

UNCLASSIFIED

PE NUMBER: 0207247F
PE TITLE: Air Force TENCAP

Exhibit R-2, RDT&E Budget Item Justification								DATE February 2005		
BUDGET ACTIVITY 07 Operational System Development					PE NUMBER AND TITLE 0207247F Air Force TENCAP					
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	17.651	18.112	10.829	11.067	11.314	11.508	11.764	11.952	Continuing	TBD
0001 Air Force TENCAP	17.651	18.112	10.829	11.067	11.314	11.508	11.764	11.952	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

AF TENCAP serves as an Air Force-level program executed through the Space Warfare Center (SWC) with the warfighting MAJCOMs as its customers. As an integrated directorate within the SWC, AF TENCAP supports the overall SWC mission to advance Air Force, joint and combined space warfare through innovation, testing, tactics development and training. AF TENCAP is the Air Force lead for NTM exploitation for the tactical warrior and innovation to increase the efficiency and effectiveness of space-related activities to further integrate black and white space and connect the “last tactical mile” for the warfighter.

In August 1977, the Joint Appropriations Conference Report from Congress directed the Air Force and the Navy to establish a Tactical Exploitation of National Capabilities (TENCAP) program similar to what the Army instituted in 1973. AF TENCAP objectives comply with the original congressional intent to exploit space systems, National Technical Means (NTM) and related technologies for the warfighter.

The AF TENCAP mission increases warfighter awareness and tactical use of National Technical Means (NTMs) and other space systems through:

- 1) Exploiting current space systems, NTMs and related technologies to rapidly prototype and assist in the identification and definition of possible warfighter application. AF TENCAP is a non-traditional acquisition program that rapidly prototypes projects, validates proofs of concepts and demonstrates capabilities and transitions them to the warfighter.
- 2) Influencing the development of future space systems for tactical users by providing inputs into the capabilities and development cycle of national, military, commercial and civil space systems.
- 3) Educating and training operational forces about the concepts developed by AF TENCAP.

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

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(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	10.479	10.673	10.771	10.962
(U) Current PBR/President's Budget	17.651	18.112	10.829	11.067
(U) Total Adjustments	7.172	7.439		
(U) Congressional Program Reductions				
Congressional Rescissions	-0.161	-0.161		
Congressional Increases	8.500	7.600		
Reprogrammings				
SBIR/STTR Transfer	-1.167			

(U) **Significant Program Changes:**

Significant Program Changes (funding, schedule, and/or technical parameter): In FY04 Congress added funds (\$8.5M) to continue development of the Global Positioning System (GPS) Jammer Detection and Location (JLOC) and the Finding Obscured Ground objects using Laser Imaging of the Target (FOGLITE) projects.

In FY05, \$7.6M in Congressional funding was added to continue development of the Global Positioning System (GPS) Jammer Detection and Location (JLOC) and the Finding Obscured Ground objects using Laser Imaging of the Target (FOGLITE) projects.

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
07 Operational System Development					0207247F Air Force TENCAP			0001 Air Force TENCAP		
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
0001 Air Force TENCAP	17.651	18.112	10.829	11.067	11.314	11.508	11.764	11.952	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**

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In August 1977, the Joint Appropriations Conference Report from Congress directed the Air Force and the Navy to establish a Tactical Exploitation of National Capabilities (TENCAP) program similar to what the Army instituted in 1973. AF TENCAP objectives comply with the original congressional intent to exploit space systems, National Technical Means (NTM) and related technologies for the warfighter.

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- 1) Exploiting current space systems, NTMs and related technologies to rapidly prototype and assist in the identification and definition of possible warfighter application. AF TENCAP is a non-traditional acquisition program that rapidly prototypes projects, validates proofs of concepts and demonstrates capabilities and transitions them to the warfighter.
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- 3) Educating and training operational forces about the concepts developed by AF TENCAP.

