERY	JSC	T KANADE	NAG 9 1092	434
46	CASE WESTERN RESERVE UNIV	F HURWITZ	GRC	J D ALEXANDER	NCC 3 1005	404
46	CASE WESTERN RESERVE UNIV	F J MONTEGANI	GRC	J R KADAMBI	NGT 3 52374	405
46	CASE WESTERN RESERVE UNIV	G W HUNTER	GRC	C LIU	NCC 3 1004	404
46	CASE WESTERN RESERVE UNIV	J C DUH	GRC	I D ALEXANDER	NAG 3 2160	401
46	CASE WESTERN RESERVE UNIV	J M LUCERO	GRC	J M PRAHL	NCC 3 999	404
46	CASE WESTERN RESERVE UNIV	J PEREIRA	GRC	V PRAKASH	NAG 3 2315	401
46	CASE WESTERN RESERVE UNIV	J PEREIRA	GRC	V PRAKASH	NAG 3 2794	402
46	CASE WESTERN RESERVE UNIV	K SACKSTEDER	GRC	J S TIEN	NCC 3 633	403
46	CASE WESTERN RESERVE UNIV	N N NEMETH	GRC	D A GASPARINI	NCC 3 653	403
46	CASE WESTERN RESERVE UNIV	P DUNLAP	GRC	J D CAWLEY	NCC 3 898	404
46	CASE WESTERN RESERVE UNIV	K BLANDING	GSFC	R QUINN	NGT 5 50274	405
46	CENTRAL STATE UNIV - OHIO	G FRALICK	GRC	T V REID	NCC 3 996	405
46	CITY UNIV OF NY CITY COLL	F D CHIARAMONTE	GRC	A ACRIVOS	NCC 3 607	366
46	CLEVELAND STATE UNIV	J MANDERSCHIED	GRC	S F DUFFY	NCC 3 761	407
46	CLEVELAND STATE UNIV	L THIEMENE	GRC	D IBRAHIM	NAG 3 2482	405
46	COLORADO STATE UNIV	M C GREENNISEN	JSC	S P JAMES	NGT 9 49	121
46	CORNELL UNIV	D G LOWICKI	GRC	A R INGRAFFEA	NAG 3 1993	372
46	CORNELL UNIV	F P CHARIAMONTE 111	GRC	J JENKINS	NCC 3 797	377
46	CORNELL UNIV	R HAKIMAZADEH	GRC	M LOUGE	NAG 3 2112	372
46	CORNELL UNIV	D YOUNG	LARC	A R INGRAFFEA	NAG 1 02001	372
46	DREXEL UNIV	D D ROSS	GRC	D A RUFF	NAG 3 1884	436
46	DUKE UNIV	A P KURKOV	GRC	K C HALL	NAG 3 2627	390
46	DUKE UNIV	K BELVIN	LARC	L VIRGIN	NGT 1 02009	391
46	FLORIDA ATLANTIC UNIV	W J STROUD	LARC	I ELISHAKOFF	NAG 1 01079	163
46	FLORIDA INST OF TECH	L E JONES	LARC	D C FLEMING	NAG 1 2260	164
46	FLORIDA STATE UNIV	K Q ZAMAN	GRC	C K TAM	NAG 3 2102	165
46	GEORGIA INST OF TECH	B SINGH	GRC	M K SMITH	NAG 3 1949	181
46	GEORGIA INST OF TECH	F J MONTEGANI	GRC	J H GINSBERG	NGT 3 52371	186
46	GEORGIA INST OF TECH	M S BURRELL	GSFC	W E SINGHOSE	NGT 5 129	186
46	GEORGIA INST OF TECH	B J JENSEN	LARC	W S JOHNSON	NAG 1 2312	180
46	GEORGIA INST OF TECH	R D JOSLIN	LARC	A GLEZER	NGT 1 52132	186
46	GEORGIA INST OF TECH	T A ZANG	LARC	F MISTREE	NGT 1 52170	186
46	GEORGIA INST OF TECH	R DABNEY	MSFC	A CALISE	NAG 8 1638	183
46	ILLINOIS INST OF TECH	B M STEINETZ	GRC	D RAMAN	NCC 3 798	199
46	ILLINOIS INST OF TECH	M M HASAN	GRC	J SEYED-YAGOOBI	NAG 3 2743	199
46	IOWA STATE UNIV	K R SACKSTEDER	GRC	G M COLVER	NCC 3 846	222
46	IOWA STATE UNIV	G DUKEMAN	MSFC	P LU	NAG 8 1637	221
46	JOHNS HOPKINS UNIV	H K NAHRA	GRC	D HERMAN	NAG 3 1815	239
46	JOHNS HOPKINS UNIV	J G SCHREIBER	GRC	D MEHOKE	NAG 3 2622	239
46	JOHNS HOPKINS UNIV	N N NEMETH	GRC	D N SHARPE	NCC 3 961	251
46	JOHNS HOPKINS UNIV	D DOUGLAS	GSFC	R OSIANDER	NAG 5 10241	244
46	KETTERING UNIV	D REDDY	GRC	S ROY	NAG 3 2638	304
46	LEHIGH UNIV	M J WALSH	LARC	D O ROCKWELL	NAG 1 2248	437
46	LOUISIANA STATE UNIV - BATON ROUGE	R TRAVIS	SSC	S ACHARYS	NGT13 52755	232
46	MASSACHUSETTS INST OF TECH	H THOMAS	ARC	J K SALISBURY	NCC 2 1121	295
46	MASSACHUSETTS INST OF TECH	J DOWDY	MSFC	A WITT	NGT 8 52880	297
46	MISSISSIPPI STATE UNIV	E R MCFARLAND	GRC	W R BRILEY	NAG 3 2176	324
46	NEW MEXICO STATE UNIV - LAS CRUCES	R P TRAVIS	SSC	E G CONLEY	NGT13 52752	361
46	NORFOLK STATE UNIV	S H CHOI	LARC	K D SONG	NCC 1 280	511
46	NORTH CAROLINA A&T STATE UNIV	G ZILLIAC	ARC	M HUMAN	NAG 2 1430	392
46	NORTH CAROLINA STATE UNIV. - RALEIGH	R D GREEN	GRC	A V KUZNETSOV	NAG 3 2706	395
46	NORTH CAROLINA STATE UNIV. - RALEIGH	R L SPELLMAN	LARC	F G YUAN	NAG 1 02091	395
46	NORTH CAROLINA STATE UNIV. - RALEIGH	P DOTY	MSFC	N MA	NAG 8 1817	396
46	NORTHWESTERN UNIV	F P CHIARAMONTE	GRC	H RIECKE	NAG 3 2113	200
46	NORTHWESTERN UNIV	A NURRIDIN	HQ	T IGUSA	NGT 5 50198	202
46	NORTHWESTERN UNIV	N PACKMAN	JSC	R M LUEPTOW	NAG 9 1053	201
46	NORTHWESTERN UNIV	J T WANG	LARC	W K LIU	NAG 1 02078	199
46	OHIO STATE UNIV	F J MONTEGANI	GRC	V V SUBRAMANIAM	NGT 3 52373	415

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
46	OHIO STATE UNIV	S J SCHNEIDER	GRC	I ADAMOVICH	NAG 3 2339	410
46	OLD DOMINION UNIV	C M BELCASTRO	LARC	W S GRAY	NCC 1 392	514
46	OLD DOMINION UNIV	P FERGEN	LARC	J HUANG	NGT 1 01027	516
46	OLD DOMINION UNIV	R J DEYOUNG	LARC	H ELSAVIDELE	NGT 1 52229	516
46	PENN STATE UNIV. - UNIV. PARK	B A LERCH	GRC	C J LISSENOEN	NCC 3 597	446
46	PENN STATE UNIV. - UNIV. PARK	D T PALAC	GRC	R J SANTORO	NAG 3 2657	440
46	PENN STATE UNIV. - UNIV. PARK	F J MONTEGANI	GRC	D A SANTAVICCA	NGT 3 52368	447
46	PENN STATE UNIV. - UNIV. PARK	S A HOWARD	GRC	M CARPINO	NAG 3 2656	439
46	PENN STATE UNIV. - UNIV. PARK	M HAGOPIAN	GSFC	J E FREDLEY	NCC 5 508	447
46	PENN STATE UNIV. - UNIV. PARK	H TRINH	MSFC	D SANTAVICCA	NAG 8 1873	445
46	PENN STATE UNIV. - UNIV. PARK	J DOWDY	MSFC	G A SMITH	NGT 8 52876	448
46	POLYTECH UNIV - BROOKLYN	D B ZAMAN	GRC	M OTUGEN	NAG 3 2533	380
46	PRAIRIE VIEW A&M UNIV	W C ROEH	JSC	W F TROTTY	NAG 9 1136	471
46	PRINCETON UNIV	D L URBAN	GRC	F L DRYER	NCC 3 735	352
46	PURDUE UNIV	Y R HICKS	GRC	N M LAVRENDEAN	NAG 8 1782	217
46	RENSSELAER POLYTECH INST	J W LEHNER	MSFC	L N MYRABO	NAG 8 1795	381
46	RICE UNIV	J CREWS	JSC	E V BARRERA	NAG 9 1285	474
46	SOUTHERN UNIV & A&M COLL	B NOTARDONATO	KSC	D F MENSAH	NAG10 322	233
46	STANFORD UNIV	G RAICHE	ARC	R K HANSON	NCC 2 5522	66
46	STANFORD UNIV	N N MANSOUR	ARC	R K HANSON	NAG 2 1478	59
46	STANFORD UNIV	N N MANSOUR	ARC	P MOIN	NCC 2 1151	64
46	STANFORD UNIV	F CHARIMONTE	GRC	J K EATON	NCC 3 640	66
46	STATE UNIV OF NY - BUFFALO	J P DRUMMOND	LARC	P GIVI	NAG 1 2238	383
46	TENNESSEE TECHNOLOGICAL UNIV	J DOWDY	MSFC	C WILSON	NGT 8 52883	465
46	TENNESSEE TECHNOLOGICAL UNIV	J J HUTT	MSFC	S S HAN	NAG 8 1794	465
46	TENNESSEE TECHNOLOGICAL UNIV	K WELZN	MSFC	S CANFIELD	NAG 8 1793	465
46	TENNESSEE TECHNOLOGICAL UNIV	S NASH-STEVENSON	MSFC	S CANFIELD	NGT 8 52911	465
46	TEXAS A&M UNIV	F P CHIARAMONTE	GRC	J SEYED-YAGOOBI	NCC 3 602	479
46	TEXAS A&M UNIV	K P MCLALLIN	GRC	D PALAZZOLO	NCC 3 836	479
46	TEXAS A&M UNIV	E K UNGAR	JSC	J SEYED-YAGOOBI	NAG 9 1145	478
46	TEXAS A&M UNIV	K HURLBERT	JSC	F R BEST	NAG 9 1328	478
46	TEXAS A&M UNIV	M GUISBERT	KSC	D BEST	NAG10 328	479
46	TEXAS A&M UNIV	T R REINARTS	KSC	F R BEST	NAG10 304	479
46	TEXAS A&M UNIV	I S RAJU	LARC	J D WHITCOMB	NAG 1 01080	476
46	TEXAS A&M UNIV	T JETT	MSFC	L S ANDRES	NAG 8 1853	478
46	TEXAS SOUTHERN UNIV	M K EWERT	JSC	D C DAVIS	NAG 9 1132	481
46	THE UNIV OF CENTRAL FLORIDA	J D HEIDMANN	GRC	D J KASSAB	NAG 3 2691	168
46	THE UNIV OF CENTRAL FLORIDA	B NOTARDONATO	KSC	R NAIDYANATHAN	NAG10 323	169
46	THE UNIV OF CENTRAL FLORIDA	G HADDARD	KSC	D CHEN	NAG10 319	169
46	UNIV HOUSTON-HOUSTON	D SICKOREZ	JSC	R B BANNEROT	NAG 9 867	483
46	UNIV HOUSTON-HOUSTON	J D CORNWELL	JSC	L C WHITTE	NAG 9 1012	483
46	UNIV HOUSTON-HOUSTON	K M HURBERT	JSC	L C WHITE	NAG 9 1421	483
46	UNIV OF AKRON	A ARNOLD	GRC	D F SALEEB	NCC 3 788	417
46	UNIV OF AKRON	D HOPKINS	GRC	S N PATNAIK	NCC 3 831	418
46	UNIV OF AKRON	M P PROCTOR	GRC	M J BRAUN	NCC 3 929	418
46	UNIV OF AKRON	S A THORP	GRC	A F SALEEB	NCC 3 578	417
46	UNIV OF AKRON	W B DUVAL	GRC	C BATUR	NCC 3 567	417
46	UNIV OF ALABAMA - HUNTSVILLE	J DOWDY	MSFC	C HAWK	NGT 8 52878	14
46	UNIV OF ALABAMA - HUNTSVILLE	S NASH-STEVENSON	MSFC	C HAWK	NGT 8 52891	14
46	UNIV OF ARIZONA	J E FINN	ARC	K R SRIDHAR	NCC 2 5357	37
46	UNIV OF ARIZONA	S P WALKER	LARC	E MADENCI	NAG 1 2052	24
46	UNIV OF ARIZONA	P M DOTY	MSFC	J R SRIDHAR	NAG 8 1469	35
46	UNIV OF CALIFORNIA - BERKELEY	B A ADELSTEIN	ARC	H KAZEROONI	NCC 2 1347	76
46	UNIV OF CALIFORNIA - BERKELEY	B ADELSTEIN	ARC	H KAZEROONI	NCC 2 1255	76
46	UNIV OF CALIFORNIA - BERKELEY	S R ELLIS	ARC	H KAZEROONI	NCC 2 1171	76
46	UNIV OF CALIFORNIA - BERKELEY	H D ROSS	GRC	D FERNANDEZ-PELLO	NCC 3 803	77
46	UNIV OF CALIFORNIA - DAVIS	F P CHIARAMONTE	GRC	B D SHAW	NCC 3 353	82
46	UNIV OF CALIFORNIA - IRVINE	H D ROSS	GRC	W A SIRIGNANO	NAG 3 2024	83
46	UNIV OF CALIFORNIA - IRVINE	H D ROSS	GRC	D A SIRIGNANO	NAG 3 2775	84
46	UNIV OF CALIFORNIA - IRVINE	K Q ZAMAN	GRC	D PAPAMOSCHOU	NAG 3 2345	83
46	UNIV OF CALIFORNIA - IRVINE	I S RAJU	LARC	S N ATLURI	NAG 1 02115	83
46	UNIV OF CALIFORNIA - LOS ANGELES	D F CHAO	GRC	V K DHIR	NAG 3 2467	87
46	UNIV OF CALIFORNIA - LOS ANGELES	I S RAJU	LARC	S N ATLURI	NAG 1 2274	86
46	UNIV OF CALIFORNIA - LOS ANGELES	W H PROSSER	LARC	A K MAL	NAG 1 02036	86
46	UNIV OF CALIFORNIA - SAN DIEGO	O MEHMED	GRC	D KOSMATKA	NCC 3 902	103
46	UNIV OF CINCINNATI	E GOLLIHER	GRC	T HENSERSON	NAS 3 01120	419

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
46	UNIV OF CINCINNATI	H D PERKINS	GRC	E J GUTMARK	NAG 3 2669	419
46	UNIV OF COLORADO - BOULDER	M S BURRELL	GSFC	P AXELRAD	NGT 5 47	140
46	UNIV OF COLORADO - BOULDER	T B GATSKI	LARC	O VASILOV	NGT 1 02022	139
46	UNIV OF DELAWARE	M W WEISLOGEL	GRC	L W SCHWARTZ	NAG 3 1920	148
46	UNIV OF FLORIDA	E L GOLLIHER	GRC	D E LEAR	NAG 3 2630	171
46	UNIV OF FLORIDA	M S BURRELL	GSFC	P C MASON	NGT 5 128	174
46	UNIV OF FLORIDA	M L BLOSSER	LARC	R T HAFTKA	NAG 1 02067	170
46	UNIV OF FLORIDA	S NASH-STEVENSON	MSFC	N ARAKERE	NGT 8 52890	174
46	UNIV OF ILLINOIS - CHICAGO CIRCLE	R F HANDSCHUH	GRC	D L LITVIN	NAG 3 2450	206
46	UNIV OF ILLINOIS - CHICAGO CIRCLE	A NURRIDIN	HQ	C M MEGARIDIS	NGT 5 50214	207
46	UNIV OF ILLINOIS - CHICAGO CIRCLE	C A SANDRIDGE	LARC	P BANERJEE	NAG 1 01065	206
46	UNIV OF ILLINOIS - CHICAGO CIRCLE	C TALLEY	MSFC	C MEGARIDIS	NAG 8 1473	206
46	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	B S SINGH	GRC	H AREF	NAG 3 2122	207
46	UNIV OF KENTUCKY	D MIN	GRC	V CAPECE	NAG 3 2613	229
46	UNIV OF KENTUCKY	M S BURRELL	GSFC	J A MAIN	NGT 5 71	230
46	UNIV OF KENTUCKY	G C HORNER	LARC	M ROCHE	NGT 1 52223	230
46	UNIV OF KENTUCKY	R S PAPP	LARC	S W SMITH	NAS 1 01099	229
46	UNIV OF KENTUCKY	R S PAPP	LARC	J A MAIN	NCC 1 385	229
46	UNIV OF MARYLAND - COLL PARK	D G LEWICKI	GRC	D J PINES	NAG 3 2223	255
46	UNIV OF MARYLAND - COLL PARK	H D ROSS	GRC	D L	NCC 3 804	268
46	UNIV OF MARYLAND - COLL PARK	R S OKOJIE	GRC	D MCCLUSKEY	NAG 3 2805	255
46	UNIV OF MASSACHUSETTS - AMHERST	D LEWICKI	GRC	D DANAI	NAG 3 2452	299
46	UNIV OF MASSACHUSETTS - AMHERST	R SAVELY	JSC	M T ROSENSTEIN	NAG 9 1379	301
46	UNIV OF MICHIGAN - ANN ARBOR	A R PORRO	GRC	D E GEISTER	NAG 3 2800	309
46	UNIV OF MICHIGAN - ANN ARBOR	D URBAN	GRC	G M FAETH	NAG 3 2048	307
46	UNIV OF MICHIGAN - ANN ARBOR	D URBAN	GRC	G M FAETH	NAG 3 2404	308
46	UNIV OF MICHIGAN - ANN ARBOR	D W GRIFFIN	GRC	R G LARSON	NAG 3 2134	307
46	UNIV OF MICHIGAN - ANN ARBOR	F CHIARAMONTE	GRC	P MERTE	NAG 3 1900	307
46	UNIV OF MICHIGAN - ANN ARBOR	H D ROSS	GRC	G M FAETH	NAG 3 1878	307
46	UNIV OF MICHIGAN - ANN ARBOR	J B MCGUILLEN	GRC	L P BERNAL	NCC 3 474	314
46	UNIV OF MICHIGAN - ANN ARBOR	O MEHMED	GRC	C PIERRE	NAG 3 2604	308
46	UNIV OF MICHIGAN - ANN ARBOR	W F EMRICH	MSFC	T KAMMASH	NAG 8 1725	314
46	UNIV OF MINN	D E ASHPIS	GRC	T W SIMON	NCC 3 652	322
46	UNIV OF MISSOURI - COLUMBIA	S NASH-STEVENSON	MSFC	C KLUEVER	NGT 8 52914	327
46	UNIV OF MISSOURI - ROLLA	M A MEADER	GRC	D ROY	NAG 3 2357	328
46	UNIV OF MISSOURI - ROLLA	Q A SHAMS	LARC	R W SCHWARTZ	NAG 1 02094	328
46	UNIV OF MISSOURI - ROLLA	D KRUPP	MSFC	S N BALAKRISHNAN	NAG 8 1805	328
46	UNIV OF NEVADA - RENO	G FRALICK	GRC	J A KLEPPE	NCC 3 750	340
46	UNIV OF NEW MEXICO-ALBUQUERQUE	M K EWERT	JSC	R FOSTER	NAG 9 1303	364
46	UNIV OF NEW MEXICO-ALBUQUERQUE	M V RUIZ	LARC	R LAFARGE	NGT 1 02017	364
46	UNIV OF NEW MEXICO-ALBUQUERQUE	M D WATSON	MSFC	M OSINSKI	NAG 8 1664	363
46	UNIV OF NORTH CAROLINA	S NASH-STEVENSON	MSFC	S SMITH	NGT 8 52901	399
46	UNIV OF SOUTHERN CALIFORNIA	B SIGH	GRC	T MAXWORTHY	NAG 3 2125	114
46	UNIV OF SOUTHERN CALIFORNIA	K J WEILAND	GRC	P D RONNEY	NAG 3 2124	114
46	UNIV OF TEXAS - ARLINGTON	J PORTER	MSFC	Z MUSIELAK	NAG 8 1889	488
46	UNIV OF TEXAS - AUSTIN	K L MCLALLIN	GRC	R H BENO	NAS 3 01133	492
46	UNIV OF TEXAS - AUSTIN	K KONNO	JSC	J H BENO	NAS 3 99169	492
46	UNIV OF TEXAS - AUSTIN	L A TREVINO	JSC	H L PAUL	NAG 9 1213	492
46	UNIV OF TEXAS AT TYLER	C D SCOTT	JSC	R B GREENDYKE	NAG 9 1382	496
46	UNIV OF TOLEDO	A F KASCAK	GRC	T G KEITH	NAG 3 2756	421
46	UNIV OF TOLEDO	D P FLEMING	GRC	T G KEITH	NAG 3 2408	420
46	UNIV OF TOLEDO	G MONTAGUE	GRC	T G KEITH	NCC 3 943	423
46	UNIV OF TOLEDO	J MINNS	GRC	T KEITH	NAS 3 01116	422
46	UNIV OF TOLEDO	K MCLALLIN	GRC	T G KEITH	NCC 3 907	423
46	UNIV OF TOLEDO	O MEHMED	GRC	T G KEITH	NCC 3 717	423
46	UNIV OF TOLEDO	O MEHMED	GRC	T G KEITH	NCC 3 527	423
46	UNIV OF TOLEDO	R E GAUGLER	GRC	T G KEITH	NCC 3 923	423
46	UNIV OF TOLEDO	R E GAUGLER	GRC	T G KEITH	NCC 3 926	423
46	UNIV OF TOLEDO	R F BEACH	GRC	T G KEITH	NAG 3 2646	421
46	UNIV OF TOLEDO	R HANDSCHUH	GRC	A KAHRAMAN	NAG 3 2641	421
46	UNIV OF TOLEDO	T L KRANTZ	GRC	T G KEITH	NAG 3 2269	420
46	UNIV OF TOLEDO	W MORALES	GRC	T G KEITH	NCC 3 954	423
46	UNIV OF VIRGINIA	H ROSS	GRC	H CHELLIAH	NAG 3 1928	518
46	UNIV OF VIRGINIA	T GLASGOW	GRC	H HAJ-HARIRI	NAG 3 1916	518
46	UNIV OF WASHINGTON	J SALEM	GRC	M G JENKINS	NCC 3 970	536
46	UNIV OF WISCONSIN - MADISON	M L TINKER	MSFC	D C KAMMER	NAG 8 1820	547

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
46	VA POLYTECH INST & ST UNIV	C H GERHOLD	LARC	R A BURDISSO	NAG 1 2325	523
46	VA POLYTECH INST & ST UNIV	D L PALUMBO	LARC	C R FULLER	NAG 1 2158	523
46	VA POLYTECH INST & ST UNIV	D L PALUMBO	LARC	C R FULLER	NAG 1 02053	524
46	VA POLYTECH INST & ST UNIV	D L PALUMBO	LARC	M AHMADIAN	NGT 1 01038	527
46	VA POLYTECH INST & ST UNIV	G C HORNER	LARC	D J LEO	NAG 1 2190	523
46	VA POLYTECH INST & ST UNIV	K J PRIESTLEY	LARC	A M SMITH	NGT 1 52248	527
46	VA POLYTECH INST & ST UNIV	L G HORTA	LARC	R KAPANIA	NAG 1 2277	523
46	VA POLYTECH INST & ST UNIV	W K WILKE	LARC	D J INMAN	NGT 1 02014	527
46	VA POLYTECH INST & ST UNIV	S NASH-STEVENSON	MSFC	D J INMAN	NGT 8 52909	527
46	VANDERBILT UNIV	G C HORNER	LARC	A COX	NGT 1 52227	469
46	VANDERBILT UNIV	J F DOWDY	MSFC	M GOLDFARB	NGT 8 52859	469
46	VANDERBILT UNIV	S NASH-STEVENSON	MSFC	R A WELLER	NGT 8 52905	469
46	VANDERBILT UNIV	S NASH-STEVENSON	MSFC	R W PITZ	NGT 8 52910	469
46	VIRGINIA COMMONWEALTH UNIV	J S HARRISON	LARC	Z OUNAIES	NCC 1 02013	528
46	WASHINGTON UNIV - ST. LOUIS	C TUNG	ARC	D A PETERS	NAG 2 1457	329
46	YALE UNIV	K J WEILAND	GRC	M B LONG	NAG 3 1939	146
47	ALABAMA A&M UNIV	B PENN	MSFC	M D AGGARWAL	NAG 8 1623	2
47	ALL RUSSIA INST. OF AVIATION METALS (VIAM)	R K BIRD	LARC	J FRIDLANDER	NCC 1 353	553
47	AUBURN UNIV	R D NOEBE	GRC	W F GALE	NAG 3 2120	3
47	AUBURN UNIV	S L DRAPER	GRC	W F GALE	NAG 3 2682	3
47	AUBURN UNIV	S LAMBING	MSFC	R A OVERFELT	NCC 8 128	4
47	BRIGHAM YOUNG UNIV	G C KING	LARC	J N HARB	NCC 1 02005	497
47	CARNEGIE - MELLON UNIV	D L BRITTON	GRC	P N KUMTA	NAG 3 2640	432
47	CASE WESTERN RESERVE UNIV	A CHAIT	GRC	D H MATTHIESEN	NCC 3 681	403
47	CASE WESTERN RESERVE UNIV	A CHAIT	GRC	P L TAYLOR	NCC 3 701	403
47	CASE WESTERN RESERVE UNIV	D L KIETRICH	GRC	J S TIEN	NAG 3 2331	401
47	CASE WESTERN RESERVE UNIV	J J MONTEGANI	GRC	J S TIEN	NGT 3 52350	405
47	CASE WESTERN RESERVE UNIV	J LANG	GRC	J D CRAWLEY	NCC 3 714	403
47	CASE WESTERN RESERVE UNIV	J LANG	GRC	J D CAWLEY	NCC 3 955	404
47	CASE WESTERN RESERVE UNIV	J M PEREIRA	GRC	V PRAKASH	NAG 3 2677	402
47	CASE WESTERN RESERVE UNIV	K MIYOSHI	GRC	C A ZORMAN	NCC 3 915	404
47	CASE WESTERN RESERVE UNIV	M NATHAL	GRC	D L ELLIS	NCC 3 830	403
47	CASE WESTERN RESERVE UNIV	M V NATHAL	GRC	I E LOCCI	NCC 3 766	403
47	CASE WESTERN RESERVE UNIV	S C FARMER	GRC	S SAYIR	NCC 3 850	403
47	CHRISTOPHER NEWPORT UNIV	M NAMKUNG	LARC	R SELIM	NAG 1 01070	503
47	CITY UNIV OF NY CITY COLL	K J BOWLES	GRC	B LIAW	NAG 3 2259	365
47	CLARK ATLANTA UNIV	S DUTTA	GRC	A A MINTZ	NCC 3 552	179
47	CLARK ATLANTA UNIV	E S WEISER	LARC	D R VEAZIE	NAG 1 01091	178
47	CLEMSON UNIV - CLEMSON	H C SHAW	GSFC	D L CARROLL	NAG 5 9459	459
47	CLEVELAND STATE UNIV	H E KAUTZ	GRC	J HEMANN	NAG 3 2514	406
47	CLEVELAND STATE UNIV	H KAUTZ	GRC	J HEMANN	NCC 3 581	407
47	CLEVELAND STATE UNIV	L A GREENBAUER-SENG	GRC	S TEWARI	NCC 3 862	408
47	CLEVELAND STATE UNIV	L GREENBAUER-SENG	GRC	S N TEWARI	NCC 3 853	407
47	CLEVELAND STATE UNIV	M NATHAL	GRC	S N TEWARI	NCC 3 749	407
47	CLEVELAND STATE UNIV	R V MINER	GRC	S N TEWARI	NCC 3 939	408
47	CLEVELAND STATE UNIV	S G BAILEY	GRC	C GORADIA	NAG 3 1828	405
47	COLL OF WILLIAM AND MARY	J W CONNELL	LARC	R A ORWOLL	NGT 1 52200	505
47	COLL OF WILLIAM AND MARY	M W SMITH	LARC	B C HOLLOWAY	NCC 1 01056	504
47	CORNELL UNIV	M MEADOR	GRC	D P GIANNELIS	NCC 3 832	377
47	CORNELL UNIV	E H GLAESSGEN	LARC	A R INGRAFFEA	NAG 1 02051	372
47	CORNELL UNIV	P DOTY	MSFC	A J SIEVERS	NAG 8 1666	376
47	DREXEL UNIV	J K SUTTER	GRC	D KNIGHT	NCC 3 825	437
47	DREXEL UNIV	M A MEADOR	GRC	D R PALMESE	NCC 3 835	437
47	DUKE UNIV	M TINKER	MSFC	L N VIRGIN	NAG 8 1715	391
47	FLORIDA STATE UNIV	A CHAIT	GRC	J VINALS	NAG 3 1885	165
47	GEORGIA INST OF TECH	S JOHNSON	ARC	M SACKS	NAG 2 1571	181
47	GEORGIA INST OF TECH	J R ELLIS	GRC	D TALREJA	NCC 3 711	185
47	GEORGIA INST OF TECH	W DUVAL	GRC	M F SCHATZ	NAG 3 2006	181
47	GEORGIA INST OF TECH	E H GLAESSGEN	LARC	D L MCDOWELL	NAG 1 02054	180
47	GEORGIA INST OF TECH	E WEISER	LARC	W S REES	NGT 1 02019	185
47	GEORGIA INST OF TECH	R K BIRD	LARC	W S JOHNSON	NAG 1 02018	180
47	GEORGIA INST OF TECH	A NETTLES	MSFC	W S JOHNSON	NAG 8 1819	183
47	GEORGIA INST OF TECH	J DOWDY	MSFC	A GOKHALE	NGT 8 52881	187
47	GEORGIA INST OF TECH	P DOTY	MSFC	A M GOKHALE	NAG 8 1245	183
47	HARVARD UNIV	P DOTY	MSFC	F A SPAEPEN	NAG 8 1680	283
47	HOPE COLL	T S GATES	LARC	J PAWLOSKE	NAG 1 01060	304

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
47	IOWA STATE UNIV	A JACKSON	MSFC	R K TRIVETI	NAG 8 1681	221
47	JOHNS HOPKINS UNIV	S V RAJ	GRC	D J HEMKER	NAG 3 2690	239
47	KANSAS STATE UNIV	J A HINKLEY	LARC	Y WANG	NAG 1 02014	225
47	KANSAS STATE UNIV	J SU	LARC	Y WANG	NAG 1 02041	226
47	KENT STATE UNIV	M A MEADOR	GRC	R J TWIEG	NCC 3 721	409
47	LE TOURNEAU UNIV	C SCOTT	JSC	G DE BOER	NAG 9 1274	471
47	MASSACHUSETTS INST OF TECH	M PURVEY	MSFC	A WITT	NAG 8 1487	293
47	MASSACHUSETTS INST OF TECH	P DOTY	MSFC	R SADOWAY	NAG 8 1689	293
47	MICHIGAN STATE UNIV	M V NATHAL	GRC	D S GRUMMON	NCC 3 868	306
47	MICHIGAN STATE UNIV	J M BENAVIDES	GSFC	V AYRES	NAG 5 8893	305
47	MICHIGAN STATE UNIV	P DOTY	MSFC	A BERNARD	NAG 8 1690	305
47	MISSISSIPPI STATE UNIV	W GREGG	MSFC	S R DANIEWICZ	NAG 8 1883	324
47	MONTANA STATE UNIV	V C VANDERBILT	ARC	L H SPANGLER	NAG 2 1323	333
47	MORGAN STATE UNIV	E ORDONEZ	MSFC	A KENNEDY	NAG 8 1847	253
47	NEW JERSEY INST OF TECH	E S WEISER	LARC	M JAFFE	NAG 1 01110	347
47	NEW MEXICO INST OF MINING & TECH	J K SUTTER	GRC	D A HIRSCHFELD	NAG 3 2688	358
47	NORFOLK STATE UNIV	E T PRIOR	LARC	J JACOBS	NAG 1 2125	510
47	NORFOLK STATE UNIV	J C BARNES	LARC	L MATTIX	NCC 1 01049	511
47	NORTH CAROLINA A&T STATE UNIV	M R FREEDMAN	GRC	D N SHIVAKUMAR	NAG 3 2650	393
47	NORTH CAROLINA A&T STATE UNIV	T HAAG	GRC	K SHIVAKUMAR	NAS 3 01197	394
47	NORTH CAROLINA A&T STATE UNIV	R A HATHAWAY	LARC	A D KELKAR	NAG 1 02077	392
47	NORTH CAROLINA STATE UNIV. - RALEIGH	H PARTRIDGE	ARC	D W BRENNER	NCC 2 5506	397
47	NORTH CAROLINA STATE UNIV. - RALEIGH	C H LIN	JSC	M H MOHAMAD	NAG 9 1087	396
47	NORTH CAROLINA STATE UNIV. - RALEIGH	D R AMBER	LARC	F G YUAN	NAG 1 01128	395
47	NORTH CAROLINA STATE UNIV. - RALEIGH	E H GLASSGEN	LARC	F G YUAN	NAG 1 01103	394
47	NORTH CAROLINA STATE UNIV. - RALEIGH	E SAETHER	LARC	F G YUAN	NAG 1 02086	395
47	NORTH CAROLINA STATE UNIV. - RALEIGH	J S HARRISON	LARC	R C SMITH	NAG 1 02080	395
47	NORTHWESTERN UNIV	M V NATHAL	GRC	D C DUNAND	NCC 3 870	202
47	NORTHWESTERN UNIV	R D NOEBE	GRC	D N SEIDMAN	NAG 3 2485	200
47	NORTHWESTERN UNIV	T K GLASGOW	GRC	P W VOORHEES	NAG 3 1823	200
47	NORTHWESTERN UNIV	T L TURNER	LARC	L C BRINSON	NCC 1 02007	202
47	NORTHWESTERN UNIV	T S GATES	LARC	R S RUOFF	NAG 1 2313	199
47	NORTHWESTERN UNIV	T S GATES	LARC	L C BRINSON	NCC 1 01002	202
47	OHIO STATE UNIV	M V ZELLER	GRC	P DUTTA	NCA 3 206	414
47	OHIO STATE UNIV	R D NOEBE	GRC	M J MILLS	NAG 3 2675	411
47	OHIO STATE UNIV	R GOLDBERG	GRC	A GILAT	NAG 3 2748	411
47	OHIO STATE UNIV	R K GOLDBERG	GRC	GILAT	NAG 3 2522	410
47	OHIO STATE UNIV	P DOTY	MSFC	P K DUTTA	NAG 8 1670	414
47	OKLAHOMA STATE UNIV	M A MEADOR	LARC	S ROY	NAG 3 2780	424
47	OLD DOMINION UNIV	T H HOU	LARC	M C GUPTA	NCC 1 363	514
47	OLD DOMINION UNIV	T S GATES	LARC	R B PIPES	NAG 1 01043	512
47	OLD DOMINION UNIV	T S GATES	LARC	M C GUPTA	NCC 1 02022	515
47	OLD DOMINION UNIV	A T NETTLES	MSFC	R PRABHAKARAN	NAG 8 1813	513
47	PENN STATE UNIV. - UNIV. PARK	D T ELLERBY	ARC	J R HELLMANN	NAG 2 1524	439
47	PENN STATE UNIV. - UNIV. PARK	G E SCHWARZE	GRC	D T LANAGAN	NAG 3 2561	439
47	PENN STATE UNIV. - UNIV. PARK	M V NATHAL	GRC	D CHEN	NCC 3 920	446
47	PENN STATE UNIV. - UNIV. PARK	R DRAPER	GRC	NOT AVAILABLE	NAS 3 01082	445
47	PENN STATE UNIV. - UNIV. PARK	S M ARNOLD	GRC	D J LISSENDEN	NCC 3 848	446
47	PENN STATE UNIV. - UNIV. PARK	K M TAMINGER	LARC	V V SEMAK	NAG 1 02065	438
47	PRINCETON UNIV	B GOOD	GRC	D J SROLOVITZ	NAG 3 2665	349
47	PURDUE UNIV	TS GATES	LARC	C T SUN	NAG 1 01073	214
47	RENSSELAER POLYTECH INST	P M DOTY	MSFC	M E GLICKSMAN	NAG 8 1696	381
47	SAINT LOUIS UNIV	C DELLACORTE	GRC	P A BENOY	NAG 3 2469	326
47	SAINT LOUIS UNIV	C DELLACORTE	GRC	P A BENOY	NAG 3 2642	326
47	STATE UNIV OF NY - STONY BROOK	J J ELDRIDGE	GRC	C C BERNDT	NAG 3 2693	385
47	STATE UNIV OF NY - STONY BROOK	R OKOJIE	GRC	D DUDLEY	NCC 3 957	387
47	TEXAS A&M UNIV	R ELLIS	GRC	R TAIREJA	NCC 3 933	479
47	TEXAS A&M UNIV	M R EFFINGER	MSFC	O O OCHOA	NAG 8 1802	478
47	TULANE UNIV	M A MEADOR	GRC	D DEKEE	NCC 3 946	234
47	TUSKEGEE UNIV	M J VERILLE	GRC	A HAQUE	NCC 3 591	6
47	UNIV HOUSTON-HOUSTON	S J LAMBING	MSFC	A IGNATIEV	NCC 8 127	484
47	UNIV OF AKRON	A CHAIT	GRC	G W YOUNG	NCC 3 716	417
47	UNIV OF AKRON	C CHUANG	GRC	F W HARRIS	NAG 3 2390	416
47	UNIV OF AKRON	G D ROBERTS	GRC	E SANCAKTAR	NCC 3 744	417
47	UNIV OF AKRON	G D ROBERTS	GRC	W K BINIENDA	NCC 3 932	418
47	UNIV OF AKRON	M A MEADOR	GRC	F N KELLEY	NAG 3 2566	417

