

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

DATE

February 2003

BUDGET ACTIVITY

**04 - Advanced Component Development and Prototypes
(ACD&P)**

PE NUMBER AND TITLE

0603432F Polar MILSATCOM (Space)

COST (\$ in Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	21,380	19,347	5,580	963	0	0	0	0	0	297,572
4052 Polar Satellite Communications	21,380	19,347	5,580	963	0	0	0	0	0	297,572
A005 National Strategic SATCOM System (NSSS)	0	0	0	0	0	0	0	0	0	0
Quantity of RDT&E Articles	0	0	1	0	1	0	0	0	0	0

In FY 2003, Project A005, National Strategic SATCOM System (NSSS) was terminated. NSSS will be addressed via the Transformational Communication Architecture. Advanced Polar System (PE 0604635F) will satisfy north polar region requirements beginning in FY09.

(U) **A. Mission Description**

This program element provides for continued acquisition of the Interim Polar system to provide protected communications (anti jam, anti scintillation, and low probability of intercept) for tactical users in the north polar region.

Project 4052, Polar Satellite Communications, continues funding the addition of scaled-down low data rate Milstar packages onto 3 classified host satellites as an expedited, interim solution to protected connectivity requirements in the north polar region.

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

The Polar MILSATCOM program is in Budget Activity 4, Advanced Component Development and Prototypes, based on the 30 Mar 95 USD(A&T) memorandum to pursue the interim hosted solution (Interim Polar).

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

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
(U) Previous President's Budget	18,539	19,554	80,683	1,515,051
(U) Appropriated Value	18,724	19,554		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-185	-207		
b. Small Business Innovative Research				
c. Omnibus or Other Above Threshold Reprogram	-1,100			
d. Below Threshold Reprogram	4,047			
e. Rescissions	-106			
(U) Adjustments to Budget Years Since FY 2003 PBR			-75,103	
(U) Current Budget Submit/FY 2004 PBR	21,380	19,347	5,580	297,572

(U) Significant Program Changes:

FY02: Increased Polar Satellite Communications funding for program cost growth at classified host program office.

FY04: Reflects decision to fulfill NSSS mission with combination of other strategic satellites (APS, AEHF, Transformational Communications Architecture).

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0603432F Polar MILSATCOM (Space)

PROJECT

4052

COST (\$ in Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
4052 Polar Satellite Communications	21,380	19,347	5,580	963	0	0	0	0	0	297,572

FY03: Added \$9,872 from Project A005, National Strategic SATCOM System to address Project 4052 overrun. NSSS will be addressed via the Transformational Communication Architecture. Advanced Polar System (PE 0604635F) will satisfy north polar region requirements beginning in FY09.

(U) **A. Mission Description**

This project (often referred to as Interim Polar) is currently acquiring protected communications services for warfighters operating in the northern polar region. It is adjunct to Milstar based on the 1995 JROC approved Polar ORD that contains a subset of requirements requiring expedited solution. The expedited program adds small Milstar-compatible packages to 3 classified host satellites to provide limited requirements satisfaction while a long term solution is pursued. The first hosted package was launched in 1997, the last two will be available in FY04 and FY06.

Note: The Air Force has continued updating the 95 ORD and defining a follow-on program -- new start project A010 in PE 0604435F called the Advanced Polar System (APS).

(U) **FY 2002 (\$ in Thousands)**

(U) \$0 Accomplishment/Planned Program

(U) \$21,380 Continued to assemble payload and integrate with host vehicle for Interim Polar packages 2 and 3. (Through the classified host contract)

(U) \$21,380 Total

(U) **FY 2003 (\$ in Thousands)**

(U) \$0 Accomplishment/Planned Program

(U) \$19,347 Assemble payload and integrate with host vehicle for Interim Polar packages 2 and 3. (Through the classified host contract)

(U) \$19,347 Total

(U) **FY 2004 (\$ in Thousands)**

(U) \$0 Accomplishment/Planned Program

(U) \$5,580 Complete Polar package 3 integration with host vehicle. (Through the classified host contract)

(U) \$5,580 Total

Project 4052

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Exhibit R-2A (PE 0603432F)

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

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BUDGET ACTIVITY

**04 - Advanced Component Development and Prototypes
(ACD&P)**

PE NUMBER AND TITLE

0603432F Polar MILSATCOM (Space)

PROJECT

4052

(U) **B. Project Change Summary**

Maintains development and integration of final two EHF packages on two host satellites due to be launched and available in FY04 and FY06.

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

<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>FY 2008</u>	<u>FY 2009</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.

The Navy has used its own PE(s) to modify control systems and terminals to work with Interim Polar.

(U) **D. 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.

(U) **E. Schedule Profile**

	<u>FY 2002</u>				<u>FY 2003</u>				<u>FY 2004</u>			
	1	2	3	4	1	2	3	4	1	2	3	4

(U) Acquisition activities and dates are classified

* Completed Event

X Planned Event

Project 4052

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Exhibit R-2A (PE 0603432F)

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2003																																																																																																																																																																		
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<u>Subtotals</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>	
	<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>	<u>Program</u>	
Subtotal Product Development	250,302	21,380	19,347	5,580	963	297,572	
Subtotal Support and Management							
Subtotal Test and Evaluation							
Total Project	250,302	21,380	19,347	5,580	963	297,572	

Project 4052
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Exhibit R-3 (PE 0603432F)

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