

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 1998		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604442F Space Based IR Arch (EMD) (Space)				PROJECT 4598	
COST (\$ In Thousands)	FY 1997 Actual	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	33,328	79,064	148,749	420,206	823,950	5,938,759	7,444,056
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

Notes: Funding from PE 64441F, BPAC 4598 was transferred to this to establish a SBIRS Low EMD program element.

(U) A. Mission Description and Budget Item Justification

(U) The Space-Based Infrared System's (SBIRS) primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces or its allies. SBIRS will incorporate new technologies to 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. This system will provide increased performance in order to meet requirements in US Space Command's Capstone Requirement Document and Operations Requirements Document. SBIRS 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 SBIRS space elements and Defense Support System (DSP) satellites. This Program Element funds Program Definition and Engineering, Manufacturing & Development (EMD) activities for the LEO portion of the SBIRS program and is assigned to Budget Activity 5, Engineering and Manufacturing Development.

(U) Acquisition Strategy:

(U) The SBIRS program is managed through a single consolidated System Program Office (SPO) at the Space and Missile Systems Center, Los Angeles Air Force Base, CA. The SBIRS acquisition plan was approved in August 92 and is currently being updated to reflect the FY04 SBIRS Low accelerated launch date. The SBIRS Low EMD contract is scheduled for award 2QFY01 with the first SBIRS Low satellite launch planned in 4QFY04.

(U) FY 1997 (\$ in Thousands):

– (U) \$0 Total

(U) FY 1998 (\$ in Thousands):

– (U) \$0 Total

(U) FY 1999 (\$ in Thousands):

- (U) \$30,387 SBIRS Low Program Definition activities for Cost as an Independent Variable (CAIV), operational design and risk assessment, operations concept analyses, production planning, life cycle cost projections, and EMD planning
- (U) \$2,941 Radiation Hardened Parts
- (U) \$33,328 Total

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(U) B. <u>Program Change Summary (\$ in Thousands)</u>									
	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>Total Cost</u>					
(U) Previous President's Budget /FY 1998 PB	0	0	0	0					
(U) Appropriated Value									
(U) Adjustments to Appropriated Value									
a. Cong Gen Reductions									
b. SBIR									
c. Omnibus or Other Above Threshold Reprogram									
d. Below Threshold Reprogram									
(U) Adjustments to Budget Years Since FY 1998 PB				+33,328	7,444,056				
(U) Current Budget Submit/FY 1999 President's Budget	0	0	33,328	7,444,056					
(U) Change Summary Explanation:									
Funding: Funding was transferred from PE604441F, BPAC 654598.									
\$2,941K FY99 increase funds for radiation hardened parts. \$672K FY99 reduction for non-pay inflation.									
Schedule: Not Applicable									
Technical: Not Applicable									
(U) C. <u>Other Program Funding Summary (\$ in Thousands)</u>									
Not Applicable									
<u>Related RDT&E:</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>FY2003</u>	<u>To Complete</u>	<u>Total Cost</u>
(U) PE 0603441F - SBIRS Dem/Val	252,492	202,433	160,262	154,133	115,398	0	0	0	1,432,558
(U) PE 0305911F - DSP	24,668	20,689	12,037	7,595	7,587	4,462	4,760	0	1,941,972
(U) PE 0604441F - SBIRS High EMD	193,018	316,467	538,438	564,239	395,905	269,798	143,059	102,566	2,801,661
(U) D. <u>Schedule Profile</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>FY 1999</u>	
	1	2	3	4	1	2	3	4	
(U) Program Definition Contract Award						X			
(U) EMD Contract Award (1QFY01)									
(U) EMD Preliminary Design Review (2Q01)									
(U) SBIRS Low First Launch (4QFY04)									
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 1998				
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604442F Space Based IR Arch (EMD) (Space)				PROJECT 4598		
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>					<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>				
(U) Program Definition					0	0	\$30,387				
(U) Radiation Hardened Parts					0	0	\$2,941				
(U) Total					0	0	\$33,328				
(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 1997	Budget FY 1997	Budget FY 1998	Budget FY 1999	Budget to Complete	Total Program	
<u>Product Development Organizations</u>											
TBD	Competitive/ Cost Plus	2QFY99						30,387	7,137,728	7,168,115	
Various	TBD	TBD						2,941	12,000	14,941	
<u>Support and Management Organizations</u>											
Program Support	Various	Various	N/A	N/A	0	0	0	0	261,000	261,000	
<u>Test and Evaluation Organizations:</u>											
Not Applicable											
Government Furnished Property:											
Not Applicable											
Subtotal Product Development					0	0	0	33,328	7,149,728	7,183,056	
Subtotal Support and Management					0	0	0	0	261,000	261,000	
Subtotal Test and Evaluation					0	0	0	0	0	0	
Total Project					0	0	0	33,328	7,410,728	7,444,056	
Project 4598					Page 3 of 3 Pages			Exhibit R-3 (PE 0604442F)			

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