

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2000		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0303601F MILSATCOM Terminals				PROJECT 672487		
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
672487	MILSTAR (AF - Terminals)	6,018	6,923	17,797	24,416	34,334	79,367	90,590	0	2,297,542
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
<p>(U) <u>A. Mission Description</u> Military Satellite Communications (MILSATCOM) provides world-wide communications to strategic and tactical warfighters. The MILSATCOM Terminals Program contains efforts to develop equipment for users to communicate over military satellites, including Milstar, Advanced Extremely High Frequency (AEHF), Ultra High Frequency (UHF) satellites, Defense Satellite Communication System (DSCS), and Wideband Gapfiller as well as commercial satellites. Global Broadcast Service (GBS) is a joint program to implement a world-wide, high-capacity satellite broadcast information system that will provide a continuous, high speed, one-way flow of high volume classified and unclassified data, imagery and other information to forces in garrison, deployed, or on the move. Milstar ground and airborne Command Post Terminal (CPT) enhancements are continuing in addition to system-level testing in support of Milstar IOC II. The MILSATCOM Terminals program began a gradual transition from a Milstar-centered program to a wider focus of multiband SATCOM supporting the tactical requirements for Air Expeditionary Forces while maintaining essential strategic connectivity for nuclear forces. Future concept development efforts and new terminals development became the key focus of the AF Terminals program in FY99 and FY00. In FY01, concept development work further increases emphasis on assessment of technological alternatives (commercial and military unique) and continues the AF Terminals roadmap development, culminating in new terminal products for assured high capacity connectivity for conventional and strategic air forces and ground command and control components. Airborne wideband terminal (AWT) risk reduction and ground multiband terminal (GMT) development begin in FY01. CPT replacement will begin in FY03. The Air Force's Milstar tactical terminals, the Single Channel Anti-Jam Manportable (SCAMP) and the Secure Mobile Anti-Jam Reliable Tactical Terminal (SMART-T) are funded by the Air Force and procured by the Army. Ground and airborne UHF terminal production continues. Efforts in the UHF SATCOM program are primarily focused on the ground and airborne Demand Assigned Multiple Access (DAMA) terminals design and implementation. DSCS terminal procurement efforts sustain and modernize the Ground Mobile Forces terminal and the Jam-Resistant Secure Communications (JRSC) subnet of DSCS.</p>										
<p>(U) <u>FY 1999 (\$ in Thousands)</u></p>										
(U)	\$1,039	Continued MILSATCOM terminals support activities								
(U)	\$2,542	Continued CPT upgrades/begin contractor test and operations support								
(U)	\$2,437	Concept/Prototype Demonstrations/MILSATCOM Terminals Roadmap								
(U)	\$6,018	Total								
Project 672487			Page 1 of 6 Pages				Exhibit R-2 (PE 0303601F)			

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<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2000 (\$ in Thousands)</u></p> <p>(U) \$1,260 Continue MILSATCOM terminals support activities</p> <p>(U) \$2,900 Continue contractor test and operations support</p> <p>(U) \$2,763 Concept/Prototype Demo/MILSATCOM Terminals Roadmap/SATCOM testing</p> <p>(U) \$6,923 Total</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$2,442 Continue MILSATCOM terminals support activities</p> <p>(U) \$1,563 Continue contractor test and operations support</p> <p>(U) \$5,192 Concept/Prototype Demo/MILSATCOM Terminals Roadmap/SATCOM testing</p> <p>(U) \$5,600 Begin Ground Multiband development</p> <p>(U) \$3,000 Begin Airborne Wideband risk reduction</p> <p>(U) \$17,797 Total</p> <p>(U) <u>B. Budget Activity Justification</u> This effort is funded in Budget Activity 7, Operational System Development, because the program has completed a Milestone III review and is in production.</p> <p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 55%;"></th> <th style="width: 10%; text-align: center;"><u>FY 1999</u></th> <th style="width: 10%; text-align: center;"><u>FY 2000</u></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 15%; text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2000 PBR)</td> <td style="text-align: center;">2,159</td> <td style="text-align: center;">7,026</td> <td style="text-align: center;">14,955</td> <td style="text-align: center;">1,937,934</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">2,352</td> <td style="text-align: center;">7,026</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td style="text-align: center;">-193</td> <td style="text-align: center;">-10</td> <td></td> <td></td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td style="text-align: center;">-62</td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td style="text-align: center;">-38</td> <td></td> <td></td> </tr> <tr> <td> d. Below Threshold Reprogram</td> <td style="text-align: center;">3,955</td> <td></td> <td></td> <td></td> </tr> <tr> <td> e. Rescissions</td> <td style="text-align: center;">-34</td> <td style="text-align: center;">-55</td> <td></td> <td></td> </tr> <tr> <td> f. Other</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2000 PBR</td> <td></td> <td></td> <td style="text-align: center;">2,842</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2001 PBR</td> <td style="text-align: center;">6,018</td> <td style="text-align: center;">6,923</td> <td style="text-align: center;">17,797</td> <td style="text-align: center;">2,297,542</td> </tr> </tbody> </table> <p>Note: \$3.955M FY99 Below Threshold Reprogramming (BTR) funded continuation of Air Force MILSATCOM Terminals roadmap and operational support that</p>				<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 2000 PBR)	2,159	7,026	14,955	1,937,934	(U) Appropriated Value	2,352	7,026			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-193	-10			b. Small Business Innovative Research	-62				c. Omnibus or Other Above Threshold Reprogram		-38			d. Below Threshold Reprogram	3,955				e. Rescissions	-34	-55			f. Other					(U) Adjustments to Budget Years Since FY 2000 PBR			2,842		(U) Current Budget Submit/FY 2001 PBR	6,018	6,923	17,797	2,297,542
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Project 672487	Page 2 of 6 Pages	Exhibit R-2 (PE 0303601F)																																																												

