

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force	<b>DATE:</b> April 2013
--	-------------------------

<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305165F: <i>NAVSTAR Global Positioning System (Space and Control Segments)</i>
--	--

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	16.820	14.335	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
673030: NAVSTAR GPS (Space & Control)	-	16.820	14.335	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

**MDAP/MAIS Code(s):** 166

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Note**

No FY2014 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 2014 Air Force									DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: Research, Development, Test & Evaluation, Air Force				PE 0305165F: NAVSTAR Global Positioning System (Space and Control Segments)							
BA 7: Operational Systems Development											
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total					
Previous President's Budget		17.704	14.335	0.000	-	0.000					
Current President's Budget		16.820	14.335	0.000	-	0.000					
Total Adjustments		-0.884	0.000	0.000	-	0.000					
• Congressional General Reductions		-	0.000								
• Congressional Directed Reductions		-	0.000								
• Congressional Rescissions		0.000	0.000								
• Congressional Adds		-	0.000								
• Congressional Directed Transfers		-	0.000								
• Reprogrammings		0.000	0.000								
• SBIR/STTR Transfer		-0.240	0.000								
• Other Adjustments		-0.644	0.000	0.000	-	0.000					
C. Accomplishments/Planned Programs (\$ in Millions)					FY 2012	FY 2013	FY 2014				
Title: OCS					16.820	14.335	0.000				
Description: Development of GPS Block II Operational Control System (OCS).											
FY 2012 Accomplishments:											
Continued ground segment upgrades and System Engineering & Integration (SE&I).											
FY 2013 Plans:											
Complete ground segment upgrades and System Engineering & Integration (SE&I).											
Accomplishments/Planned Programs Subtotals					16.820	14.335	0.000				
D. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• MPAF: BA05: Line Item #	107.689	58.147	55.997		55.997	20.262	8.642	0.000	0.000	0.000	3,883.803
MGPS00: Global Positioning (Space)											
• OPAF: BA03: Line Item #	4.399	7.353	11.431		11.431	12.768	12.026	2.000	0.000	0.000	52.780
836790: Space Mods Space											
• OPAF: BA05: Line Item #	0.377	0.388	0.394		0.394	0.404	0.412	0.417	0.425	1.327	4.144
861900: Spares and Repair Parts											

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force										<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>					<b>R-1 ITEM NOMENCLATURE</b> PE 0305165F: <i>NAVSTAR Global Positioning System (Space and Control Segments)</i>						
<b>D. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
<b>Remarks</b>											
<b>E. Acquisition Strategy</b> 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 for the 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).											
<b>F. Performance Metrics</b> 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**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Air Force</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						<b>R-1 ITEM NOMENCLATURE</b> PE 0305165F: NAVSTAR Global Positioning System (Space and Control Segments)						<b>PROJECT</b> 673030: NAVSTAR GPS (Space & Control)			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
OCS Development & IIF Modernization	C/Various	Boeing:Seal Beach, CA	-	3.982	Nov 2011	0.000		0.000		-		0.000	0.000	3.982	
IIF Development	C/Various	Boeing:Seal Beach, CA	-	0.000		0.000		0.000		-		0.000	0.000	0.000	
Control Segment Support	MIPR	Various:Various,	-	3.783	Nov 2011	0.000		0.000		-		0.000	0.000	3.783	
Completed GPS Development Efforts	Various	Various:Various,	-	0.000		0.000		0.000		-		0.000	0.000	0.000	
OCS Prime Contract	C/Various	Boeing:Seal Beach, CA	-	0.000		10.405	Nov 2012	0.000		-		0.000	0.000	10.405	
<b>Subtotal</b>			0.000	7.765		10.405		0.000		0.000		0.000	0.000	18.170	
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
System Engineering/Support	C/CPAF	Various:Various,	-	0.333	Nov 2011	0.000		0.000		-		0.000	0.000	0.333	
FFRDC	Various	Aerospace:El Segundo, CA	-	0.764	Nov 2011	0.000		0.000		-		0.000	0.000	0.764	
Directorate Support	Various	Various:Various,	-	0.000		0.143	Nov 2012	0.000		-		0.000	0.000	0.143	
<b>Subtotal</b>			0.000	1.097		0.143		0.000		0.000		0.000	0.000	1.240	
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Completed GPS T&E Efforts	Various	Various:Various	-	0.000		0.000		0.000		-		0.000	0.000	0.000	
Integrated System Test (IST)	PO	Various:Various,	-	3.635	Jan 2012	0.000		0.000		-		0.000	0.000	3.635	
<b>Subtotal</b>			0.000	3.635		0.000		0.000		0.000		0.000	0.000	3.635	

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Air Force												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0305165F: <i>NAVSTAR Global Positioning System (Space and Control Segments)</i>				<b>PROJECT</b> 673030: <i>NAVSTAR GPS (Space &amp; Control)</i>					

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Administration (PMA)	Various	Various;	-	4.323	Nov 2011	3.787	Nov 2012	0.000		-		0.000	0.000	8.110	
<b>Subtotal</b>			0.000	4.323		3.787		0.000		0.000		0.000	0.000	8.110	

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	0.000	16.820	14.335	0.000	0.000	0.000	0.000	31.155	

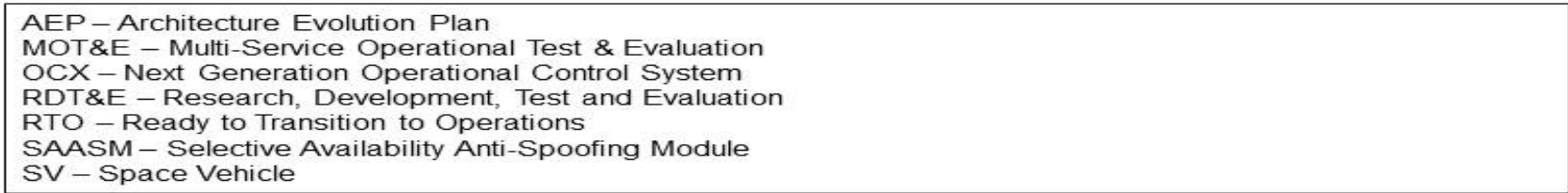
  

**Remarks**

**UNCLASSIFIED**

**APPROPRIATION/BUDGET ACTIVITY**  
3600: *Research, Development, Test & Evaluation, Air Force*  
BA 7: *Operational Systems Development*

<b>PROJECT</b>
673030: NAVSTAR GPS (Space & Control)



**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305165F: <i>NAVSTAR Global Positioning System (Space and Control Segments)</i>	<b>PROJECT</b> 673030: <i>NAVSTAR GPS (Space &amp; Control)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Critical Ops Modifications	1	2012	2	2013
Certification for SAASM Multi-Service Operational Test & Evaluation (MOT&E)	1	2013	1	2013