

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0305265F GPS III Space Segment</b>
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	0.000	420.342	284.973	262.810	299.210	247.075	0.000	0.000
A019 GPS IIIA	0.000	0.000	420.342	284.973	262.810	299.210	247.075	0.000	0.000

**(U) A. Mission Description and Budget Item Justification**

The Global Positioning System (GPS) is a space based position, navigation and time (PNT) distribution system. This Program Element (PE) funds the Research and Development (R&D) for GPS IIIA space vehicles. This includes, but is not limited to, advanced concept development, systems engineering and analysis, user equipment interfaces, Integrated Logistics Support (ILS) products and developmental test resources.

Funds will support engineering studies and analyses, architectural engineering studies, technology needs forecasting, trade studies, systems engineering, system development, test and evaluation efforts and mission operations in support of upgrades and product improvements for military and civil applications necessary to support efforts to protect U.S. military and allies' use of GPS.

Funding in this PE was previously part of the GPS III PE 0603421F. In the FY09 PB, GPS III space funding is separated out into this dedicated space PE for increased visibility. Associated ground segment funding was moved from PE 0603421F into two additional PEs.

This program is Budget Activity 7 - Operational System Development.

**(U) B. Program Change Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	0.000	0.000	0.000
(U) Current PBR/President's Budget	0.000	0.000	420.342
(U) Total Adjustments	0.000		
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			
GPS IIIA funding transferred from PE 0604321F beginning in FY09.			

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**February 2008**

BUDGET ACTIVITY <b>07 Operational System Development</b>				PE NUMBER AND TITLE <b>0305265F GPS III Space Segment</b>			PROJECT NUMBER AND TITLE <b>A019 GPS IIIA</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
A019 GPS IIIA	0.000	0.000	420.342	284.973	262.810	299.210	247.075	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(U) A. Mission Description and Budget Item Justification**

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**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	FY 2007	FY 2008	FY 2009
(U) GPS IIIA Development	0.000	0.000	413.749
(U) Program Support	0.000	0.000	6.593
(U) Total Cost	0.000	0.000	420.342

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

	<u>FY 2007</u> <u>Actual</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>Estimate</u>	<u>FY 2012</u> <u>Estimate</u>	<u>FY 2013</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) AFRDT&E									
(U) PE 0603421F Global Positioning System (Project 644993; BA-04; R-38)	291.556	482.845	0.000	0.000	0.000	0.000	0.000	0.000	774.401
(U) PE 0305165F Navstar GPS (Space) (Project 673030; BA-07; R-179)	160.555	119.089	91.277	56.335	35.414	35.699	36.417	Continuing	TBD
(U) PE 0603427F GPS Control Segment Backwards	0.000	0.000	304.360	212.962	0.000	0.000	0.000	0.000	517.322

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Exhibit R-2a (PE 0305265F)

**Exhibit R-2a, RDT&E Project Justification**

DATE

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0305265F GPS III Space Segment</b>	PROJECT NUMBER AND TITLE <b>A019 GPS IIIA</b>
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**(U) C. Other Program Funding Summary (\$ in Millions)**

Compatibility (Project 64A022; BA-04; R-XX)									
(U) PE 0603423F Global Positioning System III Operational Control Segment (Project 64A021; BA-04; R-XX)	0.000	0.000	2.975	236.734	359.524	330.812	310.996	Continuing	TBD
(U) Other APPN									
(U) Operations & Maintenance: PE 0305165F; BA-1; SAG 11M, 13D	62.936	77.264	83.326	92.168	98.214	100.103	102.492	Continuing	TBD
(U) Missile Procurement: PE 030265F, BA-5, P-XX	0.000	0.000	0.000	0.000	139.484	650.029	482.004	Continuing	TBD
(U) Missile Procurement PE 0305165F, BA 5, P-22, 23	84.576	207.826	110.443	167.801	355.160	66.553	297.178	Continuing	TBD
(U) Other Procurement: PE 0305165F, BP 83, WSC 836790, P-71; 836730, P-70; BP 86, WSC 86190A, P-62	11.087	11.599	25.111	10.802	18.215	27.624	20.470	Continuing	TBD

**(U) D. Acquisition Strategy**

The Air Force is pursuing a "Block" approach to the GPS III next generation space segment to rapidly respond to warfighter capability requirements. The Block acquisition approach follows the "Back to Basics" space program acquisition philosophy which focuses on mitigating cost and schedule risk through a lower risk incremental delivery of mature technologies. This approach, consistent with the National Security Space (NSS) 03-01 Acquisition Policy, focuses on mission success and on time delivery. The first block of GPS III satellites, GPS IIIA, will have GPS IIF capabilities plus up to a 10 dB increase in military (M-code) signal power, a new L1C civil signal compatible with the European Galileo and a satellite bus capable of supporting Block B and C capability upgrades.

