

**UNCLASSIFIED**

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2000		
BUDGET ACTIVITY <b>07 - Operational System Development</b>				PE NUMBER AND TITLE <b>0207247F Air Force TENCAP</b>				PROJECT <b>670001</b>		
COST (\$ in Thousands)		FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
670001	Air Force TENCAP	6,003	12,929	9,826	10,779	10,497	10,707	10,919	Continuing	TBD
Quantity of RDT&E Articles		0	0	0	0	0	0	0	0	0
<p>(U) <b><u>A. Mission Description</u></b></p> <p>The Congressionally-mandated Air Force Tactical Exploitation of National Capabilities (AF TENCAP) program pursues seamless integration of space systems' capabilities into military operations for tactical use by warfighters. AF TENCAP expedites improvements to Air Force combat capabilities through rapid-prototyping projects that culminate in operational concept demonstrations. Although not a developmental program per normal acquisition guidelines, the program does support future operational systems development: successfully-demonstrated concepts are transitioned to users for fielding and deployment. Additionally, AF TENCAP-developed equipment is deployed in support of real-world contingency operations.</p> <p>AF TENCAP leverages investments in space systems for tactical warfighter use in three ways, through six program branches denoted by the identifier 'TENCAP' (previously 'TALON'):</p> <ol style="list-style-type: none"> <li>1) Exploiting existing space systems for tactical applications. AF TENCAP conceives and demonstrates capabilities to exploit these systems through rapid-prototyping projects in four program divisions: <ul style="list-style-type: none"> <li>--TENCAP Command provides space systems with applications to enhance Theater Battle Management support for Command and Control (C2) systems</li> <li>--TENCAP Knight provides space system capabilities in tailored applications for use by Special Operations Forces</li> <li>--TENCAP Shooter gets time-critical intelligence obtained by space systems into aircraft cockpits and/or weapons to support weapons delivery</li> <li>--TENCAP Ready provides space systems products and applications for intelligence preparation of the battlefield through mission planning, preparation, rehearsal, and combat execution</li> </ul> </li> <li>2) TENCAP Vision influences 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/C4I systems)</li> <li>3) TENCAP Warrior supports education and training of operational forces in emerging space and 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. TENCAP Warrior also supports RDT&amp;E for and sustains (through Operations &amp; Maintenance funds) specialized aerospace integration facilities that enhance such education and training.</li> </ol>										
Project 670001		Page 1 of 6 Pages				Exhibit R-2 (PE 0207247F)				

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE			
BUDGET ACTIVITY		PE NUMBER AND TITLE		PROJECT	
<b>07 - Operational System Development</b>		<b>0207247F Air Force TENCAP</b>		<b>670001</b>	
<b>(U) <u>A. Mission Description Continued</u></b>					
<b>(U) <u>FY 1999 (\$ in Thousands)</u></b>					
(U)	\$5,065	Exploited existing space systems for tactical applications; influenced design of future space systems; supported RDT&E for training facilities			
(U)	\$767	Transitioned AF TENCAP concept demonstrations to field			
(U)	\$171	Program support			
(U)	\$6,003	Total			
<b>(U) <u>FY 2000 (\$ in Thousands)</u></b>					
(U)	\$8,291	Exploiting existing space systems for tactical applications; influencing design of future space systems; supporting RDT&E for training facilities			
(U)	\$3,000	Developing and testing hyperspectral imagery sensors and exploitation tools (per FY00 Congressional direction)			
(U)	\$1,098	Transitioning AF TENCAP concept demonstrations to field			
(U)	\$158	Contract bridge activities			
(U)	\$382	Program support			
(U)	\$12,929	Total			
<b>(U) <u>FY 2001 (\$ in Thousands)</u></b>					
(U)	\$9,141	Exploiting existing space systems for tactical applications; influencing design of future space systems			
(U)	\$100	Developing and testing hyperspectral imagery sensors and exploitation tools (completing FY00 Congressional direction)			
(U)	\$385	Transitioning AF TENCAP concept demonstrations to field			
(U)	\$200	Program support			
(U)	\$9,826	Total			
<b>(U) <u>B. Budget Activity Justification</u></b>					
Since this effort supports fielded systems, it is in Budget Activity #7, 'Operational Systems Development'.					
<b>(U) <u>C. Program Change Summary (\$ in Thousands)</u></b>					
		<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U)	Previous President's Budget (FY 2000 PBR)	6,328	10,102	9,914	TBD
(U)	Appropriated Value	6,447	13,102		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions	-119			
	b. Small Business Innovative Research	-206			
Project 670001		Page 2 of 6 Pages		Exhibit R-2 (PE 0207247F)	