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
47	UNIV OF AKRON	M A MEADOR	GRC	R K EBY	NCC 3 877	418
47	UNIV OF AKRON	M A MEADOR	GRC	D H RENEKER	NCC 3 968	418
47	UNIV OF AKRON	E S WEISER	LARC	R B PIPES	NAG 1 02003	416
47	UNIV OF AKRON	E S WEISER	LARC	R B PIPES	NCC 1 02003	417
47	UNIV OF ARIZONA	J CONNOLLY	JSC	K R SRIDHAR	NAG 9 1229	36
47	UNIV OF CALIFORNIA - DAVIS	M NATHAL	GRC	J GIBELING	NCC 3 859	82
47	UNIV OF CALIFORNIA - DAVIS	D R AMBUR	LARC	L W REHFELD	NAG 1 01116	79
47	UNIV OF CALIFORNIA - LOS ANGELES	R G BRYANT	LARC	G P CARMEN	NGT 1 52240	94
47	UNIV OF CALIFORNIA - SANTA BARBARA	C CZALAI	ARC	F MILSTEIN	NCC 2 1290	109
47	UNIV OF COLORADO - BOULDER	B V GUYNES	MSFC	S STURE	NAS 8 38779	138
47	UNIV OF FLORIDA	D E LUECK	KSC	E D WACHSMAN	NAG10 303	173
47	UNIV OF FLORIDA	D R AMBUR	LARC	B V SANKAR	NAG 1 01088	170
47	UNIV OF FLORIDA	M J VANDYKE	MSFC	S ANGHAI	NAG 8 1251	172
47	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	T L PANONTIN	ARC	R H DODDS	NAG 2 1424	207
47	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	T L PANONTIN	ARC	G H PAULINO	NGT 2 52271	212
47	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	S J HALES	LARC	R S AVERBACK	NAG 1 01035	207
47	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	S J HALES	LARC	R S AVERBACK	NAG 1 02013	207
47	UNIV OF IOWA	P DOTY	GSFC	C BECKERMANN	NCC 8 199	225
47	UNIV OF MARYLAND - COLL PARK	T T KING	GSFC	R GHODSSI	NAG 5 12011	265
47	UNIV OF MASSACHUSETTS - AMHERST	D L THOMSEN	LARC	E B COUGHLIN	NGT 1 02008	301
47	UNIV OF MICHIGAN - ANN ARBOR	M P NEMETH	LARC	A P WAAS	NCC 1 01050	314
47	UNIV OF MINN	P M DOTY	MSFC	J J DERBY	NAG 8 1676	321
47	UNIV OF MISSOURI - ROLLA	T S GATES	LARC	S ROY	NAG 1 01050	327
47	UNIV OF NEW MEXICO-ALBUQUERQUE	D ELLERBY	ARC	R E LOEHMAN	NAG 2 1516	361
47	UNIV OF NEW MEXICO-ALBUQUERQUE	D T ELLERBY	ARC	R E LOEHMAN	NAG 2 1437	361
47	UNIV OF PUERTO RICO - MAYAGUEZ	R TRAVIS	SSC	Y JIA	NAG13 02031	551
47	UNIV OF RHODE ISLAND	G C FRALICK	GRC	O GREGORY	NAG 3 2652	456
47	UNIV OF RHODE ISLAND	G C FRALICK	GRC	D GREGORY	NAG 3 2655	456
47	UNIV OF SOUTH FLORIDA	L MACDOWELL	KSC	D A SAGUESS	NAG10 310	177
47	UNIV OF TEXAS - AUSTIN	K MCLALLIN	GRC	R THOMPSON	NAG 3 2602	488
47	UNIV OF TEXAS - EL PASO	L ARMENDARIZ	JSC	L E MURR	NAG 9 1171	495
47	UNIV OF TEXAS - EL PASO	A BEAM	MSFC	J C MCCLURE	NAG 8 1645	495
47	UNIV OF TEXAS AT SAN ANTONIO	S RAJ	GRC	D L BAGLEY	NAG 3 2671	496
47	UNIV OF TOLEDO	M V NATHAL	GRC	T G KEITH	NCC 3 995	424
47	UNIV OF UTAH	B MCKISSOCK	GRC	G D SMITH	NAG 3 2624	497
47	UNIV OF UTAH	J R REEDERS	LARC	D O ADAMS	NCC 1 256	499
47	UNIV OF VIRGINIA	D L DICUS	LARC	E A STARKE	NAG 1 02090	517
47	UNIV OF VIRGINIA	M P NEMETH	LARC	C O HORGAN	NAG 1 01022	517
47	UNIV OF VIRGINIA	M S DOMACK	LARC	D A LITTLE	NAG 1 2282	517
47	UNIV OF VIRGINIA	R PIASCIK	LARC	G SHIFLET	NAG 1 2321	517
47	UNIV OF VIRGINIA	R S PIASCIK	LARC	G J SHIFLET	NAG 1 02049	517
47	UNIV OF VIRGINIA	R S PIASCIK	LARC	R G KELLY	NCC 1 01009	522
47	UNIV OF WASHINGTON	B J JENSEN	LARC	J C SEFERIS	NAG 1 01078	529
47	UNIV OF WISCONSIN - MADISON	P M DOTY	MSFC	S KOU	NAG 8 1459	546
47	VA POLYTECH INST & ST UNIV	M H JASKOWIAK	GRC	W A CURTIN	NAG 3 2100	525
47	VA POLYTECH INST & ST UNIV	D R AMBUR	LARC	L LIBRESCU	NAG 1 01101	524
47	VA POLYTECH INST & ST UNIV	D R AMBUR	LARC	Z GURDAL	NAG 1 01105	524
47	VA POLYTECH INST & ST UNIV	M P NEMETH	LARC	M W HYER	NAG 1 01072	524
47	VA POLYTECH INST & ST UNIV	R J CANO	LARC	A C LOOS	NCC 1 01037	526
47	VA POLYTECH INST & ST UNIV	R S PIASCIK	LARC	W T REYNOLDS	NAG 1 02063	524
47	VA POLYTECH INST & ST UNIV	M E PRINCE	MSFC	D A DILLIARD	NAG 8 1846	526
47	WASHINGTON UNIV - ST. LOUIS	P DOTY	MSFC	K F KELTON	NAG 8 1682	332
47	WICHITA STATE UNIV	A C NUNES	MSFC	G E TALIA	NCC 8 202	228
47	WINONA STATE UNIV	T S GATES	LARC	B ABDEL-MAGID	NAG 1 01054	323
49	ALABAMA A&M UNIV	W LOVE	MSFC	D ILA	NAG 8 1655	2
49	ALABAMA A&M UNIV	W T POWERS	MSFC	K B COOK	NAG 8 1861	2
49	ALCORN STATE UNIV	B ST. CYR	JSC	S ACEIL	NAG13 98005	323
49	ARKANSAS TECH UNIV	G R HALFORD	GRC	T GOSWAMI	NAG 3 2798	39
49	AUBURN UNIV	J HOWELL	MSFC	S A MERRYMAN	NAG 8 1728	3
49	AUBURN UNIV	J SAMS	MSFC	R A OVERFELT	NCC 8 240	4
49	AUBURN UNIV	S LAMBING	MSFC	H BRANDHORST	NCC 8 237	4
49	BOSTON UNIV	R B ROGERS	GRC	D HOLT	NAG 3 2392	276
49	BOWLING GREEN STATE UNIV	S RIDDLEBAUGH	GRC	B D PERSOL	NAG 3 2790	400
49	BRANDEIS UNIV	F P CHIARAMONTE	GRC	D FRADEN	NAG 3 2386	279
49	BROWN UNIV	J B HURST	GRC	W A CURTIN	NAG 3 2668	453
49	BROWN UNIV	G A SOFFEN	GSFC	G CRAWFORD	NGT 5 91	456

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	CALIFORNIA INST OF TECH	J H AGUI	GRC	M L HUNT	NAG 3 2358	41
49	CALIFORNIA INST OF TECH	N R HALL	GRC	J F BRADY	NAG 3 2737	41
49	CALIFORNIA INST OF TECH	S C FARMER	GRC	U USTUNDAG	NAG 3 2686	41
49	CALIFORNIA INST OF TECH	B A MERRITT	GSFC	R A MEWALDT	NAG 5 5203	42
49	CALIFORNIA INST OF TECH	D NGUYEN	GSFC	F A HARRISON	NAG 5 11851	47
49	CALIFORNIA ST. POLYTECH U-POMONA	M BATTAGLIA	NMO	V GARNER	NCC 7 11	50
49	CALIFORNIA ST. POLYTECH U-POMONA	T J LLOYD	NMO	V H GARNER	NCC 7 10	50
49	CALIFORNIA STATE UNIV-BAKERSFIELD	K S SHY	DFRC	K L NYBERG	NAG 4 200	52
49	CARNEGIE - MELLON UNIV	F J MONTEGANI	GRC	P N KUMTA	NGT 3 52370	435
49	CARNEGIE - MELLON UNIV	F J MONTEGANI	GRC	M E MCHENRY	NGT 3 52379	435
49	CARNEGIE - MELLON UNIV	C J CULBERT	JSC	D APOSTOLOPOULOS	NAG 9 1248	434
49	CARNEGIE - MELLON UNIV	C J CULBERT	JSC	R W WHITTAKER	NAG 9 1240	434
49	CARNEGIE - MELLON UNIV	C J CULBERT	JSC	W R WHITAKER	NAG 9 1256	434
49	CARNEGIE - MELLON UNIV	R D JUDAY	JSC	O AMIDI	NAG 9 1232	434
49	CARNEGIE - MELLON UNIV	T PENDLETON	JSC	R SIMMONS	NAG 9 1226	434
49	CASE WESTERN RESERVE UNIV	G MEYER	ARC	M S BRANICKY	NAG 2 1333	401
49	CASE WESTERN RESERVE UNIV	A CHAIT	GRC	P L TAYLOR	NAG 3 2541	401
49	CASE WESTERN RESERVE UNIV	A CHAIT	GRC	P L TAYLOR	NCC 3 969	404
49	CASE WESTERN RESERVE UNIV	D GREEN	GRC	Y KAMOTANI	NCC 3 823	403
49	CASE WESTERN RESERVE UNIV	D W YORK	GRC	D S ROSENBAUM	NCC 3 1001	404
49	CASE WESTERN RESERVE UNIV	F J MONTEGANI	GRC	J R KADAMBI	NGT 3 52352	405
49	CASE WESTERN RESERVE UNIV	F P CHIARAMONTE	GRC	B OVRYN	NAG 3 2504	401
49	CASE WESTERN RESERVE UNIV	G W HUNTER	GRC	C LIU	NCC 3 941	404
49	CASE WESTERN RESERVE UNIV	J MYERS	GRC	D DAVY	NCC 3 985	404
49	CASE WESTERN RESERVE UNIV	K R SACKSTEDER	GRC	J S TIEN	NCC 3 669	403
49	CASE WESTERN RESERVE UNIV	K R SACKSTEDER	GRC	C SUNG	NCC 3 838	403
49	CASE WESTERN RESERVE UNIV	M M HASAN	GRC	J ALEXANDER	NAG 3 2742	402
49	CASE WESTERN RESERVE UNIV	M M NALL	GRC	C ZORMAN	NCC 3 984	404
49	CASE WESTERN RESERVE UNIV	M NALL	GRC	D GRATZI	NAG 3 2807	402
49	CASE WESTERN RESERVE UNIV	M NALL	GRC	D L WILSON	NAG 3 2808	402
49	CASE WESTERN RESERVE UNIV	S L OLSON	GRC	J S TIEN	NCC 3 658	403
49	CHRISTOPHER NEWPORT UNIV	J M SEATON	LARC	B H BARTELS	NCC 1 02042	503
49	CITY UNIV OF NY CITY COLL	F P CHIARMONTE	GRC	D KOPLIK	NAG 3 2335	365
49	CITY UNIV OF NY CITY COLL	M HASAN	GRC	D ACHRIVOS	NAG 3 2698	365
49	CITY UNIV OF NY CITY COLL	M HASAN	GRC	D MALDARELLI	NAG 3 2720	366
49	CLARK ATLANTA UNIV	H D ROSS	GRC	Y D YEBOAH	NCC 3 707	179
49	CLARKSON UNIV	M HASAN	GRC	R SUBRAMAIAN	NAG 3 2703	367
49	CLARKSON UNIV	R D GREEN	GRC	D H SHEN	NAG 3 2717	367
49	CLEMSON UNIV - CLEMSON	B G KANKI	ARC	A K GRAMOPADHYE	NCC 2 1114	459
49	CLEMSON UNIV - CLEMSON	T BEARD	ARC	B MELLOY	NCC 2 1288	459
49	CLEMSON UNIV - CLEMSON	F P CHIARAMONTE	GRC	D M OCHTERBECK	NAG 3 2214	457
49	CLEMSON UNIV - CLEMSON	J BARTH	GSFC	P MCNULTY	NAG 5 9824	459
49	CLEVELAND STATE UNIV	H C DE GROH	GRC	S N TEWARI	NCC 3 829	407
49	CLEVELAND STATE UNIV	H DEGROH	GRC	D TEWARI	NCC 3 818	407
49	CLEVELAND STATE UNIV	H E KAUTZ	GRC	J HEMANN	NCC 3 582	407
49	CLEVELAND STATE UNIV	H KAUTZ	GRC	J T SAWICKI	NAG 3 2573	406
49	CLEVELAND STATE UNIV	J M MULLINS	GRC	G L KRAMERICH	NCC 3 647	407
49	CLEVELAND STATE UNIV	J MULLINS	GRC	G L KRAMERICH	NCC 3 908	408
49	CLEVELAND STATE UNIV	K JULES	GRC	P P LIN	NAG 3 2326	405
49	CLEVELAND STATE UNIV	P S GREENSBERG	GRC	J A LOCK	NAG 3 2423	405
49	CLEVELAND STATE UNIV	J MATURO	HQ	A LIU	NASW 02023	407
49	COLORADO SCH OF MINES	S A GOKOGLU	GRC	D J MOORE	NCC 3 659	118
49	COLORADO SCH OF MINES	J SAMS	MSFC	F D SCHOWENGERDT	NCC 8 238	118
49	CORNELL UNIV	D L DIETRICH	GRC	T AVEDISIAN	NAG 3 2224	372
49	CORNELL UNIV	F P CHIARMONTE	GRC	D T JENKINS	NAG 3 2353	372
49	CORNELL UNIV	H K NAHRA	GRC	D L KOCH	NAG 3 2349	372
49	CORNELL UNIV	H K NAHRA	GRC	D L KOCH	NAG 3 2440	372
49	CORNELL UNIV	M HASAN	GRC	D LOUGE	NAG 3 2705	372
49	CORNELL UNIV	M HASAN	GRC	D STEEN	NAG 3 2713	372
49	DINE COLL (FORMERLY NAVAJO COMM COLL)	L ARMEDARIZ	JSC	M C BAUER	NAG 9 1172	23
49	DREXEL UNIV	D L URBAN	GRC	D CHOI	NCC 3 822	437
49	DREXEL UNIV	D L URBAN	GRC	D A RUFF	NCC 3 847	437
49	DREXEL UNIV	D L URBAN	GRC	D Y CHOI	NCC 3 913	437
49	DREXEL UNIV	D L URBAN	GRC	H PEARLMAN	NCC 3 1006	437
49	DREXEL UNIV	J E BROOKER	GRC	H PEARLMAN	NCC 3 1003	437
49	DUKE UNIV	R A WILKINSON	GRC	R P BEHRINGER	NAG 3 2372	390

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	EMORY UNIV	R B ROGERS	GRC	E R WEEKS	NAG 3 2728	179
49	FLA INTERNATIONAL UNIV	A MITSKEVICH	KSC	M A CENTENO	NAG10 212	161
49	FLA INTERNATIONAL UNIV	G BUCKINGHAM	KSC	M CENTENO	NAG10 321	162
49	FLORIDA A&M UNIV	D JOHSON	GRC	A F VAUGHN-COOKE	NAG 3 2786	162
49	FLORIDA A&M UNIV	D ABRAHAM	KSC	H LEWIS III	NAG10 314	163
49	FLORIDA A&M UNIV	E SMITH	KSC	F S HUMPHRIES	NAG10 238	162
49	FLORIDA ATLANTIC UNIV	S LAMBING	MSFC	W E GLENN	NCC 8 230	164
49	FLORIDA INST OF TECH	M M AVERNER	ARC	C E HELMSTETTER	NAG 2 1508	164
49	FLORIDA STATE UNIV	F P CHIARAMONTE	GRC	D CHELLA	NAG 3 2445	165
49	GEORGE WASHINGTON UNIV	M BROWN	GSFC	S SARKANI	NAG 5 11948	151
49	GEORGIA INST OF TECH	F P CHIARAMONTE	GRC	D YODA	NAG 3 2373	181
49	GEORGIA INST OF TECH	H K NAHRA	GRC	D MORRIS	NAG 3 2739	182
49	GEORGIA INST OF TECH	M M HASAN	GRC	M K SMITH	NAG 3 2763	182
49	GEORGIA INST OF TECH	R E YACKOVETSKY	GRC	D MAVRIS	NAG 1 2235	180
49	GEORGIA INST OF TECH	R SKARDA	GRC	D P NEITZEL	NAG 3 2431	181
49	GEORGIA INST OF TECH	C M BELCASTRO	LARC	A R PRITCHETT	NCC 1 401	184
49	GEORGIA INST OF TECH	S NASH-STEVENSON	MSFC	J SEITZMAN	NGT 8 52887	187
49	GEORGIA INST OF TECH	R HOLLAND	SSC	R RIVERA	NGT13 52750	187
49	HAMPTON UNIV	D GRIFFIN	GRC	D R LYONS	NAG 3 2189	507
49	HAMPTON UNIV	D W GRIFFIN	GRC	C M OKPODU	NAG 3 2618	508
49	HAMPTON UNIV	I BLANKSON	GRC	M H MORGAN	NAG 3 2249	507
49	HARVARD UNIV	B MOTIL	GRC	D A WEITZ	NAG 3 2376	281
49	HARVARD UNIV	D GRIFFIN	GRC	D A WEITZ	NAG 3 2492	281
49	HARVARD UNIV	F P CHIARAMONTE	GRC	D A WHITE	NAG 3 2381	281
49	HENDRIX COLL	B ST. CYR	SSC	M W TEAGUE	NAG13 99016	39
49	INDIANA UNIV - BLOOMINGTON	W CULPEPPER	JSC	J CAMERON	NAS 9 01103	214
49	IOWA STATE UNIV	F J MONTGOMERY	GRC	D ROTHMAYER	NGT 3 52380	222
49	IOWA STATE UNIV	S NASH-STEVENSON	MSFC	R NAPOLITANO	NGT 8 52903	223
49	JACKSON STATE UNIV	D F NOGA	GRC	D MITRA	NAG 3 2277	323
49	JAMES MADISON UNIV	A D LITTLE	LARC	J J MILES	NAG 1 2186	509
49	JOHNS HOPKINS UNIV	F P CHIARAMONTE	GRC	K J STEBE	NCC 3 812	251
49	JOHNS HOPKINS UNIV	G CHOMOS	GRC	L BACHMAN	NAS 3 01146	251
49	JOHNS HOPKINS UNIV	M HASAN	GRC	D HERMAN	NAG 3 2726	239
49	JOHNS HOPKINS UNIV	M M HASAN	GRC	A PROSPERETTI	NAG 3 2362	239
49	JOHNS HOPKINS UNIV	M MORAN	GRC	A G DARRIN	NAG 3 2727	239
49	JOHNS HOPKINS UNIV	J F SUTTON	GSFC	D STROHBEHN	NAG 5 10402	245
49	JOHNS HOPKINS UNIV	P YEP	GSFC	R EDWARDS	NAG 5 10397	245
49	KANSAS STATE UNIV	L GOSPER	KSC	D BEN-ARIEH	NAG10 325	226
49	LOUISIANA STATE UNIV - BATON ROUGE	J SKARDA	GRC	H WONG	NAG 3 2361	231
49	LOUISIANA STATE UNIV - BATON ROUGE	H C NEEDLEMAN	GSFC	J P WEFEL	NAG 5 5064	231
49	LOUISIANA STATE UNIV - BATON ROUGE	E SHAW	MSFC	B SARKER	NAG 8 1845	232
49	MARSHALL UNIV	M E KIELEN	GSFC	M R JULIAN	NCC 5 646	539
49	MARSHALL UNIV	M KIENLEN	GSFC	M R JULIAN	NCC 5 542	539
49	MASSACHUSETTS INST OF TECH	F J MONTEGANI	GRC	G H MCKINLEY	NGT 3 52360	296
49	MASSACHUSETTS INST OF TECH	J E BROOKER	GRC	J B HOWARD	NAG 3 1879	286
49	MASSACHUSETTS INST OF TECH	O SANDS	GRC	D MODIANO	NAG 3 2685	287
49	MASSACHUSETTS INST OF TECH	K HARTMAN	GSFC	D RICKER	NAG 5 12377	293
49	MASSACHUSETTS INST OF TECH	M E ROSENTHAL	MSFC	C R CANIZARES	NAS 8 38249	294
49	MICHIGAN STATE UNIV	C G DAVILA	LARC	R C AVERILL	NAG 1 02061	304
49	MISSISSIPPI STATE UNIV	Y K CHOO	GRC	B K SONI	NAG 3 2235	324
49	MOREHOUSE COLL	W LOVE	MSFC	J KING	NAG 8 1711	187
49	MOREHOUSE SCH MED	D W GRIFFIN	GRC	D J KLEMENT	NAG 3 2611	188
49	MORGAN STATE UNIV	G SOFFEN	GSFC	E DELOATCH	NAG 5 9215	252
49	MORGAN STATE UNIV	J OBERRIGHT	GSFC	G CHEN	NAG 5 10104	253
49	NEW JERSEY INST OF TECH	A WILKENSEN	GRC	L KONDIC	NAG 3 2367	347
49	NEW JERSEY INST OF TECH	R F FRIEDMAN	GRC	E L DREIZEN	NCC 3 746	348
49	NEW MEXICO HIGHLANDS UNIV	W LOVE	MSFC	R CLARK	NAG 8 1708	358
49	NEW MEXICO STATE UNIV - LAS CRUCES	B MERRITT	GSFC	S HOTTMAN	NAG 5 5351	359
49	NEW MEXICO STATE UNIV - LAS CRUCES	W H MILLER	GSFC	S HORAN	NAG 5 9323	360
49	NORFOLK STATE UNIV	S H CHOI	LARC	K D SONG	NAG 1 02076	510
49	NORTH CAROLINA A&T STATE UNIV	R F LAWRENCE	GRC	W COLLIS	NAG 3 2782	393
49	NORTH CAROLINA A&T STATE UNIV	D ABRAHAM	KSC	D DUNN	NAG10 317	394
49	NORTHEASTERN ILLINOIS UNIV	J SAMS	MSFC	A SACCO JR.	NCC 8 244	199
49	NORTHEASTERN UNIV	M NALL	MSFC	A SACCO	NCC 8 139	297
49	NORTHWESTERN UNIV	C E NIEDERHAUS	GRC	M SILBER	NAG 3 2364	200
49	NORTHWESTERN UNIV	F J MONTEGANI	GRC	D N SEIDMAN	NGT 3 52378	202

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	NORTHWESTERN UNIV	H C DEGROH	GRC	D H DAVIS	NAG 3 2369	200
49	NORTHWESTERN UNIV	K R SACKSTEDER	GRC	D MATALON	NAG 3 2511	200
49	NORTHWESTERN UNIV	S A GOGOKLU	GRC	B J MATKOWSKY	NAG 3 2209	200
49	NORTHWESTERN UNIV	W B DUVAL	GRC	P W VOORHEES	NAG 3 2474	200
49	OAKLAND UNIV	R ANSARI	GRC	F GIBLIN	NAG 3 2792	307
49	OAKWOOD COLL	R A HATHAWAY	LARC	F BLISS	NCC 1 02033	5
49	OAKWOOD COLL	W LOVE	MSFC	E GWEBU	NAG 8 1653	5
49	OHIO STATE UNIV	C H WILLIAMS	GRC	P J TURCHI	NAG 3 2316	410
49	OHIO STATE UNIV	M M HASAN	GRC	S TANVEER	NAG 3 2700	411
49	OHIO STATE UNIV	R S OKOJIE	GRC	L BRILLSON	NAG 3 2549	411
49	OHIO UNIV	W D IVANCIC	GRC	S OSTERMANN	NCC 3 680	416
49	OHIO UNIV	J M RANKIN	MSFC	J ZHU	NAS 8 01105	415
49	OLD DOMINION UNIV	J C NEWMAN	LARC	S A TIWARI	NCC 1 371	514
49	OLD DOMINION UNIV	K S BEY	LARC	G HOU	NAG 1 2300	512
49	OLD DOMINION UNIV	R D BRAUN	LARC	A K NOOR	NCC 1 01014	514
49	OLD DOMINION UNIV	W D MORRIS	LARC	R UNAL	NAG 1 02110	513
49	PENN STATE UNIV. - UNIV. PARK	C E JOHNSON	ARC	L R RADOVIC	NCC 2 1122	446
49	PENN STATE UNIV. - UNIV. PARK	F J MONTEGANI	GRC	K W WANG	NGT 3 52359	447
49	PENN STATE UNIV. - UNIV. PARK	F P CHIARAMONTE	GRC	D BANAVAR	NAG 3 2374	439
49	PENN STATE UNIV. - UNIV. PARK	F P CHIARAMONTE	GRC	D R COLLINS	NAG 3 2470	439
49	PENN STATE UNIV. - UNIV. PARK	M M HASAN	GRC	A BORHAN	NAG 3 2729	440
49	PENN STATE UNIV. - UNIV. PARK	P A PARSONS	GRC	D M TARBELL	NAG 3 2746	440
49	PENN STATE UNIV. - UNIV. PARK	G BUCKINGHA	KSC	A FREEMAN	NAG10 326	445
49	PENN STATE UNIV. - UNIV. PARK	R A GOLUB	LARC	P J MORRIS	NAG 1 2208	438
49	PENN STATE UNIV. - UNIV. PARK	M E ROSENTHAL	MSFC	G P GARMIRE	NAS 8 38252	445
49	PHIL COLL OF PHARMACY & SCIENCE	B S SINGH	GRC	D DUBLIN	NAG 3 2424	448
49	POLYTECH UNIV - BROOKLYN	R SEASHOLTZ	GRC	D OTUGAN	NAG 3 2679	380
49	PORTLAND STATE UNIV	M M HASAN	GRC	M M WEISLOGEL	NAG 3 2741	430
49	PRAIRIE VIEW A&M UNIV	M A MEADOR	GRC	D BINEY	NCC 3 972	472
49	PRAIRIE VIEW A&M UNIV	L MCWHORTER	JSC	J D OLIVER	NCC 9 66	472
49	PRINCETON UNIV	B S SINGH	GRC	P M CHALKIN	NAG 3 2248	349
49	PRINCETON UNIV	D SACKSTEDER	GRC	C K LAW	NCC 3 687	352
49	PRINCETON UNIV	K SACKSTEDER	GRC	C K LAW	NCC 3 670	352
49	PURDUE UNIV	B J MOTIL	GRC	D T REVANKAR	NAG 3 2715	215
49	PURDUE UNIV	M HANSAN	GRC	I MUDAWAR	NAG 3 2336	215
49	PURDUE UNIV	R WILKINSON	GRC	D R WASSGREN	NAG 3 2770	216
49	RENSSELAER POLYTECH INST	M M HASAN	GRC	D HIRSA	NAG 3 2714	380
49	RENSSELAER POLYTECH INST	R SKARDA	GRC	D C WAYNER	NAG 3 2351	380
49	RENSSELAER POLYTECH INST	T ROGERS	GRC	M D SMITH	NAG 3 2552	380
49	RICE UNIV	B FILES	JSC	E V BARRERA	NGT 9 23	475
49	RICE UNIV	F MARTIN	JSC	T E TEZDUYAR	NAG 9 1059	474
49	ROCHESTER INST OF TECH	D BAILEY	GRC	D P RAFFAELLE	NCC 3 937	382
49	ROWAN UNIV	K SACKSTEDER	GRC	D MARCHESE	NAG 3 2521	353
49	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	B J MOTIL	GRC	D J GLASSER	NAG 3 2350	353
49	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	K SACKSTEDER	GRC	D D TSE	NCC 3 967	355
49	SAINT LOUIS UNIV	E SHAW	MSFC	C RAHAIM	NAG 8 1852	326
49	SAN DIEGO STATE UNIV	S L OLSON	GRC	S BHATTACHARJEE	NCC 3 842	54
49	SAN JOSE STATE UNIV	D CLANCY	ARC	N IBRAHIM	NCC 2 1368	57
49	SAN JOSE STATE UNIV	N MUSCETTOLA	ARC	J MURPHY	NCC 2 1286	56
49	SAVANNAH STATE UNIV	R J ACOSTA	GRC	D KALU	NAG 3 2241	188
49	SOUTHERN ILLINOIS UNIV - CARBONDALE	S RUSSELL	MSFC	T CHU	NAG 8 1812	203
49	SOUTHERN UNIV & A&M COLL	B B ST. CYR	SSC	A AMINI	NAG13 98003	233
49	SPELMAN COLL	W LOVE	MSFC	C GILLYARD	NAG 8 1712	189
49	SPELMAN COLL	W LOVE	MSFC	E FALCONER	NAG 8 1635	188
49	SPELMAN COLL	W LOVE	MSFC	A THOMPSON	NCC 8 227	189
49	STANFORD UNIV	G MEYER	ARC	C TOMLIN	NCC 2 5422	65
49	STANFORD UNIV	F P CHIARAMONTE	GRC	G M HOMSY	NAG 3 2446	60
49	STANFORD UNIV	G ZIMMERLI	GRC	D SHAQFEH	NAG 3 2724	60
49	STANFORD UNIV	J H AGUI	GRC	A P GAST	NAG 3 2398	60
49	STANFORD UNIV	M M HASAN	GRC	J K EATON	NAG 3 2738	60
49	STATE UNIV OF NY - BUFFALO	K R SACKSTEDER	GRC	D GIVI	NAG 3 2225	384
49	STATE UNIV OF NY - BUFFALO	S L PADULA	LARC	K LEWIS	NGT 1 01034	384
49	STATE UNIV OF NY - BUFFALO	S L PADULA	LARC	K E LEWIS	NGT 1 52228	384
49	STATE UNIV OF NY - STONY BROOK	G MEYER	ARC	J S MITCHELL	NAG 2 1325	384
49	STATE UNIV OF NY - STONY BROOK	T TURNER	MSFC	D LARSON	NCC 8 100	387
49	STATE UNIV OF NY COLL	F P CHIARAMONTE 111	GRC	H MENG	NAG 3 2464	387

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	SYRACUSE UNIV	H K NAHRA	GRC	D SANGANI	NAG 3 2427	388
49	SYRACUSE UNIV	R D BRAUN	LARC	B D DAVIDSON	NCC 1 01004	388
49	TENNESSEE STATE UNIV	S MERRITT	GRC	D ROGERS	NAG 3 2471	464
49	TEXAS A&M UNIV	J TORRES	DFRC	W TURNER	NCC 4 152	480
49	TEXAS A&M UNIV	A J PROVENZA	GRC	D PALAZZOLO	NCC 3 928	479
49	TEXAS A&M UNIV	M M HASAN	GRC	D D KHIM	NAG 3 2712	476
49	TEXAS A&M UNIV	C G PARRA	JSC	D R BOYLE	NCC 9 69	480
49	TEXAS A&M UNIV	S LAMBING	MSFC	D BOYLE	NCC 8 226	480
49	TEXAS A&M UNIV	S LAMBING	MSFC	W F BEST	NCC 8 236	480
49	TEXAS TECH UNIV	C NIEDERHAUS	GRC	D BORNHOP	NCC 3 962	482
49	TEXAS TECH UNIV	D L HENNINGER	JSC	J L SMITH	NCC 9 143	482
49	THE AMERICAN UNIV	M M MATSUMURA	GSFC	R KAY	NCC 5 630	155
49	THE UNIV OF CENTRAL FLORIDA	D J CHATO	GRC	D L BLOCK	NAG 3 2751	168
49	THE UNIV OF CENTRAL FLORIDA	C G STEVENSON	KSC	F GOMEZ	NAG10 306	169
49	THE UNIV OF CENTRAL FLORIDA	G CATES	KSC	M MOLLAGHASGEMI	NCA10 41	169
49	THE UNIV OF CENTRAL FLORIDA	J LYONS	KSC	T KOTNOUR	NAG10 296	168
49	THE UNIV OF CENTRAL FLORIDA	L GOSPER	KSC	D G KOTNOUR	NGT10 52625	169
49	THE UNIV OF CENTRAL FLORIDA	L GOSPER	KSC	NOT AVAILABLE	NGT10 52630	170
49	THE UNIV OF CENTRAL FLORIDA	R MCKINNEY	KSC	J SMITH	NAG10 258	168
49	TRINITY UNIV	K BAKER	JSC	K NICKELS	NAG 9 1278	482
49	TULANE UNIV	P A PARSONS-WINGERTE	GRC	D P GAVER	NAG 3 2734	234
49	TUSKEGEE UNIV	M A MEADOR	GRC	D HAGUE	NAG 3 2654	5
49	TUSKEGEE UNIV	S CAMPBELL	GRC	D DEAN	NAG 3 2432	5
49	UNIV HOUSTON-HOUSTON	B J MOTIL	GRC	D BALAKOTAIAH	NAG 3 2697	482
49	UNIV HOUSTON-HOUSTON	R S BAIRD	JSC	A IGNATIEV	NAG 9 1287	483
49	UNIV HOUSTON-HOUSTON	S LAMBING	MSFC	A IGNATIEV	NCC 8 239	484
49	UNIV OF AKRON	A FREED	GRC	S C JANA	NCC 3 752	417
49	UNIV OF AKRON	G R HALFORD	GRC	S N PATNAIK	NAG 3 2420	416
49	UNIV OF AKRON	G R HALFORD	GRC	S N PATNAIK	NAG 3 2777	417
49	UNIV OF AKRON	G R HALFORD	GRC	V K ARYA	NCC 3 768	417
49	UNIV OF AKRON	H LEE	GRC	G SONG	NCC 3 839	418
49	UNIV OF AKRON	K R SACKSTEDER	GRC	D PERRY	NAG 3 2512	416
49	UNIV OF AKRON	M MANZO	GRC	D T HARTLEY	NCC 3 820	418
49	UNIV OF AKRON	W B DUVAL	GRC	C BATUR	NAG 3 2442	416
49	UNIV OF ALABAMA - BIRMINGHAM	K R SACKSTEDER	GRC	J BAKER	NAG 3 2560	6
49	UNIV OF ALABAMA - HUNTSVILLE	C M BELCASTRO	LARC	F C WESSLING	NAG 1 02073	8
49	UNIV OF ALABAMA - HUNTSVILLE	J PRESSON	MSFC	G WORKMAN	NCC 8 132	13
49	UNIV OF ALABAMA - HUNTSVILLE	J WEST	MSFC	W GATHINGS	NCC 8 243	14
49	UNIV OF ALABAMA - HUNTSVILLE	S C JOHNSON	MSFC	J DIMMOCK	NCC 8 146	13
49	UNIV OF ALABAMA - UNIV	K R SACKSTEDER	GRC	J BAKER	NCC 3 964	16
49	UNIV OF ALABAMA - UNIV	F Y KUO	JSC	G P	NAG 9 1419	15
49	UNIV OF ALABAMA - UNIV	A DUARTE	MSFC	P S RAY	NAG 8 1753	15
49	UNIV OF ALASKA - FAIRBANKS	W F LAU	GSFC	G W WALKER	NAS 5 01074	18
49	UNIV OF ARIZONA	C E NIEDERHAUS	GRC	C F CHEN	NAG 3 2354	25
49	UNIV OF ARIZONA	M HASAN	GRC	D NIEDERHAUS	NAG 3 2725	25
49	UNIV OF ARIZONA	P YEH	GSFC	W RYAN	NAG 5 10643	32
49	UNIV OF ARIZONA	P YEH	GSFC	W RYAN	NAG 5 11838	34
49	UNIV OF ARIZONA	C A HOSTETLER	LARC	J A REAGAN	NGT 1 52176	38
49	UNIV OF ARIZONA	D JACOBSON	MSFC	J H BURGE	NAS 8 97309	37
49	UNIV OF ARIZONA	M HUBBARD	MSFC	D R POIRIER	NCC 8 96	38
49	UNIV OF CALIFORNIA - BERKELEY	G MEYER	ARC	S S SASTRY	NAG 2 1479	68
49	UNIV OF CALIFORNIA - BERKELEY	D L URBAN	GRC	A C FERNANDEZ-PELLO	NAG 3 2026	68
49	UNIV OF CALIFORNIA - BERKELEY	D L URBAN	GRC	C F PELLO	NCC 3 874	77
49	UNIV OF CALIFORNIA - BERKELEY	K R SACKSTEDER	GRC	C FERNANDEZ-PELLO	NCC 3 896	77
49	UNIV OF CALIFORNIA - BERKELEY	K SACKSTEDER	GRC	J CHEN	NAG 3 2221	68
49	UNIV OF CALIFORNIA - BERKELEY	N D PILTCH	GRC	M FRENKLACH	NCC 3 833	77
49	UNIV OF CALIFORNIA - DAVIS	D L DIETRICH	GRC	B D SHAW	NCC 3 683	82
49	UNIV OF CALIFORNIA - DAVIS	D L DIETRICH	GRC	B D SHAW	NCC 3 890	82
49	UNIV OF CALIFORNIA - DAVIS	K R SACKSTEDER	GRC	I M KENNEDY	NCC 3 668	82
49	UNIV OF CALIFORNIA - DAVIS	K R SACKSTEDER	GRC	R C ALDREDGE	NCC 3 845	82
49	UNIV OF CALIFORNIA - DAVIS	P YEH	GSFC	S LIN	NAG 5 10480	80
49	UNIV OF CALIFORNIA - DAVIS	W H MILLER	GSFC	S LIN	NAG 5 9025	80
49	UNIV OF CALIFORNIA - IRVINE	H D ROSS	GRC	D DUNN-RANKIN	NAG 3 2226	83
49	UNIV OF CALIFORNIA - IRVINE	B GUYNES	MSFC	F JURNAK	NAG 8 1572	85
49	UNIV OF CALIFORNIA - LOS ANGELES	K ILIFF	DFRC	A BALAKRISHNAN	NCC 4 153	94
49	UNIV OF CALIFORNIA - LOS ANGELES	D F CHAO	GRC	V K DHIR	NAG 3 2397	87

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	UNIV OF CALIFORNIA - LOS ANGELES	F P CHARIAMONTE	GRC	D J DURIAN	NAG 3 2481	87
49	UNIV OF CALIFORNIA - LOS ANGELES	K SACKSTEDER	GRC	O I SMITH	NCC 3 690	94
49	UNIV OF CALIFORNIA - LOS ANGELES	W DUVAL	GRC	S J PUTTERMAN	NAG 3 2735	87
49	UNIV OF CALIFORNIA - LOS ANGELES	K W IIIFF	SSC	A V BALAKRISHNAN	NCC 4 121	94
49	UNIV OF CALIFORNIA - SAN DIEGO	D L DIETRICH	GRC	F A WILLIAMS	NCC 3 693	103
49	UNIV OF CALIFORNIA - SAN DIEGO	D L URBAN	GRC	F A WILLIAMS	NCC 3 695	103
49	UNIV OF CALIFORNIA - SAN DIEGO	D L URBAN	GRC	F A WILLIAMS	NCC 3 769	103
49	UNIV OF CALIFORNIA - SAN DIEGO	K R SACKSTEDER	GRC	F WILLIAMS	NAG 3 2554	96
49	UNIV OF CALIFORNIA - SAN DIEGO	M E HILL	GRC	J D GODDARD	NAG 3 2465	96
49	UNIV OF CALIFORNIA - SAN DIEGO	O MEHMED	GRC	D KOSMATKA	NCC 3 819	103
49	UNIV OF CALIFORNIA - SAN DIEGO	L KALUZIENSKI	GSFC	R E ROTHSCHILD	NAG 5 8498	98
49	UNIV OF CALIFORNIA - SANTA BARBARA	F P CHARIAMONTE	GRC	E MEIBURG	NAG 3 2466	105
49	UNIV OF CALIFORNIA - SANTA BARBARA	F P CHIARAMONTE	GRC	D S CANNELL	NAG 3 2439	105
49	UNIV OF CALIFORNIA - SANTA BARBARA	F P CHIARAMONTE	GRC	E H MEIBURG	NAG 3 2493	105
49	UNIV OF CALIFORNIA - SANTA BARBARA	F P CHIARAMONTE III	GRC	G M HOMSY	NAG 3 2513	105
49	UNIV OF CALIFORNIA - SANTA BARBARA	J B MCQUILLEN	GRC	T G THEOFANOUS	NAG 3 2119	105
49	UNIV OF CALIFORNIA - SANTA BARBARA	J B MCQUILLIN	GRC	D THEOFANOUS	NAG 3 2761	106
49	UNIV OF CALIFORNIA - SANTA BARBARA	M M HASAN	GRC	E H MEIBURG	NAG 3 2785	106
49	UNIV OF CALIFORNIA - SANTA BARBARA	J H AGUI	LARC	P BANERJEE	NAG 3 2414	105
49	UNIV OF CHICAGO	C SAVINELL	GSFC	S S MEYER	NCC 5 653	206
49	UNIV OF CINCINNATI	H C DEGROH	GRC	W B KRANTZ	NAG 3 2451	419
49	UNIV OF COLORADO - BOULDER	B J MOTIL	GRC	J E COLWELL	NAG 3 2267	122
49	UNIV OF COLORADO - BOULDER	B J MOTIL	GRC	J E COLWELL	NAG 3 2400	123
49	UNIV OF COLORADO - BOULDER	B J MOTIL	GRC	D E COLWELL	NAG 3 2716	123
49	UNIV OF COLORADO - BOULDER	D S NELSON	GRC	P KLAUS	NAG 3 2783	123
49	UNIV OF COLORADO - BOULDER	F P CHARIAMONTE 111	GRC	R H DAVIS	NCC 3 796	139
49	UNIV OF COLORADO - BOULDER	F P CHIARAMONTE	GRC	J E HART	NAG 3 2402	123
49	UNIV OF COLORADO - BOULDER	F P CHIARAMONTE	GRC	N A CLARK	NAG 3 2457	123
49	UNIV OF COLORADO - BOULDER	R FRIEDMAN	GRC	M C BRANCH	NAG 3 2220	122
49	UNIV OF COLORADO - BOULDER	D CONTENT	GSFC	W CASH	NAG 5 11850	135
49	UNIV OF COLORADO - BOULDER	J R WEST	MSFC	L STODIECK	NCC 8 242	139
49	UNIV OF CONNECTICUT	E WENZEL	ARC	A BRAMMER	NAG 2 1544	144
49	UNIV OF CONNECTICUT	F P CHIARAMONTE	GRC	D FAGHRI	NCC 3 789	145
49	UNIV OF DAYTON	F J MONTEGANI	GRC	V JAIN	NGT 3 52351	420
49	UNIV OF DELAWARE	K R SACKSTER	GRC	D WANG	NCC 3 843	150
49	UNIV OF FLORIDA	B J MOTIL	GRC	A L LADD	NAG 3 2382	171
49	UNIV OF FLORIDA	D J CHATO	GRC	D GOSWAMI	NAG 3 2750	171
49	UNIV OF FLORIDA	F P CHIARAMONTE	GRC	D M HANES	NAG 3 2341	171
49	UNIV OF FLORIDA	F P CHIARAMONTE III	GRC	D NARAYANAN	NAG 3 2415	171
49	UNIV OF FLORIDA	M G JONES	LARC	L N SHEPLAK	NAG 1 01013	170
49	UNIV OF FLORIDA	M G JONES	LARC	M SHEPLAK	NAG 1 2261	170
49	UNIV OF FLORIDA	K TUCKER	MSFC	W SHYY	NAG 8 1791	172
49	UNIV OF HAWAII AT MANOA - HONOLULU	D L URBAN	GRC	B CHAO	NCC 3 696	197
49	UNIV OF IDAHO - MOSCOW	P YEH	GSFC	G MAKI	NAG 5 11734	198
49	UNIV OF IDAHO - MOSCOW	P YEH	GSFC	G MAKI	NAG 5 11805	198
49	UNIV OF IDAHO - MOSCOW	P YEH	GSFC	G DONOHOE	NAG 5 11970	198
49	UNIV OF ILLINOIS - CHICAGO CIRCLE	D L URBAN	GRC	Y CHOI	NCC 3 655	206
49	UNIV OF ILLINOIS - CHICAGO CIRCLE	K R SACKSTEDER	GRC	D K PURI	NCC 3 688	206
49	UNIV OF ILLINOIS - CHICAGO CIRCLE	S L OLSON	GRC	I K PURI	NCC 3 694	206
49	UNIV OF ILLINOIS - CHICAGO CIRCLE	W B DUVAL	GRC	D M MEGARIDIS	NAG 3 2456	206
49	UNIV OF ILLINOIS - CHICAGO CIRCLE	M DUTTA	GSFC	A FEINERMAN	NAG 5 10398	206
49	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D G FISHER	GRC	P S CARNEY	NAG 3 2764	208
49	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	F J MONTEGANI	GRC	M BRAGGS	NGT 3 52357	212
49	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	L G MATUS	GRC	I ADESIDA	NAG 3 2661	208
49	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	B MCGILL	MSFC	R H DODDS	NAG 8 1751	211
49	UNIV OF IOWA	C E NIEDERHAUS	GRC	D S MARSHALL	NAG 3 2368	223
49	UNIV OF IOWA	D P STOCKER	GRC	D CHEN	NCC 3 666	225
49	UNIV OF IOWA	R B ROGERS	GRC	A BHATTACHARJEE	NAG 3 2375	223
49	UNIV OF IOWA	R B ROGERS	GRC	D A GOREE	NAG 3 2771	223
49	UNIV OF KENTUCKY	D ASHIPS	GRC	D HUANG	NCC 3 940	230
49	UNIV OF KENTUCKY	K R SACKSTEDER	GRC	K SAITO	NAG 3 2567	229
49	UNIV OF KENTUCKY	C H ROLLINS	LARC	V SINGH	NAG 1 01036	228
49	UNIV OF MARYLAND - COLL PARK	D STOCKER	GRC	A K GUPTA	NCC 3 686	268
49	UNIV OF MARYLAND - COLL PARK	F MONTEGANI	GRC	D C WILSON JR	NGT 3 52367	270
49	UNIV OF MARYLAND - COLL PARK	F P CHIARAMONTE	GRC	D DEANE	NAG 3 2479	255
49	UNIV OF MARYLAND - COLL PARK	G A RUFF	GRC	J L TORERO	NAG 3 2568	255

