PE NUMBER: 0207247F
PE TITLE: Air Force TENCAP

TE TITLE: 7411 TOTOC TENO/41									
Exhibit R-2, RDT&E Budget Item Justification									2004
BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND 1207247F Air		ΛP			
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Day array Flore and (DE) Cost					10.962				TDD
Total Program Element (PE) Cost	14.157	18.818	10.673	10.771	10.962	11.138	11.310	Continuing	TBD
0001 Air Force TENCAP	14.157	18.818	10.673	10.771	10.962	11.138	11.310	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

The Air Force Tactical Exploitation of National Capabilities (AF TENCAP) program was established in 1977 per Congressional direction and is a non-traditional acquisition program. AF TENCAP pursues seamless integration of space systems capabilities into military operations for tactical use by warfighters, expediting improvements to Air Force combat capabilities through rapid-prototyping projects, operational concept demonstrations, and transitions to the warfighter customer. Additionally, AF TENCAP-developed equipment is deployed in support of real-world contingency operations.

AF TENCAP leverages investments in space systems for tactical warfighter use in three ways:

- 1) Exploiting existing space systems for tactical applications, conceiving and demonstrating capabilities to exploit these systems through rapid-prototyping projects.
- 2) Influencing the design and operation of new space systems for warfighters by advocating tactical applications and missions for them (in the form of analyses and integration of space systems into roadmaps and architectures for Air Force weapons and Command, Control, Communications, Computers, Intelligence [C4I] systems).
- 3) Supporting education and training of operational forces in emerging space/space-related technologies and concepts, as well as education of national providers about operational user requirements and environments, through participation in combat and contingency operations, exercises, and project demonstrations.

AF TENCAP efforts described in the individual years FY 2003, FY 2004, and FY 2005 are categorized by project status containing the start, continuation and completion of one-to-two-year projects which are then transitioned to the user. This process is reflected in the Schedule Profile (R-4).

This program is in Budget Activity 7, Operational System Development, due to its efforts supporting fielded units.

R-1 Shopping List - Item No. 135-2 of 135-8

Exhibit R-2, RDT&E	Budget Item Justification	DATE Febru a	ary 2004
DGET ACTIVITY Operational System Development	PE NUMBER AND TITLE 0207247F Air Force TENCAP		,
) B. Program Change Summary (\$ in Millions)			
	<u>FY 2003</u>	<u>FY 2004</u>	FY 2005
) Previous President's Budget	15.066	10.479	10.701
Current PBR/President's Budget	14.157	18.818	10.673
) Total Adjustments	-0.909	8.339	
) Congressional Program Reductions		-0.161	
Congressional Rescissions			
Congressional Increases		8.500	
Reprogrammings		8.500	
Reprogrammings SBIR/STTR Transfer Significant Program Changes:	-0.909 nical parameter): In FY04, funds were added to continue development		System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	-0.909 nical parameter): In FY04, funds were added to continue development cured Ground objects using Laser Imaging of the Target (FOGLITE) p	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)
Reprogrammings SBIR/STTR Transfer) Significant Program Changes: Significant Program Changes (funding, schedule, and/or techn	nical parameter): In FY04, funds were added to continue development	of the Global Positioning	System (GPS)

R-1 Shopping List - Item No. 135-3 of 135-8

Exhibit R-2a, RDT&E Project Justification								DATE	February	2004
	T ACTIVITY erational System Development				PE NUMBER AND 0207247F Air			PROJECT NUME 0001 Air For		
	Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
0001	Air Force TENCAP	14.157	18.818	10.673	3 10.771	10.962	11.138	11.310	Continuing	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The Air Force Tactical Exploitation of National Capabilities (AF TENCAP) program was established in 1977 per Congressional direction and is a non-traditional acquisition program. AF TENCAP pursues seamless integration of space systems capabilities into military operations for tactical use by warfighters, expediting improvements to Air Force combat capabilities through rapid-prototyping projects, operational concept demonstrations, and transitions to the warfighter customer. Additionally, AF TENCAP-developed equipment is deployed in support of real-world contingency operations.

AF TENCAP leverages investments in space systems for tactical warfighter use in three ways:

- 1) Exploiting existing space systems for tactical applications, conceiving and demonstrating capabilities to exploit these systems through rapid-prototyping projects.
- 2) Influencing the design and operation of new space systems for warfighters by advocating tactical applications and missions for them (in the form of analyses and integration of space systems into roadmaps and architectures for Air Force weapons and Command, Control, Communications, Computers, Intelligence [C4I] systems).
- 3) Supporting education and training of operational forces in emerging space/space-related technologies and concepts, as well as education of national providers about operational user requirements and environments, through participation in combat and contingency operations, exercises, and project demonstrations.

