

Serving the Marshall Space Flight Center Community

July 18, 2002

A 'Vu' of the future <u>NASA fellowship recipient</u> <u>concluding two-year research</u>

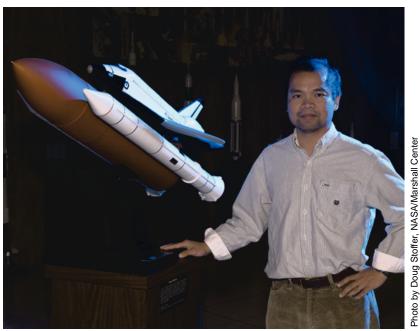
by Rick Smith

rowing up on the Pacific Coast near the end of the Apollo-era missions to the Moon, Bruce Thanh Vu's mind was on rockets to space.

Today, working on the Atlantic Coast at NASA's Kennedy Space Center, Vu is still preoccupied with the same subject — and his research is helping NASA usher in a new era of space exploration.

Since December 2001, Vu — an aerospace engineer at the Marshall Center — has been on special assignment to the Kennedy Center in Florida. There, he is wrapping up the final phase of his NASA Administrator's Fellowship, a twoyear program that partners NASA scientists and technologists with minority institutions to teach and conduct research.

Vu currently is combining field research with advanced computer simulations to analyze wind flow and other factors of fluid mechanics — the



Bruce Vu

study of fluids and air streams in motion — that impact Space Shuttle storage, assembly and launch facilities at the historic NASA facility. In the past 20 months under his NASA Fellowship, Vu also has investigated nanotechnology — research into molecular-level manufacturing of cell-sized

See Vu on page 4

NASA awards contracts to investigate commercial services to supply International Space Station

Marshall news release

ASA's Alternate Access to Station project — part of NASA's Space Launch Initiative — awarded four contracts last week to expand options beyond today's capability for delivering supplies to the International Space Station.

These awards, with a combined value of \$10.8 million, will cover 12 months of work. This work will result in cargo vehicle concepts for rendezvous and docking with the Space Station, and the technology requirements needed to accomplish an



automated approach by NASA and industry.

"These companies will get us to the point where the next steps will be flight testing, and operations and safety validation of technologies and proposed vehicles," said Chris Crumbly, manager of the Alternate Access to Station project at the Marshall Center.

Automated rendezvous and capture/docking is a key technology for the Space Launch Initiative. One of NASA's leading technology research and development programs,

Rule No.1: Don't complain, criticize or condemn

any years ago I was introduced to a communication concept that I turned into a framework for dealing with people. For my own personal use, I referred to it as "Rule No. 1."

I recently introduced Rule No. 1 to the Marshall workforce because I think as we apply it across the Center it will make a big difference in helping us change how we interact with people and organizations — and it will help us to focus on the right things. It's an attitude that will help us improve the way we conduct our operations, while at the same time, support our people, excellence, customer, innovation, and teamwork values.

Rule No. 1 is shorthand for "Don't complain about, condemn or criticize people or organizations – attack the processes – not the people or organizations." It's about having a caring attitude when we talk about what is going on. It's about building each other up and supporting each other. When we complain about, criticize or condemn people or organizations, we are tearing down our partners. This can lead to ill feelings and a breakdown of trust.

I believe, with few exceptions, that each person in our workforce comes to work each day wanting to do the best they can — and they work hard to have a positive impact on NASA's missions. Nearly everyone is doing the best they can with the resources and abilities they have. Criticizing people or organizations divides rather than unites. Think about how you feel when criticized for something you have worked hard to accomplish. You might become defensive, or develop ill feelings toward the person making the accusation. This does not promote the team spirit - our teamwork value. It causes walls to be built between persons and organizations.

I want us to better uphold our people value that states, "We treat each other with dignity and respect." When we do that, we do not point the finger of fault at others. We attack the problem or process, not the person or organization.

Director's Corner



Stephenson

Rule No. 1 helps us understand that, if we look closely, we will find that our issues and frustrations are most often about processes, not people. Our processes are far from perfect. We need to continually look at ways to improve them. We need to use "out of the box" thinking to find new and better ways of doing our business. Therefore, I encourage our team to attack the processes and problems, but not the people. Our processes are the ways we do business. They are not personalized, or at least, should not be --they just are. Therefore, we can be ruthless in our attack on our processes. There is lots of room for improvement. Continual learning and improvement is a part of our excellence value. The greatest benefit of ISO 9000 is that it defines our processes so that we can know what they are and then work at improving them.