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	UNIV OF MARYLAND - COLL PARK	J B MCQUILLEN	GRC	J KIM	NAG 3 2206	255
49	UNIV OF MARYLAND - COLL PARK	J B MCQUILLEN	GRC	J KIM	NCC 3 783	268
49	UNIV OF MARYLAND - COLL PARK	J H AGUI	GRC	W LOSERT	NAG 3 2736	255
49	UNIV OF MARYLAND - COLL PARK	S OLSON	GRC	T KASHIWAGI	NCC 3 919	268
49	UNIV OF MARYLAND - COLL PARK	D EVERETT	GSFC	M AUSTIN	NAG 5 12464	266
49	UNIV OF MARYLAND - COLL PARK	J ABSHIRE	GSFC	A CHRISTOU	NAG 5 12499	266
49	UNIV OF MARYLAND - COLL PARK	R AFZAL	GSFC	D CHRISTOU	NCC 5 238	268
49	UNIV OF MARYLAND - COLL PARK	C CULBERT	JSC	D AKIN	NAG 9 1290	267
49	UNIV OF MARYLAND - COLL PARK	S LAMBING	MSFC	J BARAS	NCC 8 235	269
49	UNIV OF MASSACHUSETTS	H DEGROH	GRC	D CHARMCHI	NAG 3 2426	298
49	UNIV OF MASSACHUSETTS - AMHERST	P DOTY	MSFC	T P RUSSELL	NAG 8 1694	300
49	UNIV OF MASSACHUSETTS - AMHERST	P DOTY	MSFC	M TSAPATIS	NAG 8 1697	300
49	UNIV OF MICHIGAN - ANN ARBOR	A GONZALEZ	GRC	D E SCOTT	NAG 3 2082	307
49	UNIV OF MICHIGAN - ANN ARBOR	C LEK	GRC	M PERLIN	NAG 3 2406	308
49	UNIV OF MICHIGAN - ANN ARBOR	C LEK	GRC	J B GROTERBERG	NAG 3 2740	308
49	UNIV OF MICHIGAN - ANN ARBOR	D F CHAO	GRC	G TRYGGVASON	NAG 3 2332	308
49	UNIV OF MICHIGAN - ANN ARBOR	D W GRIFFIN	GRC	R G LARSON	NAG 3 2708	308
49	UNIV OF MICHIGAN - ANN ARBOR	E S NELSON	GRC	M KAVIANY	NCC 3 723	315
49	UNIV OF MICHIGAN - ANN ARBOR	F J MONTEGANI	GRC	A GALLIMORE	NGT 3 52348	315
49	UNIV OF MICHIGAN - ANN ARBOR	F J MONTEGANI	GRC	A D GALLIMORE	NGT 3 52349	315
49	UNIV OF MICHIGAN - ANN ARBOR	F J MONTEGANI	GRC	W J DAHM	NGT 3 52377	316
49	UNIV OF MICHIGAN - ANN ARBOR	F P CHIARAMONTE	GRC	M D SOLOMON	NAG 3 2356	308
49	UNIV OF MICHIGAN - ANN ARBOR	J E BROOKER	GRC	J F DRISCOLL	NCC 3 656	315
49	UNIV OF MICHIGAN - ANN ARBOR	K R SACKSTEDER	GRC	W DAHM	NCC 3 663	315
49	UNIV OF MICHIGAN - ANN ARBOR	K SACKSTEDER	GRC	G M FAETH	NCC 3 661	315
49	UNIV OF MICHIGAN - ANN ARBOR	R S JANKOVSKY	GRC	A D GALLIMORE	NAG 3 2307	308
49	UNIV OF MICHIGAN - ANN ARBOR	S NASH-STEVENSON	MSFC	T KAMMASH	NGT 8 52888	317
49	UNIV OF MINN	P S GREENBERG	GRC	D H PUI	NAG 3 2435	318
49	UNIV OF MISSOURI - COLUMBIA	P YEH	GSFC	C CHEN	NAG 5 10720	327
49	UNIV OF MISSOURI - COLUMBIA	C H LIN	JSC	S NAIR	NAG 9 1210	327
49	UNIV OF MISSOURI - COLUMBIA	M R KHORRAMI	LARC	O V VASILYEV	NAG 1 02085	326
49	UNIV OF MISSOURI - COLUMBIA	W K BELVIN	LARC	P PAI	NAG 1 01037	326
49	UNIV OF MISSOURI - ROLLA	S NASH-STEVENSON	MSFC	S N BALAKRISHNAN	NGT 8 52916	328
49	UNIV OF NEBRASKA - LINCOLN	P YEH	GSFC	K SAYOOD	NAG 5 8677	337
49	UNIV OF NEBRASKA - LINCOLN	P YEH	GSFC	K SAYOOD	NAG 5 9834	337
49	UNIV OF NEBRASKA - LINCOLN	P YEH	GSFC	K SAYOOD	NAG 5 10408	337
49	UNIV OF NEBRASKA - LINCOLN	P YEH	GSFC	K SAYOOD	NAG 5 12277	337
49	UNIV OF NEW MEXICO-ALBUQUERQUE	P YEH	GSFC	G DONOHOE	NAG 5 9469	362
49	UNIV OF NEW MEXICO-ALBUQUERQUE	P YEP	GSFC	G K MAKI	NAG 5 10960	363
49	UNIV OF NEW MEXICO-ALBUQUERQUE	W H MILLER	GSFC	G MAKI	NAG 5 8454	362
49	UNIV OF NEW MEXICO-ALBUQUERQUE	W H MILLER	GSFC	G MAKI	NAG 5 9402	362
49	UNIV OF NEW MEXICO-ALBUQUERQUE	W H MILLER	GSFC	G W DONOHOE	NAG 5 9704	362
49	UNIV OF NEW MEXICO-ALBUQUERQUE	W H MILLER	GSFC	G K MAKI	NAG 5 10337	363
49	UNIV OF NEW ORLEANS	F P CHIARAMONTEH	GRC	J HEGSETH	NAG 3 2447	234
49	UNIV OF NEW ORLEANS	J VICKERS	MSFC	J N CRISP	NCC 8 223	235
49	UNIV OF NEW ORLEANS	R TRAVIS	SSC	R SAXTON	NGT13 52740	235
49	UNIV OF NOTRE DAME	B MOTIL	GRC	D J MCCREADY	NAG 3 2696	219
49	UNIV OF NOTRE DAME	F P CHIARMONTE	GRC	D A GLAZIER	NAG 3 2366	219
49	UNIV OF NOTRE DAME	J B MCGUILLEN	GRC	M J MCCREADY	NCC 3 466	220
49	UNIV OF NOTRE DAME	J H AGUI	GRC	D BARBASI	NAG 3 2384	219
49	UNIV OF NOTRE DAME	R ANSAH	GRC	D CHANG	NAG 3 2701	219
49	UNIV OF NOTRE DAME	R FRIEDMAN	GRC	A VARMA	NAG 3 2213	219
49	UNIV OF NOTRE DAME	P YEH	GSFC	D J COSTELLO	NAG 5 10503	220
49	UNIV OF NOTRE DAME	J L ROSEY	LARC	J E RENAUD	NAG 1 2240	219
49	UNIV OF OKLAHOMA - NORMAN	F P CHIARAMONTE	GRC	A K AGRAWAI	NAG 3 2388	425
49	UNIV OF OKLAHOMA - NORMAN	H C DEGROH	GRC	D C LAI	NCC 3 791	426
49	UNIV OF OKLAHOMA - NORMAN	J B MCQUILLEN	GRC	D N PARTHASAETHY	NCC 3 787	426
49	UNIV OF PENNSYLVANIA	D W GRIFFIN	GRC	D A HAMMER	NAG 3 2417	448
49	UNIV OF PITTSBURGH	F P CHIARAMONTE	GRC	D WI	NAG 3 2396	450
49	UNIV OF PITTSBURGH	M M HASAN	GRC	D L WU	NAG 3 2730	450
49	UNIV OF RHODE ISLAND	D A JACQUIN	GRC	A BOSE	NAG 3 2229	456
49	UNIV OF RHODE ISLAND	H C DEGROH	GRC	D FAGHRI	NAG 3 2434	456
49	UNIV OF ROCHESTER	D GRIFFIN	GRC	K MARSHALL	NAG 3 2348	389
49	UNIV OF SOUTHERN CALIFORNIA	D L URBAN	GRC	H PEARLMAN	NCC 3 871	117
49	UNIV OF SOUTHERN CALIFORNIA	F P CHARIAMONTE	GRC	D MAXWORTHY	NAG 3 2478	114
49	UNIV OF SOUTHERN CALIFORNIA	J E BROOKER	GRC	H PEARLMAN	NCC 3 854	117

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	UNIV OF SOUTHERN CALIFORNIA	K R SACKSTEDER	GRC	F N EGOLFOPOLUOS	NCC 3 678	117
49	UNIV OF SOUTHERN CALIFORNIA	K R SACKSTEDER	GRC	P N EGOLFPOULOS	NCC 3 834	117
49	UNIV OF SOUTHERN CALIFORNIA	K R SACKSTEDER	GRC	K OHSAKA	NCC 3 841	117
49	UNIV OF SOUTHERN CALIFORNIA	M M HASAN	GRC	T MAXWORTHY	NAG 3 2776	115
49	UNIV OF SOUTHERN CALIFORNIA	M M HASAN	GRC	K OHSAKA	NCC 3 827	117
49	UNIV OF SOUTHERN CALIFORNIA	S A GOKOGLU	GRC	P D RONNEY	NCC 3 671	117
49	UNIV OF SOUTHERN CALIFORNIA	M DUTTA	GSFC	G SHIFLETT	NAG 5 10399	116
49	UNIV OF SOUTHERN MISSISSIPPI	P DOTY	MSFC	J WHITEHEAD	NAG 8 1684	326
49	UNIV OF TENNESSEE - KNOXVILLE	S NASH-STEVENSON	MSFC	L TOWNSEND	NGT 8 52920	467
49	UNIV OF TENNESSEE SPACE INST-TULLAHOMA	M E OLSEN	ARC	S VENKATESWARAN	NCC 2 5413	468
49	UNIV OF TEXAS - AUSTIN	K MCLALLIN	GRC	J BENO	NAS 3 00119	492
49	UNIV OF TEXAS - AUSTIN	K SACKSTEDER	GRC	N T CLEMENS	NCC 3 677	493
49	UNIV OF TEXAS - AUSTIN	P GEORGE	GRC	W A WALLS	NAS 3 00135	492
49	UNIV OF TEXAS - AUSTIN	P S GREENBERG	GRC	P L VARGHESE	NAG 3 2240	488
49	UNIV OF TEXAS - AUSTIN	T CRAIN	JSC	R H BISHOP	NAG 9 1437	492
49	UNIV OF TEXAS - DALLAS	P H YEH	GSFC	J P FONSEKA	NAG 5 9476	494
49	UNIV OF TEXAS AT BROWNSVILLE	L ARMENDARIZ	JSC	W WELLS	NAG 9 1064	496
49	UNIV OF TEXAS AT SAN ANTONIO	F SAFIE	MSFC	R MANTUEFEL	NAG 8 1720	496
49	UNIV OF TOLEDO	D C JANETZKE	GRC	T G KEITH	NCC 3 719	423
49	UNIV OF TOLEDO	D JANETZKE	GRC	T KEITH	NCC 3 774	423
49	UNIV OF TOLEDO	D MONTEGANI	GRC	D J KAPOOR	NGT 3 52342	424
49	UNIV OF TOLEDO	F J MONTEGANI	GRC	V J KAPOOR	NGT 3 52375	424
49	UNIV OF TOLEDO	N J GEORGIADIS	GRC	T G KEITH	NCC 3 922	423
49	UNIV OF TOLEDO	P MURTHY	GRC	T G KEITH	NCC 3 524	422
49	UNIV OF TURABO	M MATEU	GSFC	A COURTIER	NAG 5 10240	552
49	UNIV OF UTAH	H D ROSS	GRC	D E MELL	NAG 3 2403	497
49	UNIV OF UTAH	H D ROSS	GRC	W MELL	NAG 3 2548	497
49	UNIV OF VIRGINIA	M HASAN	GRC	D HAJ-HARIRI	NAG 3 2760	518
49	UNIV OF VIRGINIA	S M ARNOLD	GRC	M J PINDERA	NAG 3 2359	518
49	UNIV OF VIRGINIA	H A ROELANT	LARC	J BECHTA-DUGAN	NAS 1 99098	522
49	UNIV OF VIRGINIA	J A CARABALLO	LARC	K J SULLIVAN	NAS 1 02076	521
49	UNIV OF VIRGINIA	L E JONES	LARC	R W KENT	NGT 1 52244	522
49	UNIV OF VIRGINIA	M T PALMER	LARC	E J BASS	NAG 1 02113	518
49	UNIV OF VIRGINIA	S M JONES	LARC	G E LOUIS	NAG 1 02102	518
49	UNIV OF WASHINGTON	G MEYER	ARC	S DEVASIA	NAG 2 1450	529
49	UNIV OF WASHINGTON	J E BROOKER	GRC	D RILEY	NAG 3 2517	529
49	UNIV OF WASHINGTON	N R HALL	GRC	T J MATULA	NAG 3 2379	529
49	UNIV OF WASHINGTON	W J STOUD	LARC	K Y LIN	NAG 1 2296	528
49	UNIV OF WEST FLORIDA	B WARD	JSC	J HANSEN	NAG 9 1386	178
49	UNIV OF WISCONSIN - MADISON	A MATISAK	MSFC	W ZHOU	NCC 8 241	548
49	UNIV OF WISCONSIN - MADISON	J F DOWDY	MSFC	J F CRUISE	NGT 8 52865	548
49	VA POLYTECH INST & ST UNIV	J E MAY	GRC	U VANDSBURGER	NAG 3 2093	525
49	VA POLYTECH INST & ST UNIV	J R SAUS	GRC	W R SAUNDERS	NAG 3 2687	525
49	VA POLYTECH INST & ST UNIV	D L PALOMBO	LARC	M AHMODEON	NGT 1 52246	527
49	VA POLYTECH INST & ST UNIV	J M SEATON	LARC	B DUGGINS	NAG 1 02106	524
49	VANDERBILT UNIV	R D GREEN	GRC	D LEVAN	NAG 3 2401	468
49	VANDERBILT UNIV	J BARTH	GSFC	L MASSENGILL	NAG 5 9828	468
49	VANDERBILT UNIV	C J CULBERT	JSC	R A PETERS II	NGT 9 52	469
49	WASHINGTON STATE UNIV	C NIEDERHAUS	GRC	D MARSTON	NAG 3 2378	538
49	WASHINGTON UNIV - ST. LOUIS	D L URBAN	GRC	R L AXELBAUM	NCC 3 697	332
49	WASHINGTON UNIV - ST. LOUIS	P S GREENBERG	GRC	D CHEN	NAG 3 2625	329
49	WASHINGTON UNIV - ST. LOUIS	S A GOKOGLE	GRC	R L AXELBAUM	NAG 3 1910	329
49	WASHINGTON UNIV - ST. LOUIS	L KALUZIENSKI	GSFC	P L HINK	NAG 5 8568	330
49	WAYNE STATE UNIV	G MEYER	ARC	F LIN	NAG 2 1279	317
49	WAYNE STATE UNIV	G MEYER	ARC	F LIN	NAG 2 1532	317
49	WICHITA STATE UNIV	C BIDWELL	GRC	D PAPADAKIS	NAG 3 2324	228
49	WILBERFORCE UNIV	A F HEPP	GRC	D R BUFFINGER	NAG 3 2301	424
49	WORCESTER POLYTECH INST	D F CHAO	GRC	D TRYGGVASON	NAG 3 2545	303
49	WORCESTER POLYTECH INST	D F CHAO	GRC	D TRYGGVASON	NAG 3 2583	303
49	WORCESTER POLYTECH INST	D P STOCKER	GRC	D C HERMANSON	NCC 3 673	303
49	WORCESTER POLYTECH INST	F CHIARAMONTE	GRC	D C HERMANSON	NAG 3 2395	303
49	WORCESTER POLYTECH INST	F P CHIARAMONTE	GRC	D TRYGGVASON	NAG 3 2535	303
49	XAVIER UNIV - LOUISIANA	L RANDOLPH	GSFC	G BAKER	NGT 5 90084	235
49	XAVIER UNIV - LOUISIANA	R A HATHAWAY	LARC	T C TAYLOR	NCC 1 02036	235
49	YALE UNIV	D F CHAO	GRC	D LOEWENBERG	NAG 3 2722	146
49	YALE UNIV	D L URBAN	GRC	M D SMOOKE	NAG 3 2262	146

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
49	YALE UNIV	F P CHIARAMONTE	GRC	D LOEWENBERG	NAG 3 2477	146
49	YALE UNIV	K SACKSTEDER	GRC	D E ROSNER	NCC 3 691	148
49	YALE UNIV	M HASAN	GRC	D BLAWZDZIEWICZ	NAG 3 2704	146
49	YALE UNIV	R ROGERS	GRC	R E APFEL	NAG 3 2377	146
51	ALABAMA A&M UNIV	R C RICHMOND	MSFC	D KALE	NAG 8 1541	1
51	ARIZONA STATE UNIV	D J DESMARAIS	ARC	F G PICHEL	NCC 2 5411	23
51	ARIZONA STATE UNIV	L ROTHSCCHILD	ARC	R E BLAKENSHIP	NGT 2 52284	23
51	ARIZONA STATE UNIV	M MEYER	GSFC	D CRONIN	NAG 5 4131	19
51	ARIZONA STATE UNIV	M MEYER	GSFC	J FARMER	NAG 5 9507	20
51	BAYLOR COLL OF MED	M M AVERNER	ARC	H J BELLEN	NAG 2 1355	470
51	BAYLOR COLL OF MED	M M AVERNER	ARC	B B HASHEMI	NAG 2 1357	470
51	BAYLOR COLL OF MED	M M AVERNER	ARC	H J BELLEN	NAG 2 1496	470
51	BAYLOR COLL OF MED	C F SAWIN	JSC	B R ALFORD	NCC 9 58	470
51	BAYLOR COLL OF MED	D RISIN	JSC	B YOFEE	NAG 9 1361	470
51	BAYLOR COLL OF MED	N R PELLIS	JSC	A S RAJAN	NAG 8 1583	470
51	CALIFORNIA INST OF TECH	M M AVERNER	ARC	E H DAVIDSON	NAG 2 1541	41
51	CALIFORNIA INST OF TECH	M M AVERNER	ARC	M BRONNER-FRASER	NAG 2 1346	41
51	CALIFORNIA INST OF TECH	M M AVERNER	ARC	E M DAVIDSON	NAG 2 1368	41
51	CALIFORNIA INST OF TECH	M M AVERNER	ARC	E V ROTHENBERG	NAG 2 1370	41
51	CALIFORNIA INST OF TECH	M A MEYER	GSFC	G A BLAKE	NAG 5 11488	46
51	CALIFORNIA INST OF TECH	M MEYER	GSFC	G BLAKE	NAG 5 8822	43
51	CASE WESTERN RESERVE UNIV	M M AVERNER	ARC	S J MOORMAN	NAG 2 1356	401
51	COLORADO STATE UNIV	M FONDA	ARC	M CRISWELL	NCC 2 1268	121
51	COLUMBIA UNIV	M M AVRENER	ARC	D J WOLGEMUTH	NAG 2 1345	367
51	CORNELL UNIV	R K GLOBUS	ARC	M C VAN DER MEULEN	NCC 2 1201	377
51	CORNELL UNIV	B GUYNES	MSFC	R THORNE	NAG 8 1574	376
51	CREIGHTON UNIV	M M AVERNER	ARC	B FRITZSCH	NAG 2 1353	336
51	DARTMOUTH COLL	M M AVERNER	ARC	K PETERSON	NAG 2 1420	340
51	DARTMOUTH COLL	H K HIGGINBOTTAM	MSFC	U J GIBSON	NAG 8 1590	341
51	DREXEL UNIV	M M AVERNER	ARC	P I LELKES	NAG 2 1436	436
51	DREXEL UNIV	H SHAW	GSFC	M A WHEATLEY	NAG 5 11340	436
51	DREXEL UNIV	D RISIN	JSC	P LELKE	NCC 9 130	437
51	DUKE UNIV	M M AVERNER	ARC	G A WRAT	NAG 2 1377	390
51	DUKE UNIV	B GUYNES	MSFC	W E KRAUS	NAG 8 1581	391
51	EAST CAROLINA UNIV	A E RONCA	ARC	H W BURDEN	NCC 2 1165	391
51	ELIZABETH CITY STATE UNIV	J L HARRINGTON	GSFC	D BANERJEE	NAG 5 12554	392
51	EMORY UNIV	D RISIN	JSC	L CHUNG	NCC 9 144	180
51	EMORY UNIV	B GUYNES	MSFC	V CONTICELLO	NAG 8 1579	179
51	FLORIDA A&M UNIV	C M WINGET	ARC	M S SACHDEVA	NCC 2 1005	163
51	FLORIDA INST OF TECH	B GUYNES	MSFC	C HELMSTALTER	NAG 8 1582	164
51	GEORGIA INST OF TECH	M M AVERNER	ARC	H JO	NAG 2 1431	181
51	HARVARD UNIV	M M AVERNER	ARC	N M HOLBROOK	NAG 2 1417	281
51	HARVARD UNIV	M M AVERNER	ARC	N WANG	NAG 2 1509	281
51	HARVARD UNIV	G A SOFFEN	GSFC	C CAVANAUGH	NGT 5 101	283
51	HARVARD UNIV	M MEYER	GSFC	C M CAVANAUGH	NAG 5 10906	282
51	HOWARD UNIV	L PUTCHA	JSC	M W COOMES	NAG 9 977	154
51	INDIANA UNIV - BLOOMINGTON	A E RONCA	ARC	J R ALBERTS	NAG 2 1449	213
51	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	A NURRIDIN	HQ	R L DUCN	NGT 5 50203	213
51	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	B GUYNES	MSFC	C M TRAYCOFF	NAG 8 1586	213
51	JOHNS HOPKINS UNIV	C SAMS	JSC	D WIRTZ	NGT 9 65	252
51	JUDSON COLL-ELGIN ILLINOIS	M M AVERNER	ARC	E A JUERGENSMEYER	NAG 2 1512	199
51	KANSAS STATE UNIV	W E HINDS	ARC	S K CHAPES	NAG 2 1274	226
51	KENT STATE UNIV	M M AVERNER	ARC	L G LEFF	NAG 2 1497	409
51	LOUISIANA STATE UNIV - BATON ROUGE	M FONDA	ARC	J R BATTISTA	NAG 2 1460	230
51	LOUISIANA STATE UNIV - BATON ROUGE	M M AVERNER	ARC	V J LICATA	NAG 2 1511	231
51	LOUISIANA STATE UNIV - BATON ROUGE	M MEYYAPPAN	ARC	P VASHISTA	NCC 2 5440	232
51	MARSHALL UNIV	M M AVERNER	ARC	W B RHOTEN	NAG 2 1194	539
51	MASSACHUSETTS INST OF TECH	M M AVERNER	ARC	A L DEMAIN	NAG 2 1350	285
51	MASSACHUSETTS INST OF TECH	M M AVERNER	ARC	Y L WANG	NAG 2 1540	286
51	MASSACHUSETTS INST OF TECH	N R PELLIS	JSC	L FREED	NCC 8 174	296
51	MEDICAL COLL OF GEORGIA	M M AVERNER	ARC	P L MCNEIL	NAG 2 1416	187
51	MEDICAL COLL OF WISCONSIN	R D MACELROY	ARC	D A RILEY	NAG 2 1422	541
51	MEDICAL COLL OF WISCONSIN	W E HINDS	ARC	D A RILEY	NAG 2 956	541
51	MEDICAL UNIV OF SOUTH CAROLINA	M M AVERNER	ARC	S HOFFMAN	NAG 2 1415	461
51	MIAMI UNIV	C M WINGET	ARC	J Z KISS	NAG 2 1017	410
51	MIAMI UNIV	D REISS-BUBENHEIM	ARC	J Z KISS	NCC 2 1200	410

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
51	MICHIGAN STATE UNIV	B GUYNES	MSFC	L R MCCABE	NAG 8 1575	305
51	MISSISSIPPI STATE UNIV	B GUYNES	MSFC	W W WILSON	NAG 8 1837	324
51	MISSISSIPPI STATE UNIV	B V GUYNES	MSFC	W W WILSON	NAG 8 1566	324
51	MONTANA STATE UNIV	M F VASQUES	ARC	B H PYLE	NCC 2 1143	334
51	MOREHOUSE SCH MED	M M AVERNER	ARC	B J KLEMENT	NAG 2 1215	188
51	MOREHOUSE SCH MED	S M HING	ARC	G SONNENFELD	NCC 2 1262	188
51	MT SINAI SCH OF MED OF THE CUNY	M F VASQUES	ARC	G R HOLSTEIN	NCC 2 1173	379
51	MT SINAI SCH OF MED OF THE CUNY	M M AVERNER	ARC	G R HOLSTEIN	NAG 2 1191	379
51	MT SINAI SCH OF MED OF THE CUNY	W E HINDS	ARC	G R HOLSTEIN	NAG 2 946	378
51	NEW MEXICO HIGHLANDS UNIV	D S MCKAY	JSC	J C DEBACA	NAG 9 1168	358
51	NY UNIV	MM AVERNER	ARC	K D WALTON	NAG 2 1426	379
51	NY UNIV	W E HINDS	ARC	K D WALTON	NAG 2 951	379
51	NORTH CAROLINA STATE UNIV. - RALEIGH	M M AVERNER	ARC	I Y PERERA	NAG 2 1502	395
51	NORTH CAROLINA STATE UNIV. - RALEIGH	M M AVERNER	ARC	C BROWN	NAG 2 1566	395
51	NORTH CAROLINA STATE UNIV. - RALEIGH	J LETCHWORTH	KSC	D S BROWN	NAG10 308	396
51	NORTHERN ARIZONA UNIV	M L FONDA	ARC	J H WITTK	NCC 2 5356	24
51	OHIO STATE UNIV	M M AVERNER	ARC	M L EVANS	NAG 2 1411	410
51	OREGON HEALTH SCIENCES UNIV	M M AVERNER	ARC	M V DANILCHIK	NAG 2 1199	427
51	OREGON STATE UNIV	M M AVERNER	ARC	T L LOMAX	NAG 2 1341	427
51	PENN STATE UNIV. - UNIV. PARK	M M AVERNER	ARC	D J COSGROVE	NAG 2 1342	438
51	PENN STATE UNIV. - UNIV. PARK	M M AVERNER	ARC	S G GILROY	NAG 2 1366	438
51	PURDUE UNIV	C A CONLEY	ARC	C A MITCHELL	NGT 5 52285	218
51	PURDUE UNIV	M M AVERNER	ARC	D J MORRE	NAG 2 1344	215
51	PURDUE UNIV	R MACELROY	ARC	C MITCHELL	NAG 2 1389	215
51	RENSSELAER POLYTECH INST	M MEYER	GSFC	D WHITTET	NAG 5 9148	381
51	RICE UNIV	D R BUBENHIEM	ARC	K M BECKINGHAM	NCC 2 1356	474
51	ROCHESTER INST OF TECH	J A SMITH	GSFC	D SCHOTT	NAG 5 11009	382
51	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	A NURRIDDIIN	HQ	K C TING	NGT 5 50229	356
51	RUTGERS STATE UNIV OF NJ NEW BRUNS	K DAUES	JSC	L KERKHOF	NAG 9 1283	356
51	SAN FRANCISCO STATE UNIV	N D SEARBY	ARC	S WEINSTEIN	NCC 2 1277	54
51	SAN JOSE STATE UNIV	K W CULLINGS	ARC	C A BRINEGAR	NCC 2 5311	57
51	SAN JOSE STATE UNIV	N G DAUNTON	ARC	R A FOX	NCC 2 1096	56
51	STANFORD UNIV	C A CONLEY	ARC	S K KIM	NCC 2 1208	64
51	STANFORD UNIV	J TRENT	ARC	S KARLIN	NCC 2 5497	66
51	STANFORD UNIV	M M AVERNER	ARC	D BERSTEIN	NAG 2 1354	59
51	STANFORD UNIV	N MANSOUR	ARC	E F DARVE	NCC 2 5502	66
51	STANFORD UNIV	R D BOYLE	ARC	J RAYMOND	NGT 2 52282	66
51	STANFORD UNIV	S LIANG	ARC	R B LAUGHLIN	NCC 2 5475	65
51	STATE UNIV OF NY - STONY BROOK	M M AVERNER	ARC	M A MORROW	NAG 2 1379	384
51	STATE UNIV OF NY - STONY BROOK	M M AVERNER	ARC	M HADJIARYROU	NAG 2 1517	385
51	STATE UNIV OF NY COLL - PURCHASE	M A MEYER	GSFC	D J FLYNN	NAG 5 4691	387
51	TENNESSEE STATE UNIV	J HARRINGTON	GSFC	T P GARY	NCC 5 657	464
51	TEXAS A&M UNIV	M F VASQUES	ARC	M D DELP	NCC 2 1166	479
51	TEXAS A&M UNIV	M M AVERNER	ARC	M D DELP	NAG 2 1340	476
51	TEXAS A&M UNIV	M ANDERSON	JSC	G COTE	NCC 8 169	480
51	THE UNIV OF CENTRAL FLORIDA	C QUINCY	KSC	J F WEISHAMPEL	NAG10 278	168
51	THOMAS JEFFERSON UNIV	D RISEN	JSC	A FERTALA	NAG 9 1342	448
51	THOMAS JEFFERSON UNIV	F A CUCINOTTA	JSC	C ILIAKIS	NAG 9 1023	448
51	TULANE UNIV	B E GIRTEN	ARC	C A NICKERSON	NCC 2 1362	234
51	TULANE UNIV	M M AVERNER	ARC	C A NICKERSON	NAG 2 1378	234
51	TULANE UNIV	N PELLIS	JSC	K O'CONNER	NAG 9 826	234
51	U OF ARKANSAS MAIN CAMP-FAYETTEVILLE	R P TRAVIS	SSC	S BAJAWA	NGT13 52753	40
51	UNIV HOUSTON-HOUSTON	K F ROBINSON	MSFC	P VEKILOV	NAG 8 1857	483
51	UNIV OF ALABAMA - BIRMINGHAM	J WEST	MSFC	L DELUCAS	NCC 8 246	7
51	UNIV OF ALABAMA - BIRMINGHAM	T OWEN	MSFC	L J DELUCAS	NCC 8 172	7
51	UNIV OF ALABAMA - HUNTSVILLE	A E RONCA	ARC	R F EATON	NGT 2 52283	14
51	UNIV OF ALABAMA - HUNTSVILLE	B GUYNES	MSFC	R J NAVMANN	NAG 8 1577	12
51	UNIV OF ALABAMA - HUNTSVILLE	C R TALLEY	MSFC	F ROSENBERGER	NAG 8 1354	11
51	UNIV OF ALABAMA - HUNTSVILLE	H K HIGGINBOTHAM	MSFC	P G VEKILOV	NAG 8 1790	12
51	UNIV OF ALABAMA - HUNTSVILLE	M L PUSEY	MSFC	J D NG	NCC 8 203	13
51	UNIV OF ALABAMA - UNIV	M M AVERNER	ARC	J M O'DONNELL	NAG 2 1499	15
51	UNIV OF ARIZONA	M FONDA	ARC	W NICHOLSON	NCC 2 1342	37
51	UNIV OF ARIZONA	M M AVERNER	ARC	M E TISCHER	NAG 2 1187	25
51	UNIV OF ARIZONA	M M AVERNER	ARC	D DELUCA	NAG 2 1369	25
51	UNIV OF ARIZONA	R D MACELROY	ARC	K R SRIDHAR	NCC 2 5487	38
51	UNIV OF ARIZONA	R S BAIRD	JSC	K R SRIDHAR	NAG 9 923	36

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
51	UNIV OF CALIFORNIA - BERKELEY	C MCKAY	ARC	R ADMUNDSON	NCC 2 5455	76
51	UNIV OF CALIFORNIA - BERKELEY	M M AVERNER	ARC	J C GERHART	NAG 2 1361	67
51	UNIV OF CALIFORNIA - BERKELEY	M M AVERNER	ARC	L J FELDMAN	NAG 2 1351	67
51	UNIV OF CALIFORNIA - BERKELEY	M M AVERNER	ARC	D A WEISBLAT	NAG 2 1359	67
51	UNIV OF CALIFORNIA - DAVIS	B E GIRTIN	ARC	T M HOBAN-HIGGINS	NCC 2 1352	81
51	UNIV OF CALIFORNIA - DAVIS	E M HOLTON	ARC	C A FULLER	NCC 2 1271	81
51	UNIV OF CALIFORNIA - DAVIS	M M AVERNER	ARC	C A FULLER	NAG 2 1451	79
51	UNIV OF CALIFORNIA - DAVIS	M M AVERNER	ARC	B A HORWITZ	NAG 2 1494	80
51	UNIV OF CALIFORNIA - DAVIS	R D MACELROY	ARC	T M HOBAN-HIGGINS	NAG 2 1404	79
51	UNIV OF CALIFORNIA - DAVIS	W E HINDS	ARC	C A FULLER	NAG 2 944	79
51	UNIV OF CALIFORNIA - IRVINE	A POHORILLE	ARC	J K LANYI	NCC 2 5404	85
51	UNIV OF CALIFORNIA - IRVINE	C W LLOYD	JSC	R E PURDY	NAG 9 1149	85
51	UNIV OF CALIFORNIA - IRVINE	B GUYNES	MSFC	A J MALKIN	NAG 8 1569	85
51	UNIV OF CALIFORNIA - LOS ANGELES	M M AVERNER	ARC	T J TIDBALL	NAG 2 1193	86
51	UNIV OF CALIFORNIA - LOS ANGELES	M M AVERNER	ARC	L F HOFFMAN	NAG 2 1222	86
51	UNIV OF CALIFORNIA - LOS ANGELES	R E GRINDELAND	ARC	V R EDGERTON	NGT 2 52265	94
51	UNIV OF CALIFORNIA - SAN DIEGO	M M AVERNER	ARC	L Z HOLLAND	NAG 2 1376	96
51	UNIV OF CALIFORNIA - SAN DIEGO	M MEYER	GSFC	G ARRHENIUS	NAG 5 9566	99
51	UNIV OF CALIFORNIA - SAN DIEGO	M MEYER	HQ	P L BADA	NAG 5 4546	96
51	UNIV OF CALIFORNIA - SAN DIEGO	B GUYNES	MSFC	J A FRANGOS	NAG 8 1589	102
51	UNIV OF CALIFORNIA - SAN FRANCISCO	R K GLOBUS	ARC	C H DAMSKY	NCC 2 1194	105
51	UNIV OF CALIFORNIA - SAN FRANCISCO	R L JAFFE	ARC	M A WILSON	NCC 2 5412	105
51	UNIV OF CALIFORNIA - SANTA CRUZ	B BEBOUT	ARC	J ZEHR	NCC 2 5483	113
51	UNIV OF CALIFORNIA - SANTA CRUZ	B N BEBOUT	ARC	J P ZEHR	NCC 2 5370	113
51	UNIV OF CALIFORNIA - SANTA CRUZ	M KLISS	ARC	G MILLHAUSER	NCC 2 5358	113
51	UNIV OF CHICAGO	R D MAC-ELROY	ARC	N H PATEL	NAG 2 6050	203
51	UNIV OF COLORADO - BOULDER	M FONDA	ARC	R PAPPALARDO	NCC 2 1340	138
51	UNIV OF COLORADO - BOULDER	M KLISS	ARC	G HEYENGA	NCC 2 1145	138
51	UNIV OF CONNECTICUT	B M BEBOUT	ARC	P T VISSCHER	NCC 2 1067	145
51	UNIV OF CONNECTICUT	D J DESMARAIS	ARC	P T VISSCHER	NCC 2 5481	145
51	UNIV OF CONNECTICUT	M MEYER	GSFC	J P GOGARTEN	NAG 5 11470	144
51	UNIV. OF CONNECTICUT HEALTH CTR	M M AVERNER	ARC	D W ROWE	NAG 2 1434	144
51	UNIV. OF CONNECTICUT HEALTH CTR	S LIANG	ARC	Z Y PENG	NCC 2 5470	144
51	UNIV OF DISTRICT OF COLUMBIA	D MENCHAN	GSFC	H L PHELPS	NAG 5 9545	160
51	UNIV OF FLORIDA	R K GLOBUS	ARC	T J WRONSKI	NCC 2 1197	173
51	UNIV OF FLORIDA	C D BLACK	KSC	H BECK	NGT10 52632	174
51	UNIV OF FLORIDA	D FITCH	KSC	W M PHILLIPS	NAG10 316	173
51	UNIV OF FLORIDA	D R COX	KSC	R J FERL	NAG10 291	172
51	UNIV OF HAWAII AT MANOA - HONOLULU	M M AVERNER	ARC	M Q MARTINDALE	NAG 2 1519	190
51	UNIV OF HAWAII AT MANOA - HONOLULU	M M AVERNER	ARC	M Q MARTINDALE	NAG 2 1374	190
51	UNIV OF ILLINOIS - CHICAGO CIRCLE	M M AVERNER	ARC	A LYSAKOWSKI	NAG 2 1358	206
51	UNIV OF IOWA	M ANDERSON	JSC	V G RODGERS	NAG 8 1591	225
51	UNIV OF IOWA	S GONDA	JSC	D W MURHAMMER	NAG 8 1592	225
51	UNIV OF IOWA	B GUYNES	MSFC	J WIENECK	NAG 8 1588	225
51	UNIV OF IOWA	B GUYNES	MSFC	T L PEEPLES	NAG 8 1593	225
51	UNIV OF KANSAS MEDICAL CTR	C M WINGET	ARC	J S TASH	NAG 2 1016	228
51	UNIV OF KANSAS MEDICAL CTR	M M AVERNER	ARC	J S TASH	NAG 2 1491	228
51	UNIV OF KENTUCKY	M M AVERNER	ARC	S DAUNERT	NAG 2 1363	228
51	UNIV OF LOUISVILLE	J W HINES	ARC	E WANG	NCC 2 5373	230
51	UNIV OF LOUISVILLE	J W HINES	ARC	E WANG	NCC 2 5374	230
51	UNIV OF MARYLAND - COLL PARK	M M AVERNER	ARC	S I SUKHAREV	NAG 2 1352	254
51	UNIV OF MARYLAND - COLL PARK	D E WALTER	GSFC	L W ADAMS	NAG 5 8678	259
51	UNIV OF MARYLAND BALTIMORE	B GUYNE	MSFC	K COLLINS	NAG 8 1573	271
51	UNIV OF MASSACHUSETTS - AMHERST	M M AVERNER	ARC	M E MUSGRAVE	NAG 2 1375	299
51	UNIV OF MASSACHUSETTS WORCESTER	M M AVERNER	ARC	Y L WANG	NAG 2 1197	298
51	UNIV OF MASSACHUSETTS WORCESTER	M M AVERNER	ARC	P J MACCAFFERY	NAG 2 1438	298
51	UNIV OF MASSACHUSETTS WORCESTER	M M AVERNER	ARC	Y L WANG	NAG 2 1495	298
51	UNIV OF MD - BIOTECH INST - COLLEGE PARK	B L WOOD	ARC	R R COLWELL	NAG 2 1195	254
51	UNIV. OF MED & DENTISTRY-NJ.	M M AVERNER	ARC	S J MOORMAN	NAG 2 1556	357
51	UNIV OF MED AND DENTISTRY	C E WADE	ARC	T P STEIN	NCC 2 1354	357
51	UNIV OF MED AND DENTISTRY	M M AVERNER	ARC	R S NOWAKOWSKI	NAG 2 1367	357
51	UNIV OF MIAMI	D RISEN	JSC	L INVERARDI	NAG 9 1346	175
51	UNIV OF MICHIGAN - ANN ARBOR	D A REISS-BUBENHEIM	ARC	K I CLARK	NCC 2 856	314
51	UNIV OF MINN	B GUYNES	MSFC	W S HU	NAG 8 1349	321
51	UNIV OF MISSOURI - COLUMBIA	M M AVERNER	ARC	F W BOOTH	NAG 2 1372	326
51	UNIV OF NEVADA - RENO	R T WHALEN	ARC	E WANG	NCC 2 5408	339

