

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305165F / NAVSTAR Global Positioning System (Space and Control Segments)							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	2,226.120	12.436	-	-	-	-	-	-	-	-	-	2,238.556
673030: NAVSTAR GPS (Space & Control)	2,226.120	12.436	-	-	-	-	-	-	-	-	-	2,238.556
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 166												
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
No FY2015 funding requested. In FY2013, Navstar GPS (Space & Control) Project 673030 is complete.												
A. Mission Description and Budget Item Justification												
This Program Element (PE) funds Research and Development (R&D) for the Navstar Global Positioning System (GPS) Space and Control segments for GPS Block II satellites. It includes, but is not limited to: training simulators, Integrated Logistics Support (ILS) products, ground control segment development, sustaining engineering, space and ground segments upgrades, and R&D efforts to support GPS Block II system deployment including efforts to provide anti-jam capability through increased Military (M)-Code signal power. The Operational Control Segment (OCS) delivers control segment capabilities to support Block IIF satellites as well as the existing constellation of Block IIA/IIR/IIR-M satellites.												
Funding provides development of upgrades to integrate the Selective Availability Anti-Spoofing Module (SAASM) mission planning system (SMPS) and implement the new STRATCOM/SAASM operations concept. FY13 is the final year of funding.												
This program is in Budget Activity 7 - Operational Systems Development because it supports operational systems.												

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force								Date: March 2014			
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development				R-1 Program Element (Number/Name) PE 0305165F I NAVSTAR Global Positioning System (Space and Control Segments)							
B. Program Change Summary (\$ in Millions)				FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total			
Previous President's Budget				14.335	-	-	-	-			
Current President's Budget				12.436	-	-	-	-			
Total Adjustments				-1.899	-	-	-	-			
• Congressional General Reductions				-0.019	-						
• Congressional Directed Reductions				-	-						
• Congressional Rescissions				-	-						
• Congressional Adds				-	-						
• Congressional Directed Transfers				-	-						
• Reprogrammings				-	-						
• SBIR/STTR Transfer				-0.697	-						
• Other Adjustments				-1.183	-	-	-	-			
Change Summary Explanation											
FY13: \$-1.183M sequestration reduction											
In FY13, Navstar GPS (Space & Control) Project 673030 is complete.											
C. Accomplishments/Planned Programs (\$ in Millions)							FY 2013	FY 2014	FY 2015		
Title: OCS							12.436	-	-		
Description: Development of GPS Block II Operational Control Segment (OCS).											
FY 2013 Accomplishments:											
Completed ground segment upgrades and System Engineering & Integration (SE&I).											
Accomplishments/Planned Programs Subtotals							12.436	-	-		
D. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• MPAF: BA05: Line Item # MGPS00: Global Positioning (Space)	48.084	55.895	52.090	-	52.090	22.615	13.393	-	-	-	192.077
• OPAF: BA03: Line Item # 836790: Space Mods Space	7.182	9.774	12.656	-	12.656	11.960	1.990	-	-	-	43.562
• OPAF: BA05: Line Item # 861900: Spares and Repair Parts	0.324	0.252	0.309	-	0.309	0.537	0.474	0.423	0.431	0.894	3.644

