

<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)</b>	DATE <b>February 1999</b>
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<b>BUDGET ACTIVITY</b> <b>4 - Demonstration and Validation</b>	<b>PE NUMBER AND TITLE</b> <b>0603854F Wideband MILSATCOM (Space)</b>
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COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	70,224	69,376	53,344	97,756	190,236	90,216	102,518	294,019	1,338,021	2,357,206
2679 Global Broadcast Service (GBS) Phases 1 and 2	70,224	69,376	48,434	39,574	29,141	22,256	17,538	16,208	91,681	455,928
4811 Wideband Gapfiller	0	0	4,910	58,182	161,095	67,960	53,316	14,249	148,700	508,412
4812 Advanced Wideband	0	0	0	0	0	0	31,664	263,562	1,097,640	1,392,866
Quantity of RDT&E Articles		0	0	0	0	0	0	0	0	0

**(U) A. Mission Description**

Provide DoD with high data rate (wideband) MILSATCOM services in accordance with the Joint Requirements Oversight Council (JROC) and Joint Space Management Board approved MILSATCOM Architecture (Aug 96) and the MILSATCOM Capstone Requirements Document (CRD) approved by the JROC in Oct 97.

Global Broadcast Service (GBS) will provide efficient high data rate broadcast capability between many distributed information sources and warfighters who receive the broadcast directly on small, inexpensive users terminals. Broadcast data includes digitized imagery, logistics and weather data, maps, operational orders and video. The GBS program was established as a three phase program that was approved by the JROC in late 1995. Phase 1 was started in 1996 and uses commercial satellite leases to provide a Continental United States (CONUS)-based testbed for requirements definition and operational concept refinement. Phase 2 provides a near worldwide, limited capability at military frequencies hosted on the last three Navy Ultra High Frequency follow-on satellites. Phase 3 will provide a global capability integrated into a conceptual Advanced Wideband System. The Air Force was designated executive agent for the GBS Program by USD(A&T) on 27 Mar 96.

The JROC approved the OSD led transition to implement the MILSATCOM architecture in Sept 97. The transition includes 3 Wideband Gapfiller satellites to be launched in 2004/5. The Wideband Gapfiller System is intended to minimize the probability of a gap in wideband service between current and follow-on systems and incorporate the best commercial technology and practices available at the time. A worldwide constellation of Advanced Wideband satellites with launches starting in 2008 will replace current wideband systems and incorporate the latest in commercial capabilities. Both programs will include a broadcast space segment (GBS Phase 2 compatible, on Wideband Gapfiller; GBS Phase 3 on Advanced Wideband).

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

(U) Funding is in Budget Activity 4, Demonstration and Validation, since it supports Global Broadcast Service technology demonstration and validation.

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BUDGET ACTIVITY	PE NUMBER AND TITLE				
<b>4 - Demonstration and Validation</b>	<b>0603854F Wideband MILSATCOM (Space)</b>				
<b>(U) C. <u>Program Change Summary (\$ in Thousands)</u></b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total</u>
(U) Previous President's Budget (FY 1999 PB)	54,089	70,147	54,315	134,817	2,267,104
(U) Appropriated Value	56,977	70,147			
(U) Adjustments to Appropriated Value					
a. Congressional General Reductions	-2,888	-771			
b. SBIR					
c. Omnibus and Other Above Threshold Reprogram	16,141				
d. Below Threshold Reprogram	-6				
(U) Adjustments to Budget Years Since FY 1999 PB			-971	-37,061	
(U) Current Budget Submit /FY 2000 PB	70,224	69,376	53,344	97,756	2,357,206
 (U) Significant Program Changes:					
FY99: \$398K identified as a source for SBIR.					
FY00: \$971K used to support higher Air Force priorities.					
FY01: Funding for the 2 <sup>nd</sup> and 3 <sup>rd</sup> Wideband Gapfiller satellites was realigned from the RDT&E to the Procurement appropriation.					