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
51	UNIV OF NEW ORLEANS	M T FLYNN	ARC	Z ROSENZWEIG	NCC 2 5376	234
51	UNIV OF NORTH CAROLINA - CHAPEL HILL	M M AVERNER	ARC	M YAMAUCHI	NAG 2 1188	398
51	UNIV OF NORTH CAROLINA - CHAPEL HILL	B GUYNES	MSFC	C W CARTER	NAG 8 1580	398
51	UNIV OF OKLAHOMA - NORMAN	D BLAKE	ARC	R D ELMORE	NCC 2 5382	426
51	UNIV OF OKLAHOMA - NORMAN	D REISS-BUBENHEIM	ARC	J N THOMPSON	NCC 2 1355	426
51	UNIV OF OKLAHOMA - NORMAN	M M AVERNER	ARC	J T THOMPSON	NAG 2 1427	425
51	UNIV OF OREGON - EUGENE	B M BEBATH	ARC	R W CASTENHOLZ	NCC 2 5409	431
51	UNIV OF PENNSYLVANIA	P DOTY	MSFC	D A	NAG 8 1683	449
51	UNIV OF PITTSBURGH	M M AVERNER	ARC	C D BALABAN	NAG 2 1186	450
51	UNIV OF PUERTO RICO - MAYAGUEZ	R TRAVIS	SSC	F GILBES	NAG13 99029	551
51	UNIV OF ROCHESTER	D RISEN	JSC	J H WU	NAG 9 1360	389
51	UNIV OF SAN FRANCISCO	E A ALMEIDA	ARC	C H DAMSKY	NCC 2 1282	114
51	UNIV OF SOUTH ALABAMA	V L KLOERIS	JSC	J CRUTHIRDS	NAG 9 1282	16
51	UNIV OF SOUTH ALABAMA	S NASH-STEVENSON	MSFC	R HONKANEN	NGT 8 52896	16
51	UNIV OF SOUTH FLORIDA	D RISIN	JSC	J L BECKER	NAG 9 1341	177
51	UNIV OF SOUTH FLORIDA	S R GONDA	JSC	J L BECKER	NAG 9 648	177
51	UNIV OF SOUTHWESTERN LOUISIANA	R D MACELROY	ARC	K H HASENSTEIN	NAG 2 1423	235
51	UNIV OF SOUTHWESTERN LOUISIANA	W M KNOTT	KSC	K H HASENSTEIN	NAG10 190	235
51	UNIV OF TENNESSEE - KNOXVILLE	D JAN	JPL	G S SAYLER	NAG 9 1080	467
51	UNIV OF TEXAS - AUSTIN	M M AVERNER	ARC	S J ROUX	NAG 2 1347	488
51	UNIV OF TEXAS - AUSTIN	M M AVERNER	ARC	S M SHANKLAND	NAG 2 1349	488
51	UNIV OF TEXAS - AUSTIN	D SCHULTZ	KSC	D ROUX	NAG10 295	492
51	UNIV OF TEXAS - AUSTIN	W M KNOTT	KSC	S J POUX	NAG10 202	492
51	UNIV OF TEXAS	D REISS-BUBENHEIM	ARC	S T BRADY	NAG 2 962	485
51	UNIV. OF TEXAS MD ANDERSON CANCER CTR	M M AVERNER	ARC	B W MCINTYRE	NAG 2 1505	485
51	UNIV. OF TEXAS MD ANDERSON CANCER CTR	S R GONDAS	JSC	C A SAVARY	NAG 8 1347	486
51	UNIV. OF TEXAS MD ANDERSON CANCER CTR	S R GONDAS	JSC	E H GRIMM	NAG 8 1348	486
51	UNIV. OF TEXAS MD ANDERSON CANCER CTR	D RISEN	MSFC	E A GRIMM	NAG 8 1570	486
51	UNIV OF TEXAS MED BRAN - GALVESTON	C M WINGET	ARC	D NIESSEL	NCC 2 1160	485
51	UNIV OF TEXAS MED BRAN - GALVESTON	B PALOSKI	JSC	G KAUFMAN	NCC 9 123	485
51	UNIV OF TEXAS MED BRAN - GALVESTON	C HAVEN	JSC	M MCGINNIS	NAG 9 98138	484
51	UNIV OF TEXAS MED BRAN - GALVESTON	C W LLOYD	JSC	C W COOPER	NGT 9 47	485
51	UNIV OF TEXAS-GRAD SCH OF BIOMED SCI.	B GUYNES	MSFC	P G VEKILOV	NAG 8 1824	485
51	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	M M AVERNER	ARC	M E MARSH	NAG 2 1498	486
51	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	O SANTOS	ARC	P J DUKE	NAG 2 1261	486
51	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	C W LLOYD	JSC	J WEINDER	NGT 9 46	487
51	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	M R POWELL	JSC	C FIFE	NAG 9 952	486
51	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	S GONDAS	JSC	A D KULKARNI	NCC 8 168	486
51	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	B V GUYNES	MSFC	L P RUTZKY	NAG 8 1585	486
51	UNIV OF TOLEDO	B GUYNES	MSFC	C A SCHALL	NAG 8 1578	422
51	UNIV OF VIRGINIA	D R MORRISON	MSFC	L W CHUNG	NCC 8 171	522
51	UNIV OF WASHINGTON	J H BELL	ARC	J B CALLIS	NGT 2 52281	537
51	UNIV OF WASHINGTON	M M AVERNER	ARC	J S STONE	NAG 2 1514	529
51	UNIV OF WISCONSIN - MADISON	M M AVERNER	ARC	P H MASSON	NAG 2 1189	541
51	UNIV OF WISCONSIN - MADISON	M M AVERNER	ARC	E SCHULTZ	NAG 2 1220	541
51	UNIV OF WISCONSIN - MADISON	M M AVERNER	ARC	P MASSON	NAG 2 1336	542
51	UNIV OF WISCONSIN - MADISON	M M AVERNER	ARC	P H MASSON	NAG 2 1492	542
51	UNIV OF WISCONSIN - MADISON	M M AVERNER	ARC	E SCHULTZ	NAG 2 1510	542
51	UNIV OF WISCONSIN - MILWAUKEE	D R MORRISON	JSC	P I LELKES	NCC 8 173	549
51	UTAH STATE UNIV	C P MCKAY	ARC	L S POWERS	NCC 2 5466	501
51	UTAH STATE UNIV	R M WHEELER	KSC	D DEWALD	NGT10 52631	502
51	WAKE FOREST UNIV	M M AVERNER	ARC	G K MUDAAY	NAG 2 1203	399
51	WAKE FOREST UNIV	M M AVERNER	ARC	G K MUDAY	NAG 2 1507	399
51	WASHINGTON STATE UNIV	M M AVERNER	ARC	N G LEWIS	NAG 2 1513	538
51	WASHINGTON UNIV - ST. LOUIS	M M AVERNER	ARC	J B SKEATH	NAG 2 1500	329
51	WASHINGTON UNIV - ST. LOUIS	M M AVERNER	ARC	D E ANGELAKI	NAG 2 1493	329
51	WAYNE STATE UNIV	M M AVERNER	ARC	D A RAPPOLEE	NAG 2 1503	317
51	WAYNE STATE UNIV	S P COLOMBANO	ARC	K PETER ZAUNER	NCC 2 1189	317
51	WAYNE STATE UNIV	B WOOLFORD	JSC	L ZAMORANO	NAG 9 1183	317
51	WAYNE STATE UNIV	C GUIDRY	JSC	S A DULCHAVSKY	NAG 9 1432	317
51	WOODS HOLE OCEANOGRAPHIC INST	M MEYER	GSFC	D M HAYES	NAG 5 9422	302
51	YALE UNIV	D R BUBENHEIM	ARC	H S KESHISHIAN	NAG 2 1433	146
51	YALE UNIV	M M AVERNER	ARC	R G KALB	NAG 2 1504	146
51	YALE UNIV	M MEYER	GSFC	D SOLL	NAG 5 9554	147
51	YALE UNIV	B GUYNES	MSFC	R E APFEL	NAG 8 1351	147
54	ALABAMA A&M UNIV	M H KLISS	ARC	C A BEYL	NAG 2 1175	1

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
54	ARIZONA STATE UNIV	D RISEN	JSC	B C TOWE	NAG 9 1359	22
54	CLEVELAND STATE UNIV	T M SCOTT	GRC	D CLAPHAM	NAG 3 2664	406
54	MONTANA STATE UNIV	D J DES MARAIS	ARC	D M WARD	NCC 2 1073	334
54	MONTANA STATE UNIV	K CULLINGS	ARC	J HENSON	NCC 2 5445	334
54	NORTHWESTERN UNIV	D RUSSO	JSC	R M LUEPTOW	NAG 9 1297	201
54	PENN STATE UNIV. - UNIV. PARK	D RUSSO	JSC	M V PISHKO	NAG 9 1372	445
54	PONCE SCH OF MED	H L D'ANTONI	ARC	J L MATTA	NAG 2 1176	550
54	RICE UNIV	J C GRAF	JSC	F K TITTEL	NGT 9 19	475
54	STEVENS INST OF TECH	J GRAF	JSC	G P KORFIATIS	NAG 9 1063	357
54	TEXAS A&M UNIV	D RUSSO	JSC	M V PISHKO	NAG 9 1277	478
54	TEXAS SOUTHERN UNIV	L M ARMENDARIZ	JSC	G RAMESH	NAG 9 1414	482
54	U OF ARKANSAS MAIN CAMP-FAYETTEVILLE	C P MCKAY	ARC	T A KRAL	NGT 2 52243	40
54	UNIV OF ARIZONA	C A DARBY	MSFC	P H SMITH	NAG 8 1654	36
54	UNIV OF CALIFORNIA - BERKELEY	D J DES MARAIS	ARC	N R PACE	NGT 2 52233	77
54	UNIV OF CALIFORNIA - SAN DIEGO	K ARRIGO	GSFC	D LUBIN	NAG 5 6414	97
54	UNIV OF CONNECTICUT	M S BURRELL	GSFC	R COLWELL	NGT 5 82	145
54	UNIV OF FLORIDA	K R DAUES	JSC	J J WARWICK	NCC 9 110	173
54	UNIV OF MARYLAND - COLL PARK	D E SQUIBB	GSFC	L W ADAMS	NAG 5 11399	264
54	UNIV OF MARYLAND - COLL PARK	D RISIN	JSC	J DIRUGGIERO	NCC 9 147	269
54	UNIV OF MARYLAND BALTIMORE COUNTY	F A CUCINOTTA	JSC	B M RABIN	NAG 9 1190	274
54	UNIV OF MASSACHUSETTS BOSTON	R P TRAVIS	SSC	J URBAN-RICH	NGT13 52756	302
54	UNIV OF MD - BIOTECH INST - COLLEGE PARK	S GONDA	JSC	J DI RUAGIERO	NCC 8 175	254
54	UNIV OF MIAMI	L GUILD	ARC	P KRAMER	NCC 2 5500	176
54	UNIV OF NORTH CAROLINA-GREENSBORO	D RUSSO	JSC	C N STEWART	NAG 9 1296	399
54	UNIV OF PUERTO RICO-RIO PIEDRAS	W J LOVE	MSFC	B R WEINER	NAG 8 1709	552
54	UNIV OF TEXAS-PAN AMERICAN	S GONZALEZ	JSC	R FOWLER	NAG 9 1169	485
54	UNIV OF WISCONSIN - MADISON	A L MATISAK	MSFC	W L ZHOU	NCC 8 129	548
54	UTAH STATE UNIV	R M WHEELER	KSC	B G BUGBEE	NAG 9 999	501
54	VIRGINIA COMMONWEALTH UNIV	C M BUNTIN	JSC	H B CHERMSIDE	NAS 9 19541	527
54	WASHINGTON STATE UNIV	M M AVERNER	ARC	N G LEWIS	NAG 2 1198	538
55	CORNELL UNIV	R WHEELER	KSC	L ALBRIGHT	NGT10 52623	378
55	INST AMER INDIAN & AK NATIVE CULT & DEV	W LOVE	MSFC	S SULNA	NAG 8 1730	357
55	INST AMER INDIAN & AK NATIVE CULT & DEV	W LOVE	MSFC	W COFFEY	NAG 8 1860	357
55	IOWA STATE UNIV	H LANE	JSC	D OLSEN	NCC 9 100	222
55	LOUISIANA STATE UNIV - BATON ROUGE	R MCKELLIP	SSC	B R LEONARD	NCC13 02003	232
55	MISSISSIPPI VALLEY STATE UNIV.	G CARTER	JSC	R BAHADUR	NAG13 98004	325
55	MISSISSIPPI VALLEY STATE UNIV.	R TRAVIS	JSC	R BAHADUR	NAG13 99026	325
55	OHIO STATE UNIV	G ETHERIDGE	KSC	F SACK	NAG10 263	414
55	OHIO STATE UNIV	J C SAGER	KSC	P LING	NAG10 320	414
55	PRAIRIE VIEW A&M UNIV	D S MCKAY	JSC	R CUERO	NAG 9 1241	471
55	TEXAS A&M UNIV	C T BOURLAND	JSC	R L RICHTER	NAG 9 1119	478
55	TEXAS A&M UNIV	D G SICKOREZ	JSC	R W WEAVER	NGT 9 34	481
55	TEXAS SOUTHERN UNIV	L ARMENDARIZ	JSC	O A JEJELOWO	NAG 9 1194	482
55	TEXAS SOUTHERN UNIV	L ARMENDARIZ	JSC	G A JEJEDOWO	NAG 9 1227	482
55	TUSKEGEE UNIV	L M ARMENDARIZ	JSC	D MORTLEY	NAG 9 1408	6
55	UNIV OF ARIZONA	D BARTA	JSC	G GIACOMELLI	NAG 9 1378	36
55	UNIV OF FLORIDA	J C SAGER	KSC	R A BUCKLIN	NAG10 293	172
55	UNIV OF FLORIDA	W M KNOTT	KSC	R J FERL	NAG10 145	172
55	UNIV OF MAINE - ORONO	B GRAHAM	JSC	S SADER	NAG13 98008	236
55	UNIV OF VIRGINIA	R WHEELER	KSC	A MILLS	NGT10 52620	523
55	UTAH STATE UNIV	D BARTA	JSC	B BUGBEE	NAG 9 1237	501
55	UTAH STATE UNIV	T FRISBLE	SSC	D RAMSEY	NAG13 02058	501
56	BAYLOR COLL OF MED	C LLOYD	JSC	B J SCHWARTZ	NAG 9 1158	470
56	BAYLOR COLL OF MED	L C SHACKELFORD	JSC	A D LE BLANC	NCC 9 61	470
56	BAYLOR COLL OF MED	C R TALLEY	MSFC	B YOFE	NAG 8 1383	470
56	BOSTON UNIV	M ANDERSON	JSC	C J DE LUCA	NCC 9 127	279
56	BROWN UNIV	J JONES	JSC	M RUTHERFORD	NAG 9 1302	455
56	CASE WESTERN RESERVE UNIV	J M SANKOVIC	GRC	J R KADAMBI	NAG 3 2620	401
56	COLORADO SCH OF MINES	D RISIN	JSC	D W. M. MARR	NAG 9 1364	118
56	COLUMBIA UNIV	P P FUNG	ARC	D W LANDY	NAS 2 02039	371
56	DARTMOUTH COLL	C LLYOD	JSC	J BUCKLEY	NAG 9 1387	342
56	DARTMOUTH COLL	D BELL	JSC	J BUCKEY	NAG 9 1088	341
56	HOWARD UNIV	R SRIDHAR	MSFC	R SRIDHAR	NCC 8 184	154
56	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	K BLANDING	GSFC	F PAVALKO	NGT 5 50291	213
56	JOHNS HOPKINS UNIV	F A CUCINOTTA	JSC	J DICELLO	NGT 9 50	252
56	KENT STATE UNIV	C LLOYD	JSC	D D MACLEAN	NAG 9 1389	409

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
56	LOMA LINDA UNIV	C LLOYD	JSC	L M GREEN	NAG 9 1452	52
56	MASSACHUSETTS INST OF TECH	J W HINES	ARC	T M SWAGER	NAS 2 02056	294
56	MASSACHUSETTS INST OF TECH	B WOOLFORD	JSC	D J NEWMAN	NAG 9 1003	293
56	MEDICAL UNIV OF SOUTH CAROLINA	N R PELLIS	MSFC	A J SMOKA	NAG 8 1385	461
56	MOREHOUSE COLL	K KRISHEN	JSC	K DUTT	NAG 9 964	188
56	MOREHOUSE SCH MED	C SAMS	JSC	M THIERRY-PALMER	NCC 9 112	188
56	MOREHOUSE SCH MED	K KRISHEN	JSC	R SRIDARAN	NAG 9 963	188
56	NY UNIV	F A CUCINOTTA	JSC	F J BURNS	NAG 9 1024	379
56	NORTHWESTERN UNIV	E STANSBERY	JSC	K MCKEEGAN	NAS 9 02003	201
56	PENN STATE UNIV. - UNIV. PARK	C W LLOYD	JSC	P CAVANAGH	NAG 9 1264	445
56	PENN STATE UNIV. - UNIV. PARK	M KAMMAN	JSC	P CAVANAGH	NAS 9 99095	445
56	PENN STATE UNIV -HERSHEY MED.	C F SAWIN	JSC	L I SINOWAY	NAG 9 1044	438
56	PONCE SCH OF MED	H L D'ANTONI	ARC	J L MATTA	NAG 2 1385	550
56	STANFORD UNIV	J W HINES	ARC	S A SCHENDEL	NCC 2 1010	64
56	STANFORD UNIV	R MAH	ARC	S S JEFFREY	NCC 2 5489	66
56	STANFORD UNIV	R T WHALEN	ARC	N J PELC	NCC 2 5434	65
56	STATE UNIV OF NY - STONY BROOK	S MCCOLLUM	JSC	C RUBIN	NAG 9 1433	386
56	THOMAS JEFFERSON UNIV	D RISIN	JSC	I M SHAPIRO	NAG 9 1400	448
56	TUFTS UNIV	P M DOTY	MSFC	D L KAPLAN	NAG 8 1699	298
56	TULANE UNIV	D RIIN	JSC	K C O'CONNOR	NAG 9 1351	234
56	TULANE UNIV	D RISEN	JSC	T HAMMOND	NAG 9 1344	234
56	TULANE UNIV	D RISIN	JSC	C A NICKERSON	NAG 9 1350	234
56	TULANE UNIV	S R GONDA	JSC	T HAMMOND	NAG 8 1362	234
56	UNIV HOUSTON-HOUSTON	D FEEBACK	JSC	J DAVIS	NCC 9 151	484
56	UNIV HOUSTON-HOUSTON	L PUTCHA	JSC	D CHOW	NAG 9 1453	484
56	UNIV OF ALABAMA - HUNTSVILLE	M CROUCH	MSFC	M BANISH	NAG 8 1476	12
56	UNIV OF ARIZONA	J SCHONFELD	ARC	J SZIVEK	NCC 2 5375	37
56	UNIV OF CALIFORNIA - SAN DIEGO	E M HOLTON	ARC	A R HARGENS	NCC 2 1133	103
56	UNIV OF CALIFORNIA - SAN DIEGO	E M HOLTON	ARC	C ROGERS	NCC 2 1196	103
56	UNIV OF CALIFORNIA - SAN DIEGO	D RISEN	JSC	R L SAH	NAG 8 1571	102
56	UNIV OF CALIFORNIA - SAN DIEGO	F H FARMER	LARC	A R HARGENS	NAG 1 02092	96
56	UNIV OF CALIFORNIA - SAN FRANCISCO	C W LLOYD	JSC	J P MURNANE	NAG 9 1261	104
56	UNIV OF CALIFORNIA - SAN FRANCISCO	D BAUMANN	JSC	T LANG	NAS 9 99055	104
56	UNIV OF FLORIDA	D A TIPTON	KSC	A H NEIMS	NAS10 96004	173
56	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J W HINES	ARC	S A BOPPART	NAS 2 02057	211
56	UNIV OF MASSACHUSETTS WORCESTER	D RISEN	JSC	W J SCHWARTZ	NAG 9 1356	298
56	UNIV OF MED AND DENTISTRY	C W LLOYD	JSC	T P STEIN	NAG 9 1162	357
56	UNIV OF MICHIGAN - ANN ARBOR	J W HINES	ARC	J R BAKER	NAS 2 02069	314
56	UNIV OF OKLAHOMA - NORMAN	B WOOLFORD	JSC	R SCHEGEL	NAG 9 1280	426
56	UNIV OF PENNSYLVANIA	B WOOLFORD	JSC	N BADLER	NAG 9 1279	449
56	UNIV OF PITTSBURGH	J HINES	ARC	S ASHER	NAS 2 02058	451
56	UNIV OF PITTSBURGH	C W LLOYD	JSC	T H MONK	NAG 9 1234	451
56	UNIV OF SAN DIEGO	D RISIN	JSC	R SAH	NAG 9 1354	114
56	UNIV OF SOUTH FLORIDA	D RISEN	JSC	S SAPORTA	NAG 9 1365	177
56	UNIV OF TEXAS - AUSTIN	C LLOYD	JSC	R L HELMREICH	NAG 9 1275	492
56	UNIV OF TEXAS	C W LLOYD	JSC	C G CRANDALL	NAG 9 1033	485
56	UNIV. OF TEXAS MD ANDERSON CANCER CTR	C LLOYD	JSC	J REUBEN	NAG 9 1454	486
56	UNIV OF TEXAS MED BRAN - GALVESTON	J W HINES	ARC	J F LEARY	NAS 2 02059	484
56	UNIV OF TEXAS MED BRAN - GALVESTON	A LEE	JSC	A FERRANDO	NAS 9 97147	484
56	UNIV OF TEXAS MED BRAN - GALVESTON	C LLOYD	JSC	A A FERRANDO	NAG 9 1155	484
56	UNIV OF TEXAS MED BRAN - GALVESTON	M ANDERSON	JSC	A D BARRET	NAS 9 01006	484
56	UNIV OF TEXAS MED BRAN - GALVESTON	V CHOPPA	MSFC	V CHOPPA	NCC 8 170	485
56	UNIV OF TX-HLTH SCI CTR-SAN ANTONIO	S GONDA	JSC	J M JESSUP	NAG 9 1206	485
56	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	C SAWIN	JSC	B BUTLER	NAG 9 1040	486
56	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	D RISIN	JSC	L P RUTZKY	NAG 9 1353	486
56	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	J T JAMES	JSC	A HOLIAN	NAG 9 1144	486
56	UTAH STATE UNIV	K DAUES	JSC	G BINGHAM	NAG 9 1284	501
56	UTAH STATE UNIV	D RISEN	SSC	T HAMMOND	NCC13 02001	502
56	VIRGINIA COMMONWEALTH UNIV	A LEE	JSC	D ECKBURG	NAS 9 19539	527
59	ALABAMA A&M UNIV	A CARDENAS	ARC	P G KALE	NAG 2 1130	1
59	ARIZONA STATE UNIV	R A GRYMES	ARC	J D FARMER	NCC 2 1051	22
59	ARIZONA STATE UNIV	R V MORRIS	JSC	P R CHRISTENSON	NAG 9 1331	22
59	BAYLOR COLL OF MED	C LLOYD	JSC	C SMITH	NAG 9 1253	470
59	BAYLOR COLL OF MED	C W LLOYD	JSC	A D LE BLANC	NAG 9 1151	470
59	BAYLOR COLL OF MED	F A CUCINOTTA	JSC	L E PETERSON	NAG 9 1052	470
59	BRANDEIS UNIV	C W LLOYD	JSC	J LACKNER	NAG 9 1038	279

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
59	CALIFORNIA INST OF TECH	P DOTY	MSFC	W K RHIM	NAG 8 1743	48
59	CALIFORNIA INST OF TECH	P DOTY	MSFC	W L JOHNSON	NAG 8 1744	48
59	COLORADO STATE UNIV	S POTTER	ARC	G VOGT	NCC 2 1099	120
59	COLORADO STATE UNIV	W M KNOTT	KSC	A N REDDY	NAG10 234	120
59	COLUMBIA UNIV	F A CUCINOTTA	JSC	E J HALL	NAG 9 1148	371
59	CORNELL UNIV	H W JONES	ARC	J B HUNTER	NCC 2 5459	377
59	EAST TENNESSEE STATE UNIV	B GUYNES	MSFC	L WILSON	NAG 8 1375	463
59	FINCH UNIV HEALTH SCI - CHICAGO MED SCH	B GUYNES	MSFC	R S KAPLAN	NAG 8 1827	199
59	HARVARD UNIV	R A GRYMES	ARC	A H KNOLL	NCC 2 1053	283
59	IOWA STATE UNIV	D JAN	JPL	M D PORTER	NAG 9 1191	222
59	JOHNS HOPKINS UNIV	J A KAYE	GSFC	J YEE	NAG 5 7552	240
59	LOUISIANA STATE UNIV - BATON ROUGE	D L DEVINCENZI	ARC	J R BATTISTA	NAG 2 1320	230
59	MARQUETTE UNIV	D BAUMANN	JSC	D L COSTILL	NCC 9 116	541
59	MASSACHUSETTS INST OF TECH	V SCHNEIDER	GSFC	R COHEN	NAG 5 4989	287
59	MASSACHUSETTS INST OF TECH	D K BAUMAN	JSC	C M OMAN	NAS 9 00097	294
59	MASSACHUSETTS INST OF TECH	J DETROVE	JSC	C M OMAN	NAG 9 1004	294
59	MOREHOUSE SCH MED	P COWLINGS	ARC	E OFILI	NCC 2 1322	188
59	MOREHOUSE SCH MED	C SAMS	JSC	K DUTT	NAG 9 1164	188
59	MT SINAI SCH OF MED OF THE CUNY	V SCHNEIDER	GSFC	H KAUFMANN	NAG 5 6276	379
59	MT SINAI SCH OF MED OF THE CUNY	M E ANDERSON	JSC	S MOORE	NCC 9 128	379
59	NEW MEXICO HIGHLANDS UNIV	D S MCKAY	JSC	J R JUAREZ	NAG 9 1394	358
59	NORTH CAROLINA STATE UNIV. - RALEIGH	D P LISKOWSKY	GSFC	E DAVIES	NAG 5 3743	395
59	NORTHEASTERN OHIO UNIV COL OF MED	M M AVERNER	GSFC	W J LANDIS	NAG 5 7789	410
59	NORTHEASTERN UNIV	P DOTY	MSFC	A KARMA	NAG 8 1668	297
59	OHIO STATE UNIV	B J WOOLFORD	JSC	D D WOODS	NAG 9 1005	414
59	OHIO STATE UNIV	R MORRIS	JSC	J BIGHAM	NGT 9 51	415
59	OLD DOMINION UNIV	J R COMSTOCK	LARC	J M STARK	NGT 1 52232	516
59	PENN STATE UNIV. - UNIV. PARK	R A GRYMES	ARC	H OHMOTO	NCC 2 1057	446
59	PENN STATE UNIV. - UNIV. PARK	M AVERNER	GSFC	N V FEDOROFF	NAG 5 3970	440
59	PENN STATE UNIV. - UNIV. PARK	M AVERNER	GSFC	R CYR	NAG 5 4840	440
59	PENN STATE UNIV. - UNIV. PARK	C LLOYD	JSC	J A PAWELCZYK	NAG 9 1173	445
59	RICE UNIV	D LASKOWSKY	GSFC	L MCINTIRE	NAG 5 4072	472
59	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	G FOGLEMAN	GSFC	H JANES	NAG 5 6011	354
59	SAN JOSE STATE UNIV	H L D'ANTONI	ARC	E P METZGER	NCC 2 5344	57
59	SAN JOSE STATE UNIV	R D MACELROY	ARC	M M AVERNER	NCC 2 6042	58
59	SOUTHERN UNIV & A&M COLL	G J FISHMAN	MSFC	J G STACY	NAG 8 1625	233
59	SPELMAN COLL	D O FRAIZER	MSFC	O SCRIVEN	NCC 8 194	189
59	STANFORD UNIV	R T WHALEN	ARC	B LUSIGNAN	NGT 2 52246	66
59	STANFORD UNIV	A JANETOS	GSFC	P MATSON	NAG 5 6615	60
59	STATE UNIV OF NY - STONY BROOK	V SCHNEIDER	GSFC	C T RUBIN	NAG 5 3950	385
59	TENNESSEE TECHNOLOGICAL UNIV	D HATHAWAY	MSFC	S HAN	NAG 8 1631	465
59	TEXAS A&M UNIV	C BLACK	KSC	D PILLAI	NGT10 52628	481
59	TEXAS TECH UNIV	D L HENNINGER	JSC	J L SMITH	NCC 9 108	482
59	THE SCRIPPS RES INST (TSRI) -LA JOLLA	L J CAROFF	ARC	R GHADIRI	NCC 2 1055	67
59	THE UNIV OF CENTRAL FLORIDA	C D QUINCY	KSC	D W JOHNSON	NAG10 276	168
59	TUFTS UNIV	D JAN	JPL	S P KOUNAVES	NAG 9 1182	298
59	TUSKEGEE UNIV	P X CALLAHAN	ARC	W A HILL	NAG 2 6049	5
59	TUSKEGEE UNIV	R WHEELER	KSC	D MARTLEY	NAG10 209	6
59	TUSKEGEE UNIV	S POTTER	KSC	D HILL	NAG10 281	6
59	U OF N TEXAS HLTH SCI CTR - FT. WORTH	V SCHNEIDER	GSFC	P B RAVEN	NAG 5 4668	487
59	UNIV HOUSTON-HOUSTON	C W LLOYD	JSC	D A MARTINEZ	NAG 9 1152	483
59	UNIV OF ALABAMA - BIRMINGHAM	D K COLLINS	MSFC	L J DELUCAS	NAS 8 40189	7
59	UNIV OF ALABAMA - HUNTSVILLE	P M DOTY	MSFC	M T ZUGRAV	NAG 8 1456	12
59	UNIV OF ALABAMA - HUNTSVILLE	P M DOTY	MSFC	R J NAUMANN	NAG 8 1464	12
59	UNIV OF ALABAMA - HUNTSVILLE	S SPEARMAN	MSFC	F ROSENBERGER	NCC 8 99	13
59	UNIV OF ARIZONA	R WHEELER	KSC	J L CUELLO	NAG10 255	36
59	UNIV OF CALIFORNIA - IRVINE	S ROBBINS	MSFC	A MCPHERSON	NAS 8 00017	85
59	UNIV OF CALIFORNIA - IRVINE	S ROBBINS	MSFC	A MCPHERSON	NAS 8 00019	85
59	UNIV OF CALIFORNIA - LOS ANGELES	R A GRYMES	ARC	B RUNNEGAR	NCC 2 1050	93
59	UNIV OF CALIFORNIA - SAN DIEGO	J MECK	JSC	P J MILLS	NCC 9 105	104
59	UNIV OF CALIFORNIA - SAN DIEGO	J MECK	JSC	M G ZEIGLER	NCC 9 106	104
59	UNIV OF CALIFORNIA - SAN DIEGO	S M MCCULLUM	JSC	J B WEST	NAS 9 98124	103
59	UNIV OF CALIFORNIA - SAN FRANCISCO	M H NEW	ARC	M A WILSON	NCC 2 5295	105
59	UNIV OF CALIFORNIA - SANTA BARBARA	C LLOYD	JSC	M ECKSTIEN	NAG 9 1329	109
59	UNIV OF CALIFORNIA - SANTA CRUZ	M FONDA	ARC	J PEARSE	NCC 2 5351	113
59	UNIV OF COLORADO - BOULDER	R A GRYMES	ARC	B JAKOSKI	NCC 2 1052	138

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
59	UNIV OF COLORADO - BOULDER	M AVERNER	GSFC	A STAEHELIN	NAG 5 3967	123
59	UNIV OF COLORADO - BOULDER	S J LAMBING	MSFC	G MORGENTHALER	NCC 8 131	139
59	UNIV OF COLORADO - DENVER	R GLOBUS	ARC	S NIELSON-PREISS	NGT 2 52291	143
59	UNIV. OF CONNECTICUT HEALTH CTR	M AVERNER	GSFC	D ROWE	NAG 5 6316	144
59	UNIV OF FLORIDA	A L FROST	MSFC	B CARROLL	NAG 8 1821	172
59	UNIV OF GEORGIA	C KUNDROT	MSFC	B WANG	NCC 8 233	190
59	UNIV OF HOUSTON - CLEAR LAKE	M POWELL	JSC	R S CHHIKARA	NAG 9 1083	487
59	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	J R ROGERS	MSFC	C F ZOKOSKI	NAG 8 1376	211
59	UNIV OF MISSOURI - COLUMBIA	M AVERNER	GSFC	T A JONES	NAG 5 4607	326
59	UNIV OF MISSOURI - COLUMBIA	R P KEHOE	JSC	G M CHIPPENDALE	NAG 9 1230	327
59	UNIV OF NEVADA - RENO	M T FLYNN	ARC	V D ADAMS	NCC 2 5443	339
59	UNIV OF PENNSYLVANIA	C W LLOYD	JSC	H VAN D	NAG 9 1161	449
59	UNIV OF PENNSYLVANIA	D RISEN	JSC	L M SHAPIRO	NAG 9 1357	449
59	UNIV OF PITTSBURGH	C W LLOYD	JSC	T H MONK	NAG 9 1036	451
59	UNIV OF PUERTO RICO - MAYAGUEZ	J SAYER	KSC	G COLON	NAG10 257	551
59	UNIV OF ROCHESTER	C TALLEY	MSFC	D WU	NAG 8 1382	389
59	UNIV OF SOUTHERN CALIFORNIA	B J WOOLFORD	JSC	U NEUMANN	NAG 9 1165	117
59	UNIV OF TENNESSEE - KNOXVILLE	F A CUCINOTTA	JSC	L W TOWNSEND	NAG 9 1123	467
59	UNIV OF TEXAS - EL PASO	F HORZ	JSC	L E MURR	NAG 9 1100	495
59	UNIV OF TEXAS	V SCHNEIDER	GSFC	B LEVINE	NAG 5 4846	485
59	UNIV OF TEXAS MED BRAN - GALVESTON	R BILICA	JSC	J R DAVIS	NCC 9 81	485
59	UNIV OF TX-HLTH SCI CTR-SAN ANTONIO	W M KNOTT	KSC	M L WIEDERHOLD	NAG10 180	485
59	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	M AVERNER	GSFC	E DURBAN	NAG 5 4710	486
59	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	J MECK	JSC	R F LODATO	NCC 9 103	487
59	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	M R POWELL	JSC	B D BUTLER	NCC 9 90	487
59	UNIV OF VIRGINIA	B Q GUYNES	MSFC	M C WIENER	NAG 8 1832	521
59	UNIV OF WISCONSIN - LA CROSSE	J D SMITH	ARC	S O SENER	NCC 2 1163	541
59	UNIV OF WYOMING	C LUNDQUIST	GSFC	R E GANTENBEIN	NAG 9 1176	549
59	UTAH STATE UNIV	R WHEELER	KSC	P GROSSEL	NGT10 52617	502
59	VANDERBILT UNIV	R GRUGEL	MSFC	A V ANIKUMER	NAG 8 1745	468
59	WASHINGTON STATE UNIV	M AVERNER	GSFC	B POOVAIAH	NAG 5 4841	538
59	WRIGHT STATE UNIV	R J WILLIAMS	GSFC	S R MOHLER	NGT 5 30091	424
61	CLEVELAND STATE UNIV	B GUYNES	MSFC	J M BELOVICH	NAG 8 1584	406
61	DREXEL UNIV	N PELLIS	JSC	P LELKES	NAG 9 1380	436
61	MOREHOUSE COLL	R RICHMOND	MSFC	G L SANFORD	NAG 8 1636	187
61	NY UNIV	A J AHUMADA	ARC	M S LANDY	NCC 2 5513	380
61	OLD DOMINION UNIV	A T POPE	LARC	F G FREEMAN	NGT 1 52219	516
61	OLD DOMINION UNIV	A T POPE	LARC	G D COATES	NGT 1 52220	516
61	RUTGERS STATE UNIV OF NJ NEW BRUNS	J B HARTLEY	GSFC	Z KOLBER	NAG 5 99138	356
61	STANFORD UNIV	R W REMINGTON	ARC	J E GABRIELI	NCC 2 5261	64
61	UNIV OF MICHIGAN - ANN ARBOR	C LLOYD	JSC	G L AMIDON	NAG 9 1154	314
61	UNIV OF PITTSBURGH	B GUYNES	MSFC	X L WU	NAG 8 1587	451
61	UNIV OF TENNESSEE - KNOXVILLE	A NURRIDDI	HQ	G SAYLER	NGT 5 50206	467
62	FLORIDA A&M UNIV	R MCKINNEY	KSC	B MCCUNE	NAG10 248	163
62	GEORGIA INST OF TECH	J ORASANU	ARC	U M FISCHER	NCC 2 1332	185
62	HERITAGE COLL	R TRAVIS	SSC	J W FALCO	NAG13 99027	528
62	OLD DOMINION UNIV	P C SHUTTIE	LARC	D D DAVIS	NAG 1 2303	512
62	SAN FRANCISCO STATE UNIV	M E DUENAS	ARC	S UJLAKI	NCC 2 6059	55
62	SANTA CLARA UNIV	B KANKI	ARC	J TAYLOR	NCC 2 1156	58
62	TUSKEGEE UNIV	D BARTA	JSC	W A HILL	NCC 9 51	6
69	CARNEGIE - MELLON UNIV	J ORASANU	ARC	K CARLEY	NAG 2 1569	432
69	GEORGE MASON UNIV	S M CASNER	ARC	D B DAVIS	NAG 2 1289	505
69	GEORGIA INST OF TECH	J M ORASANU	ARC	U M FISCHER	NCC 2 1124	185
69	MASSACHUSETTS INST OF TECH	S C LOZITO	ARC	R J HANSMAN	NAG 2 1299	285
69	MASSACHUSETTS INST OF TECH	S C LOZITO	ARC	T B SHERIDAN	NAG 2 729	285
69	NEW MEXICO STATE UNIV - LAS CRUCES	J ORASANU	ARC	N J COOKE	NAG 2 1562	359
69	NY UNIV	A J AHUMADA	ARC	M LANDY	NCC 2 5417	379
69	NY UNIV	B L BEARD	ARC	M S LANDY	NCC 2 5472	379
69	NORTH CAROLINA STATE UNIV. - RALEIGH	I BARSHI	ARC	D H MERSHON	NAG 2 1281	395
69	NORTH CAROLINA STATE UNIV. - RALEIGH	L J PRINZEL	LARC	D KABER	NAG 1 01039	394
69	NORTH CAROLINA STATE UNIV. - RALEIGH	L J PRINZEL, III	LARC	D KABER	NGT 1 01004	397
69	NORTH CAROLINA STATE UNIV. - RALEIGH	L J PRINZEL	LARC	D B KABER	NAG 1 02056	395
69	NORTH CAROLINA STATE UNIV. - RALEIGH	P TROUTMAN	LARC	H K KHACHATOORIAN	NGT 1 02010	397
69	NORTHWESTERN UNIV	B G KANKI	ARC	E J CZEPIEL	NCC 2 1098	202
69	OHIO UNIV	J M ORASANU	ARC	C E MCCOY	NCC 2 1030	416
69	OHIO UNIV	J ORASANU	ARC	C E MCCOY	NCC 2 1258	416