Rule No. 1 is not about stifling communication. As human beings, we have the need to communicate our thoughts, feelings and perceptions to each other and to our supervisors, and to receive appropriate feedback. There also will be times when someone must report inappropriate behavior or poor performance issues directly to another employee's supervisor or manager. Supervisors have a legitimate need for this information, as they share responsibility with employees to improve their performance and conduct. Thus, the intent is to help correct a situation by talking only to the persons with responsibility and authority to do so — not to gossip or to sabotage an employee or organization. This must be done in a constructive, not a destructive, manner. Keeping our motives in check will allow us to implement Rule No. 1 while continuing to openly communicate with each other.

Further, Rule No. 1 does not negate the legitimate processes we have for employees to raise concerns or complaints regarding illegal or discriminatory actions taken by another employee. For example, we will always encourage an employee who believes he or she has been the victim of illegal discrimination to exercise their right to file a complaint through the Equal Opportunity Office. Another example is bargaining unit employees can bring issues to the attention of their union representatives.

Bottom line: I am committed to grow a culture at Marshall that embraces our values and empowers our employees. I believe Rule No. 1 will help us move toward such a culture, and, just as with the values, we should hold each other accountable for supporting Rule No. 1 if it is to be effective. In doing so, I trust that each of you will apply this in the spirit in which it has been described and not just use it as a phrase to throw around when it is convenient to embarrass someone or to thwart communication. I am convinced that if we uphold Rule No. 1, we will change the way we talk to one another, open our processes to constructive criticism, innovation, and improvement, all while we preserve a high level of trust and respect for the great people and organizations that make mission success possible.

"We are creating our future" by how we support one another in getting there. Thanks in advance for your support in upholding Rule No. 1.

> —— Art Stephenson Marshall Center Director

Rex Geveden named deputy director of Marshall Science Directorate

by Sherrie Super

R ex Geveden has been named deputy director of Marshall's Science Directorate – an organization with more than 600 civil servant and contractor employees who perform a wide array of science activities.

This position will tap Geveden's prior experience in key science initiatives at the Marshall Center, ranging from leadership roles in supporting research aboard the International Space Station to managing research related to fundamental laws of physics.

Geveden began his NASA career at Marshall in 1990. He was chief engineer for the Waves in Space Plasmas Experiment, a study that involved the measurement of the characteristic frequencies of the plasma, comprising more than 99 percent of the visible universe. He became project manager for the Optical Transient Detector and Lightning Imaging Sensor earth orbiting satellites that produced data for the world's first global map of lightning.

Geveden was program manager of Gravity Probe-B, which will test two key areas of Einstein's General Theory of Relativ-



Geveden

and space-flight, science experiments — including science experiments on the Space Station.

The writer, an employee of ASRI, supports the Media Relations Department.



Congressman visits Michoud

U.S. Rep. John Cooksey of Louisiana, left, examines a friction stir welding sample with NASA External Tank Project Manager Jerry Smelser, center, and Lockheed Martin's Shuttle Upgrades Manager Dave Hartley, right, during a recent visit to the Michoud Assembly Facility in New Orleans where the External Tank is assembled.

Proposals being accepted for fiscal year 2003 Center Director's Discretionary Fund

ity. In his new role, Geveden

Also, Geveden recently

will continue to play a key

leadership role in this

served as manager of

Marshall's Microgravity

Science and Applications

Department in the Science

Directorate, supervising

more than 350 scientists,

engineers, project managers

and support personnel who

are responsible for develop-

ment of both ground-based,

project.

Proposals are being accepted for conducting research to be funded from the fiscal year 2003 Center Director's Discretionary Fund.

The proposal should address welldefined activities for a period of one-totwo years.

The Center Director's Discretionary Fund (CDDF) provides the resources necessary to pursue innovative and creative research ideas that are relevant to the Marshall Center's roles and missions for which other funding sources are unavailable.

The CDDF Program includes Space Transportation, Science, Flight Projects and Engineering directorates individually soliciting proposals and selecting projects. The proposals will be evaluated and selected by an advisory panel within each of those directorates.

The CDDF program manager, responsible for overall program management, is Fred Schramm of the Technology Transfer Department at 544-0823.

For more information, see "Inside Marshall."