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<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)</b>								DATE <b>February 1999</b>		
BUDGET ACTIVITY <b>4 - Demonstration and Validation</b>				PE NUMBER AND TITLE <b>0603854F Wideband MILSATCOM (Space)</b>				PROJECT <b>2679</b>		
<i>COST (\$ In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
2679 Global Broadcast Service (GBS) Phases 1 and 2	70,224	69,376	48,434	39,574	29,141	22,256	17,538	16,208	91,681	455,928
<p>(U) <b>A. <u>Mission Description</u></b>          Acquires phases 1 and 2 of the GBS program to provide DoD with efficient, high data rate connectivity to many distributed information sources and warfighters who will receive the broadcast directly on small, inexpensive user terminals in accordance with the GBS Operational Requirements Document (ORD) validated by the Joint Requirements Oversight Council in Apr 95. Broadcast data includes digitized imagery, logistics and weather data, maps, operational orders (e.g., Air Tasking Order), and video. Phase 1 is a single channel leased through FY98 for initial testing and concept exploration. Phase 2 is the initial ground infrastructure for broadcast management, uplink and receive equipment. This ground infrastructure works with GBS packages hosted on three Navy UHF Follow-on (UFO) satellites providing near-worldwide service. (Note: Beyond Phase 2 capabilities will be integrated into the wideband segment of the Wideband Gapfiller System and Advanced Wideband System, and will incorporate requirements gleaned from use of Phase 2).</p> <p>(U) <b><u>FY 1998 (\$ in Thousands):</u></b></p> <ul style="list-style-type: none"> <li>- (U) \$ 3,346 Testbed Transponder, Transition, and Lease</li> <li>- (U) \$ 2,189 Field Engineering and Demonstration Support</li> <li>- (U) \$ 42,749 System Development and Test</li> <li>- (U) \$ 1,163 Initial Communications Connectivity/Interface</li> <li>- (U) \$ 13,404 Phase 2 Government System Integration</li> <li>- (U) \$ 1,302 Field Survey and Integration</li> <li>- (U) \$ 6,000 Navy Terminals</li> <li>- (U) \$ 71 System Test &amp; Eval Support</li> <li>- (U) \$ 70,224 Total</li> </ul>										
Project 2679			Page 3 of 15 Pages			Exhibit R-2A (PE 0603854F)				

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<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)</b>		DATE <b>February 1999</b>
<b>BUDGET ACTIVITY</b> <b>4 - Demonstration and Validation</b>	<b>PE NUMBER AND TITLE</b> <b>0603854F Wideband MILSATCOM (Space)</b>	<b>PROJECT</b> <b>2679</b>
<p>(U) <u>FY 1999 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> <li>- (U) \$ 41,837 System Development and Test</li> <li>- (U) \$ 5,781 Initial Comm Connectivity/Interface, CONUS Transponder Lease</li> <li>- (U) \$ 14,486 Phase 2 Government System Integration</li> <li>- (U) \$ 666 Field Survey and Integration</li> <li>- (U) \$ 6,000 Navy Terminals</li> <li>- (U) \$ 72 Joint Spectrum Center</li> <li>- (U) \$ 136 System Test &amp; Eval Support</li> <li>- (U) \$ 398 Identified as a source for SBIR</li> <li>- (U) \$ 69,376 Total</li> </ul> <p>(U) <u>FY 2000 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> <li>- (U) \$ 16,081 System Development and Test</li> <li>- (U) \$ 5,675 Initial Comm Connectivity/Interface, CONUS Transponder Lease</li> <li>- (U) \$ 17,021 Phase 2 Government System Integration</li> <li>- (U) \$ 6,000 Navy Terminals</li> <li>- (U) \$ 131 Joint Spectrum Center</li> <li>- (U) \$ 26 System Test &amp; Eval Support</li> <li>- (U) \$ 3,500 Joint Terminals Engineering Office (JTEO) Support</li> <li>- (U) \$ 48,434 Total</li> </ul> <p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> <li>- (U) \$ 15,564 System Development and Test</li> <li>- (U) \$ 5,579 Initial Comm Connectivity/Interface, CONUS Transponder Lease</li> <li>- (U) \$ 12,274 Phase 2 Government System Integration</li> <li>- (U) \$ 6,000 Navy Terminals</li> <li>- (U) \$ 133 Joint Spectrum Center</li> <li>- (U) \$ 24 System Test &amp; Eval Support</li> <li>- (U) \$ 39,574 Total</li> </ul> <p><b>(U) B. <u>Project Change Summary - Description of Significant Changes:</u></b> (U) None</p>		
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BUDGET ACTIVITY <b>4 - Demonstration and Validation</b>	PE NUMBER AND TITLE <b>0603854F Wideband MILSATCOM (Space)</b>	PROJECT <b>2679</b>
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**(U) C. Other Program Funding Summary (\$ in Thousands)**

