

UNCLASSIFIED

PE NUMBER: 0603423F

PE TITLE: Global Positioning System III - Operational Control Segment

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603423F Global Positioning System III - Operational Control Segment
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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	2.975	236.734	359.524	330.812	310.996	0.000	0.000
A021 GPS III OCX	0.000	0.000	2.975	236.734	359.524	330.812	310.996	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 funds the Research and Development (R&D) for the next generation GPS control segment (OCX). This includes, but is not limited to, advanced concept development, systems engineering and analysis, modernized control segment development, training simulators, Integrated Logistics Support (ILS) productions, and developmental test resources. The OCX acquisition was established to 1) fly the GPS III satellites, 2) incorporate the GPS Operations Center (GPSOC) functionality into the GPS Control Segment and 3) enable mission capability upgrades to support warfighter effect based operations.

Funds will support engineering studies and analyses, architectural engineering studies, trade studies, technology needs forecasting, 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. Additionally, funds will ensure a disciplined Capability Insertion Program plan to meet Joint Requirements Oversight Council (JROC) approved required capabilities. Funds will support science and technology, technology development and systems development efforts.

Funding in this PE was previously part of the GPS III PE 0603421F. In the FY09 PB, OCX funding is separated out from PE 0603421F into two separate PEs for increased visibility. This PE contains funding for GPS III OCX Block II, III and IV. Funding for OCX Block I is contained in PE 0603427F, GPS Operational Control Segment Backwards Compatibility.

This program is Budget Activity 4 - Advanced Component Development and Prototypes because it is in Phase A (Concept 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	2.975
(U) Total Adjustments	0.000		
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			

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OCX funding transferred from PE 0604321F beginning in FY09.

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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
A021 GPS III OCX	0.000	0.000	2.975	236.734	359.524	330.812	310.996	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(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 funds the Research and Development (R&D) for the next generation GPS control segment (OCX). This includes, but is not limited to, advanced concept development, systems engineering and analysis, modernized control segment development, training simulators, Integrated Logistics Support (ILS) productions, and developmental test resources. The OCX acquisition was established to 1) fly the GPS III satellites, 2) incorporate the GPS Operations Center (GPSOC) functionality into the GPS Control Segment and 3) enable mission capability upgrades to support warfighter effect based operations.

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Funding in this PE was previously part of the GPS III PE 0603421F. In the FY09 PB, OCX funding is separated out from PE 0603421F into two separate PEs for increased visibility. This PE contains funding for GPS III OCX Block II, III and IV. Funding for OCX Block I is contained in PE 0603427F, GPS Operational Control Segment Backwards Compatibility.

This program is Budget Activity 4 - Advanced Component Development and Prototypes because it is in Phase A (Concept Development).

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) OCX Block II Development	0.000	0.000	2.975
(U) Total Cost	0.000	0.000	2.975

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E									
(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 0603421F Global Positioning	291.556	482.845	0.000	0.000	0.000	0.000	0.000	0.000	774.401

Exhibit R-2a, RDT&E Project Justification

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III - Operational Control Segment

PROJECT NUMBER AND TITLE

A021 GPS III OCX

(U) **C. Other Program Funding Summary (\$ in Millions)**System (Project 644993; BA-04;
R-38)

(U) PE 0603427F GPS Operational Control Segment Backwards Compatibility (Project 64A022; BA-04; R-XX)	0.000	0.000	304.360	212.962	0.000	0.000	0.000	0.000	517.322
(U) PE 0305265F GPS III Space Segment (Project 67A019; BA-04; R-XX)	0.000	0.000	420.342	284.973	262.810	299.210	247.075	Continuing	TBD
(U) Other APPN									
(U) Operations and Maintenance: PE 030165F, 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 0305165F, BA 5, P-22, P-23	84.576	207.826	110.443	167.801	355.160	66.553	297.178	Continuing	TBD
(U) Missile Procurement: PE 0305265F, BA 5, P-XX	0.000	0.000	0.000	0.000	139.484	650.029	482.004	Continuing	TBD
(U) Other Procurement: PE 0305165F, BP 83, WSC 836790, P-70; WSC 836730, P-71; 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 next generation GPS control segment (OCX) 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.