Vu

Continued from page 1

computers and microscopic surgical devices — for the U.S. Army at Redstone Arsenal. In addition, he developed an innovative computer network solution for a Boeing Company national missile defense project, and taught fluid mechanics and other courses at Alabama A&M University — both in Huntsville.

No wonder the beach is calling to him.

Vu smiled, recalling the dizzying pace of the past two years, which brought his wife and family to the Florida coast from their longtime home in Northern Alabama.

"It's always been my goal to stay on the leading edge of the space program, to bring whatever I can to the table and help NASA accomplish its missions," he said. "To be able to travel, to show my family different ways of life — that's a bonus."

"Bruce is a very focused and motivated individual," says Robert Garcia, manager of the computational fluid dynamics branch of the Marshall Center's Structural Dynamics Laboratory. "He has worked hard to make a difference at NASA, and to make the most of the opportunities available to him."

Vu is currently working in the Computational Sciences branch at the Kennedy Center, studying wind flow characteristics around the Center's large launch facilities to determine ways to reduce or negate unfavorable wind conditions during Shuttle "rollouts," or transfer from the assembly building to the launch facility. His computer simulation, completed this spring, is expected to help facility engineers understand the physical phenomena of wind behavior at the site and update rollout requirements, making the Space Shuttle safer than ever during pre-launch activities.

Recipients of NASA Administrator's Fellowship Program awards spend a year teaching mathematics, science, engineering or technology at a minority institution, where they also conduct research and mentor students. The program also seeks to increase the ability of these minority institutions to become an integral part of NASA's overall research and development mission, introducing new partnership opportunities and teaching curricula.

"The NASA Administrator's Fellowship Program has given me a chance to accomplish many things I wouldn't otherwise be able to do as a federal employee," Vu says. "The program has allowed me not only to enhance my career but also to share my knowledge with minority institutions and other organizations to pass on what I've learned to a new generation of aerospace engineers and scientists."

Vu's commitment to the program hasn't ended with his own award.

During Alabama A&M University's "High School Day," sponsored annually by the Marshall Center, Vu spoke last year to high school students about careers in engineering. He was instrumental in inviting a fellow Administrator's Fellowship candidate to the Marshall Center to complete his fellowship. He also initiated a technical exchange between NASA, Engineering Science Inc., and Morgan State University, a minority institution in Baltimore, Md.

Vu started his NASA career in 1987 at Ames Research Center in Moffett Field, Calif., as a research assistant, developing computer programs to analyze wind tunnel performance at Ames's Fluid Mechanics Laboratory. In 1989, he joined NASA's Marshall Center as an aerospace engineer, developing complex computer simulations for studying advanced fluid dynamics related to launch vehicle design and performance.

The writer, employed by ASRI, supports the Media Relations Department.

Contracts -

Continued from page 1

the Space Launch Initiative aims to dramatically increase safety and reliability, while reducing the cost of a second generation reusable launch system. The objective is to provide additional cargo service capability to increase the Space Station's operational flexibility.

Companies chosen to participate in this effort include Andrews Space and Technology, Seattle, Wash., \$2.9 million; Lockheed Martin, Denver, Colo., \$3 million; The Boeing Company, Huntsville, Ala., \$2.6 million; and Constellation Services International, Inc., Woodland Hills, Calif., \$2.3 million.

Contractors will begin work on the project by the end of July.

"The system must be able to operate safely around Space Station and ensure automatic dockings are achieved with minimal input from mission control," Crumbly said.

Automated rendezvous and docking/ capture operations are critical for several NASA missions, including satellite servicing, interplanetary sample return, and in the future, large-scale space construction.

By enabling new access avenues, NASA is stimulating a commercial access industry.

"Our job is to demonstrate the capability," Crumbly said. "Once demonstrated, industry may provide services, which the Space Station program can then purchase." Purchasing services from commercial industry enables NASA to concentrate on research and science mission objectives, while promoting continuous risk reduction and improvements through industry competition. NASA hopes to demonstrate commercial servicing as soon as practicable.

Current alternate access concepts include expendable rockets and cargo vehicles. Evolution of the service could result in a fully reusable system.

All NASA field centers and the U.S. Air Force Research Laboratory are participating in the Space Launch Initiative. The Marshall Center implements the Space Launch Initiative for NASA's Office of Aerospace Technology in Washington, D.C.

Bldg. 4200: Historic legacy stands tall

by Bob Jaques

t was 39 years ago that about 1,200 Marshall Space Flight Center employees began moving into the new Central Laboratory and Office Building.