Related RDT&E

(U) None

Other Appropriations

(U) Air Force GBS receive terminals. Included in BPAC 836780, line P-67 -- PE 33601, Milstar Satellite Comm Sys, Other Procurement, AF

(U) Navy SATCOM Ship Terminal Programs

(U) Army Ground Terminal Programs

(U) Navy UFO Program

(U) ARPA-DISA Bosnia Command and Control Augmentation Program (BC2A) and Joint Broadcast Service (JBS)

(U) ARPA Battlefield Awareness and Data Dissemination (BADD) Advanced Concept Technical Demonstration (ACTD)

(U) DISA Long Haul Communications

**(U) D. Acquisition Strategy**

(U) Evolutionary acquisition approach making maximum use of commercial technology and acquisition practices. Single integration contractor with total system performance responsibility. (Navy providing space segment for Phase 2 and adapting common receive terminal equipments for shipboard installation.)

**(U) E. Schedule Profile**

	<u>FY 1998</u>			<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) Phase 1 (96-98)												
(U) Joint Warfighter Interoperability Demos (JWID)				x								
(U) Lease Commercial Transponder	*	*	*	x								
(U) Phase 2 (98-00+)												
(U) Acquisition Milestone I/II	*											
(U) Launch UFO #8 (Mar 98)		*										
(U) Launch UFO #9 (Oct 98)					x							
(U) Launch UFO #10 (Feb/Mar 99)						x						
(U) Threshold System Operational Capability										x		

\* = Completed Event; x = Planned Event

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)						DATE February 1999					
BUDGET ACTIVITY 4 - Demonstration and Validation					PE NUMBER AND TITLE 0603854F Wideband MILSATCOM (Space)					PROJECT 2679	
<b>(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u></b>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	Testbed Transponder, Transition, and Lease				3,346	0	0	0			
(U)	Field Engineering and Demonstration Support				2,189	0	0	0			
(U)	UFO GBS Payload				0	0	0	0			
(U)	System Development and Test				42,749	41,837	16,081	15,564			
(U)	Communication Connectivity/Interface				1,163	5,781	5,675	5,579			
(U)	Phase 2 Government System Integration				13,404	14,486	17,021	12,274			
(U)	Field Survey and Integration				1,302	666	0	0			
(U)	Navy Terminals				6,000	6,000	6,000	6,000			
(U)	Joint Spectrum Center				0	72	131	133			
(U)	System Test & Eval Support				71	136	26	24			
(U)	JTEO Support				0	0	3,500	0			
(U)	Identified as a source for SBIR					398					
(U)	Total				70,224	69,376	48,434	39,574			
<b>(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u></b>											
<b>Performing Organizations:</b>											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Identified as a source for SBIR							398				
<u>Product Development Organizations</u>											
Raytheon Sys Co.	CPAF	18 NOV 97	219,926	219,926	18,686	42,749	41,837	16,081	15,564	98,065	232,982
Government/TBD	TBD	TBD	N/A	N/A	16,139	13,404	14,486	17,021	12,274	26,658	99,982

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
<b>4 - Demonstration and Validation</b>					<b>0603854F Wideband MILSATCOM (Space)</b>					<b>2679</b>	
<u>Support and Management Organizations</u>											
Various	Various	Various	N/A	N/A	17,033	14,000	12,519	15,306	11,712	51,388	121,958
<u>Test and Evaluation Organizations</u>											
Support for Development & Operational Test	TBD	TBD	N/A	N/A	36	71	136	26	24	315	608
<b>Government Furnished Property:</b>											
	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program	
<u>Product Development Property- TBD</u>											
<u>Support and Management Property - TBD</u>											
<u>Test and Evaluation Property- TBD</u>											
Identified as a source for SBIR							398				398
Subtotal Product Development					34,825	56,153	56,323	33,102	27,838	124,723	332,964
Subtotal Support and Management					17,033	14,000	12,519	15,306	11,712	51,388	121,958
Subtotal Test and Evaluation					36	71	136	26	24	315	608
Total Project					51,894	70,224	69,376	48,434	39,574	176,426	455,928
Project 2679					Page 7 of 15 Pages				Exhibit R-3 (PE 0603854F)		