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 2000				
BUDGET ACTIVITY <b>07 - Operational System Development</b>				PE NUMBER AND TITLE <b>0207247F Air Force TENCAP</b>				PROJECT <b>670001</b>			
<b>(U) C. Program Change Summary (\$ in Thousands) Continued</b>											
			<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>			<u>Total Cost</u>	
	c. Omnibus or Other Above Threshold Reprogram				-71						
	d. Below Threshold Reprogram		-85								
	e. Rescissions		-34		-102						
	f. Other									TBD	
(U)	Adjustments to Budget Years Since FY 2000 PBR						-88				
(U)	Current Budget Submit/FY 2001 PBR		6,003		12,929		9,826			TBD	
(U)	<u>Significant Program Changes:</u>										
	FY 1999: \$85K reprogrammed to support higher Air Force priorities										
	FY 2001: \$88K adjustment to fund higher Air Force priorities										
<b>(U) D. Other Program Funding Summary (\$ in Thousands)</b>											
		<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</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>Complete</u>		
(U)	Other Procurement funding in 'Intelligence Communications Equipment', WSC 832070		190	192	196	197	196	199	203	Continuing	TBD
<b>(U) E. Acquisition Strategy</b>											
	Cost plus award fee contract with a ceiling of hours 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 an AF TENCAP O-6 (Colonel) Review Group. In addition, theater MAJCOMs must be willing to assume future acquisition and logistics responsibilities, budgeting for projects in their Program Objective Memorandums.										
<b>(U) F. Schedule Profile</b>											
			<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>				
			1	2	3	4	1	2	3	4	
(U)	Contractor Proposals for FY00 Projects					*					
(U)	FY00 Project Evaluated and Approved					*					
(U)	FY00 Project Authority to Proceed						*				
(U)	FY01 Projects Identified					*					
(U)	Contractor Proposals for FY01 Projects							X			
Project 670001			Page 3 of 6 Pages				Exhibit R-2 (PE 0207247F)				

UNCLASSIFIED

<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)</b>	DATE <b>February 2000</b>
--	------------------------------

BUDGET ACTIVITY <b>07 - Operational System Development</b>	PE NUMBER AND TITLE <b>0207247F Air Force TENCAP</b>	PROJECT <b>670001</b>
---	---	--------------------------

(U) **F. Schedule Profile Continued**

	<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) FY01 Projects Evaluated and Approved									X			
(U) FY01 Project Authority to Proceed										X		
(U) FY02 Projects Identified										X		
(U) Contractor Proposals for FY02 Projects												X
(U) FY02 Projects Evaluated and Approved												X

\* = Completed Event  
X = Planned Event

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000			
BUDGET ACTIVITY 07 - Operational System Development					PE NUMBER AND TITLE 0207247F Air Force TENCAP			PROJECT 670001		
<b>(U) A. Project Cost Breakdown (\$ in Thousands)</b>										
					<u>FY 1999</u>		<u>FY 2000</u>			<u>FY 2001</u>
(U)	Exploiting existing space systems for tactical applications				3,613		7,114			7,867
(U)	Influencing design of future space systems				974		880			1,274
(U)	Supporting RDT&E for aerospace integration facilities				478		297			0
(U)	Developing/testing hyperspectral imagery sensors/exploitation (per FY00 Congressional direction)				0		3,000			100
(U)	Transitioning concept demonstrations to field				767		1,098			385
(U)	Contract Bridge Activities				0		158			0
(U)	Program Support				171		382			200
(U)	Total				6,003		12,929			9,826
*This section has been revised since the FY 2000 President's Budget submission to display costs by AF TENCAP mission rather than AF TENCAP division										
*AF TENCAP RDT&E-funded aerospace integration facility upgrade efforts complete in FY 2000, but facility sustainment efforts (financed by Operations & Maintenance appropriations) will continue.										
*Program support costs increase in FY 2000 to support transition of the AF TENCAP acquisition function from Schriever AFB to Peterson AFB										
<b>(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)</b>										
<b>(U) Performing Organizations:</b>										
<u>Contractor or Government Performing Activity</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 1999</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
Not Applicable										
<u>Support and Management Organizations</u>										
Multiple	Various	Multiple			19,568	1,127	6,682	5,896	Continuing	TBD
Lockheed Martin	CPAF	Sept 95	Continuing	Continuing	31,559	4,876	6,070	0	0	42,505
Future Contract	TBD	Aug 00	TBD	Continuing	0	0	177	3,930	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
Not Applicable										

UNCLASSIFIED

<b>RDT&amp;E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)</b>	DATE <b>February 2000</b>
---	------------------------------

BUDGET ACTIVITY <b>07 - Operational System Development</b>	PE NUMBER AND TITLE <b>0207247F Air Force TENCAP</b>	PROJECT <b>670001</b>
---	---	--------------------------

(U) **Government Furnished Property:**

<u>Item</u> <u>Description</u>	<u>Contract</u> <u>Method/Type</u> <u>or Funding</u> <u>Vehicle</u>	<u>Award or</u> <u>Obligation</u> <u>Date</u>	<u>Delivery</u> <u>Date</u>	<u>Total Prior</u> <u>to FY 1999</u>	<u>Budget</u> <u>FY 1999</u>	<u>Budget</u> <u>FY 2000</u>	<u>Budget</u> <u>FY 2001</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Product Development Property</u>									
None									
<u>Support and Management Property</u>									
None									
<u>Test and Evaluation Property</u>									
None									
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>				<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development									
Subtotal Support and Management				51,127	6,003	12,929	9,826	TBD	TBD
Subtotal Test and Evaluation									
Total Project				51,127	6,003	12,929	9,826	TBD	TBD