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
69	OLD DOMINION UNIV	I BARSHI	ARC	D S MCNAMARA	NAG 2 1481	513
69	OLD DOMINION UNIV	A T POPE	LARC	T L DICKINSON	NAG 1 2252	511
69	OLD DOMINION UNIV	A T POPE	LARC	M SCERBO	NAG 1 02062	513
69	OLD DOMINION UNIV	A T POPE	LARC	F G FREEMAN	NCC 1 364	514
69	OLD DOMINION UNIV	J R COMSTOCK	LARC	J P BLISS	NGT 1 01019	515
69	OLD DOMINION UNIV	L J PRENZEL	LARC	F G FREEMAN	NGT 1 01015	515
69	OLD DOMINION UNIV	L J PRINZEL	LARC	F G FREEMAN	NCC 1 01012	514
69	OLD DOMINION UNIV	L J PRINZEL	LARC	F G FREEMAN	NGT 1 52231	516
69	OLD DOMINION UNIV	P C SCHUTTE	LARC	D D DOVES	NGT 1 01021	516
69	OLD DOMINION UNIV	P C SCHUTTE	LARC	M MIHALECZ	NGT 1 52230	516
69	OLD DOMINION UNIV	T PINELLI	LARC	G J MCAULIFFE	NGT 1 02020	516
69	OREGON GRADUATE INST OF SCI & TECH	A J AHUMADA	ARC	M PAVEL	NCC 2 1190	427
69	OREGON GRADUATE INST OF SCI & TECH	B L BEARD	ARC	M PAVEL	NCC 2 1215	427
69	PENN STATE UNIV. - UNIV. PARK	L J PRINZEL	LARC	W J RAY	NAG 1 2273	438
69	RICE UNIV	B L BEARD	ARC	M BYRNE	NCC 2 1219	474
69	RICE UNIV	D C FOYLE	ARC	M BYRNE	NCC 2 1321	474
69	SAN FRANCISCO STATE UNIV	J M ORASANU	ARC	K L MOSIER	NAG 2 1285	54
69	SAN JOSE STATE UNIV	B BEARD	ARC	K CORKER	NCC 2 1313	57
69	SAN JOSE STATE UNIV	D C FOYLE	ARC	K CORKER	NCC 2 1307	57
69	SAN JOSE STATE UNIV	D FOYLE	ARC	K CORKER	NAG 2 1563	55
69	SANTA CLARA UNIV	B KANKI	ARC	J C TAYLOR	NCC 2 1320	58
69	TEXAS A&M UNIV	S NASH-STEVEN	MSFC	S SMITH	NGT 8 52913	481
69	THE CATHOLIC UNIV OF AMERICA	L J PRINZEL	LARC	R PARASURAMAN	NAG 1 01066	155
69	THE CATHOLIC UNIV OF AMERICA	P C SHUTTE	LARC	S M GALSTER	NGT 1 52190	160
69	UNIV OF AKRON	E RUTHRUFF	ARC	P ALLEN	NCC 2 1325	417
69	UNIV OF ARKANSAS - LITTLE ROCK	C SAWIN	JSC	P A TESCH	NAG 9 1061	40
69	UNIV OF CALIFORNIA - IRVINE	J MULLIGAN	ARC	T M DZMURA	NCC 2 5378	85
69	UNIV OF COLORADO - BOULDER	I BARSHI	ARC	A F HEALY	NCC 2 1112	138
69	UNIV OF COLORADO - BOULDER	I BARSHI	ARC	A F HEALY	NCC 2 1310	138
69	UNIV OF COLORADO - BOULDER	I BARSHI	ARC	L E BOURNE	NAG 2 1561	122
69	UNIV OF IDAHO - MOSCOW	B G KANKE	ARC	L T OSTROM	NCC 2 1174	198
69	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	B BEARD	ARC	C D WICKENS	NCC 2 1214	211
69	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	B L BEARD	ARC	C WICKENS	NCC 2 1293	211
69	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D C FOYLE	ARC	C D WICKENS	NAG 2 1120	207
69	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D FOYLE	ARC	C D WICKENS	NAG 2 1535	207
69	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	I BARSHI	ARC	H L TAYLOR	NAG 2 1282	207
69	UNIV OF MASSACHUSETTS - AMHERST	J M ORASANU	ARC	D FISHER	NAG 2 1551	299
69	UNIV OF NEVADA - RENO	J B MULLIGAN	ARC	M A CROGNALE	NCC 2 5503	340
69	UNIV OF OREGON - EUGENE	I BARSHI	ARC	R MAURO	NCC 2 1089	431
69	UNIV OF OREGON - EUGENE	I BARSHI	ARC	R MAURO	NCC 2 1304	431
69	UNIV OF VIRGINIA	M K KAISER	ARC	D R PROFFITT	NCC 2 1093	522
69	UNIV OF WEST FLORIDA	D C FOYLE	ARC	D L STILL	NAG 2 1225	177
69	UNIV OF WEST FLORIDA	J DEMAIIO	ARC	A K RAJ	NAG 2 1490	178
69	WAYNE STATE UNIV	B KANKI	ARC	A BATTEAU	NCC 2 1318	317
71	RUTGERS STATE UNIV OF NJ NEW BRUNS	R TRAVIS	SSC	D HARRIS	NGT13 52758	357
71	TULANE UNIV	T TRAVIS	SSC	W ANDREWS	NGT13 52754	234
73	SOUTHWEST TEXAS STATE UNIV	W A LARSEN	JSC	K MARGERISON	NCC 9 54	476
74	WRIGHT STATE UNIV	J ORASANU	ARC	V SHALIN	NCC 2 1351	424
75	UNIV OF MARYLAND - COLL PARK	J BOYCE	HQ	L MUKHIN	NASW 00028	268
76	LAWSON STATE COMM COLL	W J LOVE	MSFC	B CRAWFORD	NAG 8 1871	5
79	ALBANY STATE UNIV	R J MCKINNEY	KSC	D HODGES-TILLER	NAG10 265	178
79	BETHUNE - COOKMAN COLL	W B WILLIAMS	KSC	A D TAYLOR	NAG10 269	160
79	FLA INTERNATIONAL UNIV	R MCKINNEY	KSC	C MENDEZ	NAG10 254	161
79	FLORIDA A&M UNIV	R J MCKINNEY	KSC	S C MOBLEY	NAG10 267	163
79	HAMPTON UNIV	R A HATHAWAY	LARC	R SCHWAN	NAG 1 2331	507
79	MIAMI-DADE COMM COLL	D CULBERTSON	KSC	E J PADRON	NAG10 282	167
79	SAVANNAH STATE UNIV	R J MCKINNEY	KSC	D SAJWAN	NAG10 266	188
79	TUSKEGEE UNIV	C D BLACK	KSC	H J FINDLAY	NAG10 298	6
79	UNIV OF MICHIGAN - ANN ARBOR	J F DOWDY	MSFC	H T WRIGHT	NGT 8 52864	316
99	ALABAMA A&M UNIV	C PERSON	GSFC	A MANU	NAG 5 9885	1
99	ALABAMA A&M UNIV	M WEI	GSFC	T COLEMAN	NAG 5 10721	1
99	ALABAMA A&M UNIV	G BUCKINGHAM	KSC	E TEMPLE	NAG10 324	2
99	ALBANY STATE UNIV	R F LAWRENCE	GRC	G WRENSFORD	NAG 3 2806	178
99	ALCORN STATE UNIV	N SULLIVAN	JSC	D ADDIE	NAG13 98010	323
99	AMERICAN RIVER COLL	D HALE	GSFC	S GRIFFITH	NAG 5 12576	40
99	ARIZONA STATE UNIV	A TUYAHOV	GSFC	D BOYER	NAG 5 10899	21

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	ARIZONA STATE UNIV	D SENSKE	GSFC	M A PRESLEY	NAG 5 10214	21
99	ARIZONA STATE UNIV	D SENSKE	GSFC	J FINK	NAG 5 11655	22
99	ARIZONA STATE UNIV	D SENSKE	GSFC	R GREELEY	NAG 5 11787	22
99	ARIZONA STATE UNIV	J BOYCE	GSFC	A S MCEWEN	NAG 5 10268	21
99	ARIZONA STATE UNIV	K BLANDING	GSFC	T SHARP	NGT 5 50276	23
99	ARIZONA STATE UNIV	M MEYER	GSFC	P KNAUTH	NAG 5 9430	20
99	ARIZONA STATE UNIV	M MEYER	GSFC	R BLANKENSHIP	NAG 5 10689	21
99	ARIZONA STATE UNIV	M MEYER	GSFC	E SHOCK	NAG 5 12543	22
99	AUBURN UNIV	J E DUDENHOEFER	GRC	D W BRANDHORST	NCC 3 511	3
99	AUBURN UNIV	S COLEMAN	MSFC	C MORIARTY	NCC 8 247	4
99	BALL STATE UNIV	D WICKLAND	GSFC	A F RAHMAN	NAG 5 11261	213
99	BARNARD COLL	L P CHAMBERS	GSFC	R SILVER	NAG 5 11863	364
99	BAYLOR COLL OF MED	C LLOYD	JSC	B A BRODY	NAG 9 1153	470
99	BETHUNE - COOKMAN COLL	S DUTCZAK	KSC	A LONG	NCC10 55	160
99	BLUEFIELD STATE COLL	M MATHEWS	GSFC	F WOOTEN BLANKS	NAG 5 11072	539
99	BOSTON COLL	W J WAGNER	GSFC	D F WEBB	NAG 5 10833	275
99	BOSTON UNIV	D WICKLAND	GSFC	R B MYNENI	NAG 5 10156	277
99	BOSTON UNIV	J HILLMAN	GSFC	M MENDILLO	NAG 5 12095	278
99	BOSTON UNIV	J SHARBER	GSFC	G ERICKSON	NAG 5 9110	277
99	BOSTON UNIV	J SHARBER	GSFC	M MENDILLO	NAG 5 10286	277
99	BOSTON UNIV	J SPANN	GSFC	H E SPENCE	NAG 5 12003	278
99	BOSTON UNIV	K BLANDING	GSFC	S KANDARIAN	NGT 5 50307	279
99	BOSTON UNIV	L SMITH	GSFC	M OPPENHEIM	NGT 5 50288	279
99	BOSTON UNIV	L SMITH	GSFC	L ODDSSON	NGT 5 50309	279
99	BOSTON UNIV	M MELLOTT	GSFC	M OPPENHEIM	NAG 5 9444	277
99	BOSTON UNIV	M WEI	GSFC	C WOODSTOCK	NGT 5 30401	279
99	BOSTON UNIV	M WEI	GSFC	M FRIEDL	NGT 5 30405	279
99	BOSTON UNIV	M WEI	GSFC	R MYNENI	NGT 5 30462	279
99	BOSTON UNIV	P CRANE	GSFC	S CHAKRABARTI	NAG 5 11454	278
99	BOWIE STATE UNIV	C HOLLINGSWORTH	GSFC	V B GUILFORD	NAG 5 9843	237
99	BOWIE STATE UNIV	D MENCHAN	GSFC	D W CRIM	NAG 5 8370	237
99	BOWIE STATE UNIV	D MENCHAN	GSFC	D LANGDON	NAG 5 9458	237
99	BOWIE STATE UNIV	D MENCHAN	GSFC	D LANGDON	NAG 5 10697	237
99	BOWIE STATE UNIV	D MENCHAN	GSFC	D LANGDON	NAG 5 12165	237
99	BOWIE STATE UNIV	D MENCHAN	GSFC	J E TAYLOR	NAG 5 12237	237
99	BOWIE STATE UNIV	D MENCHAN	GSFC	E J DAVIS	NCC 5 516	238
99	BOWIE STATE UNIV	L RANDOLPH	GSFC	N WAKIM	NCC 5 232	237
99	BOWIE STATE UNIV	P CROUSE	GSFC	N WAKIM	NAG 5 8787	237
99	BOWLING GREEN STATE UNIV	V L KLOERIS	JSC	D L HENTGES	NAG 9 1186	401
99	BROWN UNIV	D D DETROYE	GSFC	P H SCHULTZ	NGT 5 40106	456
99	BROWN UNIV	D E SMITH	GSFC	J W HEAD	NAG 5 6144	453
99	BROWN UNIV	D SENSKE	GSFC	J W HEAD	NAG 5 11774	455
99	BROWN UNIV	D SENSKE	GSFC	J W HEAD	NAG 5 11775	455
99	BROWN UNIV	M MEYER	GSFC	P H SCHULTZ	NAG 5 12327	455
99	BROWN UNIV	K BLANDING	HQ	R BRANDENBERGER	NGT 5 50355	456
99	BROWN UNIV	H CARR	SSC	J F MUSTARD	NCC13 98005	455
99	CALIFORNIA INST OF TECH	B BETTS	GSFC	J L KIRSCHVINK	NAG 5 9687	44
99	CALIFORNIA INST OF TECH	D E SMITH	GSFC	D O MUHLEMAN	NAG 5 4437	42
99	CALIFORNIA INST OF TECH	D SENSKE	GSFC	T AHRENS	NAG 5 10198	45
99	CALIFORNIA INST OF TECH	G STRINGFELLOW	GSFC	J ZMUIDZINAS	NAG 5 9493	44
99	CALIFORNIA INST OF TECH	J BOYCE	GSFC	A P INGERSOLL	NAG 5 11214	46
99	CALIFORNIA INST OF TECH	J BREDEKAMP	GSFC	S DJORGOVSKI	NAG 5 9482	44
99	CALIFORNIA INST OF TECH	J BREDEKAMP	GSFC	S DJORGOVSKI	NAG 5 9603	44
99	CALIFORNIA INST OF TECH	J F SPANN	GSFC	Y L YUNG	NAG 5 10901	46
99	CALIFORNIA INST OF TECH	K BLANDING	GSFC	A ALBEE	NAG 5 11932	47
99	CALIFORNIA INST OF TECH	K BLANDING	GSFC	G BLAKE	NGT 5 50231	48
99	CALIFORNIA INST OF TECH	K BLANDING	GSFC	F CULICK	NGT 5 50280	49
99	CALIFORNIA INST OF TECH	K BLANDING	GSFC	N YEY	NGT 5 50308	49
99	CALIFORNIA INST OF TECH	K BLANDING	GSFC	M KAMIONKOWSKI	NGT 5 50339	49
99	CALIFORNIA INST OF TECH	K BLANDING	GSFC	A ALBEE	NGT 5 60003	49
99	CALIFORNIA INST OF TECH	L K SMITH	GSFC	A LANGE	NGT 5 50278	49
99	CALIFORNIA INST OF TECH	L SMITH	GSFC	A LANGE	NGT 5 50249	49
99	CALIFORNIA INST OF TECH	M WEI	GSFC	J STOCK	NGT 5 30393	48
99	CALIFORNIA INST OF TECH	M WEI	GSFC	M SIMONS	NGT 5 30407	48
99	CALIFORNIA INST OF TECH	M WEI	GSFC	M OKUMURA	NGT 5 30452	48
99	CALIFORNIA INST OF TECH	P E HUNTER	GSFC	R BRUNNER	NAG 5 12000	47

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	CALIFORNIA INST OF TECH	T MORGAN	GSFC	M BROWN	NAG 5 11273	46
99	CALIFORNIA INST OF TECH	W WAGNER	GSFC	C S COHEN	NAG 5 12492	47
99	CALIFORNIA INST OF TECH	J BOYCE	HQ	A ALBEE	NAG 5 11257	46
99	CALIFORNIA STATE UNIV - LONG BEACH	M PHELPS	GSFC	R WEST	NAG 5 12361	50
99	CALIFORNIA STATE UNIV - LOS ANGELES	M MCCARTY	DFRC	T ADENIKA-MORROW	NAG 4 173	51
99	CALIFORNIA STATE UNIV - LOS ANGELES	B WHITE	GSFC	T ADENIKA-MORROW	NCC 5 439	51
99	CALIFORNIA STATE UNIV - LOS ANGELES	J MALONE	GSFC	H R BOUSSALIS	NAG 5 8889	51
99	CALIFORNIA STATE UNIV - LOS ANGELES	M STOUTSENBERGER	GSFC	M EPSTEIN	NAG 5 9160	51
99	CALIFORNIA STATE UNIV - NORTHRIDGE	M MCCARTHY	DFRC	W FURUMOTO	NAG 4 162	51
99	CALIFORNIA STATE UNIV - NORTHRIDGE	C PERSON	GSFC	S RENGARAJAN	NAG 5 9726	52
99	CALIFORNIA STATE UNIV - NORTHRIDGE	C PERSON	GSFC	B BAVARIAN	NCC 5 513	52
99	CALIFORNIA STATE UNIV - NORTHRIDGE	M MATTHEWS	GSFC	C SHUBIN	NCC 5 489	52
99	CALIFORNIA STATE UNIV	M MC CARTHY	DFRC	E KRINSKY	NAG 4 161	52
99	CALIFORNIA STATE UNIV	C HILL	JSC	C LEE	NAG13 99010	52
99	CAPITOL COLL	D MENCHAN	GSFC	H JARRELL	NAG 5 12066	238
99	CARNEGIE - MELLON UNIV	D SMITH	ARC	R SIMMONS	NGT 2 52286	435
99	CARNEGIE - MELLON UNIV	J BREDEKAMP	GSFC	C GLYMOUR	NAG 5 9309	433
99	CARNEGIE - MELLON UNIV	K BLANDING	GSFC	A W MOORE	NGT 5 50279	435
99	CARNEGIE - MELLON UNIV	P E HUNTER	GSFC	R NICHOL	NAG 5 10740	433
99	CARNEGIE - MELLON UNIV	P E HUNTER	GSFC	C GLYMOUR	NAG 5 11998	433
99	CARNEGIE - MELLON UNIV	R E GABRYS	GSFC	P COPPIN	NCC 5 431	435
99	CARNEGIE - MELLON UNIV	A KEYS	MSFC	L R CARLEY	NAG 8 1799	433
99	CASE WESTERN RESERVE UNIV	G STRINGFELLOW	GSFC	G STARKMAN	NAG 5 11059	402
99	CASE WESTERN RESERVE UNIV	K BLANDING	GSFC	J T'IEH	NGT 5 50369	405
99	CASE WESTERN RESERVE UNIV	K BLANDING	GSFC	R QUINN	NGT 5 50413	405
99	CAYUGA COUNTY COMM COLL	D POWE	SSC	R FRESTOPKIK	NAG13 00043	365
99	CAYUGA COUNTY COMM COLL	M MICK	SSC	R BROWER	NAG13 00044	365
99	CAYUGA COUNTY COMM COLL	W DAMAGGIO	SSC	M FLINTON	NAG13 02053	365
99	CHICAGO STATE UNIV	C HOLLINGSWORTH	GSFC	J RICHARD	NAG 5 12091	199
99	CHRISTOPHER NEWPORT UNIV	D GABRYS	GSFC	D B CATON	NCC 5 435	503
99	CHRISTOPHER NEWPORT UNIV	D BUSHNELL	LARC	L LAMBERT	NAG 1 2284	503
99	CITY U COL OF NY YORK COLL	M STOUTSENBERGER	GSFC	J SCHEIN	NAG 5 7532	365
99	CITY UNIV OF NY CITY COLL	R F LAWRENCE	GRC	L P JOHNSON	NAG 3 2258	365
99	CITY UNIV OF NY CITY COLL	C PERSON	GSFC	F MOSHARY	NAG 5 9732	366
99	CITY UNIV OF NY CITY COLL	J HARRINGTON	GSFC	S AUSTIN	NCC 5 530	367
99	CITY UNIV OF NY CITY COLL	M MATEU	GSFC	J BARBA	NAG 5 4911	366
99	CITY UNIV OF NY CITY COLL	M MATEU	GSFC	J BARBA	NAG 5 10845	366
99	CITY UNIV OF NY CITY COLL	B WHITE	HQ	R KHANBILVARDI	NCC 5 344	366
99	CITY UNIV OF NY SYSTEM	M MATEU	GSFC	J BARBA	NAG 5 12280	367
99	CITY UNIV OF NY HERBERT H. LEHMAN COLL	R F LAWRENCE	GRC	A L ROTHSETIN	NAG 3 2268	365
99	CLAFLIN COLL	C PERSON	GSFC	A WILLIAMS	NAG 5 11761	457
99	CLARK ATLANTA UNIV	H HASAN	GSFC	S S TAYAL	NAG 5 11434	179
99	CLARK ATLANTA UNIV	M MATEU	GSFC	B FLOURNOY	NCC 5 666	179
99	CLARK ATLANTA UNIV	M MATHEWS	GSFC	C H WILLIAMS	NCC 5 347	179
99	CLARK ATLANTA UNIV	A C BEAM	MSFC	B E ALICK	NAG 8 1535	179
99	CLARK UNIV	G GUTMAN	GSFC	B TURNER	NAG 5 11134	280
99	CLARK UNIV	M Y WEI	GSFC	L LEWIS	NGT 5 30061	280
99	CLEMSON UNIV - CLEMSON	J KU	GSFC	D M OCHTERBECK	NAG 5 10367	459
99	CLEMSON UNIV - CLEMSON	M MELLOTT	GSFC	M HICKEY	NAG 5 10251	459
99	CLEMSON UNIV - CLEMSON	S DAVISON	GSFC	I D WALKER	NAG 5 8759	458
99	CLEVELAND STATE UNIV	D WHITE	GRC	D M KOCHER	NAG 3 2296	405
99	CLEVELAND STATE UNIV	M L BOROWSKI	GRC	P CHARITY	NAG 3 2075	405
99	COLL OF CHARLESTON	D DETROYE	GSFC	M COLGAN	NCC 5 413	460
99	COLL OF CHARLESTON	D DETROYE	GSFC	M COLGAN	NGT 5 40099	460
99	COLL OF CHARLESTON	DDETROYE	GSFC	M COLGAN	NCC 5 575	460
99	COLL OF CHARLESTON	L KEFFER	GSFC	M COLGAN	NGT 5 40050	460
99	COLL OF CHARLESTON	P SAKIMOTO	GSFC	C RUNYON	NCC 5 607	460
99	COLL OF SANTA FE	L ARMENDARIZ	JSC	B COLEMAN	NAG 9 1066	357
99	COLL OF WILLIAM AND MARY	T E PINELLI	LARC	M HINDERS	NGT 1 52204	505
99	COLORADO SCH OF MINES	D MCKAY	JSC	M B DUKE	NAG 9 1207	118
99	COLORADO STATE UNIV	J BOYCE	GSFC	H PERKON	NAG 5 11280	119
99	COLORADO STATE UNIV	K BLANDING	GSFC	J NELSON	NGT 5 50164	121
99	COLORADO STATE UNIV	M MELLOTT	GSFC	C SHE	NAG 5 10076	119
99	COLORADO STATE UNIV	M WEI	GSFC	R PIELKE	NGT 5 30344	121
99	COLORADO STATE UNIV	M WEI	GSFC	W LAUENROTH	NGT 5 30438	121
99	COLORADO STATE UNIV	M WEI	GSFC	G STEPHENS	NGT 5 30458	121

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	COLUMBIA UNIV	K E BLANDING	GSFC	S KAHN	NGT 5 50353	372
99	COLUMBIA UNIV	M WEI	GSFC	D PETEET	NGT 5 30226	371
99	COLUMBIA UNIV	M WEI	GSFC	M VISBECK	NGT 5 30442	372
99	COLUMBIA UNIV	M WEI	GSFC	M A CANE	NGT 5 30465	372
99	COLUMBIA UNIV	W ABDALATI	GSFC	X YUAN	NAG 5 8725	369
99	COLUMBIA UNIV	K BLANDING	HQ	C HAILEY	NGT 5 50392	372
99	COPPIN STATE COLL	D MENCHAN	GSFC	D C WILSON	NAG 5 11846	238
99	CORNELL UNIV	D D DETROYE	GSFC	Y TERZIAN	NGT 5 40078	378
99	CORNELL UNIV	D SENSKE	GSFC	P THOMAS	NAG 5 10168	375
99	CORNELL UNIV	G ASRAR	GSFC	B ISACKS	NGT 5 30126	378
99	CORNELL UNIV	G STRINGFELLOW	GSFC	S EIKENBERRY	NAG 5 10356	375
99	CORNELL UNIV	J BOYCE	GSFC	D BANFIELD	NAG 5 12187	376
99	CORNELL UNIV	J HILLMAN	GSFC	D J BANFIELD	NAG 5 12470	376
99	CORNELL UNIV	J Q SPANN	GSFC	M PSIAKI	NAG 5 12211	376
99	CORNELL UNIV	K BLANDING	GSFC	M H VAN DER MUELEN	NGT 5 50375	378
99	CORNELL UNIV	M MEYER	GSFC	D A USHER	NAG 5 12332	376
99	CORNELL UNIV	M WEI	GSFC	T JORDAN	NGT 5 30461	378
99	CORNELL UNIV	P E HUNTER	GSFC	T LOREDO	NAG 5 12082	376
99	CORNELL UNIV	S DAVISON	GSFC	C MONTEEMAGNO	NAG 5 8775	374
99	CORNELL UNIV	K BLANDING	HQ	J HOUCK	NGT 5 50390	378
99	CORNELL UNIV	R V MORRIS	JSC	R V MORRIS	NCC 9 89	377
99	CUYAHOGA COMM COLL	R L BONDURANT	GRC	L L DARLING	NAS 3 98099	409
99	CUYAHOGA COMM COLL	R ROMERO	GRC	T L BUTLER	NAG 3 2663	408
99	CUYAHOGA COMM COLL	C HOLLINGSWORTH	GSFC	A JOHNSON	NAG 5 12154	408
99	CUYAHOGA COMM COLL	M MICK	SSC	R BROWER	NAG13 02059	409
99	DARTMOUTH COLL	J SPANN	GSFC	B O SONNERUP	NAG 5 12005	341
99	DARTMOUTH COLL	J SPANN	GSFC	M K HUDSON	NAG 5 12202	341
99	DARTMOUTH COLL	J SPANN	GSFC	M HUDSON	NGT 5 50403	342
99	DARTMOUTH COLL	M MELLOTT	GSFC	A V STRELTSOV	NAG 5 10216	341
99	DARTMOUTH COLL	M MELLOTT	GSFC	M R LESSARD	NAG 5 10219	341
99	DENISON UNIV	J HILLMAN	GSFC	M E MICKELSON	NAG 5 11966	409
99	DINE COLL (FORMERLY NAVAJO COMM COLL)	R TRAVIS	JSC	D ISELY	NAG13 99028	23
99	DUKE UNIV	J SPANN	GSFC	S A CUMMER	NAG 5 12072	390
99	DUKE UNIV	L SMITH	GSFC	G TRUSKEY	NGT 5 50266	391
99	DUKE UNIV	M MELLOTT	GSFC	S CUMMER	NAG 5 10270	390
99	DUKE UNIV	M MEYER	GSFC	D MCSHEA	NAG 5 12336	390
99	DUKE UNIV	M WEI	GSFC	S ROJSTACZER	NGT 5 30379	391
99	DUKE UNIV	M WEI	GSFC	W H SCHESSINGER	NGT 5 30397	391
99	DUKE UNIV	M WEI	GSFC	N L CHRISTENSEN	NGT 5 30472	391
99	DUKE UNIV	M GERNHARDT	JSC	R VANN	NCC 9 83	391
99	EAST NEW MEX. UNIV - MAIN CAMP	L ARMENDARIZ	JSC	J MILLER	NAG 9 1255	357
99	ELIZABETH CITY STATE UNIV	D MENCHAN	GSFC	W PORTER	NAG 5 11842	392
99	ELIZABETH CITY STATE UNIV	J HARRINGTON	GSFC	L HAYDEN	NCC 5 533	392
99	EMBRY-RIDDLE AERONAUTICAL UNIV	M MELLOTT	GSFC	G G SIVJEE	NAG 5 10066	160
99	ESTRELLA MOUNTAIN COMM COLL	M MATEU	HQ	M REYES	NAG 5 12476	23
99	FAYETTEVILLE STATE UNIV	M STOUTSENBERGER	GSFC	L EDWARDS	NAG 5 9155	392
99	FISK UNIV	C HUA SU	MSFC	A BURGER	NCC 8 195	463
99	FLA INTERNATIONAL UNIV	A CARDENAS	ARC	X HE	NAG 2 1440	161
99	FLA INTERNATIONAL UNIV	H T STEWART	ARC	I R FERNANDEZ	NAG 2 1384	161
99	FLA INTERNATIONAL UNIV	D MENCHAN	GSFC	N RISHE	NAG 5 9478	161
99	FLA INTERNATIONAL UNIV	M MATEU	GSFC	C MENDEZ	NCC 5 663	162
99	FLA INTERNATIONAL UNIV	H BURSIA	KSC	G A ROIG	NAG10 311	162
99	FLA INTERNATIONAL UNIV	R MC KINNEY	KSC	C MENDEZ	NAG10 251	161
99	FLORIDA A&M UNIV	B J COLLINS	ARC	M ENCINOSA	NAG 2 1439	162
99	FLORIDA A&M UNIV	J E BOYD	GRC	F S HUMPHRIES	NAG 3 1759	162
99	FLORIDA A&M UNIV	J MALONE	GSFC	J H AMMONS	NAG 5 9119	162
99	FLORIDA A&M UNIV	J MALONE	GSFC	J ZHENG	NAG 5 9420	162
99	FLORIDA A&M UNIV	J MALONE	GSFC	B KELLY	NAG 5 10726	162
99	FLORIDA A&M UNIV	E JOHNSON	KSC	B SAMUELS	NAG10 242	163
99	FLORIDA INST OF TECH	L SMITH	GSFC	C HELMSTETTER	NGT 5 50257	164
99	FLORIDA INST OF TECH	L SMITH	GSFC	T OSWALT	NGT 5 50290	164
99	FLORIDA INST OF TECH	W WAGNER	GSFC	M ZHANG	NAG 5 11036	164
99	FLORIDA STATE UNIV	M WEI	GSFC	J O'BRIEN	NGT 5 30370	167
99	FLORIDA STATE UNIV	M WEI	GSFC	J C CAIN	NGT 5 30454	167
99	FOOTHILL-DE ANZA COM COLL SYSTEM OFF	G JAMES	ARC	V K SERMON	NGT 2 52280	52
99	FOOTHILL-DE ANZA COM COLL SYSTEM OFF	M E LOPEZ	ARC	M CONWAY	NGT 2 1001	52

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	FRANKLIN-MARSHALL COLL	L CAROFF	ARC	D BACKMAN	NCC 2 5365	437
99	FURMAN UNIV	R K DISMUKES	ARC	G O EINSTEIN	NCC 2 1085	461
99	GEORGE MASON UNIV	A J MATURO	GSFC	R R STOUGH	NCC 5 360	506
99	GEORGE MASON UNIV	H HASSAN	GSFC	S SATYAPAL	NAG 5 11432	506
99	GEORGE MASON UNIV	M MAIDEN	GSFC	M KAFATOS	NCC 5 306	506
99	GEORGE MASON UNIV	M MELLOTT	GSFC	M E SUMMERS	NAG 5 9669	505
99	GEORGE MASON UNIV	M GIARDINO	SSC	M KAFATOS	NAG13 02054	506
99	GEORGE WASHINGTON UNIV	G BLANEY	GSFC	M PHILLIPS	NAG 5 11317	151
99	GEORGE WASHINGTON UNIV	J BOYCE	GSFC	G KEATING	NAG 5 11175	151
99	GEORGE WASHINGTON UNIV	J I TROMBKA	GSFC	D A ROWLEY	NAG 5 10417	151
99	GEORGE WASHINGTON UNIV	P E O'NEIL	GSFC	R LANG	NAG 5 12264	152
99	GEORGE WASHINGTON UNIV	R A HATHAWAY	LARC	J WHITESIDES	NCC 1 01020	152
99	GEORGE WASHINGTON UNIV	D JAN	NMO	J H MILLER	NAG 9 1185	152
99	GEORGIA INST OF TECH	I STATLER	ARC	A R PRITCHETT	NCC 2 1306	185
99	GEORGIA INST OF TECH	K GUPTA	DFRC	W M HADDAD	NGT 4 52434	186
99	GEORGIA INST OF TECH	D D DETROYE	GSFC	E ARMANIOS	NGT 5 40116	186
99	GEORGIA INST OF TECH	J HILLMAN	GSFC	P G STEFFES	NAG 5 12122	183
99	GEORGIA INST OF TECH	K BLANDING	GSFC	P NEITZEL	NGT 5 50363	186
99	GEORGIA INST OF TECH	L SMITH	GSFC	R FUJIMOTO	NGT 5 50284	186
99	GEORGIA INST OF TECH	M WEI	GSFC	L HUEY	NGT 5 30384	186
99	GEORGIA INST OF TECH	P DECOLA	GSFC	Y WANG	NAG 5 12498	183
99	GEORGIA INST OF TECH	C GRIFFIN	KSC	D BRIDGES	NAS10 01025	184
99	GEORGIA INST OF TECH	J E GARDNER	LARC	B V GIBBENS	NGT 1 52162	186
99	GEORGIA INST OF TECH	J HOWELL	MSFC	J OLDS	NAG 8 1713	183
99	GEORGIA INST OF TECH	S COLEMAN	MSFC	J L GODDARD	NCC 8 253	185
99	GEORGIA SOUTHERN UNIV	J HILLMAN	GSFC	M S KELLEY	NAG 5 12445	187
99	GLENDALE COMM COLL	H KASS	GSFC	L SEROT	NAG 5 9700	52
99	HAMPTON UNIV	B W MEESON	GSFC	J RUSSELL	NAG 5 11126	508
99	HAMPTON UNIV	C P HOLMES	GSFC	S M BAILEY	NAG 5 10063	508
99	HAMPTON UNIV	M MATHEWS	GSFC	T A CHYBA	NCC 5 348	509
99	HAMPTON UNIV	M STOUTSENBERGER	GSFC	C RANKINS	NAG 5 9156	508
99	HAMPTON UNIV	N KHAZENIE	GSFC	D A TEMPLE	NAG 5 6296	508
99	HAMPTON UNIV	P S BOELLNER	GSFC	C L REAVES	NAG 5 10015	508
99	HAMPTON UNIV	R A HATHAWAY	LARC	R SCHWAN	NAG 1 01089	507
99	HAMPTON UNIV	R A HATHAWAY	LARC	R SCHWAN	NCC 1 01034	509
99	HAMPTON UNIV	R HATHAWAY	LARC	D DEPRIEST	NCC 1 358	509
99	HARVARD UNIV	D E WICKLAND	GSFC	S C WOFESY	NAG 5 11154	282
99	HARVARD UNIV	L SMITH	GSFC	W H PARKINSON	NGT 5 50258	284
99	HARVARD UNIV	M WEI	GSFC	S WOFESY	NGT 5 30366	284
99	HARVARD UNIV	M WEI	GSFC	J ANDERSON	NGT 5 30410	284
99	HARVARD UNIV	M WEI	GSFC	D JACOB	NGT 5 30466	284
99	HARVARD UNIV	P DECOLA	GSFC	D JACOB	NAG 5 11270	282
99	HARVARD UNIV	P R HOUSER	GSFC	A P BARROS	NAG 5 10792	282
99	HEIDELBERG COLL	F SAVINO	GRC	D A KRIEGER	NAG 3 2768	409
99	HERITAGE COLL	A CARDENAS	ARC	P T ALEXANDER	NAG 2 6034	528
99	HOUSTON COMM COLL	M MATEU	GSFC	C GARCIA	NAG 5 8566	470
99	HOUSTON COMM COLL	M MATEU	GSFC	C GARCIA	NAG 5 10239	470
99	HOWARD UNIV	G COOPER	ARC	P HAMBRIGHT	NAG 2 1526	153
99	HOWARD UNIV	C PERSON	GSFC	A N THORPE	NAG 5 10675	153
99	HOWARD UNIV	C PERSON	GSFC	A THORPE	NAG 5 12021	153
99	HOWARD UNIV	D MENCHAN	GSFC	W WOODARD	NAG 5 9279	153
99	HOWARD UNIV	D MENCHAN	GSFC	M C WOODARD	NAG 5 10838	153
99	HOWARD UNIV	D MENCHAN	GSFC	D WOODARD	NAG 5 12172	153
99	HOWARD UNIV	G A SOFFEN	GSFC	A N THORPE	NCC 5 184	154
99	HOWARD UNIV	M S BURRELL	GSFC	J B HALPERN	NGT 5 77	154
99	HOWARD UNIV	M S BURRELL	GSFC	J B HALPERN	NGT 5 113	154
99	HOWARD UNIV	N KHAZANIE	GSFC	V M MORRIS	NAG 5 9175	153
99	ILLINOIS STATE UNIV	J SHARBER	GSFC	D HOLLAND	NAG 5 9584	199
99	INDIANA UNIV - BLOOMINGTON	M MEYER	GSFC	D H BURKE	NAG 5 12360	214
99	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	K BLANDING	GSFC	R DUNCAN	NGT 5 50366	213
99	INDIANA UNIV.-PURDUE U. AT INDIANAPOLIS	K BLANDING	GSFC	W WAGNER	NGT 5 50373	213
99	INTER AMER UNIV OF PR - AGUADILLA	M STOUTSENBERGER	HQ	R GONZALEZ	NAG 5 9311	378
99	IOWA STATE UNIV	D D DETROYE	GSFC	W J BYRD	NGT 5 40081	222
99	JACKSON STATE UNIV	M MATEU	GSFC	C CRAIG	NCC 5 667	323
99	JACKSON STATE UNIV	A JOYCE	SSC	A K MOHAMED	NAG13 98007	323
99	JACKSON STATE UNIV	A JOYCE	SSC	H GORE	NAG13 99004	323

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	JACKSON STATE UNIV	R P TRAVIS	SSC	A K MOHAMED	NAG13 02056	323
99	JACKSONVILLE STATE UNIV	K BLANDING	GSFC	T HUDDLESTON	NAG 5 12251	4
99	JAMES MADISON UNIV	J JOHNSON	GSFC	J BLANDINO	NAG 5 10701	510
99	JAMES MADISON UNIV	R A HATHAWAY	LARC	A A TEATE	NAG 1 2155	509
99	JOHNS HOPKINS UNIV	D D DETROYE	GSFC	R C HENRY	NGT 5 40079	252
99	JOHNS HOPKINS UNIV	J F SPANN	GSFC	J M RUOHONIEMI	NAG 5 10902	246
99	JOHNS HOPKINS UNIV	J HILLMAN	GSFC	X ZHU	NAG 5 11962	249
99	JOHNS HOPKINS UNIV	J HILLMAN	GSFC	D F STROBEL	NAG 5 12051	249
99	JOHNS HOPKINS UNIV	J Q SPANN	GSFC	K TAKAHASHI	NAG 5 12201	249
99	JOHNS HOPKINS UNIV	J SHARBER	GSFC	K TAKAHASHI	NAG 5 8964	242
99	JOHNS HOPKINS UNIV	J SHARBER	GSFC	B MAUK	NAG 5 10281	244
99	JOHNS HOPKINS UNIV	J SHARBER	GSFC	D G SIBECK	NAG 5 10285	244
99	JOHNS HOPKINS UNIV	J SHARBER	GSFC	S OHTANI	NAG 5 10941	246
99	JOHNS HOPKINS UNIV	J SPANN	GSFC	S OHTANI	NAG 5 12050	249
99	JOHNS HOPKINS UNIV	J SPANN	GSFC	J SHUE	NAG 5 12108	249
99	JOHNS HOPKINS UNIV	K BLANDING	GSFC	P C SEARSON	NGT 5 50372	252
99	JOHNS HOPKINS UNIV	L SMITH	GSFC	K J STEBE	NGT 5 50259	252
99	JOHNS HOPKINS UNIV	L SMITH	GSFC	K J STEBE	NGT 5 50268	252
99	JOHNS HOPKINS UNIV	M KURYLO	GSFC	S A LLOYD	NAG 5 11035	247
99	JOHNS HOPKINS UNIV	M MELLOTT	GSFC	R A GREENWALD	NAG 5 10060	244
99	JOHNS HOPKINS UNIV	M MEYER	GSFC	W B BRINCKERHOFF	NAG 5 12169	249
99	JOHNS HOPKINS UNIV	M MEYER	GSFC	W B BRINCKERHOFF	NAG 5 12354	250
99	JOHNS HOPKINS UNIV	M MEYER	GSFC	W B BRINCKERHOFF	NAG 5 12363	250
99	JOHNS HOPKINS UNIV	P DECOLA	GSFC	D WAUCH	NAG 5 11283	247
99	JOHNS HOPKINS UNIV	P DECOLA	GSFC	W SWARTZ	NAG 5 11297	247
99	JOHNS HOPKINS UNIV	P E HUNTER	GSFC	D SIBECK	NAG 5 12085	249
99	JOHNS HOPKINS UNIV	P E HUNTER	GSFC	A R THAKAR	NAG 5 12092	249
99	JOHNS HOPKINS UNIV	PCRANE	GSFC	S R MCCANDLISS	NAG 5 11456	248
99	JOHNS HOPKINS UNIV	T MORGAN	GSFC	B MAUK	NAG 5 12224	249
99	JOHNS HOPKINS UNIV	W ABDALATI	GSFC	R RANEY	NAG 5 10261	244
99	JOHNS HOPKINS UNIV	W J WAGNER	GSFC	D LARIO	NAG 5 10787	246
99	JOHNS HOPKINS UNIV	W J WAGNER	GSFC	G HO	NAG 5 10836	246
99	JOHNS HOPKINS UNIV	W WAGNER	GSFC	D HAGGERTY	NAG 5 12479	250
99	LAWSON STATE COMM COLL	C PERSON	GSFC	B CRAWFORD	NAG 5 11986	5
99	LEHIGH UNIV	K BLANDING	GSFC	F J PAZZAGLIA	NGT 5 50418	437
99	LINCOLN UNIV - PA.	D MENCHAN	GSFC	R LANGLEY	NAG 5 10172	438
99	LINCOLN UNIV - PA.	M MATEU	GSFC	O RICHARD	NCC 5 662	438
99	LOUISIANA STATE UNIV - BATON ROUGE	D DETROYE	GSFC	J P WEFEL	NCC 5 167	232
99	LOUISIANA STATE UNIV - BATON ROUGE	D DETROY	HQ	J WEFEL	NCC 5 393	232
99	LOUISIANA STATE UNIV - BATON ROUGE	D DETROYE	HQ	J WEFEL	NGT 5 40115	232
99	MARIST COLL	M MEYER	GSFC	R KEPNER	NAG 5 9889	378
99	MARQUETTE UNIV	C W LLOYD	JSC	R H FITTS	NAG 9 1156	541
99	MASSACHUSETTS INST OF TECH	D D DETROYE	GSFC	L YOUNG	NGT 5 40075	296
99	MASSACHUSETTS INST OF TECH	D E SMITH	GSFC	G H PETTENGILL	NAG 5 4434	287
99	MASSACHUSETTS INST OF TECH	D E SMITH	GSFC	M T ZUBER	NAG 5 4806	287
99	MASSACHUSETTS INST OF TECH	D E SMITH	GSFC	M T ZUBER	NAG 5 11113	291
99	MASSACHUSETTS INST OF TECH	D SENKE	GSFC	A RIVKIN	NAG 5 10328	291
99	MASSACHUSETTS INST OF TECH	D SPEARS	GSFC	D PRITCHARD	NAG 5 12515	293
99	MASSACHUSETTS INST OF TECH	J HILLMAN	GSFC	R BINZEL	NAG 5 12355	293
99	MASSACHUSETTS INST OF TECH	K BLANDING	GSFC	J B HOWARD	NGT 5 50302	296
99	MASSACHUSETTS INST OF TECH	K BLANDING	GSFC	B C WILLIAMS	NGT 5 50411	297
99	MASSACHUSETTS INST OF TECH	K BLANDING	GSFC	R WALSWORTH	NGT 5 50414	297
99	MASSACHUSETTS INST OF TECH	L SMITH	GSFC	M FLEMINGS	NGT 5 50306	296
99	MASSACHUSETTS INST OF TECH	M KURYLO	GSFC	J I STEINFELD	NAG 5 10613	291
99	MASSACHUSETTS INST OF TECH	M MEYER	GSFC	J GROTZINGER	NAG 5 9445	290
99	MASSACHUSETTS INST OF TECH	M MEYER	GSFC	R SUMMONS	NAG 5 12356	293
99	MASSACHUSETTS INST OF TECH	M SALAMON	GSFC	S A RAPPORT	NAG 5 12522	293
99	MASSACHUSETTS INST OF TECH	M SISTILLI	GSFC	S C TING	NAG 5 10711	291
99	MASSACHUSETTS INST OF TECH	M WEI	GSFC	R BRAS	NGT 5 30469	296
99	MASSACHUSETTS INST OF TECH	P DECOLA	GSFC	R A PLUMB	NAG 5 11285	292
99	MASSACHUSETTS INST OF TECH	R CROUCH	GSFC	G MCKINLEY	NAG 5 8776	289
99	MASSACHUSETTS INST OF TECH	T MATURO	GSFC	J KLEIN	NAG 5 11268	292
99	MEDGAR EVERS COLL	M STOUTSENBERGER	HQ	L JOHNSON	NAG 5 9256	378
99	MEHARRY MEDICAL COLL	C PERSON	GSFC	M F LIMA	NAG 5 12093	463
99	MICHIGAN STATE UNIV	R GRYMES	ARC	M THOMASHOW	NCC 2 1274	305
99	MICHIGAN STATE UNIV	S OLSON	GRC	I S WICHMAN	NCC 3 662	305