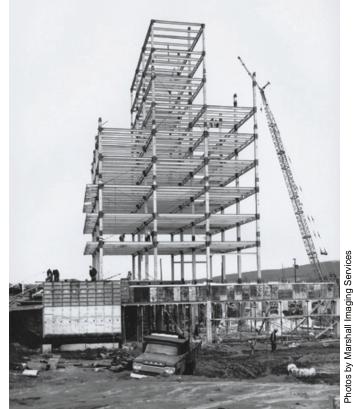
The building now is officially the Marshall Space Flight Center Headquarters Building — but most team members simply refer to it as Bldg. 4200.

Between October 1961 and June 1963, while the building was being constructed, many Marshall employees worked in leased space at the Twickenham Building and the Quick Building in downtown Huntsville. These temporary office sites helped to alleviate crowded conditions at Marshall.

Realizing the need for a larger office structure, on Aug. 8, 1961, Marshall accepted a \$4 million bid for construction of a nine-story, 227,000-square-foot facility with a 3,000-square-foot library, cafeteria, and 400-seat auditorium. The new building was planned and built under the supervision of the Marshall Facilities Engineering Office.

When Bldg. 4200 was completed in July 1963, the total cost was \$4.4 million, contained 235,650 square feet, and stood 157 feet tall. In today's dollars, the building replacement cost would be almost \$30 million.

From the time the Marshall Center began operations on July 1, 1960 — until July 1963 — its headquarters was located in the Army Ballistic Missile Agency Headquarters, Bldg. 4488 on Martin Road.



Bldg. 4200 takes shape in this photograph taken March 21, 1962.

The move into the new Central Laboratory and Office Building was the largest mass employee relocation ever undertaken at Marshall at that time. Throughout the month of July 1963, engineering and specialty offices from other buildings around the Center continued to move into the new building.

On July 20 and 21, Center Director Dr. Wernher von Braun and his staff moved from Bldg. 4488 to the ninth floor and penthouse of Bldg. 4200. Marshall Center Director Art



The Central Laboratory and Office Building on March 29, 1963, about four months before Dr. Wernher von Braun and his staff moved into the building.

Stephenson now occupies Dr. von Braun's former office on the ninth floor.

this unique and historic building on Rideout Road retains its prominence to visitors and employees alike.

The Center's Central Laboratory and Office Building was the

The writer, employed by ASRI, is a Marshall Center historian.

first and largest of three

buildings to be located in a

occupied in the summer of

1964 — the Engineering

Building, referred to as

Project Engineer Office

Building, or Bldg. 4202.

records do not clearly

show when the name

Laboratory and Office

Space Flight Center

changed from the Central

Building to the Marshall

Headquarters Building.

After almost 40 years,

Unfortunately, historic

triangle on Rideout Road.

The other two buildings

were completed and

and Administration

Bldg. 4201, and the



Silver Snoopy Award

Jeff Irby, left, a NASA project engineer at the Michoud Assembly Facility in New Orleans, receives a Silver Snoopy from STS-109 Pilot Duane Carey. Irby was cited for his contributions to the External Tank Project. In particular, Carey complimented Irby for overseeing the Facility Upgrades that are instrumental in providing the environment that enhances the reliability and safety of flight hardware.

AIAA Ala./Miss. Section celebrates

its 50th anniversary on July 25

he American Institute of Aeronautics and Astronautics (AIAA), Alabama/Mississippi Section, is celebrating its 50th anniversary on July 25 with a panel discussion by some of the distinguished AIAA leaders who have been instrumental in the Section's history and major aerospace programs.

The celebration will be at the Huntsville Marriott, with a reception at 5:30 p.m., followed by dinner at 6:30 p.m., and program at 7 p.m. Tickets are \$20 for adults and \$10 per student. The deadline for reservations is July 22.

Panelists include von Braun team members, Dr. Ernst Stuhlinger and Konrad Dannenberg, retired Teledyne Brown Engineering Chief Executive Officer Joe Moquin, Marshall managers Alex McCool and Dr. Ann Whitaker, as well as George K. Williams. The panel members will discuss favorite memories from their careers and their hope for the future of the AIAA and the aerospace program.

Also being honored are the AIAA Section's 50-year members, former Section chairpersons, AIAA Fellows, von Braun team members, charter Marshall employees, past Marshall directors, and the AIAA Section's honorary members, including Alabama's and Mississippi's congressional delegation and governors.

