

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 1999
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604480F Global Positioning System Block IIF (Space)	PROJECT 0005
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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
0005 NAVSTAR GPS BLOCK IIF	69,152	73,339	0	0	0	0	0	0	0	197,984
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

Note: GPS Block IIF development funding is consolidated into PE 35165F starting in FY00 in order to combine all Block IIF activities into a single PE.

(U) A. Mission Description

Activities include satellite design and development; control system, training simulator, and Mission Operation Support Center development and test; satellite upgrade design and development; control system, simulator and support center software upgrades; and R&D efforts to support NAVSTAR Global Positioning System (GPS) Block IIF deployment.

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

- (U) \$ 54,926 Continued Block IIF - System Sustainment Satellite System Development
- (U) \$ 11,232 Continued Block IIF - System Sustainment Ground System/Simulator Development
- (U) \$ 2,730 GPS Modernization Studies
- (U) \$ 20 Clock Technology Development
- (U) \$ 30 Launch Support
- (U) \$ 214 Mission Support
- (U) \$ 69,152 Total

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

- (U) \$ 30,025 Continue Block IIF - System Sustainment Satellite System Development
- (U) \$ 3,390 Clock Technology Development
- (U) \$ 27,153 Continue Block IIF - System Sustainment Ground System/Simulator Development
- (U) \$ 10,230 GPS Modernization Studies
- (U) \$ 90 Launch Support
- (U) \$ 2,451 Identified as a source for SBIR
- (U) \$ 73,339 Total

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<p>(U) <u>FY 2000 (\$ in Thousands):</u> GPS Block IIF development funding is consolidated into PE 35165F starting in FY00</p> <p>(U) B. <u>Budget Activity Justification:</u></p> <p>This PE is in Budget Activity 5 - Engineering and Manufacturing Development (EMD) and supports research and development of GPS Space and Control systems within the Block IIF Sustainment Program.</p>		
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604480F Global Positioning System Block IIF (Space)			PROJECT 0005						
(U) C. <u>Program Change Summary (\$ in Thousands)</u>										
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total</u> <u>Cost</u>					
(U) Previous President's Budget (FY 1999 PB)	66,918	62,591	26,677	23,099						
(U) Appropriated Value	71,094	73,591								
(U) Adjustments to Appropriated Value										
a. Cong Gen Reductions	-2,354	-252								
b. SBIR	-1,832									
c. Omnibus or Other Above Threshold Reprogram										
d. Below Threshold Reprogramming	2,244									
e. Rescission										
(U) Adjustments to Budget Years Since FY 1999 PB			-26,677	-23,099						
(U) Current Budget Submit/FY 2000 PB	69,152	73,339	0	0						
 (U) Significant Program Changes: \$2,451K identified in FY 1999 as a source for SBIR. The FY 1998 reprogramming action and additional funds appropriated in FY 1999 were for GPS Modernization. FY 2000 through FY 2004 funds were transferred to PE 0305165F in order to consolidate all Block IIF efforts.										
(U) D. <u>Other Program Funding Summary (\$ in Thousands)</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 2004</u>	<u>FY 2005</u>	<u>To</u> <u>Compl</u>	<u>Total</u> <u>Cost</u>
N/A										
 <u>Related RDT&E:</u>										
(U) PE 0305165F, NAVSTAR GPS Space/Control										
(U) PE 0305164F, NAVSTAR GPS User Equipment										
(U) PE 0305913F Nuclear Detonation Detection System (NDS)										
(U) PE 0305119F Space Boosters (Delta II)										
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(U) **E. Acquisition Strategy:** Single satellite development/production contract was competitively awarded in April 1996.

(U) **F. 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) GPS Modernization Studies Begin	*															
(U) Satellite Final Design Complete			*													
(U) GPS ORD Coordination Starts				*												
(U) GPS ORD Validation							X									
(U) GPS OIPT			*		X				X							
(U) GPS Program Review									X							

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604480F Global Positioning System Block IIF (Space)					PROJECT 0005	
(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) Satellite System Development					54,926	30,025					
(U) Clock Technology Development					20	3,390					
(U) Ground/Control System Development					11,232	27,153					
(U) Mission Support					214	0					
(U) GPS Modernization					2,730	10,230					
(U) Launch Support					30	90					
(U) Identified as a source for SBIR					0	2,451					
(U) Total					69,152	73,339					
(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 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Identified as a source for SBIR							2,451				2,451
<u>Product Development Organizations</u>											
Block IIF Development, Boeing North America, Seal Beach, CA	FPAF/CPAF	Apr 96	Cont	Cont	55,267	68,590	67,498	0	0	0	191,355
Various Support and Management Organizations	Various	Various	N/A	N/A	1,250	348	3,390	0	0	0	4,988
Misc Test and Evaluation Organizations	Various	Various	N/A	N/A	1,427	214	0	0	0	0	1,641
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604480F Global Positioning System Block IIF (Space)					PROJECT 0005	
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>Government Furnished Property:</u>											
N/A											
Identified as a source for SBIR											
							2,451				2,451
Subtotal Product Development					56,517	68,938	70,888	0	0	0	196,343
Subtotal Support and Management					1,427	214	0	0	0	0	1,641
Subtotal Test and Evaluation					0	0	0	0	0	0	0
Total Project					57,944	69,152	73,339	0	0	0	200,435