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	MICHIGAN STATE UNIV	G GUTMAN	GSFC	J LIU	NAG 5 10200	305
99	MICHIGAN STATE UNIV	K BLANDING	GSFC	P PIERRE	NGT 5 50378	306
99	MICHIGAN STATE UNIV	M MAIDEN	GSFC	D SKOLE	NCC 5 303	306
99	MICHIGAN STATE UNIV	W WAGNER	GSFC	R F STEIN	NAG 5 12450	305
99	MICHIGAN STATE UNIV	A NURRIDIN	HQ	P WEBBER	NGT 5 50150	306
99	MICHIGAN STATE UNIV	D S MCKAY	JSC	M A VELBEL	NAG 9 1211	305
99	MICHIGAN TECHNOLOGICAL UNIV	M WEI	GSFC	R SHAW	NAG 5 10568	307
99	MIDDLE TENNESSEE STATE UNIV	L BILBROUGH	GSFC	E R PHILLIPS	NAG 5 11692	463
99	MIDDLE TENNESSEE STATE UNIV	L BILBROUGH	GSFC	E KLUMPE	NAG 5 12561	463
99	MISSISSIPPI STATE UNIV	M MATHEWS	GSFC	B JOINER	NAG 5 11127	324
99	MISSISSIPPI STATE UNIV	R MCKELLIP	SSC	D SHAW	NCC13 99001	324
99	MISSISSIPPI VALLEY STATE UNIV.	C PERSON	GSFC	C BLAND	NAG 5 9535	325
99	MISSISSIPPI VALLEY STATE UNIV.	M MATEU	GSFC	O CATHEY	NCC 5 665	325
99	MISSISSIPPI VALLEY STATE UNIV.	M STOUTSENBERGER	GSFC	C G BLAND	NAG 5 9197	324
99	MISSISSIPPI VALLEY STATE UNIV.	N S SULLIVAN	SSC	S J WHITE	NAG13 99003	325
99	MONTANA STATE UNIV	R A GRYMES	ARC	D L DICKENSHEETS	NCC 2 5437	334
99	MONTANA STATE UNIV	D D DETROYE	GSFC	W HISCOCK	NGT 5 40092	335
99	MONTANA STATE UNIV	D DETROYE	GSFC	W HISCOCK	NCC 5 410	334
99	MONTANA STATE UNIV	D DETROYE	GSFC	W HISCOCK	NCC 5 579	334
99	MONTANA STATE UNIV	L SMITH	GSFC	J C PRISCU	NGT 5 50297	335
99	MONTANA STATE UNIV	M SALAMON	GSFC	R HELLINGS	NAG 5 11467	334
99	MONTANA STATE UNIV	M SALAMON	GSFC	R HELLINGS	NAG 5 11469	334
99	MONTANA STATE UNIV	M V PHELPS	GSFC	G TUTHILL	NAG 5 4576	333
99	MONTANA STATE UNIV	W WALTER	GSFC	D LONGCOPE	NAG 5 10489	333
99	MONTANA STATE UNIV	D JAN	JPL	B H PYLE	NAG 9 1082	334
99	MONTANA STATE UNIV	K LASSMAN	JSC	W SWEARINGEN	NCC 9 44	335
99	MOREHOUSE SCH MED	A J CARDENAS	ARC	M THIERRY-PALMER	NAG 2 1381	188
99	MOREHOUSE SCH MED	C E WADE	ARC	B J KLEMENT	NAG 2 1448	188
99	MORGAN STATE UNIV	B WHITE	GSFC	E N ISUK	NAG 5 10947	253
99	MORGAN STATE UNIV	C PERSON	GSFC	D N WILLIAMS	NAG 5 9710	253
99	MORGAN STATE UNIV	D MENCAHN	GSFC	E ISUK	NAG 5 11852	253
99	MORGAN STATE UNIV	J HARRINGTON	GSFC	W LUPTON	NCC 5 532	253
99	MORGAN STATE UNIV	JBENNETT	GSFC	E DELOATCH	NAG 5 11405	253
99	MORGAN STATE UNIV	P HOLLOWAY	GSFC	H WILLIAMS	NAG 5 8574	252
99	MORGAN STATE UNIV	K KRISHEN	JSC	J E WHITNEY	NAG 9 998	253
99	MT HOLYOKE COLL	CHOLLINGSWORTH	GSFC	J MORROW	NAG 5 11759	297
99	MUHLENBERG COLL	S CANRIGHT	HQ	R MILLIGAN	NAG 5 12416	438
99	NATIONAL HISPANIC UNIV	A CARDENAS	ARC	J HAWKINS	NAG 2 6062	52
99	NATIONAL HISPANIC UNIV	A CARDENAS	ARC	J S HAWKINS	NCC 2 6055	53
99	NATIONAL HISPANIC UNIV	M MATEU	GSFC	J HAWKINS	NCC 5 664	53
99	NEW JERSEY INST OF TECH	W WAGNER	GSFC	D E GARY	NAG 5 10212	348
99	NEW JERSEY INST OF TECH	P DOTY	MSFC	E DREIZIN	NAG 8 1714	348
99	NEW MEXICO HIGHLANDS UNIV	G HENDERSEN	JSC	J R JUAREZ	NAG 9 1260	358
99	NEW MEXICO HIGHLANDS UNIV	L ARMENDARIZ	JSC	J R JUAREZ	NAG 9 1921	358
99	NEW MEXICO HIGHLANDS UNIV	L M ARMENDARIZ	JSC	J R JUAREZ	NAG 9 1330	358
99	NEW MEXICO HIGHLANDS UNIV	L M ARMENDARIZ	JSC	E RYAN	NAG 9 1409	358
99	NEW MEXICO HIGHLANDS UNIV	PBAKER	WFF	J JUAREZ	NAG 9 1369	358
99	NEW MEXICO STATE UNIV - LAS CRUCES	A CARDENAS	ARC	G V GARCIA	NAG 2 6030	359
99	NEW MEXICO STATE UNIV - LAS CRUCES	B J COLLINS	ARC	N R PRASAD	NAG 2 6053	359
99	NEW MEXICO STATE UNIV - LAS CRUCES	B WHITE	GSFC	H BAPTISTE	NCC 5 466	361
99	NEW MEXICO STATE UNIV - LAS CRUCES	D BOGAN	GSFC	M MARLEY	NAG 5 8919	360
99	NEW MEXICO STATE UNIV - LAS CRUCES	D D DETROYE	GSFC	P HYNES	NGT 5 40087	361
99	NEW MEXICO STATE UNIV - LAS CRUCES	D DETROYE	GSFC	P HYNES	NGT 5 40061	361
99	NEW MEXICO STATE UNIV - LAS CRUCES	J HILLMAN	GSFC	J R MURPHY	NAG 5 12123	360
99	NEW MEXICO STATE UNIV - LAS CRUCES	D M RUSSO	JSC	G A EICEMAN	NAG 9 1291	360
99	NY UNIV	W ABDALATI	GSFC	D HOLLAND	NAG 5 12419	379
99	NORFOLK STATE UNIV	B L WHITE	GSFC	G GOLEMBIEWSKI	NAG 5 9257	511
99	NORFOLK STATE UNIV	M MATTHEWS	GSFC	L MATTIX	NCC 5 457	511
99	NORFOLK STATE UNIV	N KHAZENIE	GSFC	S CHAUDHURY	NAG 5 8541	511
99	NORFOLK STATE UNIV	R A HATHAWAY	LARC	P TUCKER-HOGAN	NCC 1 01053	511
99	NORFOLK STATE UNIV	R A HATHAWAY	LARC	W RODRIGUEZ	NCC 1 01055	511
99	NORFOLK STATE UNIV	R A HATHAWAY	LARC	S M PROCTOR	NCC 1 02024	511
99	NORTH CAROLINA A&T STATE UNIV	A CARDENAS	ARC	J MONROE	NAG 2 6061	393
99	NORTH CAROLINA A&T STATE UNIV	D F NOGA	GRC	Y ELLEN	NAG 3 2165	393
99	NORTH CAROLINA A&T STATE UNIV	B WHITE	GSFC	J D MONROE	NCC 5 349	394
99	NORTH CAROLINA A&T STATE UNIV	J MALONE	GSFC	N DOGAN	NAG 5 9419	393

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	NORTH CAROLINA CENTRAL UNIV	R F LAWRENCE	GRC	B V VIAHOVIC	NAG 3 2804	394
99	NORTH CAROLINA STATE UNIV. - RALEIGH	A GHASSEM	GSFC	D REICHLER	NGT 5 30054	397
99	NORTH CAROLINA STATE UNIV. - RALEIGH	D D DETROYE	GSFC	F R DEJARNETTE	NGT 5 40109	398
99	NORTH CAROLINA STATE UNIV. - RALEIGH	D DETROYE	GSFC	F R DEJARNETTE	NGT 5 40011	398
99	NORTH CAROLINA STATE UNIV. - RALEIGH	J BREDEKAMP	GSFC	K J BORKOWSKI	NAG 5 9490	396
99	NORTH CAROLINA STATE UNIV. - RALEIGH	J A WHITE	LARC	J R EDWARDS	NAG 1 2216	394
99	NORTH CAROLINA STATE UNIV. - RALEIGH	S SPEARMAN	MSFC	K J BACHMANN	NCC 8 95	397
99	NORTHERN ARIZONA UNIV	D BOGAN	GSFC	R YELLE	NAG 5 9214	24
99	NORTHERN ARIZONA UNIV	J HILMAN	GSFC	C GRIFFITH	NAG 5 11239	24
99	NORTHWESTERN UNIV	D SENSKE	GSFC	B BUSSEY	NAG 5 12587	201
99	NORTHWESTERN UNIV	K BLANDING	GSFC	P VOORHEES	NGT 5 50368	202
99	NORTHWESTERN UNIV	K BLANDING	GSFC	M MATALON	NGT 5 50405	202
99	NORTHWESTERN UNIV	L SMITH	GSFC	B J MATKOWSKY	NGT 5 50263	202
99	NORTHWESTERN UNIV	M WEI	GSFC	F GEIGER	NGT 5 30456	202
99	NORTHWESTERN UNIV	M WEI	GSFC	P SCHEUERMANN	NGT 5 30471	202
99	NORTHWESTERN UNIV	P CRANE	GSFC	M P ULMER	NAG 5 11457	201
99	NORTHWESTERN UNIV	K DAUES	JSC	R N LUEPTOW	NAG 9 1398	201
99	OAKWOOD COLL	W LOVE	MSFC	A OSEI	NAG 8 1868	5
99	OGLELALA LAKOTA COLL	D MENCHAN	GSFC	S PHELPS	NAG 5 10935	462
99	OGLELALA LAKOTA COLL	T GULL	GSFC	J HAAS	NAG 5 7548	462
99	OHIO STATE UNIV	G STRINGFELLO	GSFC	E HERBST	NAG 5 10207	413
99	OHIO STATE UNIV	H HASAN	GSFC	A K PRADHAN	NAG 5 11462	413
99	OHIO STATE UNIV	K PARTINGTON	GSFC	K JEZEK	NAG 5 10112	412
99	OHIO STATE UNIV	L SMITH	GSFC	E MOSLEY-THOMPSON	NGT 5 30178	415
99	OHIO STATE UNIV	M WEI	GSFC	D BRZEZINSKA	NAG 5 10619	413
99	OHIO STATE UNIV	W ABDALATI	GSFC	D BROMWICH	NAG 5 10160	412
99	OHIO STATE UNIV	W ABDALATI	GSFC	B CSATHO	NAG 5 10199	413
99	OHIO STATE UNIV	W ABDALATI	GSFC	E MOSLEY-THOMPSON	NAG 5 10266	413
99	OHIO STATE UNIV	W ABDALATI	GSFC	K JEZEK	NAG 5 12290	413
99	OHIO STATE UNIV	W ABDALTI	GSFC	K JEZEK	NAG 5 10275	413
99	OHIO WESLEYAN UNINERITY	F SAVINO	GRC	W C LOUTHAN	NAG 3 2645	416
99	OHIO WESLEYAN UNINERITY	J ROSENDHAL	HQ	W LOUTHAN	NAG 5 10453	416
99	OKLAHOMA STATE UNIV	L BILBROUGH	GSFC	S MARKS	NCC 5 629	425
99	OKLAHOMA STATE UNIV	L BILLBROUGH	GSFC	T COLLINS	NCC 5 561	425
99	OKLAHOMA STATE UNIV	L L BILBROUGH	GSFC	S K MARKS	NCC 5 185	425
99	OKLAHOMA STATE UNIV	K BLANDING	HQ	S MCKEEVERS	NGT 5 50420	425
99	OKLAHOMA STATE UNIV	C W LLOYD	JSC	B J STOECKER	NAG 9 1159	425
99	OLD DOMINION UNIV	D D DETROYE	GSFC	M SANDY	NGT 5 40080	517
99	OLD DOMINION UNIV	D DETROYE	GSFC	M SANDY	NGT 5 40070	517
99	OLD DOMINION UNIV	J GORMAN	GSFC	M SANDY	NCC 5 592	515
99	OLD DOMINION UNIV	J MARRA	GSFC	E HOFMANN	NAG 5 11259	513
99	OLD DOMINION UNIV	L KEFFER	GSFC	M L SANDY	NGT 5 40059	517
99	OLD DOMINION UNIV	D L HARM	JSC	R B LOFTIN	NCC 9 135	515
99	OLD DOMINION UNIV	R A HATHAWAY	LARC	B TIWARI	NCC 1 01043	515
99	OLD DOMINION UNIV	R HATHAWAY	LARC	M SCERBO	NGT 1 01005	515
99	ORAL ROBERTS UNIV	R HARMAN	GSFC	D HALSMER	NAG 5 7378	425
99	OREGON STATE UNIV	R K DISMUKES	ARC	K H FUNK	NAG 2 1287	427
99	OREGON STATE UNIV	D D DETROYE	GSFC	A C KLEIN	NGT 5 40103	430
99	OREGON STATE UNIV	D WICKLAND	GSFC	D P TURNER	NAG 5 11222	429
99	OREGON STATE UNIV	D WICKLAND	GSFC	B LAW	NAG 5 11223	429
99	OREGON STATE UNIV	D WICKLAND	GSFC	L MAHRT	NAG 5 11231	429
99	OREGON STATE UNIV	E LINDSTROM	GSFC	A BENNET	NAG 5 12443	429
99	OREGON STATE UNIV	G GUTMAN	GSFC	O N KRANKINA	NAG 5 10614	428
99	OREGON STATE UNIV	J MARRA	GSFC	Y SPITZ	NAG 5 11190	429
99	OREGON STATE UNIV	M MEYER	GSFC	M FISK	NAG 5 9446	428
99	OREGON STATE UNIV	M MEYER	GSFC	M FISK	NAG 5 12351	429
99	OREGON STATE UNIV	M WEI	GSFC	W PEGAU	NGT 5 30347	430
99	OREGON STATE UNIV	M Y WEI	GSFC	B BOND	NGT 5 30181	430
99	OREGON STATE UNIV	W WEI	GSFC	L MAHRT	NGT 5 30387	430
99	OUR LADY OF THE LAKE UNIV	L ARMENDARIZ	JSC	K A WARD	NAG 9 1170	471
99	PAINÉ COLL	M STOUTSENBERGER	GSFC	R KESSLER	NAG 5 9157	188
99	PASADENA CITY COLL	P J SAKIMOTO	GSFC	J SEPIKAS	NAG 5 11197	53
99	PASSAIC COUNTY COMM COLL	STOUTSENBERGER	HQ	R EPSTEIN	NAG 5 9103	348
99	PAUL QUINN COLL	C PERSON	GSFC	S JONES	NAG 5 11658	471
99	PENN. STATE UNIV.-RADNOR	K BLANDING	GSFC	M ERACLEOUS	NGT 5 50387	438
99	PENN STATE UNIV. - UNIV. PARK	M MC CARTHY	DFRC	B GRABOWSKI	NAG 4 160	440

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	PENN STATE UNIV. - UNIV. PARK	D DETROYE	GSFC	R DEVON	NGT 5 40090	447
99	PENN STATE UNIV. - UNIV. PARK	D GOLOMBEK	GSFC	G BABU	NAG 5 10542	443
99	PENN STATE UNIV. - UNIV. PARK	K BLANDING	GSFC	M BERSHADY	NGT 5 50236	448
99	PENN STATE UNIV. - UNIV. PARK	K BLANDING	GSFC	R WADE	NGT 5 50399	448
99	PENN STATE UNIV. - UNIV. PARK	L K SMITH	GSFC	W BRANDT	NGT 5 50277	448
99	PENN STATE UNIV. - UNIV. PARK	L SMITH	GSFC	N BRANDT	NGT 5 50247	448
99	PENN STATE UNIV. - UNIV. PARK	L SMITH	GSFC	S COUTU	NGT 5 50296	448
99	PENN STATE UNIV. - UNIV. PARK	M MEYER	GSFC	J GE	NAG 5 12115	444
99	PENN STATE UNIV. - UNIV. PARK	M MEYER	GSFC	S BRANTLEY	NAG 5 12330	444
99	PENN STATE UNIV. - UNIV. PARK	M MEYER	GSFC	M E PATZKOWSKY	NAG 5 12338	444
99	PENN STATE UNIV. - UNIV. PARK	M MEYER	GSFC	J F KASTING	NAG 5 12352	444
99	PENN STATE UNIV. - UNIV. PARK	P CRANE	GSFC	R A WADE	NAG 5 9586	442
99	PENN STATE UNIV. - UNIV. PARK	P CRANE	GSFC	J GE	NAG 5 11427	444
99	PENN STATE UNIV. - UNIV. PARK	R E GABRYS	GSFC	D L GRABOWSKI	NCC 5 432	446
99	PENN STATE UNIV. - UNIV. PARK	J DASCH	HQ	R DEVON	NGT 5 40064	447
99	PENN STATE UNIV -HERSHEY MED.	C W LLOYD	JSC	D MACLEAN	NAG 9 1259	438
99	POLYTECH UNIV PUERTO RICO	G MOAK	GSFC	E LEAL-QUIROS	NAG 5 11711	550
99	POMONA COLL	D SENSKE	GSFC	E GROSFILS	NAG 5 10157	53
99	PORTLAND STATE UNIV	M MEYER	GSFC	S CADY	NAG 5 9579	430
99	PORTLAND STATE UNIV	M MEYER	GSFC	N LEHMAN	NAG 5 11441	431
99	PORTLAND STATE UNIV	M MEYER	GSFC	T STEVENS	NAG 5 11442	431
99	PORTLAND STATE UNIV	W ABDALATI	GSFC	C HULBE	NAG 5 11309	431
99	PRAIRIE VIEW A&M UNIV	J HARRINGTON	GSFC	J WILLIAMS	NCC 5 529	472
99	PRAIRIE VIEW A&M UNIV	J MALONE	GSFC	R WILKINS	NAG 5 11070	471
99	PRAIRIE VIEW A&M UNIV	A JOYCE	SSC	S SHAKIR	NAG13 46	471
99	PRESCOTT COLL	R VENEZIA	GSFC	W ORR	NAG 5 11550	24
99	PRINCETON UNIV	J HILLMAN	GSFC	R Q WILSON	NAG 5 12015	351
99	PRINCETON UNIV	J MARRA	GSFC	M BENDER	NAG 5 11301	351
99	PRINCETON UNIV	K BLANDING	GSFC	E CHOUAIRI	NGT 5 50356	352
99	PRINCETON UNIV	K BLANDING	GSFC	D SAVILLE	NGT 5 50370	353
99	PRINCETON UNIV	K BLANDING	GSFC	U SELJAK	NGT 5 50383	353
99	PRINCETON UNIV	K BLANDING	GSFC	W RUSSEL	NGT 5 50407	353
99	PRINCETON UNIV	M WEI	GSFC	S HUBBELL	NGT 5 30113	352
99	PURDUE UNIV	D DETROYE	GSFC	D ANDRISANI	NGT 5 40114	218
99	PURDUE UNIV	D FOLTA	GSFC	K C HOWELL	NCC 5 358	218
99	PURDUE UNIV	D SENSKE	GSFC	B PICKETT	NAG 5 10262	216
99	PURDUE UNIV	J HILLMAN	GSFC	T ZWIER	NAG 5 12098	217
99	PURDUE UNIV	J M BOYCE	GSFC	J SHAN	NAG 5 11080	216
99	PURDUE UNIV	K BLANDING	GSFC	J M LONGUSKI	NGT 5 50275	219
99	PURDUE UNIV	K BLANDING	GSFC	T ZWEIR	NGT 5 50336	219
99	PURDUE UNIV	M MATEU	GSFC	S BAST	NAG 5 12562	217
99	PURDUE UNIV	M MEYER	GSFC	J A CHMIELEWSKI	NAG 5 10735	216
99	PURDUE UNIV	P ULRICH	GSFC	C NOUSSAIR	NAG 5 10061	216
99	PURDUE UNIV	B J WOOLFORD	JSC	G SALVENDY	NAG 9 1281	217
99	RENSSELAER POLYTECH INST	D MONTEGANI	GRC	J A TICHY	NGT 3 52341	381
99	RENSSELAER POLYTECH INST	K BLANDING	GSFC	M GAFFEY	NGT 5 50382	381
99	RENSSELAER POLYTECH INST	M MEYER	GSFC	J P FERRIS	NAG 5 9607	381
99	RICE UNIV	A TUYAHOV	GSFC	P REIFF	NCC 5 311	474
99	RICE UNIV	J SHARBER	GSFC	R WOLF	NAG 5 9077	473
99	RICE UNIV	J SPANN	GSFC	F R TOFFOLETTO	NAG 5 12144	474
99	RICE UNIV	P HUNTER	GSFC	E MERENYI	NAG 5 10432	473
99	RICE UNIV	C L FARMER	JSC	D SUBRAMANIAN	NAG 9 1249	474
99	ROCHESTER INST OF TECH	M GIARDINO	SSC	MCKEOWN	NAG13 02051	382
99	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	K BLADING	GSFC	C MAVROIDIS	NGT 5 50364	356
99	RUTGERS ST UNIV N.J.-INCLUDES PSCTWY	P CRANE	GSFC	J SELLWOOD	NAG 5 10110	355
99	RUTGERS STATE UNIV OF NJ NEW BRUNS	L P CHAMBERS	GSFC	H JANES	NAG 5 12435	356
99	RUTGERS STATE UNIV OF NJ NEW BRUNS	P DECOLA	GSFC	Y WANG	NAG 5 11244	356
99	SAINT CLOUD STATE UNIV	J HILLMAN	GSFC	M WOMACK	NAG 5 11287	318
99	SALISH KOOTENAI COLL	D MENCHAN	GSFC	T S OLSON	NAG 5 12205	335
99	SALISH KOOTENAI COLL	M STOUTSENBERGER	GSFC	J M GOBERT	NAG 5 9147	335
99	SAN BERNARDINO VALLEY COLL	A CARDENAS	ARC	D AVILA	NAG 2 6060	53
99	SAN DIEGO STATE UNIV	M WEI	GSFC	A HOPE	NGT 5 30367	54
99	SAN DIEGO STATE UNIV	M WEI	GSFC	C TAGUE	NGT 5 30439	54
99	SAN DIEGO STATE UNIV	M WEI	GSFC	J FRANKLIN	NGT 5 30444	54
99	SAN DIEGO STATE UNIV	A PEEK	SSC	D STOWE	NCC13 00002	54
99	SAN JACINTO COLL	D DENTON-MISFELDT	JSC	N J ANTHA	NAS 9 00106	475

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	SAN JACINTO COLL	D SICKOREZ	JSC	M DALTON	NCC 9 137	475
99	SAN JACINTO COLL	N AVAILABLE	JSC	N AVAILABLE	NCC 9 141	475
99	SAN JOSE STATE UNIV	I STATLER	ARC	K CORKER	NAG 2 1454	55
99	SAN JOSE STATE UNIV	I STATLER	ARC	K CORKER	NCC 2 1305	57
99	SAN JOSE STATE UNIV	K DISMUKES	ARC	K JORDAN	NCC 2 1289	56
99	SAN JOSE STATE UNIV	L K COE	ARC	E M LANDESMAN	NAG 2 6056	55
99	SAN JOSE STATE UNIV	M MOORE	ARC	B STONE	NGT 2 52262	58
99	SAN JOSE STATE UNIV	N S DORGI	ARC	M S PATANKAR	NCC 2 1284	56
99	SAN JOSE STATE UNIV	R K DISMUKES	ARC	K JORDAN	NCC 2 1302	57
99	SAN JOSE STATE UNIV	R K DISMUKES	ARC	K P JORDAN	NCC 2 1095	56
99	SAN JOSE STATE UNIV	RJ DISMUKES	ARC	K JORDON	NCC 2 1155	56
99	SAN JOSE STATE UNIV	J BOYCE	GSFC	S C RAFKIN	NAG 5 9500	55
99	SAN JOSE STATE UNIV	J BOYCE	GSFC	A BRIDGER	NAG 5 11185	55
99	SANTA ANA COLL-RANCHO SANTA COMM COLL	M PHELPS	HQ	P BOSTIC	NAG 5 12113	58
99	SHAW UNIV	M STOUTSENBERGER	GSFC	K SATAGOPAN	NAG 5 9195	398
99	SONOMA STATE UNIV	D GABRYS	GSFC	L COMINSKY	NCC 5 429	59
99	SOUTH CAROLINA STATE UNIV	D MENCHAN	GSFC	J D SALLEY	NAG 5 8246	461
99	SOUTH CAROLINA STATE UNIV	J HARRINGTON	GSFC	D WALTER	NCC 5 534	461
99	SOUTH CAROLINA STATE UNIV	M MATEU	GSFC	J SALLEY	NCC 5 651	461
99	SOUTH CAROLINA STATE UNIV	M MATTHEWS	GSFC	D K WALTER	NCC 5 454	461
99	SOUTH DAKOTA SCH OF MINES & TECH	D DETROYE	GSFC	S FARWELL	NCC 5 402	462
99	SOUTH DAKOTA SCH OF MINES & TECH	D DETROYE	GSFC	S O FARWELL	NCC 5 588	462
99	SOUTH DAKOTA SCH OF MINES & TECH	D DETROYE	GSFC	S O FARWELL	NGT 5 40042	462
99	SOUTH DAKOTA SCH OF MINES & TECH	D DETROYE	GSFC	S O FARWELL	NGT 5 40095	462
99	SOUTHERN METHODIST UNIV	L CHAMBERS	GSFC	J NEEL	NAG 5 12289	475
99	SOUTHERN UNIV & A&M COLL	B WHITE	GSFC	D BAGAYOKO	NAG 5 8552	233
99	SOUTHERN UNIV & A&M COLL	J L HARRINGTON	GSFC	D BAGAYOKO	NAG 5 11936	233
99	SOUTHERN UNIV & A&M COLL	G GORDON	MSFC	M A STUNNLEFIELD	NAG 8 1536	233
99	SOUTHERN UNIV & A&M COLL	W J LOVE	MSFC	L L LAURENCE	NAG 8 1627	233
99	SOUTHERN UNIV & A&M COLL	R TRAVIS	SSC	D BAGAYOKO	NCC13 00010	234
99	SOUTHWEST TEXAS JUNIOR COLL	L ARMENDARIZ	JSC	A HERNANDEZ	NAG 9 1019	475
99	SOUTHWESTERN INDIAN POLYTECH INST	L M ARMENDARIZ	JSC	C L ABEITA	NAG 9 1407	361
99	STANFORD UNIV	T J BARTH	ARC	T HUGHES	NCC 2 5363	65
99	STANFORD UNIV	B BETTS	GSFC	L TYLER	NAG 5 9494	61
99	STANFORD UNIV	D BOGAN	GSFC	G TYLER	NAG 5 9556	61
99	STANFORD UNIV	J SHARBER	GSFC	U S INAN	NGT 5 50351	67
99	STANFORD UNIV	L SMITH	GSFC	A B WALKER	NGT 5 50254	67
99	STANFORD UNIV	M WEI	GSFC	K ARRIGO	NGT 5 30392	67
99	STANFORD UNIV	P CRANE	GSFC	B CABRERA	NAG 5 11439	62
99	STANFORD UNIV	W WAGNER	GSFC	P H SCHERRER	NAG 5 12452	63
99	STANFORD UNIV	K BLANDING	HQ	A FOX	NGT 5 50358	67
99	STATE UNIV OF NY - ALBANY	M WEI	GSFC	D KIEBER	NGT 5 30431	383
99	STATE UNIV OF NY - ALBANY	M GIARDINO	SSC	P F HOPKINS	NAG13 02043	383
99	STATE UNIV OF NY - BUFFALO	D SENSKE	GSFC	T K GREGG	NAG 5 11835	384
99	STATE UNIV OF NY - BUFFALO	J BOYCE	GSFC	T GREGG	NAG 5 9619	384
99	STATE UNIV OF NY - BUFFALO	S DAVISON	GSFC	B GONG	NAG 5 9873	384
99	STATE UNIV OF NY - STONY BROOK	J HILLMAN	GSFC	J L FOX	NAG 5 12070	386
99	STATE UNIV OF NY - STONY BROOK	M Y WEI	GSFC	M LERDAU	NGT 5 30124	387
99	STATE UNIV OF NY - STONY BROOK	P DECOLA	GSFC	M GELLER	NAG 5 11240	386
99	STATE UNIV OF NY - STONY BROOK	R R ANTCLIFF	LARC	Y SHAMASH	NAG 1 01052	384
99	STATE UNIV OF NY COL - PLATTSBURGH	M MEYER	GSFC	G J FLYNN	NAG 5 12358	387
99	STATE UNIV OF NY COLL - PURCHASE	D SENSKE	GSFC	G FLYNN	NAG 5 10221	387
99	STEVENS INST OF TECH	D D DETROYE	GSFC	S THANGAM	NGT 5 40096	357
99	SYRACUSE UNIV	H HASAN	GSFC	G VIDALI	NAG 5 11438	388
99	TENNESSEE STATE UNIV	A CARDENAS	ARC	W A SMITH	NAG 2 6052	464
99	TENNESSEE STATE UNIV	M BOROWSKI	GRC	D ROGERS	NAG 3 2606	464
99	TENNESSEE STATE UNIV	M BOROWSKI	GRC	D ROGERS	NAG 3 2781	464
99	TENNESSEE STATE UNIV	M CAWTHON	GRC	D B ROGERS	NAG 3 2441	464
99	TENNESSEE STATE UNIV	R F LAWRENCE	GRC	D B ROGERS	NAG 3 2272	464
99	TENNESSEE STATE UNIV	R LAWRENCE	GRC	D ROGERS	NAG 3 2577	464
99	TENNESSEE STATE UNIV	J HARRINGTON	GSFC	W A SMITH	NCC 5 531	464
99	TENNESSEE STATE UNIV	M MATHEWS	GSFC	M BUSBY	NAG 5 10896	464
99	TENNESSEE STATE UNIV	M MATHEWS	GSFC	M BUSBY	NCC 5 511	464
99	TENNESSEE TECHNOLOGICAL UNIV	C K CARRINGTON	MSFC	S CANFIELD	NAG 8 1749	465
99	TEXAS A&M UNIV	J E CALOGERAS	GRC	F R BEST	NCC 3 516	479
99	TEXAS A&M UNIV	K W LASSMAN	GRC	G SERA	NAS 9 00100	479

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	TEXAS A&M UNIV	C PERSON	GSFC	C STEIDLEY	NCC 5 517	480
99	TEXAS A&M UNIV	J HILLMAN	GSFC	M T LEMMON	NAG 5 11992	478
99	TEXAS A&M UNIV	K BLANDING	GSFC	G R NORTH	NGT 5 50417	481
99	TEXAS A&M UNIV	M MEYER	GSFC	M C KENNICUT	NAG 5 9485	477
99	TEXAS A&M UNIV	M WEI	GSFC	D COLLINS	NAG 5 10549	477
99	TEXAS A&M UNIV	M WEI	GSFC	P CHANG	NGT 5 30417	480
99	TEXAS A&M UNIV	M WEI	GSFC	L HONGXING	NGT 5 30467	480
99	TEXAS A&M UNIV	P MOUNTJPOY	HQ	S BEDNARZ	NCC 5 359	480
99	TEXAS A&M UNIV	A STRAHAN	JSC	D T WARD	NAG 9 1268	478
99	TEXAS A&M UNIV	D BARTA	JSC	M C DREW	NAG 9 1067	478
99	TEXAS A&M UNIV	D SICKOREZ	JSC	W A HYMAN	NGT 9 39	481
99	TEXAS A&M UNIV	D SICKOREZ	JSC	W A HYMAN	NGT 9 54	481
99	TEXAS A&M UNIV	F J DELGADO	JSC	A P BANERJEE	NAG 9 1442	478
99	TEXAS A&M UNIV	J HOWELL	MSFC	K CHANG	NAG 8 1618	478
99	TEXAS A&M UNIV-CORPUS CHRISTI	N KHAZENIE	GSFC	G BLOUNT	NAG 5 9196	481
99	TEXAS COLL	C PERSON	GSFC	M NAMBOODIRI	NAG 5 11002	481
99	TEXAS COLL	L M ARMENDEZ	JSC	W STENGER	NAG 9 1416	481
99	TEXAS SOUTHERN UNIV	C PERSON	GSFC	D C DAVIS	NAG 5 12599	481
99	TEXAS TECH UNIV	J BREDEKAMP	GSFC	D COOKE	NAG 5 9505	482
99	THE AMERICAN UNIV	D DETROYE	GSFC	R BERENDZEN	NGT 5 40068	155
99	THE CATHOLIC UNIV OF AMERICA	B THOMPSON	GSFC	D C WANG	NAG 5 12389	159
99	THE CATHOLIC UNIV OF AMERICA	J BOYCE	GSFC	D CRIDER	NAG 5 11225	158
99	THE CATHOLIC UNIV OF AMERICA	J HILLMAN	GSFC	M A DISANTI	NAG 5 12208	158
99	THE CATHOLIC UNIV OF AMERICA	J HILLMAN	GSFC	N DELLA RUSSO	NAG 5 12285	159
99	THE CATHOLIC UNIV OF AMERICA	J HILLMAN	GSFC	F BRUHWEILER	NAG 5 12331	159
99	THE CATHOLIC UNIV OF AMERICA	P CRANE	GSFC	S KRAEMER	NAG 5 10500	157
99	THE CATHOLIC UNIV OF AMERICA	R CROUCH	GSFC	R D PARASURAMAN	NAG 5 8761	155
99	THE CATHOLIC UNIV OF AMERICA	W J WAGNER	GSFC	N GOPALSWAMY	NAG 5 10837	157
99	THE SCRIPPS RES INST (TSRI) -LA JOLLA	M MEYER	GSFC	M GHADIRI	NAG 5 12160	67
99	THE SCRIPPS RES INST (TSRI) -LA JOLLA	M MEYER	HQ	G JOYCE	NAG 5 9386	67
99	THE UNIV OF CENTRAL FLORIDA	D DETROYE	GSFC	S DURRANCE	NGT 5 40069	169
99	THE UNIV OF CENTRAL FLORIDA	D DETROYE	GSFC	S DURRANCE	NGT 5 40071	169
99	THE UNIV OF CENTRAL FLORIDA	D DETROYE	GSFC	S DURRANCE	NGT 5 40107	169
99	THE UNIV OF CENTRAL FLORIDA	C BLACK	KSC	R HOSLER	NAG10 299	168
99	THE UNIV OF CENTRAL FLORIDA	C D BLACK	KSC	D KOTNOUR	NAG10 315	169
99	THE UNIV OF CENTRAL FLORIDA	J P GORDON	KSC	D HOSIER	NAG10 280	168
99	TUFTS UNIV	P E HUNTER	GSFC	K R LANG	NAG 5 10350	297
99	TUFTS UNIV	R E GABRYS	GSFC	C ROGERS	NCC 5 434	298
99	TUFTS UNIV	W J WAGNER	GSFC	K R LANG	NAG 5 9725	297
99	TURTLE MOUNTAIN COMM COLL	L ARMENDARIZ	JSC	C DAVIS	NAG 9 1413	399
99	TUSKEGEE UNIV	M MATHEWS	GSFC	R D PACE	NAG 5 10535	6
99	TUSKEGEE UNIV	B WHITE	HQ	N O EGIEBOR	NCC 5 346	6
99	TUSKEGEE UNIV	R MCKINNEY	KSC	C DAVIS	NAG10 256	6
99	U OF ARKANSAS MAIN CAMP-FAYETTEVILLE	M J LEON	ARC	T KRAL	NCC 2 5360	40
99	U OF MD CTR FOR ENVIR SCI - CAMBRIDGE	E LINDSTROM	GSFC	L HARDING	NAG 5 11302	254
99	U OF N TEXAS HLTH SCI CTR - FT. WORTH	C W LLOYD	JSC	M L SMITH	NAG 9 1262	488
99	UNIV DEL ESTE	M MATEU	HQ	M HUERTAS	NCC 5 652	550
99	UNIV HOUSTON-HOUSTON	F J MONTEGANI	GRC	V BALAKOTIAH	NGT 3 52356	484
99	UNIV HOUSTON-HOUSTON	D G SICHAREZ	JSC	R B BANNEROT	NAG 9 1422	484
99	UNIV HOUSTON-HOUSTON	H L DAVIS	JSC	A V VAILLAS	NCC 9 70	484
99	UNIV HOUSTON-HOUSTON	L ARMENDARIZ	JSC	T MINDIOLA	NAG 9 1055	483
99	UNIV HOUSTON-HOUSTON	L M ARMENDARIZ	JSC	T MINDIOLA	NAG 9 1363	483
99	UNIV HOUSTON-HOUSTON	L M ARMENDARIZ	JSC	T MINDIOLA	NAG 9 1410	483
99	UNIV OF ALABAMA - BIRMINGHAM	B BETTS	GSFC	T WDOIWIK	NAG 5 9424	7
99	UNIV OF ALABAMA - BIRMINGHAM	K BLANDING	GSFC	J HAGOOD	NGT 5 50409	8
99	UNIV OF ALABAMA - BIRMINGHAM	L P CHAMBERS	GSFC	L J DELUCAS	NAG 5 11146	7
99	UNIV OF ALABAMA - BIRMINGHAM	S COLEMAN	MSFC	J F LORDEN	NCC 8 248	7
99	UNIV OF ALABAMA - HUNTSVILLE	D D DETROYE	GSFC	J C GREGORY	NGT 5 40077	14
99	UNIV OF ALABAMA - HUNTSVILLE	D DETROYE	GSFC	J GREGORY	NCC 5 391	13
99	UNIV OF ALABAMA - HUNTSVILLE	D DETROYE	GSFC	J C GREGORY	NCC 5 580	13
99	UNIV OF ALABAMA - HUNTSVILLE	D E DETROYE	GSFC	J GREGORY	NGT 5 40018	14
99	UNIV OF ALABAMA - HUNTSVILLE	J F SPANN	GSFC	D F SMART	NAG 5 10943	10
99	UNIV OF ALABAMA - HUNTSVILLE	J SHARBER	GSFC	N SINGH	NAG 5 9397	9
99	UNIV OF ALABAMA - HUNTSVILLE	J SPANN	GSFC	S CHANG	NAG 5 12008	11
99	UNIV OF ALABAMA - HUNTSVILLE	L KEFFER	GSFC	J C GREGORY	NCC 5 165	13
99	UNIV OF ALABAMA - HUNTSVILLE	M WEI	GSFC	S CHRISTOPHER	NGT 5 30430	14