AF TENCAP efforts described in the individual years FY 2003, FY 2004, and FY 2005 are categorized by project status containing the start, continuation and completion of one-to-two-year projects which are then transitioned to the user. This process is reflected in the Schedule Profile (R-4).

This program is in Budget Activity 7, Operational System Development, due to its efforts supporting fielded units.

(U)	B. Accomplishments/Planned Program (\$ in Millions)	FY 2003	FY 2004	FY 2005
(U)	Exploit existing space systems for tactical applications through one-two year rapid-prototyping projects (addresses	8.319	9.945	10.293
	critical short-term warfighter needs and provides tactical applications to supply otherwise unavailable capabilities);			
	identify, advocate, and influence the design and operation of future space systems for tactical applications and			
	missions; support education and training of operational forces by conducting specialized training that enhances			
	education of warfighters about the capabilities and tactical utility of national systems			
(U)	Complete GPS Jammer detection and location system (GPS-JLOC)	2.763	3.000	0.000
(U)	Complete adverse weather imaging system (FOGLITE)	1.658	5.500	0.000
(U)	Completed transition of AF TENCAP concept demonstrations to operational units/acquisition agency (transitioned to	0.786	0.000	0.000
	O&M under Space Warfare Center)			
(U)	Provide program support and other government support	0.631	0.373	0.380
Pr	pject 0001 R-1 Shopping List - Item No. 135-4 of 135-8		Exhibit R-2a	(PE 0207247F)

Exhibit R-2a, RDT&E Project Justification									2004
BUDGET ACTIVITY 07 Operational System Developm							PROJECT NUME 0001 Air Ford		
(U) Total Cost							14.157	18.818	10.673
(U) C. Other Program Funding Sun Other APPN	nmary (\$ in Millio FY 2003 Actual	ons) FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Other Procurement, Air Force (U) funding in 'Intelligence Communications Equipment,' WSC 832070, P-47	0.184	0.193	0.196	0.199	0.204	0.208	0.213	Continuing	TBD

(U) <u>D. Acquisition Strategy</u>

The AF TENCAP acquisition strategy utilizes a wide variety of solicitation/contract vehicles, to include, but not limited to, Broad Agency Announcement (BAA), General Services Administration (GSA), Cost Plus Fixed Fee (CPFF) and/or Cost Plus Award Fee (CPAF) contracts with Indefinite Delivery/Indefinite Quantity (IDIQ) contracts and existing vehicles typically available to AF TENCAP. Theater MAJCOM mission area plan (MAP) deficiencies provide the requirements for AF TENCAP development projects. Each project must correct a MAP deficiency or deficiencies and be approved by the Space Warfare Center (SWC) Strategic Planning Process. In addition, theater MAJCOMs must be willing to assume future acquisition and logistics responsibilities, and budget for projects in their Program Objective Memorandum submissions.

Project 0001 R-1 Shopping List - Item No. 135-5 of 135-8 Exhibit R-2a (PE 0207247F)

E	xhibit R-3, RD	T&E Project Cost	Analysis	5			DATE Februa	ry 200)4
BUDGET ACTIVITY 07 Operational System Development				R AND TITLE F Air Force T	ENCAP		T NUMBER AND TIT		
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions) (U) Product Development	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2003 Cost	FY FY 2003 2003 Cost Award Date	2004 2004 Cost Award	FY 2005 Cost A	FY Cost to 2005 Complete Award Date	Total Cost	Target Value of Contract
Exploting existing space systems; influencing future systems; supporting education and training	C/CPAF	* EADDS II Contract	10.079	2.640 Dec-02	2 0.000	0.000	0.000	12.719	
FOGLITE GPS JLOC Exploting existing space systems;	FFP	General Atomics, CA NAVSYS, CO Various	1.395 1.963	1.942 Jan-03 2.711 Mar-03	5.500 Feb-04 3.000 Feb-04	0.000 0.000	0.000 0.000	8.837 7.674	
influencing future systems; supporting education and training		****	32.909	6.233 Dec-02	9.945 Jan-04	10.293 Ja	an-05 Continuing	TBD 0.000	
Subtotal Product Development *Science Applications Internations contractors for the Engineerin ***Funds obligated on a class ****Multiple contracts deternations (U.) Support	ng Analysis Design sified Big Safari con	& Development II contract.	ace Corporat act that serve	ed as the AF TE	NCAP primary co	ntract vehi	cle through FY200		0.000
(U) Support Program Oversight Subtotal Support Remarks:	Various		5.508 5.508	0.631 Dec-02 0.631	0.373 Dec-03 0.373	0.380 D 0.380	Dec-04 Continuing Continuing	TBD TBD	0.000
(U) Test & Evaluation Not Applicable Subtotal Test & Evaluation Remarks:			0.000	0.000	0.000	0.000	0.000	0.000	
(U) Management Not Applicable Subtotal Management Remarks:			0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000
(U) Total Cost Project 0001		R-1 Shopping List -	51.854 tem No. 135-6		18.818	10.673	Continuing Exhibit R	TBD -3 (PE 02	0.000 207247F)

