

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

04 - Demonstration and Validation

PE NUMBER AND TITLE

0603432F Polar MILSATCOM (Space)

PROJECT

4052

COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4052 Polar Satellite Communications	37,555	25,829	18,724	9,588	5,724	981	0	0	0	277,039
Quantity of RDT&E Articles	0	0	0	1	1	0	0	0	0	0

NOTE: This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

(U) **A. Mission Description**

The Polar MILSATCOM program will provide protected communications services to U.S. forces operating in the northern polar region. In Oct 94, the DoD identified an immediate need for protected polar communications, and in Jul 95 the Joint Requirements Oversight Council (JROC) validated the Polar MILSATCOM ORD containing both full-up requirements and a subset to meet the urgent, immediate need. In July 95, the Defense Acquisition Executive approved what has been called the Interim Polar Program -- expeditious placement of a modified Milstar technology Extremely High Frequency (EHF) payload previously designed for the Navy's UHF Follow On (UFO) system onto a classified host satellite to provide limited requirements satisfaction while pursuing a long term solution. The first of three interim (hosted) packages was launched in Nov 97, the last two will be available in FY03 and FY06. Efforts are under way to update the 1995 ORD and define and plan for the long term solution that is frequently called Advanced Polar -- satisfaction of the updated full-up requirements set based on technology from the Advanced EHF Program (the successor to Milstar).

(U) **FY 2000 (\$ in Thousands)**

(U) \$37,555 Continued parts buy and payload/integration development with host vehicle for Interim Polar packages 2 and 3. (Through classified host contract)

(U) \$37,555 Total

(U) **FY 2001 (\$ in Thousands)**

(U) \$25,829 Continue payload development and integration development with host vehicle for Interim Polar packages 2 and 3. (Through the classified host contract)

(U) \$25,829 Total

The following net transaction is not reflected in the FY01 program total: BTR = +3,400 K to fund cost growth on classified host contract. This transaction is not reflected in other sections of the R-docs where an FY01 total is shown.

Project 4052

Page 1 of 5 Pages

Exhibit R-2 (PE 0603432F)

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BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

04 - Demonstration and Validation**0603432F Polar MILSATCOM (Space)****4052**(U) **A. Mission Description Continued**(U) FY 2002 (\$ in Thousands)

(U) \$18,724 Assemble payload and integrate with host vehicle for Interim Polar packages 2 and 3. (Through the classified host contract)

(U) \$18,724 Total

(U) **B. Budget Activity Justification**

The Polar MILSATCOM Program is in Budget Activity 4 (Demonstration and Validation) based on 30 Mar 95 USD(A&T) memorandum to pursue the interim hosted solution (Interim Polar).

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY 2001 PBR)	39,049	26,068	12,923	277,039
(U) Appropriated Value	39,678	26,068		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-310	-182		
b. Small Business Innovative Research	-1,442			
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram	-216			
e. Rescissions	-155	-57		
(U) Adjustments to Budget Years Since FY 2001 PBR			5,801	
(U) Current Budget Submit/FY 2002 PBR	37,555	25,829	18,724	277,039

(U) **Significant Program Changes:**

(U) FY02 adjustment funds cost growth on classified host contract.

(U) **D. Other Program Funding Summary (\$ in Thousands)**

	<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>FY 2006</u>	<u>FY 2007</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>	

(U) None.

(U) **E. Acquisition Strategy**

The Air Force provides funds to the classified host program office to modify the host satellite system contract to include the Polar EHF package. The host program office has total acquisition responsibility for interim Polar.

Project 4052

Page 2 of 5 Pages

Exhibit R-2 (PE 0603432F)

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BUDGET ACTIVITY 04 - Demonstration and Validation					PE NUMBER AND TITLE 0603432F Polar MILSATCOM (Space)					PROJECT 4052	
(U) <u>F. Schedule Profile</u>											
		<u>FY 2000</u>				<u>FY 2001</u>				<u>FY 2002</u>	
	1	2	3	4	1	2	3	4	1	2	3
(U) Hosted Interim Payload #1 Launched (1QFY98)											
(U) Preliminary Design Review											
(U) Critical Design Review											
(U) (Payloads 2 and 3 available in FYs 03 & 04)											
* Completed Event											
X Plannened Event											

Project 4052
Page 3 of 5 Pages
Exhibit R-2 (PE 0603432F)

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE June 2001			
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603432F Polar MILSATCOM (Space)				PROJECT 4052		
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
						<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>		
(U)	Packages 2 & 3 Payload/Integration Development					37,555	25,829	18,724		
(U)	Total					37,555	25,829	18,724		
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
	<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Performing Activity</u>	<u>Project Office</u>	<u>Total Prior to FY 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>
	<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>					<u>Total Program</u>
	<u>Product Development Organizations</u>									
	Classified	Classified	June 95	Continuing	Continuing	183,518	37,555	25,829	18,724	11,413
	<u>Support and Management Organizations</u>									
	N/A									
	<u>Test and Evaluation Organizations</u>									
	N/A									
(U) <u>Government Furnished Property:</u>										
	<u>Contract</u>	<u>Method/Type</u>	<u>Award or Obligation</u>	<u>Delivery</u>		<u>Total Prior to FY 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>
	<u>Item</u>	<u>or Funding</u>	<u>Date</u>	<u>Date</u>						<u>Total Program</u>
	<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>						
	<u>Product Development Property</u>									
	N/A									
	<u>Support and Management Property</u>									
	N/A									
	<u>Test and Evaluation Property</u>									
	N/A									

Project 4052

Page 4 of 5 Pages

Exhibit R-3 (PE 0603432F)

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE June 2001		
BUDGET ACTIVITY		PE NUMBER AND TITLE				PROJECT	
04 - Demonstration and Validation		0603432F Polar MILSATCOM (Space)				4052	
		<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 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development		183,518	37,555	25,829	18,724	11,413	277,039
Subtotal Support and Management							
Subtotal Test and Evaluation							
Total Project		183,518	37,555	25,829	18,724	11,413	277,039