For reservations, contact Arloe Mayne at ArloeWJr@cs.com or call 881-7124. For more information, call Wanda Reece at 544-2630 or e-mail wanda.reece@msfc.nasa.gov.

Obituaries —

Loftis, Lewis S., 69, of Huntsville, died July 11. He retired from the Marshall Center in 1995 where he was a supervisory systems accountant.

Burial was in Valhalla Memory Gardens with Bennie Pickley, Tim Orbinson and John Denny officiating.

He was a native of Winchester, Tenn., earned a bachelor's degree at David Lipscomb College and earned an MBA at the University of Alabama. He worked for the U.S. Atomic Energy Commission in Aiken, S.C., before transferring to the Marshall Center. He was a member, deacon and elder of Memorial Parkway Church of Christ.

He is survived by his wife, Katherine Ridley Loftis; one son, Mark Loftis of Brentwood, Tenn.; one daughter, Joy Loftis of Huntsville; one sister, Elaine Rich of Winchester; and three grandchildren.

Marshall annual picnic 'Family Fun Day' meal tickets, T-shirts on sale

he Marshall Center's annual picnic, "Family Fun Day," will be from 10 a.m.-2 p.m. Aug. 17 at the Marshall picnic area with a children's parade at 9:45 a.m. T-shirts and tank tops are Anvil 100% cotton in ash gray. Prices for all T-shirts -- from a child's small to Adult XX-large -are \$10 each. Adult XXX-Large T-shirts are \$12. Tank Tops, sizes child's small to Adult XX-large, are \$12. T-shirt and tank top orders must be received by the NASA Exchange Space Shop, Bldg. 4203, by July 26.

Meal tickets are \$6 each and are available until Aug. 12 through administrative officers. For each meal ticket purchased, participants will receive two door-prize tickets. Meal tickets also may be purchased from the Internal Relations and Communications Department, Bldg. 4200, Room 101.

Job announcements -

MS02D0056, AST, Technical Resources Management. GS-801-07/09/11, Space Shuttle Projects Office. No closing date.

MS02D0174, Accountant. GS-510-7/9 with promotion potential to GS-12, office of Chief Financial Officer, NASA Payroll and Center Personal Services Office. Closes July 29. This is a competitive placement plan position.

Center Announcements

University scholarships available

wo university scholarships sponsored by the Marshall Association are available for incoming freshmen in September. Both technical and nontechnical scholarships will be awarded. The Association will accept applications for the scholarships until July 31. Completed applications should be submitted to Cliff Bailey in AD01 or call 544-5482.

Thrift Savings Plan open for Marshall employees

arshall employees can change their Marshan employees contributions to Thrift Savings Plan accounts until July 31. Employees also may begin contributions to their accounts during this period. There are five different funds to choose from. For more information, call Ginger Martin at 544-5654 or Debbie Allen at 544-7536.

Marshall Retirees Association offering university scholarship

C tudents who are descendants of a Marshall Center retiree can apply for the NASA-MSFC Retirees Association Scholarship at the University of Alabama in Huntsville. The \$1,000 scholarship will be awarded for the academic year beginning in the fall. For more information, call UAH Student Financial Services at 824-2755.

NASA Performance Evaluation Profile Surveys due Friday

ll Marshall team members, civil A service and contractor, are required to complete the Performance Evaluation Profile Survey by Friday. A training module is at the Safety, Health and Environmental Web site. The training module can be completed in about one hour. For assistance, or for more information, call Dennis Davis at 544-8628, or Kristie French at 544-7474.

Did vou once race a moonbuggy?

Dlanning for the 10th annual Great Moonbuggy Race, to be held in 2003, has begun. Organizers would like to find any Marshall team members who once

raced on a moonbuggy team. For more information, call Durlean Bradford at 544-5920.

WebTADS training notice

ASA Administrator Sean O'Keefe has requested that time keeping be delegated to the employee level. Training is now available to Marshall employees on WebTADS timesheet entry and NASA standardized policies. The WebTADS training team will be contacting the administrative officer or management support assistant of each organization to coordinate training dates and location. The training sessions will last approximately two hours and will include timekeeping standardized policies and a WebTADS system navigation demonstration. Labs will be available as needed for additional practice. Administrative officers or management support assistants should call Pam Vaughn at 544-9372 for additional information.