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<b>BUDGET ACTIVITY</b> <b>4 - Demonstration and Validation</b>				<b>PE NUMBER AND TITLE</b> <b>0603854F Wideband MILSATCOM (Space)</b>					<b>PROJECT</b> <b>4811</b>	
<i>COST (\$ In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4811 Wideband Gapfiller	0	0	4,910	58,182	161,095	67,960	53,316	14,249	148,700	508,412
<p><b>(U) A. <u>Mission Description</u></b>          Provide wideband communications to continue the Defense Satellite Communications System (DSCS) X-Band connectivity. Wideband Gapfiller will also provide a new point-to-point service using the Ka-band frequency, and will host a broadcast capability similar to GBS Phase 2. Launches are scheduled for FY2004/5 and the three satellite constellation will use maximum commercial practices and technology.</p> <p><b>(U) <u>FY 1998 (\$ in Thousands):</u></b>          – (U) \$ 0 Not Applicable</p> <p><b>(U) <u>FY 1999 (\$ in Thousands):</u></b>          – (U) \$ 0 Not Applicable</p> <p><b>(U) <u>FY 2000 (\$ in Thousands):</u></b>          – (U) \$ 4,910 Begin Pre-Engineering and Manufacturing Development (EMD) activities          – (U) \$ 4,910 Total</p> <p><b>(U) <u>FY 2001 (\$ in Thousands):</u></b>          – (U) \$ 11,000 Combined Parts Purchase and Satellite Build          – (U) \$ 33,844 Satellite Design          – (U) \$ 3,500 JTEO Support          – (U) \$ 9,838 Program Support          – (U) \$ 58,182 Total</p> <p><b>(U) B. <u>Project Change Summary - Description of Significant Changes:</u></b>          (U) FY01: Funding for the 2<sup>nd</sup> and 3<sup>rd</sup> Wideband Gapfiller satellites was realigned from the RDT&amp;E to the Procurement appropriation.</p>										
Project 4811			Page 8 of 15 Pages				Exhibit R-2A (PE 0603854F)			

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<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)</b>	DATE <b>February 1999</b>
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BUDGET ACTIVITY <b>4 - Demonstration and Validation</b>	PE NUMBER AND TITLE <b>0603854F Wideband MILSATCOM (Space)</b>	PROJECT <b>4811</b>
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**(U) C. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 1998</u>	<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>	To <u>Compl</u>	Total <u>Cost</u>
(U) AF Wideband Procurement, PE 33600F	0	0	0	60,000	250,000	210,000	0	0	0	520,000
(U) AF Terminals in PE 33601F, Other Procurement, AF										
(U) Navy terminals in other PEs										
(U) Army terminals in other PEs										

**(U) D. Acquisition Strategy**

Procure Gapfiller system making maximum use of commercial technology and practices by modifying commercial satellites to support unique military requirements.

**(U) E. Schedule Profile**

	<u>FY 1998</u>			<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) Defense Acquisition Board Prep								x	x	x		
(U) EMD Contract Award												x
(U) EMD											x	x
(U) 1 <sup>st</sup> of 3 launches (FY04 - 9 months)											x	x

x = planned event

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)						DATE February 1999					
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
4 - Demonstration and Validation					0603854F Wideband MILSATCOM (Space)					4811	
<b>(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u></b>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U) Pre-EMD Activities					0	0	4,910	0			
(U) EMD Activities					0	0	0	44,844			
(U) JTEO Support					0	0	0	3,500			
(U) Program Support					0	0	0	9,838			
(U) Total					0	0	4,910	58,182			
<b>(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u></b>											
<b>Performing Organizations:</b>											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Product Development Organizations</u>											
TBD	TBD	TBD	TBD	TBD	0	0	0	0	44,844	293,407	338,251
<u>Support and Management Organizations</u>											
JTEO	TBD	TBD	TBD	TBD	0	0	0	0	3,500	61,582	65,082
Various	TBD	TBD	TBD	TBD	0	0	0	4,910	9,838	90,331	105,079
<u>Test and Evaluation Organizations</u>											