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF ALABAMA - HUNTSVILLE	M WEI	GSFC	R M WELCH	NGT 5 30455	14
99	UNIV OF ALABAMA - HUNTSVILLE	P DECOLA	GSFC	M NEWCHURCH	NAG 5 11248	11
99	UNIV OF ALABAMA - HUNTSVILLE	P E HUNTER	GSFC	G A GERMANY	NAG 5 10743	10
99	UNIV OF ALABAMA - HUNTSVILLE	P E HUNTER	GSFC	S J GRAVES	NAG 5 11995	11
99	UNIV OF ALABAMA - HUNTSVILLE	P E HUNTER	GSFC	T NEWMAN	NAG 5 12109	11
99	UNIV OF ALABAMA - HUNTSVILLE	W WAGNER	GSFC	M A SHEA	NAG 5 10785	10
99	UNIV OF ALABAMA - HUNTSVILLE	N PELLIS	JSC	K CHITTUR	NAG 8 1355	12
99	UNIV OF ALABAMA - HUNTSVILLE	N Q QURAIISHI	JSC	J RUPERT	NCC 9 109	14
99	UNIV OF ALABAMA - HUNTSVILLE	G HULLETT-SMITH	MSFC	S J GRAVES	NAS 8 00180	13
99	UNIV OF ALABAMA - HUNTSVILLE	J F DOWDY	MSFC	G R KARR	NGT 8 52874	14
99	UNIV OF ALABAMA - HUNTSVILLE	J R PRUITT	MSFC	G KARR	NAG 8 1786	12
99	UNIV OF ALABAMA - HUNTSVILLE	M WATSON	MSFC	Y TAKAHASHI	NAS 8 98226	13
99	UNIV OF ALABAMA - HUNTSVILLE	S COLEMAN	MSFC	L R GREENWOOD	NCC 8 200	13
99	UNIV OF ALABAMA - UNIV	J HARRINGTON	GSFC	M FREEMAN	NAG 5 9855	15
99	UNIV OF ALABAMA - UNIV	M PHELPS	GSFC	L FREEMAN	NAG 5 9388	15
99	UNIV OF ALABAMA - UNIV	D V GALLAWAY	HQ	M FREEMAN	NAG 5 4346	15
99	UNIV OF ALABAMA - UNIV	J R PRUITT	MSFC	L M FREEMAN	NAG 8 1724	15
99	UNIV OF ALABAMA - UNIV	S COLEMAN	MSFC	R L WELLS	NCC 8 256	16
99	UNIV OF ALABAMA - UNIV	S STEVENSON	MSFC	M FREEMAN	NAG 8 1859	15
99	UNIV OF ALASKA - FAIRBANKS	D DETROYE	GSFC	J G HAWKINS	NGT 5 40100	18
99	UNIV OF ALASKA - FAIRBANKS	J BOYCE	GSFC	K YOSHIKAWA	NAG 5 11213	17
99	UNIV OF ALASKA - FAIRBANKS	J SHARBER	GSFC	A OTTO	NAG 5 9457	17
99	UNIV OF ALASKA - FAIRBANKS	J SPANN	GSFC	D LUMMERZHEIM	NAG 5 12192	18
99	UNIV OF ALASKA - FAIRBANKS	K BLANDING	GSFC	T CHAPIN	NGT 5 50423	18
99	UNIV OF ALASKA - FAIRBANKS	M MELLOTT	GSFC	M CONDE	NAG 5 10069	17
99	UNIV OF ALASKA - FAIRBANKS	M MEYER	GSFC	G PLUMLEY	NAG 5 9513	17
99	UNIV OF ALASKA - FAIRBANKS	M WEI	GSFC	J FREYMUELLER	NGT 5 30381	18
99	UNIV OF ALASKA - FAIRBANKS	W ABDALATI	GSFC	C LINGLE	NAG 5 11226	17
99	UNIV OF ALASKA - FAIRBANKS	W WAGNER	GSFC	S M BAILEY	NAG 5 12449	18
99	UNIV OF ALBUQUERQUE	LM ARMENDARIZ	JSC	R A LAFARGE	NAG 9 1312	361
99	UNIV OF ARIZONA	A TUYAHOV	GSFC	C F HUTCHINSON	NAG 5 12484	35
99	UNIV OF ARIZONA	B BETTS	GSFC	T SWINDLE	NAG 5 9198	29
99	UNIV OF ARIZONA	B BETTS	GSFC	W BOYNTON	NAG 5 9425	30
99	UNIV OF ARIZONA	D BOGAN	GSFC	E P TURTLE	NAG 5 8937	28
99	UNIV OF ARIZONA	D BOGAN	GSFC	R GREENBERG	NAG 5 8941	28
99	UNIV OF ARIZONA	D BOGAN	GSFC	F HERBERT	NAG 5 8952	29
99	UNIV OF ARIZONA	D BOGAN	GSFC	D HUNTEN	NAG 5 8970	29
99	UNIV OF ARIZONA	D D DETROYE	GSFC	M J DRAKE	NGT 5 40082	39
99	UNIV OF ARIZONA	D SENSKE	GSFC	P GEISSLER	NAG 5 10162	31
99	UNIV OF ARIZONA	D SENSKE	GSFC	R GREENBERG	NAG 5 11497	34
99	UNIV OF ARIZONA	G STRINGFELLOW	GSFC	L M ZIURYS	NAG 5 11471	34
99	UNIV OF ARIZONA	G STRINGFELLOW	GSFC	P BERNATH	NAG 5 10205	31
99	UNIV OF ARIZONA	G STRINGFELLOW	GSFC	L ZIURYS	NAG 5 10333	31
99	UNIV OF ARIZONA	G STRINGFELLOW	GSFC	E T YOUNG	NAG 5 11433	34
99	UNIV OF ARIZONA	J BOYCE	GSFC	M J DRAKE	NAG 5 9435	30
99	UNIV OF ARIZONA	J BREDEKAMP	GSFC	J HOLBERG	NAG 5 9408	30
99	UNIV OF ARIZONA	J HILLMAN	GSFC	K KARKOSCHKA	NAG 5 12014	35
99	UNIV OF ARIZONA	J HILLMAN	GSFC	C GRIFFITH	NAG 5 12272	35
99	UNIV OF ARIZONA	K BLANDING	GSFC	C WALKER	NGT 5 50246	39
99	UNIV OF ARIZONA	K BLANDING	GSFC	L CLOSE	NGT 5 50394	39
99	UNIV OF ARIZONA	K BLANDING	GSFC	M MEYER	NGT 5 50400	39
99	UNIV OF ARIZONA	K HOLLAND	GSFC	U FINK	NGT 5 50243	39
99	UNIV OF ARIZONA	L SMITH	GSFC	L ZIURYS	NGT 5 50282	39
99	UNIV OF ARIZONA	L SMITH	GSFC	D MCCARTHY	NGT 5 50283	39
99	UNIV OF ARIZONA	L SMITH	GSFC	R GREENBERG	NGT 5 50289	39
99	UNIV OF ARIZONA	L SMITH	GSFC	A BURROWS	NGT 5 50300	39
99	UNIV OF ARIZONA	L SMITH	GSFC	D DELUCA	NGT 5 50303	39
99	UNIV OF ARIZONA	M JASINSKI	GSFC	S SOROOSHIAN	NAG 5 11044	33
99	UNIV OF ARIZONA	M WEI	GSFC	R C BALES	NGT 5 30386	39
99	UNIV OF ARIZONA	P HUNTER	GSFC	J A LARSEN	NAG 5 8095	27
99	UNIV OF ARIZONA	T MORGAN	GSFC	S LARSON	NAG 5 9465	30
99	UNIV OF ARIZONA	T MORGAN	GSFC	S LARSEN	NAG 5 10853	33
99	UNIV OF ARIZONA	T MORGAN	GSFC	R S MCMILLAN	NAG 5 11828	34
99	UNIV OF ARIZONA	T MORGAN	GSFC	R GREENBERG	NAG 5 12619	35
99	UNIV OF ARIZONA	W ABDALATI	GSFC	V BAKER	NAG 5 10123	31
99	UNIV OF ARIZONA	W ABDALATI	GSFC	R BALES	NAG 5 10264	31

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF ARIZONA	W J WAGNER	GSFC	J KOTA	NAG 5 10884	33
99	UNIV OF ARIZONA	W J WAGNER	GSFC	G M WEBB	NAG 5 10974	33
99	UNIV OF ARIZONA	W J WAGNER	GSFC	J R JOKIPII	NAG 5 10990	33
99	UNIV OF ARIZONA	W WAGNER	GSFC	L L HOOD	NAG 5 12433	35
99	UNIV OF ARIZONA	K BLANDING	HQ	J BURGE	NGT 5 50419	39
99	UNIV OF ARIZONA	C HILL	SSC	R DAVIS	NAG13 99005	37
99	UNIV OF ARKANSAS - LITTLE ROCK	D DETROYE	GSFC	K HUDSON	NCC 5 404	40
99	UNIV OF ARKANSAS - LITTLE ROCK	D DETROYE	GSFC	K HUDSON	NCC 5 597	40
99	UNIV OF ARKANSAS - LITTLE ROCK	D DETROYE	GSFC	M HUDSON	NGT 5 40119	40
99	UNIV OF ARKANSAS - LITTLE ROCK	R TRAVIS	SSC	K HUDSON	NGT13 52757	40
99	UNIV OF CALIFORNIA - BERKELEY	R GRYMES	ARC	J F BANFIELD	NAG 2 1523	68
99	UNIV OF CALIFORNIA - BERKELEY	D WICKLAND	GSFC	I FUNG	NAG 5 11200	73
99	UNIV OF CALIFORNIA - BERKELEY	F S HERRERO	GSFC	D SIEGMUND	NAG 5 7615	70
99	UNIV OF CALIFORNIA - BERKELEY	G STRINGFELLOW	GSFC	A LEE	NAG 5 11422	73
99	UNIV OF CALIFORNIA - BERKELEY	J HILLMAN	GSFC	I DEPATER	NAG 5 12062	75
99	UNIV OF CALIFORNIA - BERKELEY	J SHARBER	GSFC	L MUSCHIETTI	NAG 5 10300	72
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	T PHAN	NAG 5 10471	72
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	T PHAN	NAG 5 11987	74
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	J P MCFADDEN	NAG 5 12004	74
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	J BONNELL	NAG 5 12039	74
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	V ANGELOPOULOS	NAG 5 12047	75
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	C CHASTON	NAG 5 12453	75
99	UNIV OF CALIFORNIA - BERKELEY	J SPANN	GSFC	S D BALE	NAG 5 12483	75
99	UNIV OF CALIFORNIA - BERKELEY	K BLANDING	GSFC	R LIN	NGT 5 50338	79
99	UNIV OF CALIFORNIA - BERKELEY	K BLANDING	GSFC	J TAYLOR	NGT 5 50342	79
99	UNIV OF CALIFORNIA - BERKELEY	K BLANDING	GSFC	S FREEDMAN	NGT 5 50365	79
99	UNIV OF CALIFORNIA - BERKELEY	K BLANDING	GSFC	C M D'ANTONIO	NGT 5 50424	79
99	UNIV OF CALIFORNIA - BERKELEY	L SMITH	GSFC	J GRAHAM	NGT 5 50245	79
99	UNIV OF CALIFORNIA - BERKELEY	M MEYER	GSFC	R SAYKALLY	NAG 5 7457	70
99	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	D DE PAOLO	NGT 5 30380	78
99	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	R AMUNDSON	NGT 5 30383	78
99	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	J HARTE	NGT 5 30403	78
99	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	M FIRESTONE	NGT 5 30463	78
99	UNIV OF CALIFORNIA - BERKELEY	M WEI	GSFC	Y QUI	NGT 5 30473	78
99	UNIV OF CALIFORNIA - BERKELEY	P E HUNTER	GSFC	I HAWKINS	NAG 5 10314	72
99	UNIV OF CALIFORNIA - BERKELEY	R PFAFF	GSFC	C W CARLSON	NAG 5 99242	76
99	UNIV OF CALIFORNIA - BERKELEY	W WAGNER	GSFC	J G LUHMANN	NAG 5 10925	73
99	UNIV OF CALIFORNIA - BERKELEY	A NURRIDIN	HQ	P PRICE	NGT 5 50157	78
99	UNIV OF CALIFORNIA - BERKELEY	K BLANDING	HQ	S BOGGS	NGT 5 50393	79
99	UNIV OF CALIFORNIA - DAVIS	E LINDSTROM	GSFC	S USTIN	NAG 5 11260	80
99	UNIV OF CALIFORNIA - DAVIS	J HILLMAN	GSFC	W M JACKSON	NAG 5 12124	81
99	UNIV OF CALIFORNIA - DAVIS	K BLANDING	GSFC	L H KELLOGG	NGT 5 50230	83
99	UNIV OF CALIFORNIA - DAVIS	K BLANDING	GSFC	L KNOX	NGT 5 50388	83
99	UNIV OF CALIFORNIA - DAVIS	L SMITH	GSFC	S CARLIP	NGT 5 50281	83
99	UNIV OF CALIFORNIA - DAVIS	M WEI	GSFC	S USTIN	NGT 5 30373	82
99	UNIV OF CALIFORNIA - DAVIS	M WEI	GSFC	S USTIN	NGT 5 30411	83
99	UNIV OF CALIFORNIA - DAVIS	M WEI	GSFC	S L USTIN	NGT 5 30451	83
99	UNIV OF CALIFORNIA - IRVINE	R WILKINSON	GRC	P TABOREK	NAG 3 2389	83
99	UNIV OF CALIFORNIA - IRVINE	G GUTMAN	GSFC	C ZENDER	NAG 5 10147	84
99	UNIV OF CALIFORNIA - IRVINE	L SMITH	GSFC	R E PURDY	NGT 5 50317	86
99	UNIV OF CALIFORNIA - IRVINE	M WEI	GSFC	S TYLER	NGT 5 30409	85
99	UNIV OF CALIFORNIA - IRVINE	M WEI	GSFC	J FAMIGLIETTI	NGT 5 30443	85
99	UNIV OF CALIFORNIA - IRVINE	P DECOLA	GSFC	M PRATHER	NAG 5 11272	84
99	UNIV OF CALIFORNIA - LOS ANGELES	D BOGAN	GSFC	C T RUSSELL	NAG 5 8938	89
99	UNIV OF CALIFORNIA - LOS ANGELES	D BOGAN	GSFC	R THORNE	NAG 5 9074	89
99	UNIV OF CALIFORNIA - LOS ANGELES	D J BOGAN	GSFC	G SCHUBERT	NAG 5 11210	91
99	UNIV OF CALIFORNIA - LOS ANGELES	J HILLMAN	GSFC	C R WU	NAG 5 11960	92
99	UNIV OF CALIFORNIA - LOS ANGELES	J HILLMAN	GSFC	C T RUSSELL	NAG 5 12022	93
99	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	C WU	NAG 5 9111	89
99	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	R WALKER	NAG 5 10282	90
99	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	P L PRITCHETT	NAG 5 10287	90
99	UNIV OF CALIFORNIA - LOS ANGELES	J SHARBER	GSFC	D SCHRIVER	NAG 5 11989	92
99	UNIV OF CALIFORNIA - LOS ANGELES	J SPANN	GSFC	R M THORNE	NAG 5 12006	92
99	UNIV OF CALIFORNIA - LOS ANGELES	J SPANN	GSFC	E ZESTAV	NAG 5 12007	92
99	UNIV OF CALIFORNIA - LOS ANGELES	J SPANN	GSFC	M EL-ALAOUI	NAG 5 12106	93
99	UNIV OF CALIFORNIA - LOS ANGELES	J SPANN	GSFC	J RAEDER	NAG 5 12107	93

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF CALIFORNIA - LOS ANGELES	K BLANDING	GSFC	C RUSSELLI	NGT 5 50359	95
99	UNIV OF CALIFORNIA - LOS ANGELES	K BLANDING	GSFC	I MCLEAN	NGT 5 50395	95
99	UNIV OF CALIFORNIA - LOS ANGELES	L SMITH	GSFC	D K JACOBS	NGT 5 50310	95
99	UNIV OF CALIFORNIA - LOS ANGELES	M MAIDEN	GSFC	R MUNTZ	NCC 5 301	94
99	UNIV OF CALIFORNIA - LOS ANGELES	M MEYER	GSFC	W J SCHOPF	NAG 5 12357	93
99	UNIV OF CALIFORNIA - LOS ANGELES	M WEI	GSFC	L SMITH	NAG 5 10609	91
99	UNIV OF CALIFORNIA - LOS ANGELES	M WEI	GSFC	A ELDERING	NGT 5 30372	94
99	UNIV OF CALIFORNIA - LOS ANGELES	M WEI	GSFC	L SMITH	NGT 5 30435	94
99	UNIV OF CALIFORNIA - LOS ANGELES	S CURTIS	GSFC	M ABDALLA	NAG 5 6689	87
99	UNIV OF CALIFORNIA - LOS ANGELES	W J WAGNER	GSFC	C T RUSSELL	NAG 5 10834	91
99	UNIV OF CALIFORNIA - LOS ANGELES	S MCGEE	HQ	P WANG	NGT 5 50220	95
99	UNIV OF CALIFORNIA - LOS ANGELES	C W LLOYD	JSC	B	NAG 9 1252	93
99	UNIV OF CALIFORNIA - LOS ANGELES	G MADDERA	LARC	R P TURCO	NAG 1 1899	86
99	UNIV OF CALIFORNIA - SAN DIEGO	D D DETROYE	GSFC	J ARNOLD	NGT 5 40085	104
99	UNIV OF CALIFORNIA - SAN DIEGO	J A YODER	GSFC	P NILLER	NAG 5 6375	97
99	UNIV OF CALIFORNIA - SAN DIEGO	J BREDEKAMP	GSFC	R P PUETTER	NAG 5 9506	99
99	UNIV OF CALIFORNIA - SAN DIEGO	J GASCH	GSFC	E FURTEK	NAG 5 10669	100
99	UNIV OF CALIFORNIA - SAN DIEGO	J MARRA	GSFC	B MITCHELL	NAG 5 10276	100
99	UNIV OF CALIFORNIA - SAN DIEGO	J SHARBER	GSFC	K QUEST	NAG 5 10993	100
99	UNIV OF CALIFORNIA - SAN DIEGO	J SPANN	GSFC	C E MCIIWAIN	NAG 5 12190	102
99	UNIV OF CALIFORNIA - SAN DIEGO	K PARTINGTON	GSFC	D SANDWELL	NAG 5 10065	100
99	UNIV OF CALIFORNIA - SAN DIEGO	L KEFFER	GSFC	J A ARNOLD	NGT 5 40007	104
99	UNIV OF CALIFORNIA - SAN DIEGO	M MEYER	GSFC	J L BADA	NAG 5 12139	101
99	UNIV OF CALIFORNIA - SAN DIEGO	M WEI	GSFC	M A TOLBERT	NGT 5 30368	104
99	UNIV OF CALIFORNIA - SAN DIEGO	M WEI	GSFC	R SOMERVILLE	NGT 5 30446	104
99	UNIV OF CALIFORNIA - SAN DIEGO	P HUNTER	GSFC	B V JACKSON	NAG 5 9423	99
99	UNIV OF CALIFORNIA - SAN DIEGO	P L MOUNTJOY	GSFC	S RIDE	NCC 5 540	104
99	UNIV OF CALIFORNIA - SAN DIEGO	P MOUNTJOY	GSFC	S RIDE	NCC 5 585	104
99	UNIV OF CALIFORNIA - SAN DIEGO	R CROUCH	GSFC	T JUNG	NAG 5 8768	99
99	UNIV OF CALIFORNIA - SAN DIEGO	T MORGAN	GSFC	N OMIDI	NAG 5 9314	99
99	UNIV OF CALIFORNIA - SAN DIEGO	W WAGNER	GSFC	W B WHITE	NAG 5 12465	102
99	UNIV OF CALIFORNIA - SAN DIEGO	P MOUNTJOY	HQ	D K RIDE	NCC 5 257	104
99	UNIV OF CALIFORNIA - SAN FRANCISCO	M H NEW	ARC	M A WILSON	NCC 2 5509	105
99	UNIV OF CALIFORNIA - SANTA BARBARA	D SENSKE	GSFC	S J PEALE	NAG 5 11666	108
99	UNIV OF CALIFORNIA - SANTA BARBARA	D SPEARS	GSFC	G HOMSY	NAG 5 11249	108
99	UNIV OF CALIFORNIA - SANTA BARBARA	G STRINGFELLOW	GSFC	A CLELAND	NAG 5 11426	108
99	UNIV OF CALIFORNIA - SANTA BARBARA	J MARRA	GSFC	N NELSON	NAG 5 10146	107
99	UNIV OF CALIFORNIA - SANTA BARBARA	L SMITH	GSFC	J RUHL	NGT 5 50269	111
99	UNIV OF CALIFORNIA - SANTA BARBARA	M MAIDEN	GSFC	J FREW	NCC 5 302	109
99	UNIV OF CALIFORNIA - SANTA BARBARA	M MEYER	GSFC	L R BECKER	NAG 5 11560	108
99	UNIV OF CALIFORNIA - SANTA BARBARA	M MEYER	GSFC	K PLAXCO	NAG 5 12150	108
99	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	D ROBERTS	NGT 5 30400	110
99	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	D SIEGEL	NGT 5 30406	110
99	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	N MAHOWALD	NGT 5 30413	110
99	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	D M CLARK	NGT 5 30436	110
99	UNIV OF CALIFORNIA - SANTA BARBARA	M WEI	GSFC	S A SIEGEL	NGT 5 30440	110
99	UNIV OF CALIFORNIA - SANTA BARBARA	P CRANE	GSFC	P LUBIN	NAG 5 12053	108
99	UNIV OF CALIFORNIA - SANTA CRUZ	S . PARKHUST	ARC	D L STANSBURY	NCC 2 1037	113
99	UNIV OF CALIFORNIA - SANTA CRUZ	D J BOGAN	GSFC	G A GLATZMAIER	NAG 5 11220	112
99	UNIV OF CALIFORNIA - SANTA CRUZ	M WEI	GSFC	D POTTS	NGT 5 30415	114
99	UNIV OF CHICAGO	G STRINGFELLOW	GSFC	S MEYER	NAG 5 11443	205
99	UNIV OF CHICAGO	J BOYCE	GSFC	A M DAVIS	NAG 5 9510	204
99	UNIV OF CHICAGO	J BOYCE	GSFC	M HUMAYUN	NAG 5 9800	204
99	UNIV OF CHICAGO	M SALAMON	GSFC	A OLINTO	NAG 5 12153	205
99	UNIV OF CHICAGO	P E HUNTER	GSFC	P C FRISCH	NAG 5 11999	205
99	UNIV OF CHICAGO	W J WAGNER	GSFC	F CATTANEO	NAG 5 10831	204
99	UNIV OF CINCINNATI	G ASRAR	GSFC	S ISLAM	NGT 5 30108	419
99	UNIV OF CINCINNATI	L SMITH	GSFC	J W PIKE	NGT 5 50265	420
99	UNIV OF CINCINNATI	M WEI	GSFC	S ISLAM	NGT 5 30453	420
99	UNIV OF COLORADO - BOULDER	B BETTS	GSFC	A L BETZ	NAG 5 9474	129
99	UNIV OF COLORADO - BOULDER	C P HOLMES	GSFC	C A BARTH	NAG 5 10106	130
99	UNIV OF COLORADO - BOULDER	D BOGAN	GSFC	K SIMMONS	NAG 5 8940	128
99	UNIV OF COLORADO - BOULDER	D D DETROYE	GSFC	E R HANSEN	NGT 5 40028	141
99	UNIV OF COLORADO - BOULDER	D D DETROYE	GSFC	E R HANSEN	NGT 5 40072	141
99	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	M MELLON	NAG 5 10265	131
99	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	G R STEWART	NAG 5 11562	135

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF COLORADO - BOULDER	D SENSKE	GSFC	B M JAKOSKY	NAG 5 11648	135
99	UNIV OF COLORADO - BOULDER	D WICKLAND	GSFC	A NOLIN	NAG 5 12288	137
99	UNIV OF COLORADO - BOULDER	H HASAN	GSFC	T P SNOW	NAG 5 11487	134
99	UNIV OF COLORADO - BOULDER	J BOYCE	GSFC	S ZHONG	NAG 5 11224	133
99	UNIV OF COLORADO - BOULDER	J F SPANN	GSFC	T FULLER-ROWELL	NAG 5 10937	132
99	UNIV OF COLORADO - BOULDER	J FROGEL	GSFC	G S STRINGFELLOW	NAG 5 11907	136
99	UNIV OF COLORADO - BOULDER	J FROGEL	GSFC	G S STRINGFELLOW	NAG 5 11963	136
99	UNIV OF COLORADO - BOULDER	J HILLMAN	GSFC	F BAGENAL	NAG 5 12394	137
99	UNIV OF COLORADO - BOULDER	J M BOYCE	GSFC	J FORBES	NAG 5 11167	133
99	UNIV OF COLORADO - BOULDER	J SHARBER	GSFC	R ERGUN	NAG 5 9336	129
99	UNIV OF COLORADO - BOULDER	J SPANN	GSFC	W K PETERSON	NAG 5 12002	136
99	UNIV OF COLORADO - BOULDER	J SPANN	GSFC	R E ERGUN	NAG 5 12026	136
99	UNIV OF COLORADO - BOULDER	J SPANN	GSFC	R A AKMAEV	NAG 5 12197	136
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	R RAPPALARDO	NGT 5 50337	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	J GREEN	NGT 5 50340	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	M HORANYI	NGT 5 50345	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	E ZWEIBEL	NGT 5 50350	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	J FORBES	NGT 5 50352	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	M A TOLBERT	NGT 5 50380	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	J GLENN	NGT 5 50384	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	G STEWART	NGT 5 50389	142
99	UNIV OF COLORADO - BOULDER	K BLANDING	GSFC	D KLAUS	NGT 5 50426	142
99	UNIV OF COLORADO - BOULDER	K E BLANDING	GSFC	J GREEN	NGT 5 50341	142
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	C A WESSMAN	NGT 5 30180	140
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	J FORBES	NGT 5 50232	141
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	R CANUP	NGT 5 50237	141
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	A BROWN	NGT 5 50241	141
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	J LINSKY	NGT 5 50242	141
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	L ESPOSITO	NGT 5 50273	142
99	UNIV OF COLORADO - BOULDER	L SMITH	GSFC	J E COLDWELL	NGT 5 50294	142
99	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	R ERGUN	NAG 5 9353	129
99	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	S ROBERTSON	NAG 5 9443	129
99	UNIV OF COLORADO - BOULDER	M MELLOTT	GSFC	M CODRESCU	NAG 5 10309	131
99	UNIV OF COLORADO - BOULDER	M S BURRELL	GSFC	D AXELRAD	NGT 5 123	140
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	G ASNER	NGT 5 30345	140
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	K STEFFEN	NGT 5 30376	141
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	S NEREM	NGT 5 30394	141
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	R BARRY	NGT 5 30399	141
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	T PFEFFER	NGT 5 30416	141
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	M A TOLBERT	NGT 5 30422	141
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	V VAIDA	NGT 5 30464	141
99	UNIV OF COLORADO - BOULDER	M WEI	GSFC	J MASLANIK	NGT 5 30470	141
99	UNIV OF COLORADO - BOULDER	P CRANE	GSFC	A L BETZ	NAG 5 10213	130
99	UNIV OF COLORADO - BOULDER	P DECOLA	GSFC	O B TOON	NAG 5 11243	133
99	UNIV OF COLORADO - BOULDER	P DECOLA	GSFC	J B MILLER	NAG 5 11430	134
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	J WAHR	NAG 5 10211	130
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	T ARBETTER	NAG 5 10556	131
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	T SCAMBOS	NAG 5 10983	133
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	T SCAMBOS	NAG 5 11308	134
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	W EMERY	NAG 5 11559	135
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	J MASLANIK	NAG 5 12372	137
99	UNIV OF COLORADO - BOULDER	W ABDALATI	GSFC	J MASLANIK	NAG 5 12432	137
99	UNIV OF COLORADO - BOULDER	W WAGNER	GSFC	D W RUSCH	NAG 5 12349	137
99	UNIV OF COLORADO - BOULDER	W WAGNER	GSFC	B W HINDMAN	NAG 5 12491	137
99	UNIV OF COLORADO - BOULDER	W WAGNER	GSFC	J TOOMRE	NGT 5 50416	142
99	UNIV OF COLORADO - BOULDER	F VILAS	JSC	A R HENDRIX	NAG 9 1209	138
99	UNIV OF COLORADO - DENVER	M MELLOTT	GSFC	J M FORBES	NAG 5 10521	143
99	UNIV OF CONNECTICUT	E SHEFFNER	GSFC	D CIVCO	NAG 5 11307	144
99	UNIV OF CONNECTICUT	J I TROMBKA	GSFC	J S SCHWEITZER	NAG 5 11713	144
99	UNIV OF CONNECTICUT	M MEYER	GSFC	J GOGARTEN	NAG 5 12367	145
99	UNIV OF CONNECTICUT	M PHELPS	GSFC	D MOSS	NAG 5 10599	144
99	UNIV OF CONNECTICUT	M WEI	GSFC	E ANAGNOSTOU	NGT 5 30369	145
99	UNIV OF CONNECTICUT	M WEI	GSFC	E N ANAGNOSTOU	NGT 5 30437	145
99	UNIV OF CONNECTICUT	C HILL	SSC	D CIVCO	NAG13 99001	145
99	UNIV OF DELAWARE	K BLANDING	GSFC	P DHUJATI	NGT 5 50367	150
99	UNIV OF DELAWARE - BARTOL RES INST	D DETROYE	GSFC	N F NESS	NGT 5 40122	150

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF DELAWARE - BARTOL RES INST	L SMITH	GSFC	A M LENHOFF	NGT 5 50167	151
99	UNIV OF DISTRICT OF COLUMBIA	C HOLLINSWORTH	GSFC	W COLEMAN	NAG 5 10855	160
99	UNIV OF DISTRICT OF COLUMBIA	D HALE	GSFC	G DAVIS	NAG 5 12335	160
99	UNIV OF DISTRICT OF COLUMBIA	L RANDOLPH	GSFC	W R COLEMAN	NAG 5 4724	160
99	UNIV OF FLORIDA	B W MESSON	GSFC	J F DAY	NAG 5 7664	171
99	UNIV OF FLORIDA	D BOGAN	GSFC	L KOLOKOLOVA	NAG 5 8944	171
99	UNIV OF FLORIDA	D SENSKE	GSFC	S F DERMOTT	NAG 5 11643	172
99	UNIV OF FLORIDA	L SMITH	GSFC	E A LADA	NGT 5 50233	174
99	UNIV OF FLORIDA	M MEYER	GSFC	L B GOWER	NAG 5 10670	172
99	UNIV OF FLORIDA	R KOCZOR	MSFC	D TREISE	NCC 8 149	173
99	UNIV OF GEORGIA	D BOGAN	GSFC	N G ADAMS	NAG 5 8951	189
99	UNIV OF GEORGIA	K BLANDING	HQ	P YAGER	NGT 5 50427	190
99	UNIV OF HARTFORD	D D DETROYE	GSFC	S TOWNSEND	NGT 5 40093	145
99	UNIV OF HARTFORD	D DETROYE	GSFC	S TOWNSEND	NCC 5 390	145
99	UNIV OF HARTFORD	D DETROYE	GSFC	S L TOWNSEND	NGT 5 40031	145
99	UNIV OF HARTFORD	D DEYTROYE	GSFC	S L TOWNSEND	NCC 5 601	145
99	UNIV OF HAWAII AT MANOA - HONOLULU	D BOGAN	GSFC	G HANSEN	NAG 5 8983	193
99	UNIV OF HAWAII AT MANOA - HONOLULU	D D DETROYE	GSFC	G TAYLOR	NGT 5 40076	197
99	UNIV OF HAWAII AT MANOA - HONOLULU	D DETROYE	GSFC	D TAYLOR	NGT 5 40021	197
99	UNIV OF HAWAII AT MANOA - HONOLULU	D SENSKE	GSFC	F P FANALE	NAG 5 10229	194
99	UNIV OF HAWAII AT MANOA - HONOLULU	D SENSKE	GSFC	V E HAMILTON	NAG 5 12145	196
99	UNIV OF HAWAII AT MANOA - HONOLULU	E D PAYLOR, II	GSFC	P MOUGINIS-MARK	NAG 5 10640	195
99	UNIV OF HAWAII AT MANOA - HONOLULU	G STRINGFELLOW	GSFC	E MARTIN	NAG 5 11466	195
99	UNIV OF HAWAII AT MANOA - HONOLULU	J BOYCE	GSFC	K KEIL	NAG 5 11362	195
99	UNIV OF HAWAII AT MANOA - HONOLULU	J HILLMAN	GSFC	A T TOKUNAGA	NAG 5 12207	196
99	UNIV OF HAWAII AT MANOA - HONOLULU	J J HILLMAN	GSFC	K J MEECH	NAG 5 12236	196
99	UNIV OF HAWAII AT MANOA - HONOLULU	J M BOYCE	GSFC	S ROWLAND	NAG 5 10909	195
99	UNIV OF HAWAII AT MANOA - HONOLULU	K E BLANDING	GSFC	D JEWITT	NGT 5 50357	197
99	UNIV OF HAWAII AT MANOA - HONOLULU	K PARTINGTON	GSFC	F AMELUNG	NAG 5 10111	194
99	UNIV OF HAWAII AT MANOA - HONOLULU	L SMITH	GSFC	C FLETCHER	NGT 5 30179	197
99	UNIV OF HAWAII AT MANOA - HONOLULU	M BALTUCK	GSFC	P J MOUGINIS-MARK	NAG 5 4395	190
99	UNIV OF HAWAII AT MANOA - HONOLULU	M MEYER	GSFC	L BECKER	NAG 5 9511	193
99	UNIV OF HAWAII AT MANOA - HONOLULU	P E HUNTER	GSFC	I SZAPUDI	NAG 5 10750	195
99	UNIV OF HAWAII AT MANOA - HONOLULU	P E HUNTER	GSFC	I SZAPDUI	NAG 5 11996	196
99	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	D THOLEN	NAG 5 12406	196
99	UNIV OF HAWAII AT MANOA - HONOLULU	T MORGAN	GSFC	R KUDRITZKI	NCC 5 538	197
99	UNIV OF HAWAII AT MANOA - HONOLULU	A KEYS	MSFC	B J LABONTE	NAG 8 1798	196
99	UNIV OF HOUSTON - CLEAR LAKE	K E INGRAM	JSC	K WILHORSKI	NCC 9 156	487
99	UNIV OF HOUSTON - CLEAR LAKE	N G ROBERTSON	JSC	J N MACIR	NGT 9 48	487
99	UNIV OF HOUSTON - DOWNTOWN	M MEYER	GSFC	G E FOX	NAG 5 12366	487
99	UNIV OF HOUSTON - DOWNTOWN	P SAKIMOTO	GSFC	P A MORRIS-SMITH	NAG 5 10149	487
99	UNIV OF HOUSTON - DOWNTOWN	L ARMENDARIZ	JSC	R ALO	NAG 9 1018	487
99	UNIV OF IDAHO - MOSCOW	D D DETROYE	GSFC	J TEASDALE	NGT 5 40108	198
99	UNIV OF IDAHO - MOSCOW	D DETROYE	GSFC	J TEASDALE	NCC 5 577	198
99	UNIV OF IDAHO - MOSCOW	M PHELPS	GSFC	J A TEASDALE	NAG 5 10210	198
99	UNIV OF IDAHO - MOSCOW	M PHELPS	GSFC	J TEASDALE	NAG 5 11589	198
99	UNIV OF IDAHO - MOSCOW	D DETROYE	HQ	R GILL	NCC 5 395	198
99	UNIV OF ILLINOIS - CHICAGO CIRCLE	K BLANDING	GSFC	K ESSER	NGT 5 50406	207
99	UNIV OF ILLINOIS - CHICAGO CIRCLE	M MEYER	GSFC	P DORAN	NAG 5 9427	206
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	B F CHAO	GSFC	X SONG	NAG 5 8871	209
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D D DETROYE	GSFC	W C SOLOMON	NGT 5 40073	212
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	D DETROYE	GSFC	W C SOLOMON	NGT 5 40030	212
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	K BLANDING	GSFC	R GAMMIE	NGT 5 50343	212
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M MELLOTT	GSFC	G R SWENSON	NAG 5 10072	209
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M MEYER	GSFC	G L OLSEN	NAG 5 12334	210
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M WEI	GSFC	P KUMAR	NGT 5 30433	212
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	M WEI	GSFC	L GIROLAMO	NGT 5 30434	212
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	S DAVIDSON	GSFC	C LIU	NAG 5 8781	209
99	UNIV OF ILLINOIS AT URBANA-CHAMPAIGN	S MCGEE	HQ	R K IYER	NGT 5 50228	212
99	UNIV OF IOWA	D BOGAN	GSFC	J MENIETTI	NAG 5 8918	224
99	UNIV OF IOWA	J SHARBER	GSFC	A BHATTACHARJEE	NAG 5 10329	224
99	UNIV OF IOWA	P E HUNTER	GSFC	G W THOMAS	NAG 5 11981	225
99	UNIV OF IOWA	K BLANDING	HQ	T PEEPLES	NGT 5 50377	225
99	UNIV OF IOWA	A JACKMAN, MSFC	MSFC	C BECKERMANN	NCC 8 94	225
99	UNIV OF KANSAS	A J TUYAHOV	GSFC	K P PRICE	NAG 5 11988	227
99	UNIV OF KANSAS	D DETROYE	GSFC	D R DOWNING	NCC 5 168	227

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF KANSAS	D DETROYE	GSFC	D DOWNING	NCC 5 415	227
99	UNIV OF KANSAS	D DETROYE	GSFC	D R DOWNING	NCC 5 600	227
99	UNIV OF KANSAS	D DETROYE	GSFC	D R DOWNING	NGT 5 40065	227
99	UNIV OF KANSAS	D DETROYE	GSFC	D R DOWNING	NGT 5 40121	227
99	UNIV OF KANSAS	M WEI	GSFC	S EGBERT	NGT 5 30404	227
99	UNIV OF KANSAS	M WEI	GSFC	P GOGINENI	NGT 5 30449	227
99	UNIV OF KANSAS	W ABDALATI	GSFC	P GOGINENI	NAG 5 12439	227
99	UNIV OF KANSAS	K BLANDING	HQ	S EGBERT	NGT 5 50421	228
99	UNIV OF KANSAS	C HILL	SSC	E A MARTINKO	NAG13 99009	227
99	UNIV OF MAINE - ORONO	C TREES	GSFC	E BOSS	NAG 5 12473	236
99	UNIV OF MAINE - ORONO	E LINDSTROM	GSFC	D A BYRNE	NAG 5 11132	236
99	UNIV OF MAINE - ORONO	M WEI	GSFC	G HAMILTON	NGT 5 30426	236
99	UNIV OF MAINE - ORONO	R MILLER	SSC	W SLADE	NGT13 52751	236
99	UNIV OF MARYLAND - COLL PARK	D CAVALIERI	GSFC	K Y VINNIKOV	NAG 5 10746	262
99	UNIV OF MARYLAND - COLL PARK	D WICKLAND	GSFC	S GOETZ	NAG 5 10126	261
99	UNIV OF MARYLAND - COLL PARK	D WICKLAND	GSFC	R DUBAYAH	NAG 5 11252	263
99	UNIV OF MARYLAND - COLL PARK	E J MASUOKA	GSFC	D ROY	NCC 5 449	269
99	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	D ROY	NAG 5 11251	263
99	UNIV OF MARYLAND - COLL PARK	G GUTMAN	GSFC	J TOWNSHEND	NAG 5 11306	264
99	UNIV OF MARYLAND - COLL PARK	J HILLMAN	GSFC	R KILLEN	NAG 5 12550	266
99	UNIV OF MARYLAND - COLL PARK	J M BOYCE	GSFC	R WALKER	NAG 5 10425	262
99	UNIV OF MARYLAND - COLL PARK	J SHARBER	GSFC	S SHARMA	NAG 5 10298	261
99	UNIV OF MARYLAND - COLL PARK	J SPANN	GSFC	C C GOODRICH	NAG 5 12175	266
99	UNIV OF MARYLAND - COLL PARK	K PARTINGTON	GSFC	E KASISCHKE	NAG 5 10097	261
99	UNIV OF MARYLAND - COLL PARK	M GUHATHAKURTA	GSFC	A S SHARMA	NAG 5 10585	262
99	UNIV OF MARYLAND - COLL PARK	M MAIDEN	GSFC	J TOWNSENDE	NCC 5 300	269
99	UNIV OF MARYLAND - COLL PARK	M MEYER	GSFC	A KAUFMAN	NAG 5 12337	266
99	UNIV OF MARYLAND - COLL PARK	M MEYER	GSFC	J FARQUHAR	NAG 5 12350	266
99	UNIV OF MARYLAND - COLL PARK	M PHELPS	GSFC	G L GEOFFROY	NAG 5 9228	259
99	UNIV OF MARYLAND - COLL PARK	M S BURRELL	GSFC	M GAVRILAS	NAG 5 9560	260
99	UNIV OF MARYLAND - COLL PARK	M S BURRELL	GSFC	M GAVRILAS	NAG 5 12136	265
99	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	E KASISCHKE	NGT 5 30377	270
99	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	S D PRINCE	NGT 5 30429	270
99	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	C JUSTICE	NGT 5 30441	270
99	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	R PINKER	NGT 5 30450	270
99	UNIV OF MARYLAND - COLL PARK	M WEI	GSFC	R DEFRIES	NGT 5 30459	270
99	UNIV OF MARYLAND - COLL PARK	P DE COLA	GSFC	K PICKERING	NAG 5 11151	263
99	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	D ALLEN	NAG 5 11246	263
99	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	R HUDSON	NAG 5 11247	263
99	UNIV OF MARYLAND - COLL PARK	P DECOLA	GSFC	K PICKERING	NAG 5 11276	264
99	UNIV OF MARYLAND - COLL PARK	P E HUNTER	GSFC	C C GOODRICH	NAG 5 11994	265
99	UNIV OF MARYLAND - COLL PARK	W ABDALATI	GSFC	M FAHNESTOCK	NAG 5 10179	261
99	UNIV OF MARYLAND - COLL PARK	W J WAGNER	GSFC	C S GOODRICH	NAG 5 10882	262
99	UNIV OF MARYLAND - COLL PARK	W WAGNER	GSFC	S WHITE	NAG 5 10175	261
99	UNIV OF MARYLAND - COLL PARK	C HILL	SSC	S D PRINCE	NAG13 99011	267
99	UNIV OF MARYLAND - EASTERN SHORE	D MENCHAN	GSFC	T DUBE	NAG 5 10122	270
99	UNIV OF MARYLAND - EASTERN SHORE	D MENCHAN	GSFC	I K DABIPI	NAG 5 11861	271
99	UNIV OF MARYLAND - EASTERN SHORE	D MENCHAN	GSFC	I K DABIPI	NAG 5 11897	271
99	UNIV OF MARYLAND - EASTERN SHORE	M MATEU	GSFC	D SEATON	NCC 5 668	271
99	UNIV OF MARYLAND - EASTERN SHORE	M STOUTSENBERGER	GSFC	G SINGH	NAG 5 9243	270
99	UNIV OF MARYLAND BALTIMORE COUNTY	D MENCHAN	GSFC	E B BAKER	NAG 5 9954	272
99	UNIV OF MARYLAND BALTIMORE COUNTY	G STRINGFELLOW	GSFC	D STEVERT	NAG 5 10206	272
99	UNIV OF MARYLAND BALTIMORE COUNTY	J BOYCE	GSFC	M BULMER	NAG 5 12271	274
99	UNIV OF MARYLAND BALTIMORE COUNTY	P DECOLA	GSFC	S STRAHAN	NAG 5 11230	273
99	UNIV OF MARYLAND BALTIMORE COUNTY	P DECOLA	GSFC	J REICHARDT	NAG 5 11269	273
99	UNIV OF MARYLAND BALTIMORE COUNTY	P DECOLA	GSFC	L SPARLING	NAG 5 11284	273
99	UNIV OF MARYLAND BALTIMORE COUNTY	R HARTLE	GSFC	R CURRAN	NCC 5 494	275
99	UNIV OF MASSACHUSETTS - AMHERST	D SENSKE	GSFC	G E MCGILL	NAG 5 11649	300
99	UNIV OF MASSACHUSETTS - AMHERST	G STRINGFELLOW	GSFC	G NARAYANAN	NAG 5 11465	300
99	UNIV OF MASSACHUSETTS - AMHERST	M WEI	GSFC	D MCLAUGHLIN	NGT 5 30375	301
99	UNIV OF MASSACHUSETTS - AMHERST	M WEI	GSFC	S SEKELSKY	NGT 5 30412	301
99	UNIV OF MASSACHUSETTS WORCESTER	K BLANDING	GSFC	L BONASSAR	NGT 5 50374	298
99	UNIV OF MASSACHUSETTS WORCESTER	K BLANDING	GSFC	L BONASSAR	NGT 5 50404	298
99	UNIV OF MASSACHUSETTS-DARTMOUTH	J MARRA	GSFC	J J BISAGNI	NAG 5 10125	302
99	UNIV OF MED AND DENTISTRY	L SMITH	HQ	N C PARTRIDGE	NGT 5 50335	357
99	UNIV OF MEMPHIS	W WAGNER	GSFC	J T SCHMELZ	NAG 5 12096	465