AdminSTAR employee overview training dates set for July

he AdminSTAR employee overview L training is designed to provide users with the core functionality of AdminSTAR learning management software application. Users will be able to identify methods to overcome AdminSTAR log-on barriers, use catalog and calendar features, review and print requested and approved training as well as cancel out of approved courses. All sessions will be in Bldg. 4200, Room G13A, on July 24 from 1-2 p.m. and 2:30-3:30 p.m.; and July 25 from 1-2 p.m. and 2:30-3:30 p.m. To register, call John Heath at 544-2622.

Procurement retreat is July 18

The Procurement Office will hold an all-hands retreat from 8:30 a.m.-3:30 p.m. on July 18 at Ditto Landing Marina. The office will be closed on this date.

MARS ballroom dance lessons

X altz and Mambo dance lessons will be July 22 and 29 in the Parish Hall off St. Stephens Episcopal Church.

Fee is \$8 per lesson. Intermediate lessons are from 7-8 p.m. and beginners from 8-9 p.m. Call 650-0200 for more information.

Disposal Operations sale July 30

n auction sale hosted by Disposal Operations at Marshall will be at 9 a.m. July 30. A preview will be from 9 a.m.-3 p.m. July 29 and on the morning of the auction from 7-8:45 a.m. There will be approximately 146 lots consisting of computer equipment, test equipment and machinery. The sale will be at Intergraph Bldg. 21 on Dunlop Blvd., Huntsville. For more information, call 544-4667, 544-1774 or go to www.gsaauctions.gov.

Shuttle Buddies meeting Monday

The Shuttle Buddies will meet for L breakfast at 9 a.m. Monday at Mullins Restaurant on Andrew Jackson Way. For more information, call Deemer Self at 881-7757 or Gail Wynn at 852-8189.

NASA Ski Week reservations being accepted

he 12th-annual NASA Ski Week will L be at Big Mountain ski resort in Montana on Feb. 22-March 1, 2003. This is a 3,000-acre ski resort overlooking Glacier National Park. All Marshall team members, retirees, spouses and dependents are eligible to participate. For more information, call 233-0705 or e-mail Thomas.S.Dollman@msfc.nasa.gov.

Gregory to speak at Marshall Association meeting

Tred Gregory, deputy administrator designee and current associate administrator for the Office of Space Flight, will be the guest speaker at the Marshall Association's meeting July 30. The event begins at noon at Rustic Lodge and cost for a barbecue and ice cream lunch is \$7. Reservations are due by July 25 and can be made by contacting Cliff Bailey at 544-5482.

Employee Ads

Miscellaneous

- ★ Ethan Allan leather couch & chair, \$200; King bed, cherry, \$400; regular bed, \$200. 961-4942
- ★ Two side-by-side crypts, eye-level, Valhalla Memory Gardens, discounted. 239-272-5627/239-498-0332
- ★ 1976 18' Bass boat, 55HP Chrysler motor, \$1,250; large doghouse, wood w/shingles, make offer. 881-9150
- ★ E.A. print, 90" sofa, quilted olive background, wood trim \$75; Tell City rocker, \$50. 881-7096
- ★ Instep ZII double baby jogger, \$100. 880-7889
- ★ Four Eagles tickets, July 17, Birmingham Civic Center, \$55 each. 461-7411
- ★ Sauder computer desk and printer stand, \$75. 883-7187
- ★ Sony STR-DB940 home theater receiver, \$250. 205-647-4949
- ★ White iron bunkbed, twin top, full down, mattresses included, \$180. 518-9062
- ★ AB roller, \$25. 256-233-1487
- ★ Schwinn road bike, new tires, accessories, \$125. 527-5247
- ★ Kenmore washer, \$95; Maytag dryer, \$100. 837-6649
- ★ 1988 Fifth wheel Wilderness Lite/ Fleetwood travel trailer, sleeps 5, a/c, toilet, shower, \$2,950. 256-771-1952
- ★ Black & Decker electric lawnmower, 18" cut, l yr. old, best offer. 256-772-6469/683-6469
- ★ Aero 750 exercise bike, electronic ergo-meter knob missing, \$50 firm; Brogan enlarger, \$50 firm. 883-2869
- ★ Five Cans R12 & automobile A/C recharge kit, \$70. 232-1171
- ★ Whirlpool self-cleaning electric oven/ range, \$150; side-by-side refrigerator w/ice in door, \$225. 536-4507
- ★ 1994 Kawaski jet ski, 3 place new

MARSHALL STAR

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The Marshall Star is published every Thursday by the Internal Relations and Communications Department at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Monday noon to the Marshall Internal Relations and Communications Department (CD40), Bldg. 4200, room 101. Submissions should be written legibly and include the originator's name. Send electronic mail submissions to: intercom@msfc.nasa.gov The Marshall Star does not publish commercial advertising of any kind.

