

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 1997
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)
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COST (\$ In Thousands)	FY 1996 Actual	FY 1997 Estimate	FY 1998 Estimate	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	165,171	189,638	338,413	580,298	660,876	576,664	707,069	1,109,374	Continuing	Continuing
616 SBIRS High Element EMD	156,073	189,638	338,413	549,298	582,876	426,664	287,901	184,054	209,105	3,008,722
0002 Miniature Sensor Technology Integration (MSTI)	9,098	0	0	0	0	0	0	0	0	37,398
4598 SBIRS Low Element EMD	0	0	0	31,000	78,000	150,000	419,168	925,320	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	1*	1*	2*		

Notes: * One each HEO sensor delivered in FY01 and FY03, one each spacecraft delivered in FY02 and FY03.

Unit cost not available.

FY97 funds of \$3.7M being transferred from PE #603441F to BPAC 0002 to support MSTI on-orbit operations and program support.

(U) A. Mission Description and Budget Item Justification

(U) The purpose is to develop a system to provide increased performance to meet requirements in US Space Command's Capstone Requirements Document. The system's primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces or its allies. The Space-Based Infrared System (SBIRS) will incorporate new technologies that would enhance detection; improve reporting of ICBM, SLBM and tactical ballistic missiles; and provide critical mid-course tracking and discrimination data for national and theater missile defense. The system will consist of satellites in Geosynchronous Orbits (GEO), Highly Elliptical Orbits (HEO) and Low Earth Orbits (LEO) and an integrated, centralized ground station serving all space elements of the SBIRS system, as well as the Defense Support Program (DSP). This Program Element funds SBIRS Engineering and Manufacturing Development (EMD) activities and is, therefore, assigned to Budget Activity 5, Engineering and Manufacturing Development. Funding is also provided in FY96 and FY 97 for the Miniature Sensor Technology Integration (MSTI) program.

(U) Acquisition Strategy

(U) The SBIRS program is a lead program for acquisition streamlining. Program documentation has been consolidated into a single document, the Single Acquisition and Management Plan (SAMP). The pre-EMD contracts were competed in a full and open competition. Two contracts were awarded to Lockheed/Loral/Aerojet and Hughes/TRW for the pre-EMD phase. Downselect to a single contractor, LMMS, was accomplished for the EMD phase.

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development						PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)						
(U) B. <u>Program Change Summary (\$ in Thousands)</u>												
		<u>FY 1996</u>		<u>FY 1997</u>		<u>FY 1998</u>		<u>FY 1999</u>		<u>Total Cost</u>		
(U) Previous President's Budget (FY97)		162,276		173,290		300,155		540,530		Continuing		
(U) Appropriated Value				199,190								
(U) Adjustments to Appropriated Value												
a. Cong Gen Reductions				-4,689								
b. SBIR				-4,863								
c. Omnibus or Other Above Threshold Reprogram												
d. Below Threshold Reprogram		2,895										
(U) Adjustments to Budget Years Since FY97 PB						38,258		39,768				
(U) Current Budget Submit/President's Budget		165,171		189,638		338,413		580,298		Continuing		
(U) Change Summary Explanation:												
Funding: FY98 adjustments realigned other procurement (3080) funds to RDT&E.												
FY99 increases for SBIRS Low acceleration from 2006 fielding to 2004 fielding to support National Missile Defense.												
Schedule: Not Applicable												
Technical: Not Applicable												
(U) C. <u>Other Program Funding Summary (\$ in Thousands)</u>												
		<u>FY 1996</u>	<u>FY 1997</u>	<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>To Complete</u>	<u>Total Cost</u>	
(U) Missile Procurement (PE 35915F)		0	0	0	0	0	40,810	274,416	238,789	4,700,000	5,254,015	
(U) O & M (PE 35915F)				12,426	11,326	16,323	17,566	16,267	18,110			
<u>Related RDT&E:</u>												
(U) PE #603441F - SBIRSDem/Val												
(U) PE #305911F - DSP												
(U) D. <u>Schedule Profile</u>												
		<u>FY 1996</u>			<u>FY 1997</u>			<u>FY 1998</u>			<u>FY 1999</u>	
	1	2	3	4	1	2	3	4	1	2	3	4
(U) System Functional Review				X								
(U) DAE Program Review				X								
(U) EMD Authority To Proceed (ATP)					X							
(U) ConsolidatedGrnd IOC, Increment 1												X