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 1999			
BUDGET ACTIVITY 4 - Demonstration and Validation				PE NUMBER AND TITLE 0603854F Wideband MILSATCOM (Space)				PROJECT 4811		
<b>Government Furnished Property:</b>										
	Contract									
	Method/Type	Award or		Total						
Item	or Funding	Obligation	Delivery	Prior to	Budget	Budget	Budget	Budget	Budget to	Total
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>FY 1998</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Property</u>										
TBD										
<u>Support and Management Property</u>										
TBD										
<u>Test and Evaluation Property</u>										
TBD										
Subtotal Product Development				0	0	0	0	44,844	293,407	338,251
Subtotal Support and Management				0	0	0	4,910	13,338	151,913	170,161
Subtotal Test and Evaluation				0	0	0	0	0	0	0
Total Project				0	0	0	4,910	58,182	445,320	508,412

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BUDGET ACTIVITY <b>4 - Demonstration and Validation</b>					PE NUMBER AND TITLE <b>0603854F Wideband MILSATCOM (Space)</b>				PROJECT <b>4812</b>	
<i>COST (\$ In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4812 Advanced Wideband	0	0	0	0	0	0	31,664	263,562	1,097,640	1,392,866
<p><b>(U) A. <u>Mission Description</u></b>          Provide the follow-on to DSCS/Wideband Gapfiller communications services starting in FY 2008. Includes continuation or replacement of DSCS X-band and Wideband Gapfiller Ka-band services. The Advanced Wideband System will also include the GBS Phase 3 broadcast space segment. Constellation will provide worldwide coverage and make maximum use of commercial practices and technologies.</p> <p>(U) <u>FY 1998 (\$ in Thousands):</u>          - (U) \$ Not Applicable          0</p> <p>(U) <u>FY 1999 (\$ in Thousands):</u>          - (U) \$ Not Applicable          0</p> <p>(U) <u>FY 2000 (\$ in Thousands):</u>          - (U) \$ Not Applicable          0</p> <p>(U) <u>FY 2001 (\$ in Thousands):</u>          - (U) \$ Not Applicable          0</p> <p><b>(U) B. <u>Project Change Summary - Description of Significant Changes:</u></b>          (U) None</p> <p><b>(U) C. <u>Other Program Funding Summary (\$ in Thousands)</u></b>          (U) AF Terminals in PE 33601F, Other Procurement, AF          (U) Navy terminals in other PEs</p>										
Project 4812			<i>Page 12 of 15 Pages</i>				Exhibit R-2A (PE 0603854F)			

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BUDGET ACTIVITY <b>4 - Demonstration and Validation</b>	PE NUMBER AND TITLE <b>0603854F Wideband MILSATCOM (Space)</b>	PROJECT <b>4812</b>
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(U) Army terminals in other PEs

**(U) D. Acquisition Strategy**

Provide Advanced Wideband capability, making maximum use of commercial technology and practices.

**(U) E. Schedule Profile**

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(U) 1 <sup>st</sup> launch in FY 2008																

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)						DATE February 1999					
BUDGET ACTIVITY 4 - Demonstration and Validation					PE NUMBER AND TITLE 0603854F Wideband MILSATCOM (Space)					PROJECT 4812	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U) TBD											
(U) Total											
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
<b>Performing Organizations:</b>											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Product Development Organizations</u>											
TBD	TBD	TBD	TBD	TBD							
<u>Support and Management Organizations</u>											
TBD	TBD	TBD	TBD	TBD							
<u>Test and Evaluation Organizations</u>											
TBD	TBD	TBD	TBD	TBD							
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BUDGET ACTIVITY 4 - Demonstration and Validation				PE NUMBER AND TITLE 0603854F Wideband MILSATCOM (Space)				PROJECT 4812		
<b>Government Furnished Property:</b>										
	Contract									
	Method/Type	Award or		Total						
Item	or Funding	Obligation	Delivery	Prior to	Budget	Budget	Budget	Budget	Budget to	Total
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>FY 1998</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Property</u>										
TBD	TBD	TBD	TBD							
<u>Support and Management Property</u>										
TBD	TBD	TBD	TBD							
<u>Test and Evaluation Property</u>										
TBD	TBD	TBD	TBD							
Subtotal Product Development										
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project									1,392,866	1,392,866

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