Manager of Internal Relations and Communications — Steven Durham Editor — Jonathan Baggs

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impeller custom trailer, \$3,200. 883-2544

- ★ Apple G3 laptop, 300Mhz/64MB, 8GB/ DVD, Optical drive, \$600 obo. 828-6213
- ★ Two window screens, bronze aluminum, 30"x74". 971-1414
- ★ Nikon Coolpix 5000, 5 megapixel, zoom, 32MB CF, rechargeable battery, all accessories, \$825. 461-6337
- ★ Framed print, detailed pencil drawing of "B&O steam locomotive, \$25. 830-1060
- ★ Titleist DCI 990 3 PW, stiff steel shafts, \$350. 746-9443
- ★ 1991 MasterCraft 190 w/trailer, new tires, 350 hours, \$10,500. 534-9379/ 527-1331
- ★ Sleeper sofa, converts to full size bed, brown fabric w/oak trim, \$75. 774-5716
- ★ 1996 Suzuki DS 80 dirt bike, helmet included, \$750. 828-3181

Vehicles

- ★ 1976 Lincoln Mark IV, 2-door, less than 80K miles, garaged, leather, \$2,500. 325-6000
- ★ 2002 Toyota Tacoma Pre-runner LTD, 4-door, V6, 150 miles, Nerf, TRD, \$23,400. 536-4326
- ★ 2001 Olds Alero GS, 4-door, fully equipped, 14K miles, warranty, \$9,500. 536-3697
- ★ 1996 Ford Thunderbird, V8, 84K miles, one-owner, auto, a/c, \$6,000. 895-0280 after 5 p.m.
- ★ 1990 New Yorker Salon, V6, auto, air, full-power, loaded, sunroof, \$1,600. 851-9519
- ★ 1996 Ford Ranger XLT, 5-speed, 70K miles, AM/FM/CD, alloy wheels, stepside, short bed, \$4,850. 256-753-2278
- ★ 1994 Ford Explorer, 110K miles, 4WD, all-power, CD player, \$4,700. 882-2928
- ★ 1993 Ford Taurus, 140K miles, keyless

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entry, blue, new radiator, new Dunlop tires, \$3,000. 653-3613

- ★ 1989 Ford Bronco II, V6, 5-speed, 140K miles, \$3,500 obo. 256-586-7394
- ★ 1991 Ford F150 XLT Lariat, auto, tan, camper shell, low mileage, \$4,500. 256-859-4140
- ★ 2000 Ford Windstar SE, leather, captain's chairs, power sliding doors, \$16,700. 830-0851/leave message
- ★ 1989 Nissan Maxima SE, 5-speed, black, sunroof, well maintained, \$2,850. 882-7376
- ★ 1994 Ranger XLT, ext. cab, V6, tow package, bedliner, 93K miles, \$6,475. 895-8306
- ★ 1996 Ford Windstar LX, 91K miles, non-smoker, loaded, white/gold/tan, \$6,495 obo. 325-7542
- ★ 1980 Chevy S-10 pickup, rebuilt engine, new tires and transmission, \$3,250. 837-0559
- ★ 1999 Dodge 2500 4x4 SLT, diesel, extended cab, am/fm/CD, 5-speed, 96K miles, \$19,500 obo. 931-732-4742
- ★ 1995 Nissan King-cab, XE/V6 pickup, gray, 71K miles, automatic, a/c, bedliner, \$5,995. 895-9589
- ★ 2000 Honda CR-V EX, green, all-wheel drive, CD, power locks/windows, alloy wheels, \$15,750. 830-2903

Free

★ 10-week old kittens, litter trained, eat solid food, white w/orange, white w/gray. 650-5895

Lost

- ★ 25-Year NASA pin between Bldg. 4200 basement and Bldg. 4202. 544-8092
- ★ Ladies watch, Bldg. 4200 area. 544-3623 to claim/identify

Wanted

★ Small dorm refrigerator. 883-2757

PRE-SORT STRUDARD Prostage & Fees PAID ASAN Permit No. G-27