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 1997		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)				PROJECT 616		
COST (\$ In Thousands)	FY 1996 Actual	FY 1997 Estimate	FY 1998 Estimate	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	Cost to Complete	Total Cost
616 SBIRS High Element EMD	156,073	189,638	338,413	549,298	582,876	426,664	287,901	184,054	209,105	3,008,722
<p>(U) A. Mission Description and Budget Item Justification</p> <p>(U) The purpose is to develop a system to provide increased performance to meet requirements in US Space Command's Capstone Requirements Document. The system's primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces or its allies. The Space-Based InfraRed System (SBIRS) will incorporate new technologies that would enhance detection; improve reporting of ICBM, SLBM and tactical ballistic missiles; and provide critical mid-course tracking and discrimination data for national and theater missile defense. The system will consist of satellites in Geosynchronous Orbits (GEO), Highly Elliptical Orbits (HEO) and Low Earth Orbits (LEO) and an integrated, centralized ground station serving all space elements of the SBIRS system, as well as the Defense Support Program (DSP). This Program Element funds SBIRS High Engineering and Manufacturing Development (EMD) activities.</p> <p>(U) <u>FY 1996</u></p> <ul style="list-style-type: none"> - (U) \$118,943 Continue Pre-EMD contracts for space and ground segment development - (U) \$15,650 Continue Space Based InfraRed technology and phenomenology projects - (U) \$16,700 Continue program office activities - (U) \$ 4,780 Adjustment (Will be reprogrammed to BPAC 0002 to support Pegasus launch delay and MSTI program development) - (U) \$156,073 Total <p>(U) <u>FY 1997</u></p> <ul style="list-style-type: none"> - (U) \$172,238 Initiate EMD contract for space and ground segment development - (U) \$17,400 Continue program office activities - (U) \$189,638 Total <p>(U) <u>FY 1998</u></p> <ul style="list-style-type: none"> - (U) \$319,213 Continue EMD contract for Space and Ground segment development - (U) \$19,200 Continue program office activities - (U) \$338,413 Total <p>(U) <u>FY 1999</u></p> <ul style="list-style-type: none"> - (U) \$529,698 Continue EMD contract for Space and Ground segment development - (U) \$19,600 Continue program office activities 										
Project 616			Page 4 of 15 Pages				Exhibit R-2 (PE 0604441F)			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE February 1997				
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development			PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)			PROJECT 616				
- (U) \$549,298 Total										
(U) B. Program Change Summary (\$ in Thousands)										
	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>Total Cost</u>					
(U) Previous President's Budget (FY97)	153,178	173,290	300,155	540,530	Continuing					
(U) Appropriated Value		199,190								
(U) Adjustments to Appropriated Value										
a. Cong Gen Reductions		-4,689								
b. SBIR		-4,863								
c. Omnibus or Above Threshold Reprogramming										
d. Below Threshold Reprogramming	2,895									
(U) Adjustments to Budget Years Since FY97 PB			38,258	8,768						
(U) Current Budget Submit/President's Budget	156,073	189,638	338,413	549,298	Continuing					
(U) Change Summary Explanation:										
Funding: FY97 decreases funds SBIR initiatives and FFRDC, Anti-terrorist and general Congressional reductions										
FY98/99 increases due to realignment of funds from Other Procurement to RDT&E. Effort recognized as part of development task.										
Schedule: Not Applicable										
Technical: Not Applicable										
(U) C. Other Program Funding Summary (\$ in Thousands)										
	<u>FY 1996</u>	<u>FY 1997</u>	<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>To Complete</u>	<u>Total Cost</u>
(U) Missile Procurement (PE 35915F)	0	0	0	0	0	40,810	274,416	238,789	Continue	Continue
<u>Related RDT&E:</u>										
(U) PE #603441F - SBIRSDem/Val										
(U) PE #305911F - DSP										

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)					PROJECT 616						
(U) D. <u>Schedule Profile</u>																
		<u>FY 1996</u>				<u>FY 1997</u>				<u>FY 1998</u>				<u>FY 1999</u>		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(U) System Requirements Review			X													
(U) System Functional Review				X												
(U) DAE Program Review				X												
(U) EMD Authority To Proceed (ATP)					X											
(U) ConsolidatedGrnd IOC for DSP																X
(U) Grnd IOC for HIGH (FY01)																
(U) First HEO Delivery (FY01)																
(U) First GEO Launch (FY02)																