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF MIAMI	M WEI	GSFC	S S CHEN	NGT 5 30425	176
99	UNIV OF MIAMI	P DECOLA	GSFC	J RODRIGUEZ	NAG 5 10725	175
99	UNIV OF MIAMI	P DECOLA	GSFC	J RODRIQUEZ	NAG 5 11277	175
99	UNIV OF MIAMI	C DEL CASTILLO	SSC	T DIXON	NAG13 02050	175
99	UNIV OF MICHIGAN - ANN ARBOR	M SCARDELLETTI	GRC	R S GOLDMAN	NAG 3 2787	308
99	UNIV OF MICHIGAN - ANN ARBOR	D D DETROYE	GSFC	A D GALLIMORE	NGT 5 40118	316
99	UNIV OF MICHIGAN - ANN ARBOR	J BOYCE	GSFC	M C LIEMOHN	NAG 5 11187	312
99	UNIV OF MICHIGAN - ANN ARBOR	J BREDEKAMP	GSFC	T GOMBOSI	NAG 5 9406	311
99	UNIV OF MICHIGAN - ANN ARBOR	J BREDEKAMP	GSFC	M COMBI	NAG 5 9464	311
99	UNIV OF MICHIGAN - ANN ARBOR	J HILLMAN	GSFC	M R COMBI	NAG 5 12415	313
99	UNIV OF MICHIGAN - ANN ARBOR	J SHARBER	GSFC	K KOZYRA	NAG 5 10297	311
99	UNIV OF MICHIGAN - ANN ARBOR	J SPANN	GSFC	R CLAUER	NAG 5 12040	313
99	UNIV OF MICHIGAN - ANN ARBOR	J SPANN	GSFC	V O PAPITASHVILI	NAG 5 12146	313
99	UNIV OF MICHIGAN - ANN ARBOR	J SPANN	GSFC	C CLAEUR	NAG 5 12176	313
99	UNIV OF MICHIGAN - ANN ARBOR	K B LANDING	GSFC	I D BOYD	NGT 5 50412	316
99	UNIV OF MICHIGAN - ANN ARBOR	K BLANDING	GSFC	L FISK	NGT 5 50349	316
99	UNIV OF MICHIGAN - ANN ARBOR	L KEFFER	GSFC	R M JOHNSON	NGT 5 40062	316
99	UNIV OF MICHIGAN - ANN ARBOR	L SMITH	GSFC	L FISK	NGT 5 50255	316
99	UNIV OF MICHIGAN - ANN ARBOR	M MEYER	GSFC	J WAITE	NAG 5 12171	313
99	UNIV OF MICHIGAN - ANN ARBOR	M WEI	GSFC	C DOBSON	NGT 5 30432	316
99	UNIV OF MICHIGAN - ANN ARBOR	P DECOLA	GSFC	J PENNER	NAG 5 11275	312
99	UNIV OF MICHIGAN - ANN ARBOR	P E HUNTER	GSFC	W SKINNER	NAG 5 12084	313
99	UNIV OF MICHIGAN - ANN ARBOR	R HOFFMAN	GSFC	A NAGEY	NAG 5 7557	309
99	UNIV OF MICHIGAN - ANN ARBOR	W J WAGNER	GSFC	L A FINK	NAG 5 10975	312
99	UNIV OF MINN	A TUYAHOV	GSFC	T BURK	NCC 5 316	322
99	UNIV OF MINN	D DETROYE	GSFC	W L GARRARD	NGT 5 40086	322
99	UNIV OF MINN	E LINDSTROM	GSFC	G NIEMI	NAG 5 11262	320
99	UNIV OF MINN	G ASRAR	GSFC	M DAVIS	NGT 5 30115	322
99	UNIV OF MINN	J SHARBER	GSFC	J WYGANT	NGT 5 50312	322
99	UNIV OF MINN	K BLANDING	GSFC	S HANAY	NGT 5 50344	323
99	UNIV OF MINN	K BLANDING	GSFC	E SKILLMAN	NGT 5 50346	323
99	UNIV OF MINN	L SMITH	GSFC	J DICKEY	NGT 5 50250	322
99	UNIV OF MINN	L SMITH	GSFC	R LYSAK	NGT 5 50293	322
99	UNIV OF MINN	M WEI	GSFC	F PORTE-AGEL	NAG 5 10569	320
99	UNIV OF MINN	A NURRIDIN	HQ	HALLEY	NGT 5 50091	322
99	UNIV OF MISSISSIPPI - UNIV	D D DETROYE	GSFC	P SUKANEK	NGT 5 40098	325
99	UNIV OF MISSISSIPPI - UNIV	D DETROYE	GSFC	P SUKANEK	NCC 5 405	325
99	UNIV OF MISSISSIPPI - UNIV	D DETROYE	GSFC	P SUKANEK	NCC 5 574	325
99	UNIV OF MISSISSIPPI - UNIV	M MICK	SSC	J GABRYNOWICZ	NAG13 00036	325
99	UNIV OF MISSISSIPPI - UNIV	T VANN	SSC	G EASSON	NAG13 02052	325
99	UNIV OF MISSOURI - COLUMBIA	A TUYAHOV	GSFC	V KAUP	NAG 5 12482	327
99	UNIV OF MISSOURI - COLUMBIA	L CHAMBERS	GSFC	G CHIPENDALE	NAG 5 12284	327
99	UNIV OF MISSOURI - COLUMBIA	L CHAMBERS	GSFC	M HAY	NAG 5 12300	327
99	UNIV OF MISSOURI - COLUMBIA	M MEYER	GSFC	F SCHMIDT	NAG 5 9555	326
99	UNIV OF MISSOURI - COLUMBIA	B DAVIS	SSC	A K SHACKLEFORD	NGT13 52747	327
99	UNIV OF MISSOURI - ROLLA	D D DETROYE	GSFC	F FINIASH	NGT 5 40112	328
99	UNIV OF MISSOURI - ROLLA	D DETROYE	GSFC	F FINIASH	NGT 5 40060	328
99	UNIV OF MISSOURI - ROLLA	L CHAMBERS	GSFC	M HAY	NAG 5 12244	328
99	UNIV OF MISSOURI - SAINT LOUIS	J HILLMAN	GSFC	J J O'BRIEN	NAG 5 12013	329
99	U OF MONT	D WICKLAND	GSFC	S RUNNING	NAG 5 11256	336
99	U OF MONT	M WEI	GSFC	S RUNNING	NGT 5 30395	336
99	U OF MONT	M Y WEI	GSFC	R J FIELD	NGT 5 50225	336
99	UNIV OF NEBRASKA - LINCOLN	D D DETROYE	GSFC	B D BOWEN	NCC 5 169	337
99	UNIV OF NEBRASKA - LINCOLN	G GUTMAN	GSFC	A GITELSON	NAG 5 11147	337
99	UNIV OF NEBRASKA - LINCOLN	M Y WEI	GSFC	M BLUM	NGT 5 30358	337
99	UNIV OF NEBRASKA - LINCOLN	R E GABRYS	GSFC	D C RUNDQUIST	NCC 5 430	337
99	UNIV OF NEBRASKA - LINCOLN	A PEEK	SSC	RUNDQUIST	NCC13 98003	337
99	UNIV OF NEBRASKA-OMAHA	D D DETROYE	GSFC	B D BOWEN	NGT 5 40104	338
99	UNIV OF NEBRASKA-OMAHA	D DETROYE	GSFC	B D BOWEN	NCC 5 572	337
99	UNIV OF NEBRASKA-OMAHA	L KEFFER	GSFC	B D BOWEN	NGT 5 40037	338
99	UNIV OF NEBRASKA-OMAHA	D DETROYE	HQ	B BROWN	NCC 5 401	337
99	UNIV. OF NEVADA - DESERT RES. INST	L KEFFER	GSFC	J V TARANIK	NGT 5 40038	338
99	UNIV. OF NEVADA - DESERT RES. INST	W GRAHAM	SSC	J W BELL	NAG13 02017	338
99	UNIV OF NEVADA - LAS VEGAS	J BREDEKAMP	GSFC	S LATIFI	NAG 5 9489	338
99	UNIV OF NEVADA - LAS VEGAS	P CRANE	GSFC	V KWONG	NAG 5 11990	338
99	UNIV OF NEVADA - RENO	D DETROYE	GSFC	J V TARANIK	NGT 5 40113	340

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF NEVADA - RENO	K BLANDING	GSFC	W CALVIN	NGT 5 50362	340
99	UNIV OF NEVADA SYSTEM	D DETROYE	GSFC	J TARANKI	NCC 5 397	340
99	UNIV OF NEVADA SYSTEM	D DETROYE	GSFC	J V TARANIK	NCC 5 583	340
99	UNIV OF NEW HAMPSHIRE - DURHAM	C TREES	GSFC	C VOROSMARTY	NAG 5 12451	346
99	UNIV OF NEW HAMPSHIRE - DURHAM	D DETROYE	GSFC	D BARTLETT	NGT 5 40088	347
99	UNIV OF NEW HAMPSHIRE - DURHAM	D E WICKLAND	GSFC	B MOORE	NAG 5 10135	344
99	UNIV OF NEW HAMPSHIRE - DURHAM	D WICKLAND	GSFC	S OLLINGER	NAG 5 11310	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	J MARRA	GSFC	C VOROSMARTY	NAG 5 10260	344
99	UNIV OF NEW HAMPSHIRE - DURHAM	J MARRA	GSFC	J W CAMPBELL	NAG 5 11258	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	J SPANN	GSFC	C FARRUGIA	NAG 5 12189	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	K BLANDING	GSFC	E MOBIUS	NGT 5 50381	347
99	UNIV OF NEW HAMPSHIRE - DURHAM	M WEITH	GSFC	J E DIBB	NGT 5 30349	347
99	UNIV OF NEW HAMPSHIRE - DURHAM	W ABDALATI	GSFC	M FAHNESTOCK	NAG 5 12365	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	W J WAGNER	GSFC	P A ISENBERG	NAG 5 10835	344
99	UNIV OF NEW HAMPSHIRE - DURHAM	W J WAGNER	GSFC	T G FORBES	NAG 5 10977	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	W J WAGNER	GSFC	B J VASQUEZ	NAG 5 10988	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	W WAGNER	GSFC	M L MCCONNEL	NAG 5 10203	344
99	UNIV OF NEW HAMPSHIRE - DURHAM	W WAGNER	GSFC	C FARRUGIA	NAG 5 10883	345
99	UNIV OF NEW HAMPSHIRE - DURHAM	W WAGNER	GSFC	J J CONNEL	NAG 5 12493	346
99	UNIV OF NEW MEXICO-ALBUQUERQUE	A CARDENAS	ARC	P DORATO	NAG 2 1480	361
99	UNIV OF NEW MEXICO-ALBUQUERQUE	G S LEE	ARC	M JAMSHIDI	NAG 2 1196	361
99	UNIV OF NEW MEXICO-ALBUQUERQUE	A TUYAHOV	GSFC	S MORAIN	NCC 5 309	364
99	UNIV OF NEW MEXICO-ALBUQUERQUE	L P CHAMBERS	GSFC	P J BOYCE	NAG 5 11561	363
99	UNIV OF NEW MEXICO-ALBUQUERQUE	M MATHEWS	GSFC	L CROSSEY	NCC 5 350	364
99	UNIV OF NEW MEXICO-ALBUQUERQUE	M WEI	GSFC	B MILNE	NGT 5 30227	364
99	UNIV OF NEW MEXICO-ALBUQUERQUE	R CROUCH	GSFC	J BRINKER	NAG 5 8821	362
99	UNIV OF NEW MEXICO-ALBUQUERQUE	L ARMENDARIZ	JSC	H E NEWSOM	NAG 9 1017	364
99	UNIV OF NEW ORLEANS	R MILLER	SSC	J CORBINO	NGT13 52749	235
99	UNIV OF NORTH CAROLINA - CHAPEL HILL	L BILBROUGH	GSFC	R R GOLWALS	NAG 5 12504	398
99	UNIV OF NORTH CAROLINA - CHAPEL HILL	L SMITH	GSFC	T M WHITMORE	NGT 5 30177	399
99	UNIV OF NORTH CAROLINA - CHAPEL HILL	L SMITH	GSFC	R W MURRAY	NGT 5 50311	399
99	UNIV OF NORTH CAROLINA - CHAPEL HILL	M WEI	GSFC	J BANE	NGT 5 30389	399
99	UNIV OF NORTH CAROLINA - CHAPEL HILL	M WEI	GSFC	L BAND	NGT 5 30390	399
99	UNIV OF NORTH CAROLINA	L BILLBROUGH	GSFC	W R VEAL	NAG 5 12537	399
99	UNIV OF NORTH DAKOTA	A TUYAHOV	GSFC	G SEIELSTAD	NAG 5 12054	400
99	UNIV OF NORTH DAKOTA	A TUYAHOV	GSFC	G SEIELSTAD	NCC 5 310	400
99	UNIV OF NORTH DAKOTA	D D DETROYE	GSFC	R ANDRES	NGT 5 40117	400
99	UNIV OF NORTH DAKOTA	D DETROYE	GSFC	C WOOD	NCC 5 399	400
99	UNIV OF NORTH DAKOTA	D DETROYE	GSFC	S L DE SILVA	NCC 5 582	400
99	UNIV OF NORTH DAKOTA	C HILL	SSC	P R ZIMMERMAN	NAG13 99006	400
99	UNIV OF NORTH TEXAS	R K DISMUKES	ARC	M BINK	NCC 2 1316	487
99	UNIV OF NOTRE DAME	R LAWRENCE	GRC	S JOHNSON	NAG 3 2418	219
99	UNIV OF OKLAHOMA - NORMAN	D D DETROYE	GSFC	V DUCA-SNOWDEN	NGT 5 40111	427
99	UNIV OF OKLAHOMA - NORMAN	D DETROYE	GSFC	V DUCA-SNOWDEN	NCC 5 398	426
99	UNIV OF OKLAHOMA - NORMAN	D DETROYE	GSFC	V DUCA-SNOWDEN	NCC 5 586	426
99	UNIV OF OKLAHOMA - NORMAN	D DETROYE	GSFC	V DUCA-SNOWDEN	NGT 5 40013	426
99	UNIV OF OKLAHOMA - NORMAN	J DASCH	GSFC	V DUCA-SNOWDEN	NCC 5 171	426
99	UNIV OF OREGON - EUGENE	P E HUNTER	GSFC	J SCHOMBERT	NAG 5 11300	431
99	UNIV OF PENNSYLVANIA	K BLANDING	GSFC	D HAMMER	NGT 5 50415	450
99	UNIV OF PENNSYLVANIA	L SMITH	GSFC	D A HAMMER	NGT 5 50267	449
99	UNIV OF PENNSYLVANIA	M WEI	GSFC	D HAI-LUNG	NGT 5 30460	449
99	UNIV OF PENNSYLVANIA	R CROUCH	GSFC	D N METAXAS	NAG 5 8767	448
99	UNIV OF PENNSYLVANIA	J STANFORD	JSC	C J LAMBERTSEN	NAG 9 1265	449
99	UNIV OF PITTSBURGH	D SENSKE	GSFC	B HAPKE	NAG 5 12521	451
99	UNIV OF PITTSBURGH	J HILLMAN	GSFC	R JOHNSEN	NAG 5 11959	451
99	UNIV OF PITTSBURGH	K BLANDING	GSFC	M DRUZDZEL	NGT 5 50252	451
99	UNIV OF PITTSBURGH	K BLANDING	GSFC	B J YATES	NGT 5 50292	452
99	UNIV OF PITTSBURGH	K BLANDING	GSFC	B YATES	NGT 5 50408	452
99	UNIV OF PITTSBURGH	L SMITH	GSFC	B J YATES	NGT 5 50256	451
99	UNIV OF PITTSBURGH	L SMITH	GSFC	C L COLBY	NGT 5 50318	452
99	UNIV OF PUERTO RICO - MAYAGUEZ	R ROMERO	GRC	B RAMIREZ	NAG 3 2707	550
99	UNIV OF PUERTO RICO - MAYAGUEZ	D DETROYE	GSFC	D G WEINER	NGT 5 40012	551
99	UNIV OF PUERTO RICO - MAYAGUEZ	D L WILLIAMS	GSFC	R FERNANDEZ-SEIN	NCC 5 518	551
99	UNIV OF PUERTO RICO - MAYAGUEZ	J MARRA	GSFC	J CORREDOR	NAG 5 11296	550
99	UNIV OF PUERTO RICO - MAYAGUEZ	M MATHEWS	GSFC	L MORELL	NCC 5 340	551
99	UNIV OF PUERTO RICO - MAYAGUEZ	J DIGGS	KSC	B RAMIREZ	NAG10 243	551

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF PUERTO RICO-RIO PIEDRAS	M E PEREZ-DAVIS	GRC	C R CABRERA	NAG 3 2749	551
99	UNIV OF PUERTO RICO-RIO PIEDRAS	D DETROYE	GSFC	B R WEINER	NCC 5 407	552
99	UNIV OF PUERTO RICO-RIO PIEDRAS	D DETROYE	GSFC	B WEINER	NCC 5 595	552
99	UNIV OF PUERTO RICO-RIO PIEDRAS	D DETROYE	GSFC	W WEINER	NGT 5 40091	552
99	UNIV OF PUERTO RICO-RIO PIEDRAS	M MENCHAN	GSFC	J AYALA	NAG 5 11814	552
99	UNIV OF PUGET SOUND	M MEYER	GSFC	B PIERSON	NAG 5 12328	528
99	UNIV OF REDLANDS	M PHELPS	GSFC	J R APPLETON	NAG 5 12538	114
99	UNIV OF REDLANDS	M V PHELPS	GSFC	J R APPLETON	NAG 5 11366	114
99	UNIV OF RHODE ISLAND	R A GRYMES	ARC	S D'HONDT	NCC 2 1275	457
99	UNIV OF RHODE ISLAND	J MARRA	GSFC	B UZ	NAG 5 10554	457
99	UNIV OF ROCHESTER	G FOGLEMAN	GSFC	G PAIGE	NAG 5 11557	389
99	UNIV OF ROCHESTER	K BLANDING	GSFC	M BOCKO	NGT 5 50360	389
99	UNIV OF SAN DIEGO	M PHELPS	GSFC	S LOWERY	NAG 5 10049	114
99	UNIV OF SAN DIEGO	M PHELPS	GSFC	F M LAZARUS	NAG 5 11590	114
99	UNIV OF SOUTH ALABAMA	S COLEMAN	MSFC	J E AYLING	NCC 8 249	16
99	UNIV OF SOUTH CAROLINA-COLUMBIA	D DETROYE	GSFC	J D ODOM	NCC 5 174	462
99	UNIV OF SOUTH CAROLINA-COLUMBIA	J MARRA	GSFC	R THUNELL	NAG 5 11253	461
99	UNIV OF SOUTH CAROLINA-COLUMBIA	M MEYERS	GSFC	J BERNHARD	NAG 5 12339	462
99	UNIV OF SOUTH CAROLINA-COLUMBIA	N SOVIK	SSC	J JENSEN	NCC13 00003	462
99	UNIV OF SOUTH FLORIDA	J MARRA	GSFC	S ANDREFOUET	NAG 5 10908	176
99	UNIV OF SOUTH FLORIDA	J MARRA	GSFC	F MULLER-KARGER	NAG 5 11254	176
99	UNIV OF SOUTH FLORIDA	K BLANDING	GSFC	P COBLE	NGT 5 30346	177
99	UNIV OF SOUTH FLORIDA	M WEI	GSFC	F MULLER-KARGER	NGT 5 30414	177
99	UNIV OF SOUTH FLORIDA	K BLANDING	HQ	J WALSH	NGT 5 50422	177
99	UNIV OF SOUTHERN CALIFORNIA	D SPEARS	GSFC	S SADHAL	NAG 5 11304	116
99	UNIV OF SOUTHERN CALIFORNIA	W J WAGNER	GSFC	P K GANGOPADHAY	NAG 5 10989	116
99	UNIV OF SOUTHERN CALIFORNIA	W J WAGNER	GSFC	E J RHODES	NAG 5 11001	116
99	UNIV OF SOUTHERN CALIFORNIA	P DOTY	MSFC	S SADHAL	NAG 8 1663	116
99	UNIV OF SOUTHERN CALIFORNIA	P DOTY	MSFC	P RONNEY	NAG 8 1701	117
99	UNIV OF TENNESSEE - KNOXVILLE	J M BOYCE	GSFC	L A TAYLOR	NAG 5 11558	466
99	UNIV OF TENNESSEE - KNOXVILLE	K BLANDING	GSFC	H Y MCSWEEN	NGT 5 50286	467
99	UNIV OF TENNESSEE - KNOXVILLE	M HARTMAN	GSFC	R GREENBERG	NAG 5 12134	466
99	UNIV OF TENNESSEE - KNOXVILLE	R CROUCH	GSFC	G S SAYLER	NAG 5 8760	465
99	UNIV OF TENNESSEE - KNOXVILLE	W WAGNER	GSFC	L TOWNSEND	NAG 5 12477	466
99	UNIV OF TEXAS - ARLINGTON	M WEI	GSFC	D COOK	NGT 5 30382	488
99	UNIV OF TEXAS - AUSTIN	D D DETROYE	GSFC	B TAPLEY	NGT 5 40083	494
99	UNIV OF TEXAS - AUSTIN	D L CARTER	GSFC	P J SHELUS	NAG 5 01096	492
99	UNIV OF TEXAS - AUSTIN	J HILLMAN	GSFC	D GOLDSTEIN	NAG 5 11991	491
99	UNIV OF TEXAS - AUSTIN	J LABRECQUE	GSFC	B D TAPLEY	NAG 5 9989	490
99	UNIV OF TEXAS - AUSTIN	J MCGARRY	GSFC	P J SHELUS	NAG 5 32997	493
99	UNIV OF TEXAS - AUSTIN	K BLANDING	GSFC	M CRAWFORD	NGT 5 50239	494
99	UNIV OF TEXAS - AUSTIN	K BLANDING	GSFC	C OCAMPO	NGT 5 50361	494
99	UNIV OF TEXAS - AUSTIN	K BLANDING	GSFC	S ROUX	NGT 5 50371	494
99	UNIV OF TEXAS - AUSTIN	K BLANDING	GSFC	N EVANS	NGT 5 50401	494
99	UNIV OF TEXAS - AUSTIN	L SMITH	GSFC	G J HILL	NGT 5 50301	494
99	UNIV OF TEXAS - AUSTIN	M SALOMON	GSFC	P J SHELUS	NAG 5 10195	490
99	UNIV OF TEXAS - AUSTIN	M WEI	GSFC	C WILSON	NGT 5 30447	493
99	UNIV OF TEXAS - AUSTIN	M WEI	GSFC	B TAPLEY	NGT 5 30468	493
99	UNIV OF TEXAS - AUSTIN	T MORGAN	GSFC	E BARKER	NAG 5 10183	490
99	UNIV OF TEXAS - AUSTIN	W J WAGNER	GSFC	P KUMAR	NAG 5 12299	491
99	UNIV OF TEXAS - AUSTIN	D J PEARSON	JSC	R H BISHOP	NGT 9 20	494
99	UNIV OF TEXAS - AUSTIN	H C MANDELL	JSC	B D TAPLEY	NAG 9 1060	491
99	UNIV OF TEXAS - DALLAS	M E MELLOTT	GSFC	R A HEELIS	NGT 5 50354	494
99	UNIV OF TEXAS - DALLAS	M MELLOTT	GSFC	R HEELIS	NAG 5 10271	494
99	UNIV OF TEXAS - DALLAS	P HUNTER	GSFC	M HAIRSTON	NAG 5 9297	494
99	UNIV OF TEXAS - EL PASO	J BRADEN	DFRC	R WICKER	NAG 4 150	495
99	UNIV OF TEXAS - EL PASO	C HOLLINGSWORTH	GSFC	S BLAKE	NCC 5 468	495
99	UNIV OF TEXAS - EL PASO	J HARRINGTON	GSFC	H L SCHULTE	NCC 5 535	496
99	UNIV OF TEXAS - EL PASO	J LAMBRECQUE	GSFC	S STARKS	NCC 5 498	496
99	UNIV OF TEXAS - EL PASO	B DELIWALA	KSC	R QUINTANA	NAG10 225	495
99	UNIV OF TEXAS AT BROWNSVILLE	B WHITE	GSFC	J TELESE	NCC 5 438	496
99	UNIV OF TEXAS AT BROWNSVILLE	L ARMENDARIZ	JSC	O RIVAS	NAG 9 1054	496
99	UNIV OF TEXAS AT BROWNSVILLE	L ARMENDARIZ	JSC	A RIVAS	NAG 9 1304	496
99	UNIV OF TEXAS AT BROWNSVILLE	L M ARMENDARIZ	JSC	L V LOF	NAG 9 1391	496
99	UNIV OF TEXAS AT BROWNSVILLE	L M ARMENDARIZ	JSC	H SILVA	NAG 9 1406	496
99	UNIV OF TEXAS AT SAN ANTONIO	B J COLLINS	ARC	A T CHRONPOULOS	NAG 2 1383	496

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF TEXAS AT SAN ANTONIO	M J LEON	ARC	R F SINCOVEC	NAG 2 6040	496
99	UNIV OF TEXAS AT SAN ANTONIO	M MATEU	GSFC	M P BERRIOZABAL	NAG 5 11741	496
99	UNIV. OF TX-HLTH SCIENCE CTR-HOUSTON	M GERNHARDT	JSC	B BUTLER	NCC 9 82	486
99	UNIV OF TEXAS-PAN AMERICAN	M MATEU	GSFC	H MEDRANO	NAG 5 11928	485
99	UNIV OF TEXAS-PAN AMERICAN	M MATEU	GSFC	H MEDRADO	NAG 5 12549	485
99	UNIV OF THE INCARNATE WORD	B WHITE	GSFC	J BEAUFORD	NCC 5 465	497
99	UNIV OF TOLEDO	H HASAN	GSFC	S R FEDERMAN	NAG 5 11440	422
99	UNIV OF TOLEDO	J BOYCE	GSFC	P JAMES	NAG 5 12186	422
99	UNIV OF TURABO	M MATEAU	GSFC	A M COURTIE	NAG 5 11727	552
99	UNIV OF UTAH	D D DETROYE	GSFC	W WESTENSKOW	NGT 5 40101	499
99	UNIV OF UTAH	K BLANDING	GSFC	S MILLER	NGT 5 50410	499
99	UNIV OF UTAH	M WEI	GSFC	G MACE	NGT 5 30398	499
99	UNIV OF UTAH	M WEI	GSFC	E SIPZER	NGT 5 30423	499
99	UNIV OF VERMONT	D DETROYE	GSFC	W LAKIN	NCC 5 394	502
99	UNIV OF VERMONT	D DETROYE	GSFC	W D LAKIN	NCC 5 581	503
99	UNIV OF VERMONT	D DETROYE	GSFC	W LAKIN	NGT 5 40110	503
99	UNIV OF VERMONT	J DASCH	HQ	W D LAKIN	NGT 5 40045	503
99	UNIV OF VIRGINIA	D HALE	GSFC	D BALL	NAG 5 12405	521
99	UNIV OF VIRGINIA	D SENSKE	GSFC	A D HOWARD	NAG 5 11647	521
99	UNIV OF VIRGINIA	J HILLMAN	GSFC	R E JOHNSON	NAG 5 12061	521
99	UNIV OF VIRGINIA	K BLANDING	GSFC	R JOHNSON	NGT 5 50385	523
99	UNIV OF VIRGINIA	L SMITH	GSFC	M C WIENER	NGT 5 50305	523
99	UNIV OF VIRGINIA	M MEYER	GSFC	S MACKO	NAG 5 9758	520
99	UNIV OF VIRGINIA	M WEI	GSFC	J FUENTES	NGT 5 30365	522
99	UNIV OF VIRGINIA	M WEI	GSFC	H SHUGART	NGT 5 30418	523
99	UNIV OF VIRGINIA	M WEI	GSFC	P DESANKER	NGT 5 30448	523
99	UNIV OF VIRGINIA	T MORGAN	GSFC	R A BARAGIOLA	NAG 5 12620	521
99	UNIV OF WASHINGTON	R A GRYMES	ARC	P D WARD	NCC 2 1273	536
99	UNIV OF WASHINGTON	C YUHAS	GSFC	P HOBBS	NCC 5 550	536
99	UNIV OF WASHINGTON	D D DETROYE	GSFC	J DECOSMO	NGT 5 40084	538
99	UNIV OF WASHINGTON	D DETROYE	GSFC	J K DECOSMO	NGT 5 40017	538
99	UNIV OF WASHINGTON	D SENSKE	GSFC	K HOLSAPPLE	NAG 5 11446	534
99	UNIV OF WASHINGTON	G ASRAR	GSFC	D HEGG	NGT 5 30121	537
99	UNIV OF WASHINGTON	J F SPANN	GSFC	M J BRITTNACHER	NAG 5 10903	533
99	UNIV OF WASHINGTON	K BLANDING	GSFC	J BARDEEN	NGT 5 50298	538
99	UNIV OF WASHINGTON	K OGILVIE	GSFC	G PARKS	NAG 5 7114	530
99	UNIV OF WASHINGTON	K PARTINGTON	GSFC	D LETTENMAIER	NAG 5 10092	533
99	UNIV OF WASHINGTON	L SMITH	GSFC	R WINGLEE	NGT 5 50285	538
99	UNIV OF WASHINGTON	L SMITH	GSFC	J DALCANTON	NGT 5 50299	538
99	UNIV OF WASHINGTON	M WEI	GSFC	R TYLER	NAG 5 10570	533
99	UNIV OF WASHINGTON	M WEI	GSFC	C NEWHALL	NGT 5 98	537
99	UNIV OF WASHINGTON	M WEI	GSFC	R HOUZE	NGT 5 30378	537
99	UNIV OF WASHINGTON	M WEI	GSFC	J RICHEY	NGT 5 30427	537
99	UNIV OF WASHINGTON	M WEI	GSFC	C RAYMOND	NGT 5 30445	537
99	UNIV OF WASHINGTON	P E HUNTER	GSFC	T R QUINN	NAG 5 11892	534
99	UNIV OF WASHINGTON	P SAKIMOTO	GSFC	J H LUTZ	NCC 5 605	536
99	UNIV OF WASHINGTON	S DAVISON	GSFC	V VOGEL	NAG 5 8784	531
99	UNIV OF WASHINGTON	W ABDALATI	GSFC	P MOURAD	NAG 5 10114	533
99	UNIV OF WASHINGTON	W ABDALATI	GSFC	D WINEBRENNER	NAG 5 10225	533
99	UNIV OF WASHINGTON	W ABDALATI	GSFC	R LINDSAY	NAG 5 10621	533
99	UNIV OF WASHINGTON	W ABDALATI	GSFC	J MORRISON	NAG 5 11386	534
99	UNIV OF WASHINGTON	C W LLOYD	JSC	F H SHEEHAN	NAG 9 1258	535
99	UNIV OF WASHINGTON	D HARM	JSC	D E PARKER	NCC 9 56	536
99	UNIV OF WASHINGTON	D L JAN	JSC	D STAHL	NAG 9 1271	535
99	UNIV OF WASHINGTON	G L MADDREA	LARC	J R HOLTON	NAG 1 2193	528
99	UNIV OF WEST FLORIDA	B H WHITAKER	ARC	A J CANAS	NCC 2 1036	178
99	UNIV OF WEST FLORIDA	R CROUCH	GSFC	A K RAJ	NAG 5 8782	178
99	UNIV OF WISCONSIN - GREEN BAY	D D DETROYE	GSFC	R A YINGST	NGT 5 40097	541
99	UNIV OF WISCONSIN - MADISON	W W DOLCI	ARC	C M JOHNSON	NCC 2 5449	547
99	UNIV OF WISCONSIN - MADISON	D WICKLAND	GSFC	S T GOWER	NAG 5 11242	545
99	UNIV OF WISCONSIN - MADISON	G STRINGFELLOW	GSFC	P TIMBIE	NAG 5 10204	544
99	UNIV OF WISCONSIN - MADISON	H HASAN	GSFC	J E LAWLER	NAG 5 11436	545
99	UNIV OF WISCONSIN - MADISON	J HILLMAN	GSFC	L A SROMOVSKY	NAG 5 12012	546
99	UNIV OF WISCONSIN - MADISON	J HILLMAN	GSFC	W M HARRIS	NAG 5 12057	546
99	UNIV OF WISCONSIN - MADISON	J HILLMAN	GSFC	L A SROMOVSKY	NAG 5 12206	546
99	UNIV OF WISCONSIN - MADISON	J MARRA	GSFC	A WINGUTH	NAG 5 11245	545

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	UNIV OF WISCONSIN - MADISON	L SMITH	GSFC	J FOLEY	NGT 5 30176	548
99	UNIV OF WISCONSIN - MADISON	L SMITH	GSFC	J S GALLAGHER	NGT 5 50295	548
99	UNIV OF WISCONSIN - MADISON	M WEI	GSFC	J FOLEY	NGT 5 30396	548
99	UNIV OF WISCONSIN - MADISON	P DECOLA	GSFC	M HITCHMAN	NAG 5 11303	545
99	UNIV OF WISCONSIN - MADISON	T LEE	GSFC	G WAHBA	NAG 5 10273	545
99	UNIV OF WISCONSIN - MADISON	A PEEK	SSC	T LILLESAND	NCC13 00004	548
99	UNIV OF WISCONSIN - MADISON	C HILL	SSC	G DIAK	NAG13 99008	547
99	UNIV OF WYOMING	D BOGAN	GSFC	R N HOWELL	NAG 5 8917	549
99	UNIV OF WYOMING	D D DETROYE	GSFC	P E JOHNSON	NGT 5 40102	550
99	UNIV OF WYOMING	D DETROYE	GSFC	P JOHNSON	NCC 5 414	549
99	UNIV OF WYOMING	D DETROYE	GSFC	P E JOHNSON	NCC 5 578	550
99	UNIV OF WYOMING	D SENSKE	GSFC	R R HOWELL	NAG 5 11730	549
99	UNIV OF WYOMING	J GRANT	GSFC	R HOWELL	NAG 5 8904	549
99	UNIV OF WYOMING	G L MADDREA	LARC	T DESHLER	NAG 1 2164	549
99	UTAH STATE UNIV	D DETROYE	GSFC	D BAKER	NGT 5 40047	502
99	UTAH STATE UNIV	D WICKLAND	GSFC	M WHITE	NAG 5 11282	500
99	UTAH STATE UNIV	J SPANN	GSFC	A R BARAKAT	NAG 5 12170	501
99	UTAH STATE UNIV	K BLANDING	GSFC	T BOSE	NGT 5 50398	502
99	UTAH STATE UNIV	M MELLOTT	GSFC	B G FEJER	NAG 5 10215	500
99	UTAH STATE UNIV	P BUCHANAN	GSFC	J J SOJKA	NAG 5 12117	500
99	UTAH STATE UNIV	A PEEK	SSC	R D RAMSEY	NCC13 00005	502
99	VA POLYTECH INST & ST UNIV	K BLANDING	GSFC	W G HERBERT	NGT 5 50425	527
99	VA POLYTECH INST & ST UNIV	L SMITH	GSFC	B M KLEINER	NGT 5 50260	527
99	VANDERBILT UNIV	D D DETROYE	GSFC	A M STRAUSS	NGT 5 40074	469
99	VANDERBILT UNIV	L KEFFER	GSFC	A M STRAUSS	NGT 5 40054	469
99	VANDERBILT UNIV	L P CHAMBERS	GSFC	T G WANG	NAG 5 12429	468
99	VANDERBILT UNIV	P DOTY	MSFC	K A DEBELAK	NAG 8 1662	468
99	VANDERBILT UNIV	P DOTY	MSFC	R J BAYUZICK	NAG 8 1677	468
99	VANDERBILT UNIV	S COLEMAN	MSFC	S H SMARTT	NCC 8 255	469
99	VIRGINIA COMMONWEALTH UNIV	J S LOGAN	JSC	R C MERRELL	NCC 9 87	528
99	VIRGINIA COMMONWEALTH UNIV	J S LOGAN	JSC	R C MERRELL	NCC 9 148	528
99	VOORHEES COLL	C PERSON	GSFC	C SMITH	NAG 5 9624	462
99	WASHINGTON STATE UNIV	M AVERNER	GSFC	B W POOVAIAH	NAG 5 11364	538
99	WASHINGTON STATE UNIV	M WEI	GSFC	L JAEGLE	NAG 5 10637	538
99	WASHINGTON UNIV - ST. LOUIS	D E SMITH	GSFC	R J PHILLIPS	NAG 5 4435	329
99	WASHINGTON UNIV - ST. LOUIS	D SENSKE	GSFC	R ARVIDSON	NAG 5 10158	331
99	WASHINGTON UNIV - ST. LOUIS	D SENSKE	GSFC	B JOLLIFF	NAG 5 10227	331
99	WASHINGTON UNIV - ST. LOUIS	J HILLMAN	GSFC	B FEGLEY	NAG 5 11958	332
99	WASHINGTON UNIV - ST. LOUIS	K BLANDING	GSFC	M ISRAEL	NGT 5 50240	333
99	WASHINGTON UNIV - ST. LOUIS	K BLANDING	GSFC	J AMEND	NGT 5 50348	333
99	WASHINGTON UNIV - ST. LOUIS	K BLANDING	GSFC	M ISRAEL	NGT 5 50386	333
99	WASHINGTON UNIV - ST. LOUIS	K BLANDING	GSFC	M SWARTOUT	NGT 5 50402	333
99	WASHINGTON UNIV - ST. LOUIS	M MEYER	GSFC	A WANG	NAG 5 12114	332
99	WASHINGTON UNIV - ST. LOUIS	P CRANE	GSFC	C M WILL	NAG 5 10186	331
99	WESLEYAN UNIV	P E HUNTER	GSFC	M S GILMORE	NAG 5 12001	146
99	WEST VIRGINIA STATE COLL	M MATHEWS	GSFC	J MAYHUGH	NAG 5 11088	539
99	WEST VIRGINIA STATE COLL	M MATHEWS	GSFC	E V GRIFFIN	NAG 5 11103	539
99	WEST VIRGINIA UNIV	D OZBURN	ARC	K DAVIS	NCC 2 6043	540
99	WEST VIRGINIA UNIV	D DETROYE	GSFC	M JARAIEDI	NCC 5 406	540
99	WEST VIRGINIA UNIV	D DETROYE	GSFC	M JARAIEDI	NCC 5 570	540
99	WEST VIRGINIA UNIV	D DETROYE	GSFC	M JARAIEDI	NGT 5 40120	540
99	WEST VIRGINIA UNIV	G BLANEY	GSFC	E J PYLE	NAG 5 12608	540
99	WEST VIRGINIA UNIV	L KEFFER	GSFC	M JARAIEDI	NGT 5 40055	540
99	WEST VIRGINIA UNIV	M MELLOTT	GSFC	M KOEPKE	NAG 5 10218	540
99	WESTERN KENTUCKY UNIV	D D DETROYE	GSFC	R HACKNEY	NGT 5 40105	230
99	WESTERN KENTUCKY UNIV	D DETROYE	GSFC	R HACKNEY	NCC 5 222	230
99	WESTERN KENTUCKY UNIV	D DETROYE	GSFC	R HACKNEY	NCC 5 396	230
99	WESTERN KENTUCKY UNIV	D DETROYE	GSFC	R HACKNEY	NCC 5 571	230
99	WESTERN KENTUCKY UNIV	L KEFFER	GSFC	R HACKNEY	NGT 5 40051	230
99	WHEELING JESUIT UNIV	N CHEEKS	GSFC	J P ALLEN	NCC 5 440	541
99	WHEELING JESUIT UNIV	P SAKIMOTO	GSFC	N NAIK	NCC 5 604	541
99	WHEELING JESUIT UNIV	P STEFFEN	GSFC	N STRUM	NAG 5 12489	540
99	WHEELING JESUIT UNIV	S CANRIGHT	GSFC	N NAIK	NCC 5 451	541
99	WILLIAM JEWELL COLL	M P BODIFORD	MSFC	P BUNTON	NAG 8 1851	333
99	WOODS HOLE OCEANOGRAPHIC INST	C TREES	GSFC	S DONEY	NAG 5 12520	303
99	WOODS HOLE OCEANOGRAPHIC INST	E LINDTSROM	GSFC	R SCHMITT	NAG 5 12444	303

FIELD CODE	INSTITUTION	TECHNICAL OFFICER	TECH OFF LOC.	FIRST PRINCIPAL INVESTIGATOR	AGREEMENT NUMBER	PAGE NUM.
99	WOODS HOLE OCEANOGRAPHIC INST	J MARRA	GSFC	D MCGILLICUDDY	NAG 5 11265	302
99	WORCESTER POLYTECH INST	S J BRODEUR	GSFC	F J LOOFT	NAG 5 10712	303
99	WORCESTER POLYTECH INST	S J BRODEUR	GSFC	F J LOOFT	NAG 5 11755	303
99	WRIGHT STATE UNIV	R S WILLIAMS	GSFC	S MOHLER	NGT 5 30428	424
99	XAVIER UNIV - LOUISIANA	C COLLINGSWORTH	GSFC	A CHATTERS	NGT 5 70010	235
99	XAVIER UNIV - LOUISIANA	C PERSON	GSFC	A Z CHATTERS	NGT 5 90086	235
99	XAVIER UNIV - LOUISIANA	R TRAVIS	JSC	S O'CONNOR	NAG13 98006	235
99	YALE UNIV	G GUTMAN	GSFC	L M CURRAN	NAG 5 11335	147
99	YALE UNIV	K BLANDING	GSFC	C E BAILYN	NGT 5 50287	148
99	YALE UNIV	M WEI	GSFC	D FISH	NGT 5 30371	148
99	YALE UNIV	M WEI	GSFC	L M CURRAN	NGT 5 30457	148