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(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Exploit existing space systems, National Technical Means and related technologies for tactical applications through 12-18 month rapid prototyping projects (addresses 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.	9.079	10.121	10.431	10.661
(U) Complete GPS Jammer detection and location system (GPS-JLOC)	2.891	3.300	0.000	0.000
(U) Complete adverse weather imaging system (FOGLITE)	5.298	4.300	0.000	0.000
(U) Provide program support and other government support	0.383	0.391	0.398	0.406
(U) Total Cost	17.651	18.112	10.829	11.067

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(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
Other APPN										
Other Procurement, Air Force										
(U) funding in 'Intelligence	1.442	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.637
Communications Equipment,'										
WSC 832070, P-39										
Note: Beginning with FY06, equipment funds transferred to 3400 funds.										

(U) **D. Acquisition Strategy**

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. Theater MAJCOM mission area plan (MAP) deficiencies provide the requirements for AF TENCAP development projects which are then approved by the Space Warfare Center (SWC) Strategic Planning Process. Theater MAJCOMs assume future acquisition and logistics responsibilities, and budget for projects in their Program Objective Memorandum submissions.

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Exhibit R-3, RDT&E Project Cost Analysis												DATE February 2005		
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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u> Exploiting existing space systems, National Technical Means and related technologies; influencing future systems; supporting education and training	*Various	Various	51.861	9.079	Jan-04	10.121	Jan-05	10.431	Dec-05	10.661	Dec-06	0.000	92.153	
FOGLITE	CPFF	General Atomics, CA	3.337	5.298	May-04	4.300	Apr-05					0.000	12.935	
GPS JLOC	CPFF	Navigation Systems Corporation (NAVSYS), CO	4.674	2.891	Aug-04	3.300	Jun-05							
												Continuing	TBD	
Subtotal Product Development			59.872	17.268		17.721		10.431		10.661		Continuing	TBD	0.000
Remarks:	*Multiple contracts determined on annual basis in accordance with acquisition strategy and new Broad Area Announcement processes.													
(U) <u>Support</u> Program Oversight	Various		6.139	0.383	Dec-03	0.391	Dec-04	0.398	Dec-05	0.406	Dec-06	Continuing	TBD	
Subtotal Support			6.139	0.383		0.391		0.398		0.406		Continuing	TBD	0.000
Remarks:														
(U) <u>Test & Evaluation</u> Not Applicable													0.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) <u>Management</u> Not Applicable													0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Remarks:														
(U) Total Cost			66.011	17.651		18.112		10.829		11.067		Continuing	TBD	0.000

Project 0001

R-1 Shopping List - Item No. 138-6 of 138-10

Exhibit R-3 (PE 0207247F)

Exhibit R-4, RDT&E Schedule Profile

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PROJECT NAME "TALON ..."	FY 2004		FY 2005				FY 2006				FY 2007			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Aura														
Beowolf														
Buffalo Scout														
CB														
Chameleon														
Chip Shot														
Charlemagne														
Charm														
Cross Pulse														
Elwood														