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1997	
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)					PROJECT 616	
(U) A. Project Cost Breakdown (\$ in Thousands)											
					<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>			
(U) PreEMD Contract					118,943						
(U) EMD Contract						172,238	319,213	529,698			
(U) Technology					6,600						
(U) Phenomenology					9,050						
(U) System Program Office Support					6,900	7,200	9,000	9,400			
(U) AerospaceCorp					9,800	10,200	10,200	10,200			
(U) Adjustment (Will be moved to BPAC 0002)					4,780						
(U) Total					156,073	189,638	338,413	549,298			
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
Performing Organizations:											
Contractor or Government	Contract Method/Type	Award or Obligation Date	Performing Activity	Project Office	Total Prior to FY 1996	Budget FY 1996	Budget FY 1997	Budget FY 1998	Budget FY 1999	Budget to Complete	Total Program
	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>FY 1996</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>											
LMMS & TRW	C/CPFF	Jul 95			46,000	118,943					164,943
(Pre-EMD)											
LMMS (EMD)	C/CPAF	Nov 96					172,238	319,213	529,698	1,537,800	2,558,949
TBD(Technology)	Various	Sep 95			5,000	6,600					11,600
TBD(Phenom)	Various	Sep 95			8,300	9,050					17,350
Sandia National Laboratory (Cobra Brass)	Various	Sep 95			10,000						10,000
<u>Support and Management Organizations</u>											
AerospaceCorp	MORD	Sep 95			9,400	9,800	10,200	10,200	10,200	71,400	121,200
Prgm Mgmt Supt	Various	Sep 95			6,000	6,900	7,200	9,000	9,400	81,400	119,900
<u>Test and Evaluation Organizations</u>											
Project 616					Page 7 of 15 Pages				Exhibit R-3 (PE 0604441F)		

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1997	
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
5 - Engineering and Manufacturing Development					0604441F Space Based IR Arch (EMD) (Space)					616	
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 1996	Budget FY 1996	Budget FY 1997	Budget FY 1998	Budget FY 1999	Budget to Complete	Total Program
Not Applicable											

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1997	
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)					PROJECT 616	
(U) B. <u>Budget Acquisition History and Planning Information Continued (\$ in Thousands)</u>											
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 1996	Budget FY 1996	Budget FY 1997	Budget FY 1998	Budget FY 1999	Budget to Complete	Total Program
Government Furnished Property: Not Applicable.											
Subtotal Product Development					69,300	134,593	172,238	319,213	529,698	1,537,800	2,762,842
Subtotal Support and Management					15,400	16,700	17,400	19,200	19,600	152,800	241,100
Subtotal Test and Evaluation											
Adjustment for BPAC Realignment (Will be moved to 0002)							4,780				4,780
Total Project					84,700	156,073	189,638	338,413	549,298	1,690,600	3,008,722

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)				PROJECT 0002		
COST (\$ In Thousands)	FY 1996 Actual	FY 1997 Estimate	FY 1998 Estimate	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	Cost to Complete	Total Cost
0002 Miniature Sensor Technology Integration (MSTI)	9,098	0	0	0	0	0	0	0	0	37,398
(U) A. Mission Description and Budget Item Justification										
(U) The Miniature Sensor Technology Integration (MSTI) program will provide phenomenology data for the SBIRS program.										
(U) FY 1996										
- (U) \$16,515	Perform on-orbit operations and program support									
- (U) -\$ 7,417	Adjustments (Funds were reprogrammed to support Pegasus launch delay and program development, not yet captured in database. BPAC 616 (SBIRS EMD) provided \$4.7M, with the remainder being provided by PEs 35160, 35110, 35906).									
- (U) \$ 9,098	Total									
(U) FY 1997										
- (U) \$3,700	Planned reprogramming from 0603441F, continue on-orbit operations & program support									
- (U) \$3,700	Total									
(U) FY 1998										
- (U) 0	Total									
(U) FY 1999										
- (U) 0	Total									
(U) B. Program Change Summary (\$ in Thousands)										
	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>						
(U) Previous President's Budget	9,098	0	0	0						
(U) Appropriated Value										
(U) Adjustments to Appropriated Value										
a. Cong Gen Reductions										
b. SBIR										
c. Internal Realignment Reprogramming										
d. Below Threshold Reprogramming										
(U) Adjustments to Budget Years Since FY97 PB										
(U) Current Budget Submit/President's Budget	9,098	0	0	0						
Project 0002	Page 10 of 15 Pages				Exhibit R-2 (PE 0604441F)					