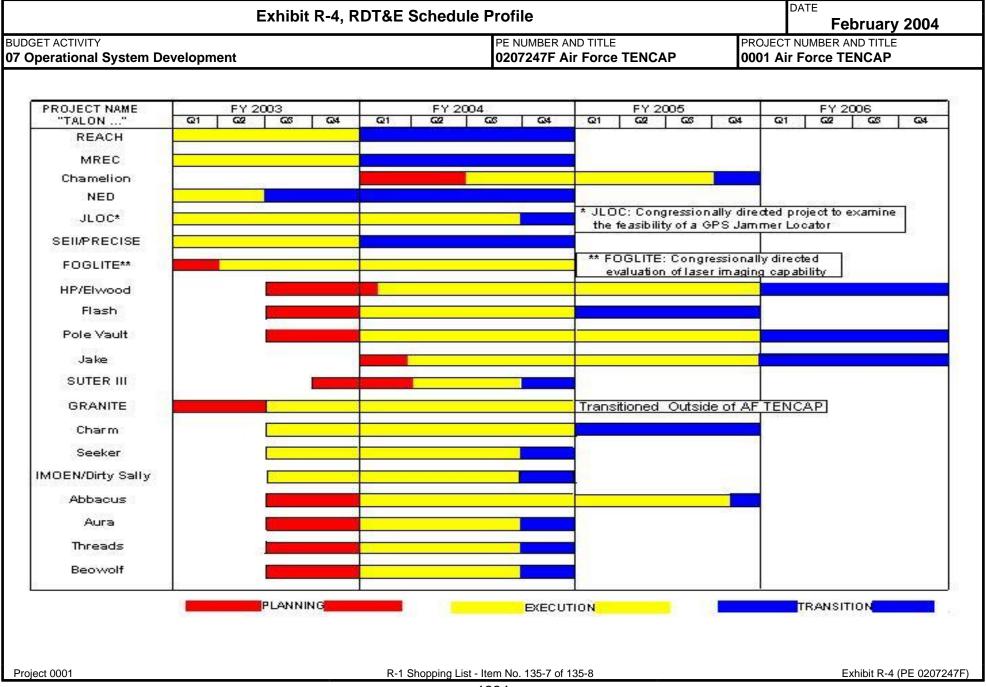


Exhibit R-4a, F	DATE February 20	004	
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207247F Air Force TENCAP	PROJECT NUMBER AND TITLE 0001 Air Force TENCAP	
 (U) Schedule Profile (U) FY 2003 Projects Evaluated and Approved (U) FY 2003 Projects Authorized to Proceed (U) FY 2004 Projects Identified (U) Contractor Proposals for FY 2004 Projects (U) FY 2004 Projects Evaluated and Approved 	FY 2003 1Q 1-2Q 2Q 3Q 4Q	FY 2004	FY 2005
 (U) FY 2004 Projects Authorized to Proceed (U) FY 2005 Projects Identified (U) Contractor Proposals for FY 2005 (U) FY 2005 Projects Evaluated and Approved (U) FY 2005 Projects Authorized to Proceed (U) FY 2006 Projects Identified (U) Contractor Proposals for FY 2006 		1-2Q 2-3Q 3Q 4Q	1-2Q 2-3Q 3Q
(U) FY 2006 Projects Evaluated and Approved			4Q
Project 0001	R-1 Shopping List - Item No. 135-8 of 135-8	Exhibit R-4a (PE (0207247F)