Exhibit R-4, RDT&E Schedule Profile

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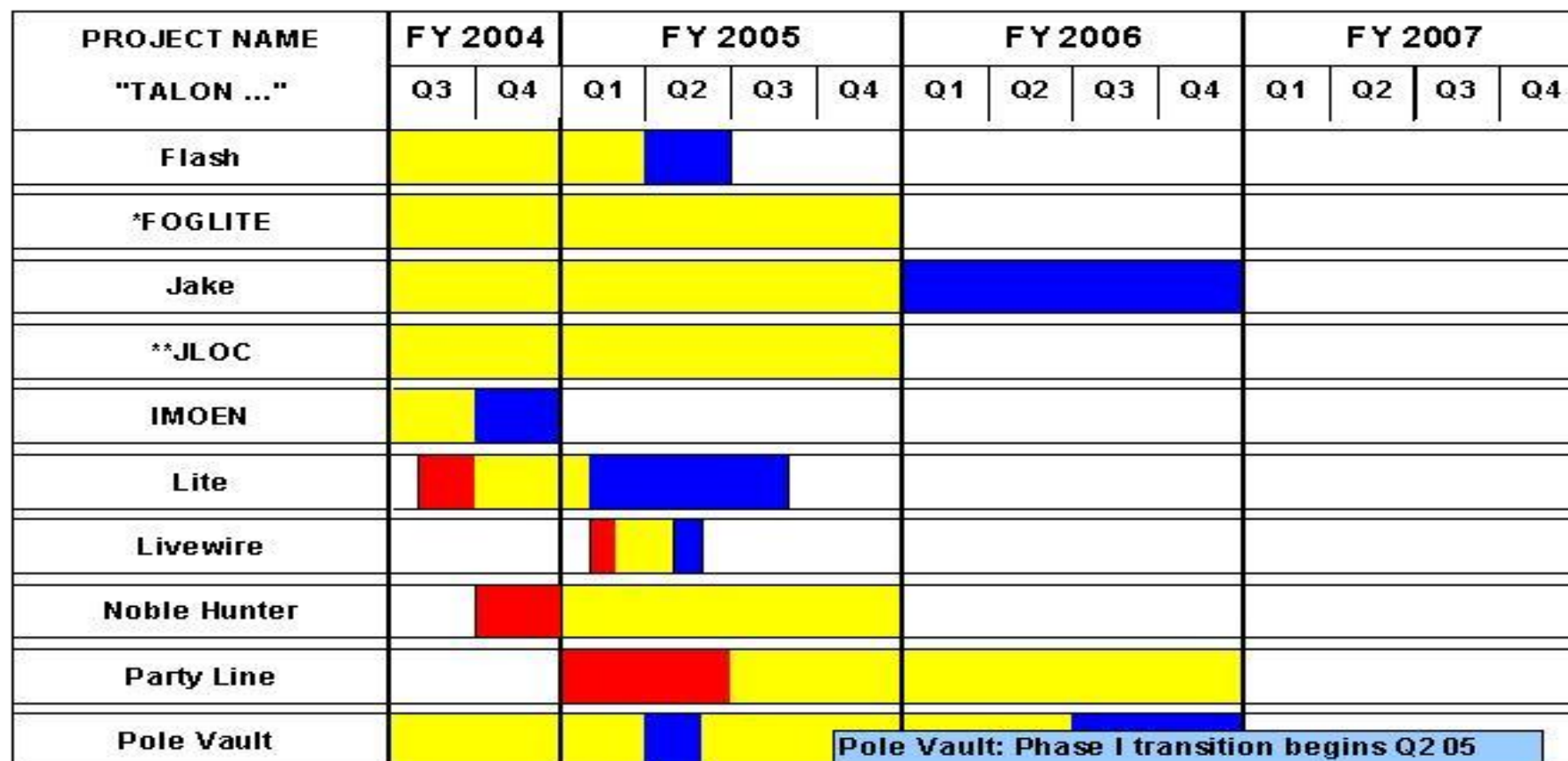
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Planning

Execution

Transition

*FOGLITE: Congressionally directed development of laser imaging capability.

**JLOC: Congressionally directed project to examine the feasibility of a GPS Jammer Locator.

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PROJECT NAME "TALON ..."	FY 2004		FY 2005				FY 2006				FY 2007			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PARROT														
REACH														
Seeker														
SUTER III														
Threads														
Traveler														
Touchback														
BAA 04 Process														
BAA 05 Process														
BAA 06 Process														

Planning

Execution

Transition

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Exhibit R-4a, RDT&E Schedule Detail

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(U) **Schedule Profile**FY 2004FY 2005FY 2006FY 2007

(U) FY 2004 Projects Authorized to Proceed

1-2Q

(U) FY 2005 Projects Identified

2-3Q

(U) Contractor Proposals for FY 2005

3Q

(U) FY 2005 Projects Evaluated and Approved

4Q

(U) FY 2005 Projects Authorized to Proceed

1-2Q

(U) FY 2006 Projects Identified

2-3Q

(U) Contractor Proposals for FY 2006

3Q

(U) FY 2006 Projects Evaluated and Approved

4Q

(U) FY 2006 Projects Authorized to Proceed

1-2Q

(U) FY 2007 Projects Identified

2Q

(U) FY 2007 Contractor Proposals

3Q

(U) FY 2007 Projects Evaluated and Approved

4Q

(U) FY 2007 Projects Authorized to Proceed

1-2Q

(U) FY 2008 Projects Identified

2-3Q

(U) FY 2008 Contractor Proposals

3Q

(U) FY 2008 Projects Evaluated and Approved

4Q