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)	PROJECT 0002																																																																																				
<p>(U) Change Summary Explanation: Funding: Planned reprogramming from 0603441F \$3,700 in FY97 Shedule: Not Applicable Technical: Not Applicable</p> <p>(U) C. Other Program Funding Summary (\$ in Thousands) Not Applicable</p> <p>Related RDT&E: (U) PE #603441F - SBIRSDem/Val (U) PE #305911F - DSP</p> <p>(U) D. Schedule Profile</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th colspan="3" style="text-align: center;"><u>FY 1996</u></th> <th></th> <th colspan="3" style="text-align: center;"><u>FY 1997</u></th> <th></th> <th colspan="3" style="text-align: center;"><u>FY 1998</u></th> <th></th> <th colspan="3" style="text-align: center;"><u>FY 1999</u></th> </tr> <tr> <th></th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> </tr> </thead> <tbody> <tr> <td>(U) Spacecraft Complete</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>(U) MSTI Spacecraft Launch</td> <td></td><td></td><td style="text-align: center;">X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>(U) On-orbit Operations</td> <td></td><td></td><td></td><td style="text-align: center;">X</td><td style="text-align: center;">X</td><td style="text-align: center;">X</td><td style="text-align: center;">X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>				<u>FY 1996</u>				<u>FY 1997</u>				<u>FY 1998</u>				<u>FY 1999</u>				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	(U) Spacecraft Complete																	(U) MSTI Spacecraft Launch			X														(U) On-orbit Operations				X	X	X	X									
	<u>FY 1996</u>				<u>FY 1997</u>				<u>FY 1998</u>				<u>FY 1999</u>																																																																									
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																																																																						
(U) Spacecraft Complete																																																																																						
(U) MSTI Spacecraft Launch			X																																																																																			
(U) On-orbit Operations				X	X	X	X																																																																															
Project 0002		Page 11 of 15 Pages	Exhibit R-2 (PE 0604441F)																																																																																			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 1997				
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)			PROJECT 0002				
(U) A. <u>Project Cost Breakdown (\$000 in Thousands)</u>											
	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>							
(U) On-orbit Ops and Support	16,515	3,700									
(U) Adjustments	-7,417	-3,700									
(U) Total Program	9,098	0	0	0							
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government	Contract Method/Type	Award or Obligation	Performing Activity	Project Office	Total Prior to FY 1996	Budget FY 1996	Budget FY 1997	Budget FY 1998	Budget FY 1999	Budget to Complete	Total Program
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>FY 1996</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>											
Spectrum Astro	CPAF	Sep 95			28,300	16,515	3,700				48,515
<u>Support and Management Organizations</u>											
Not Applicable											
<u>Test and Evaluation Organizations</u>											
Not Applicable											
Subtotal Product Development					28,300	16,515	3,700	0	0	0	48,515
Subtotal Support and Management					0	0	0	0	0	0	0
Subtotal Test and Evaluation					0	0	0	0	0	0	0
Adjustments for Reprogramming					0	-7,417	-3,700	0	0	0	-11,117
Total Project					28,300	9,098	0	0	0	0	37,398