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Exhibit R-3, RDT&E Project Cost Analysis

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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & 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>												
TBD	TBD	TBD	0.000	0.000		0.000		2.975	Nov-08	Continuing	TBD	
Subtotal Product Development			0.000	0.000		0.000		2.975		Continuing	TBD	0.000
Remarks:												
(U) <u>Support</u>												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Test & 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		2.975		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

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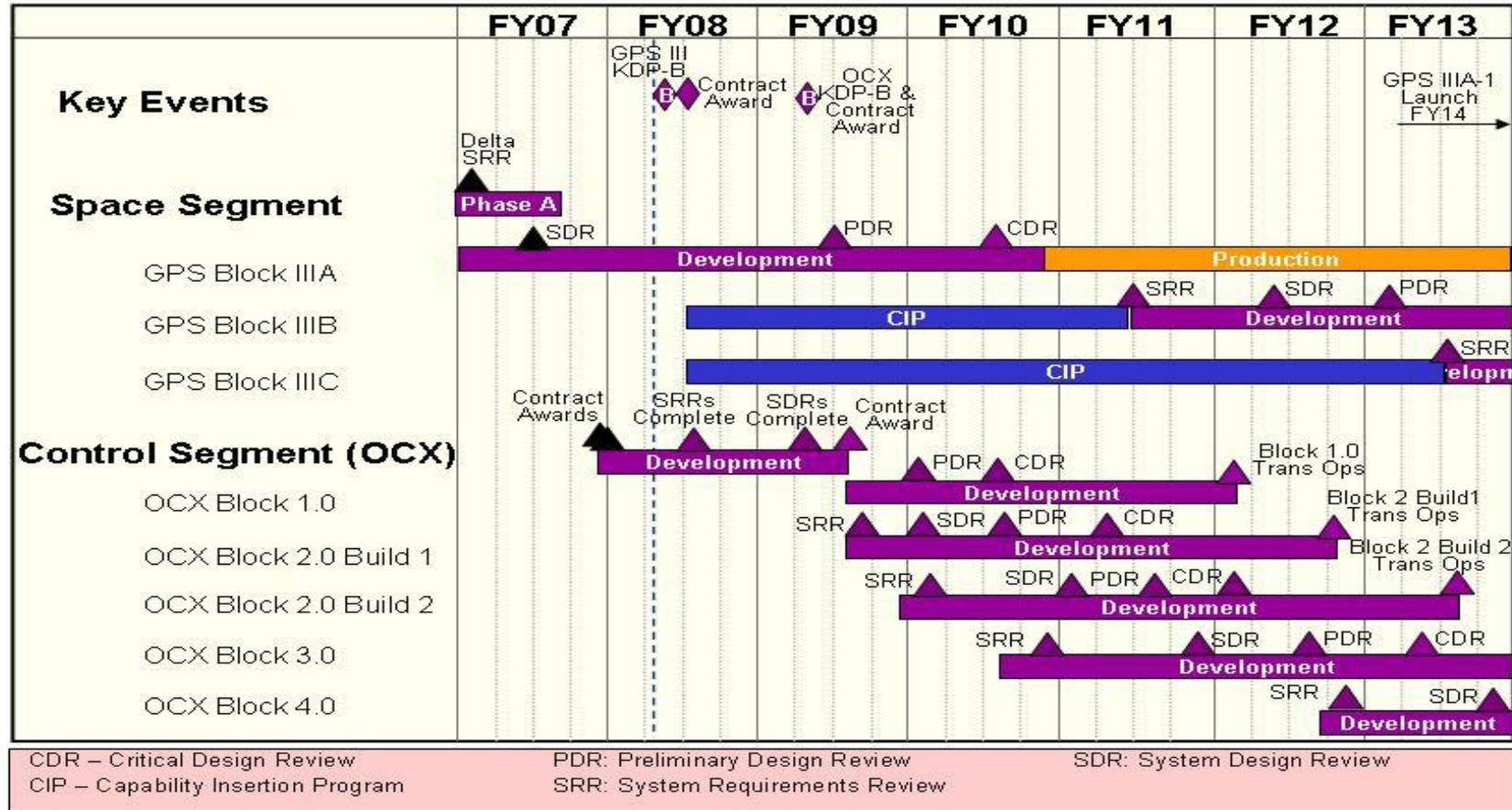


Exhibit R-4a, RDT&E Schedule Detail

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III - Operational Control Segment

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(U) Schedule Profile

FY 2007

FY 2008

FY 2009

(U)