UNCLASSIFIED

**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**February 2008**

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>07 Operational System Development</b>				<b>0305265F GPS III Space Segment</b>					<b>A019 GPS IIIA</b>			
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
Block IIIA Development	TBD	TBD	0.000	0.000		0.000		378.162	Nov-08	Continuing	TBD	
SE&I (SAIC)	CPAF	Huntington Beach, CA	0.000	0.000		0.000		13.540	Nov-08	Continuing	TBD	
Modernization/SE & Technical Support	Various	Various	0.000	0.000		0.000		22.047	Nov-08	Continuing	TBD	
Subtotal Product Development			0.000	0.000		0.000		413.749		Continuing	TBD	0.000
Remarks:												
(U) <u>Support</u>												
Wing Support	Various	Various	0.000	0.000		0.000		6.284	Nov-08	Continuing	TBD	
Other Agency Support	Various	Various	0.000	0.000		0.000		0.309	Nov-08	Continuing	TBD	
Subtotal Support			0.000	0.000		0.000		6.593		Continuing	TBD	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	0.000		0.000		420.342		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0305265F GPS III Space Segment

PROJECT NUMBER AND TITLE  
A019 GPS IIIA

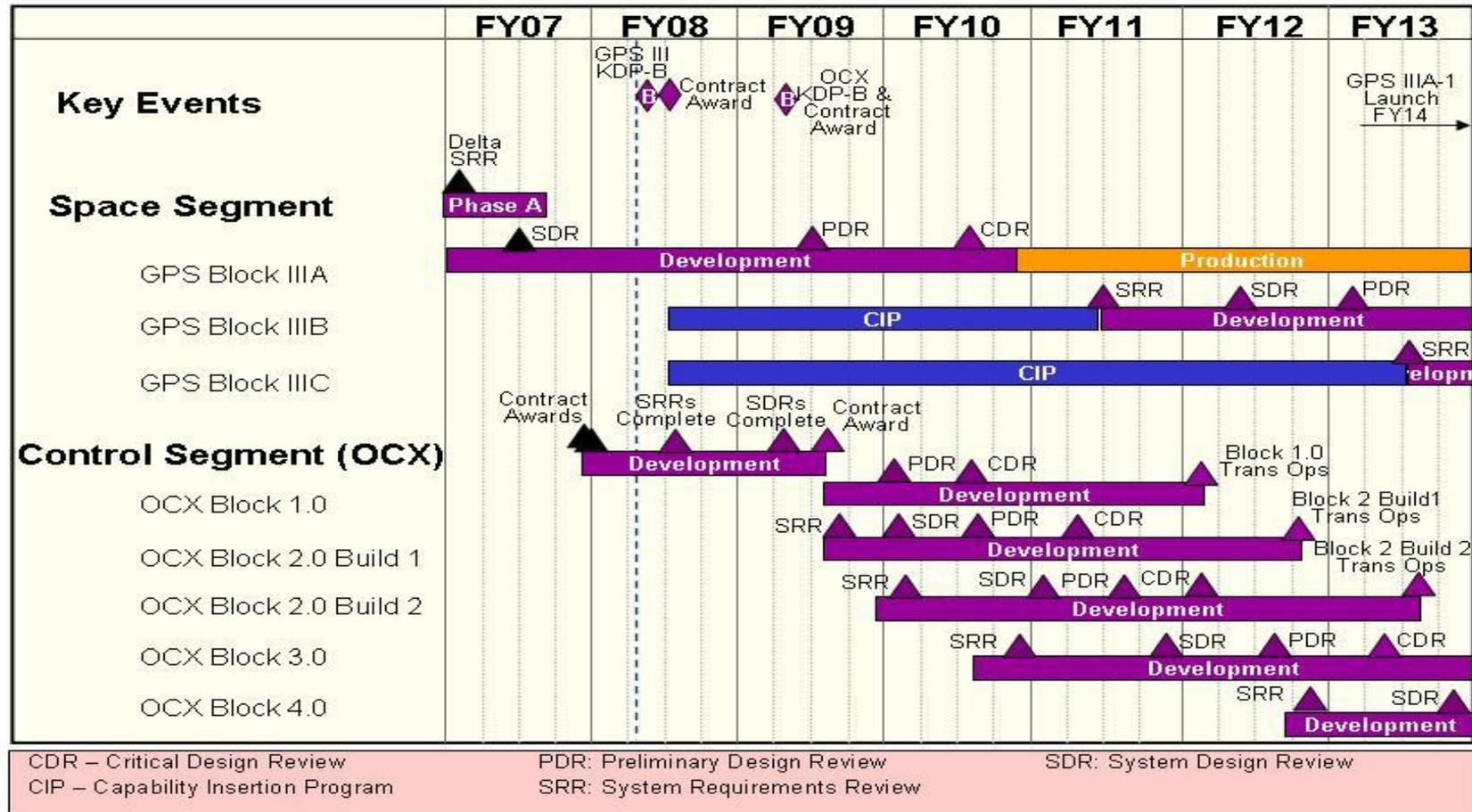


Exhibit R-4a, RDT&E Schedule Detail

DATE

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BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0305265F GPS III Space Segment

PROJECT NUMBER AND TITLE

A019 GPS IIIA

(U) Schedule Profile

FY 2007

FY 2008

FY 2009

(U) GPS IIIA Preliminary Design Review (PDR)

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