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DATE

February 2000

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

07 - Operational System Development

0303601F MILSATCOM Terminals

672487

(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) CPT Upgrades Delivery and Production	*	*	*	*	*	X	X	X	X	X	X	X
(U) Milstar SYS IOC II											X	
(U) SCAMP Deliveries Begin				*								
(U) SMART-T LRIP Deliveries					*	X	X	X				
(U) SMART-T Production Deliveries								X	X	X	X	X
(U) Airborne DAMA Terminal Upgrade												
(U) Contract Option	*					X			X			
(U) Deliveries								X	X	X	X	X
(U) Ground DAMA Terminal Deliveries	*	*	*	*	*	X	X	X	X	X	X	X
(U) Ground Multiband development									X			
(U) Airborne Wideband Terminal Risk Reduct.									X			

* Completed event

X Planned event

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000			
BUDGET ACTIVITY 07 - Operational System Development					PE NUMBER AND TITLE 0303601F MILSATCOM Terminals			PROJECT 672487		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>
(U)	MILSATCOM terminals support activities					1,039		1,260		2,442
(U)	CPT upgrades/contractor test and operations support					2,542		2,900		1,563
(U)	Concept/Prototype Demo/MILSATCOM Terminals Roadmap					2,437		2,763		5,192
(U)	Ground Multiband					0		0		5,600
(U)	Airborne Wideband					0		0		3,000
(U)	Total					6,018		6,923		17,797
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
Raytheon Corp	FPIF/FFP	Jun 85	889,337	889,337	883,570	1,204	2,000	1,563	1,000	889,337
Rockwell	CPIF	Aug 93	43,068	43,068	43,068	0	0	0	0	43,068
Miscellaneous	Various	Various			651,580	0	0	8,600	341,567	1,001,747
ViaSat	C/FFP	Oct 95	3,076	3,076	3,076	0	0	0	0	3,076
<u>Support and Management Organizations</u>										
MITRE	CPAF	Various	N/A	N/A	102,178	3,500	2,100	2,939	14,250	124,967
SPT Contractors	Various	Various	N/A	N/A	156,621	1,120	1,333	1,854	7,185	168,113
Tecolote	Various	Various	N/A	N/A	1,848	150	310	705	0	3,013
Miscellaneous	Various	Various	N/A	N/A	19,715	44	180	636	13,536	34,111
<u>Test and Evaluation Organizations</u>										
Wright-Labs	AF-616	N/A	N/A	N/A	22,103	0	1,000	1,500	0	24,603
Miscellaneous	Various	N/A	N/A	N/A	5,507	0	0	0	0	5,507

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000
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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0303601F MILSATCOM Terminals	PROJECT 672487
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	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
	<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
<u>Subtotals</u>						
Subtotal Product Development	1,581,294	1,204	2,000	10,163	342,567	1,937,228
Subtotal Support and Management	280,362	4,814	3,923	6,134	34,971	330,204
Subtotal Test and Evaluation	27,610	0	1,000	1,500	0	30,110
Total Project	1,889,266	6,018	6,923	17,797	377,538	2,297,542