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014	
Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>					R-1 Program Element (Number/Name) PE 0305165F / NAVSTAR Global Positioning System (Space and Control Segments)						
D. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Remarks E. Acquisition Strategy GPS OCS upgrade was competitively awarded to a single contractor (Lockheed Martin) in July 1995. Block IIF satellite and IIF ground systems development contract was competitively awarded to a single contractor (Boeing) in April 1996. The Single Prime Initiative (SPI) consolidated these efforts and was added to the Boeing IIF contract (with Lockheed Martin as a subcontractor) on 1 Oct 1999. GPS Modernization efforts Block IIR were awarded sole-source to Lockheed Martin under a new contract in August 2000. Modernization efforts for Block IIF were added to the existing contract with Boeing in 2002 as Engineering Change Proposals (ECPs).											
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force												Date: March 2014			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305165F / NAVSTAR Global Positioning System (Space and Control Segments)				Project (Number/Name) 673030 / NAVSTAR GPS (Space & Control)					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Navstar GPS OCS Development & IIF Modernization	C/Various	Boeing : Seal Beach, CA	1,470.445	-		-		-		-		-	-	1,470.445	-
Navstar GPS IIF Development	C/Various	Boeing : Seal Beach, CA	76.272	-		-		-		-		-	-	76.272	-
Navstar GPS Control Segment Support	MIPR	Various : Various,	40.860	-		-		-		-		-	-	40.860	-
Navstar GPS Completed Development Efforts	Various	Various : Various,	478.170	-		-		-		-		-	-	478.170	-
Navstar GPS OCS Prime Contract	C/Various	Boeing : Seal Beach, CA	0.000	3.000	Nov 2012	-		-		-		-	-	3.000	-
Navstar GPS SE&I	C/FFP	SAIC : El Segundo, CA	0.000	2.718	Nov 2012	-		-		-		-	-	2.718	-
Subtotal			2,065.747	5.718		-		-		-		-	-	2,071.465	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Navstar GPS Completed T&E Efforts	Various	Various : Various,	4.588	-		-		-		-		-	-	4.588	-
Navstar GPS Integrated System Test (IST)	PO	Various : Various,	3.635	-		-		-		-		-	-	3.635	-
Subtotal			8.223	-		-		-		-		-	-	8.223	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force												Date: March 2014			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305165F / NAVSTAR Global Positioning System (Space and Control Segments)				Project (Number/Name) 673030 / NAVSTAR GPS (Space & Control)					
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Navstar GPS System Engineering/Support	C/CPAF	Various : Various,	75.653	-		-		-		-		-	-	75.653	-
Navstar GPS Program Office Engineering Support (FFRDC)	Various	Aerospace : El Segundo, CA	3.544	5.756	Oct 2012	-		-		-		-	-	9.300	-
Navstar GPS Program Management Administration (PMA)	Various	Various : ,	72.953	0.962	Nov 2012	-		-		-		-	-	73.915	-
Subtotal			152.150	6.718		-		-		-		-	-	158.868	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			2,226.120	12.436		-		-		-		-	-	2,238.556	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity

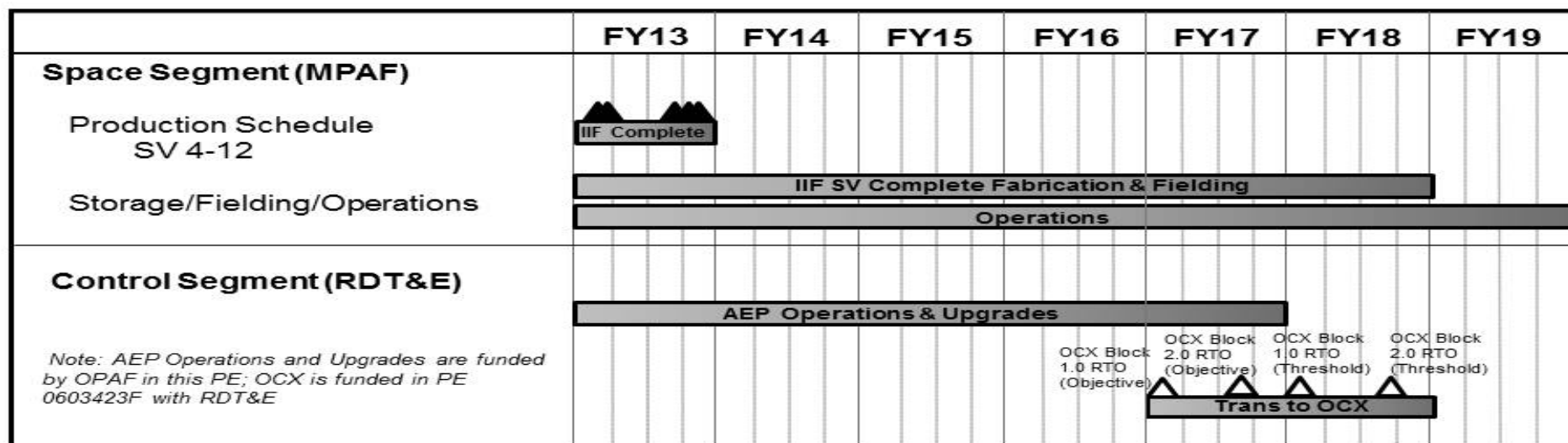
3600 / 7

R-1 Program Element (Number/Name)

PE 0305165F / NAVSTAR Global
Positioning System (Space and Control
Segments)

Project (Number/Name)

673030 / NAVSTAR GPS (Space & Control)



AEP – Architecture Evolution Plan
OCX – Next Generation Operational Control System
RTO – Ready to Transition to Operations
SV – Space Vehicle

MOT&E – Multi-Service Operational Test & Evaluation
RDT&E – Research, Development, Test and Evaluation
SAASM – Selective Availability Anti-Spoofing Module

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305165F / NAVSTAR Global Positioning System (Space and Control Segments)	Project (Number/Name) 673030 / NAVSTAR GPS (Space & Control)	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development effort complete	4	2013	4	2013