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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)				PROJECT 4598																										
COST (\$ In Thousands)	FY 1996 Actual	FY 1997 Estimate	FY 1998 Estimate	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	Cost to Complete	Total Cost																								
4598 SBIRS Low Element EMD	0	0	0	31,000	78,000	150,000	419,168	925,320	Continuing	Continuing																								
<p>(U) A. <u>Mission Description and Budget Item Justification</u></p> <p>(U) The purpose is to develop a system to provide increased performance to meet requirements in US Space Command's Capstone Requirements Document. The system's primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces or its allies. The Space-Based Infrared System (SBIRS) will incorporate new technologies that would enhance detection; improve reporting of ICBM, SLBM and tactical ballistic missiles; and provide critical mid-course tracking and discrimination data for national and theater missile defense. The system will consist of satellites in Geosynchronous Orbits (GEO), Highly Elliptical Orbits (HEO) and Low Earth Orbits (LEO) and an integrated, centralized ground station serving all space elements of the SBIRS system, as well as the Defense Support Program (DSP). This Program Element funds SBIRS Low Engineering and Manufacturing Development (EMD) activities. The DOD has recently decided to accelerate the fielding of SBIRS Low from 2006 to 2004 to support National Missile Defense, making it necessary to begin pre-EMD in FY99.</p> <p>(U) <u>FY 1996 (\$ in Thousands)</u> - (U) \$0 Total</p> <p>(U) <u>FY 1997 (\$ in Thousands)</u> - (U) \$0 Total</p> <p>(U) <u>FY 1998 (\$ in Thousands)</u> - (U) \$0 Total</p> <p>(U) <u>FY 1999 (\$ in Thousands)</u> - (U) \$31,000 SBIRS Low Pre-EMD activities - (U) \$31,000 Total</p> <p>(U) B. <u>Program Change Summary (\$ in Thousands)</u></p> <table style="width:100%; border: none;"> <tr> <td></td> <td align="center"><u>FY 1996</u></td> <td align="center"><u>FY 1997</u></td> <td align="center"><u>FY 1998</u></td> <td align="center"><u>FY 1999</u></td> <td align="center">Total</td> </tr> <tr> <td>(U) Previous President's Budget</td> <td align="center">0</td> <td align="center">0</td> <td align="center">0</td> <td align="center">0</td> <td align="center">Cost</td> </tr> <tr> <td>(U) Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> <td align="center">Cont</td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	Total	(U) Previous President's Budget	0	0	0	0	Cost	(U) Appropriated Value					Cont	(U) Adjustments to Appropriated Value					
	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	Total																													
(U) Previous President's Budget	0	0	0	0	Cost																													
(U) Appropriated Value					Cont																													
(U) Adjustments to Appropriated Value																																		
Project 4598			Page 13 of 15 Pages				Exhibit R-2 (PE 0604441F)																											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 1997					
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604441F Space Based IR Arch (EMD) (Space)			PROJECT 4598					
a. Cong Reductions b. SBIR c. Omnibus or Other Above Threshold Reprogram d. Below Threshold Reprogramming (U) Adjustments to Budget Years Since FY 1997 PB 31,000 Cont (U) Current Budget Submit/President's Budget 0 0 0 31,000 Cont												
(U) Change Summary Explanation: Funding: FY99 increases to fund SBIRS Low acceleration Pre-EMD activities Schedule: N/A Technical: N/A												
(U) C. Other Program Funding Summary (\$ in Thousands)												
	<u>FY 1996</u>	<u>FY 1997</u>	<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>To Complete</u>	<u>Total Cost</u>		
(U) Missile Procurement	0	0	0	0	0	40,810	274,416	238,789	Continue	Continue		
<u>Related RDT&E:</u>												
(U) PE #603441F - SBIRSDem/Val												
(U) PE #305911F - DSP												
(U) D. Schedule Profile												
		<u>FY 1996</u>			<u>FY 1997</u>			<u>FY 1998</u>		<u>FY 1999</u>		
(U) Defense Acquisition Board (DAB)	1	2	3	4	1	2	3	4	1	2	3	4
(U) First Launch (FY04)												x

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE	
BUDGET ACTIVITY											
5 - Engineering and Manufacturing Development										February 1997	
PE NUMBER AND TITLE										PROJECT	
0604441F Space Based IR Arch (EMD) (Space)										4598	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>					<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>			
(U) Total					0	0	0	31,000			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
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 1996	Budget FY 1996	Budget FY 1997	Budget FY 1998	Budget FY 1999	Budget to Complete	Total Program
<u>Product Development Organizations</u>											
TBD	TBD	TBD							31,000	Cont	Cont
<u>Support and Management Organizations</u>											
Not Applicable*											
<u>Test and Evaluation Organizations</u>											
Not Applicable											
Government Furnished Property:											
Not Applicable											
Subtotal Product Development					0	0	0	0	31,000	Cont	Cont
Subtotal Support and Management					0	0	0	0	0		
Subtotal Test and Evaluation					0	0	0	0	0		
Total Project					0	0	0	0	31,000	Cont	Cont
*Note: SPO support for SBIRS is funded from the SBIRS High BPAC 616											
Project 4598											
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Exhibit R-3 (PE 0604441F)											

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