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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305165F: <i>NAVSTAR GPS (Space)</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	33.404	17.704	14.335	-	14.335	-	-	-	-	Continuing	Continuing
673030: <i>NAVSTAR GPS (Space & Control)</i>	33.404	17.704	14.335	-	14.335	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

The Cost to Complete and Total Cost for MDAP projects in this program element are documented in the R3. The Cost to Complete and Total Cost on the R2 are entered as "Continuing" and not reflective of the total cost for MDAP projects since the R2 does not account for prior years funding

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 will provide continued development of upgrades to integrate the SAASM mission planning system (SMPS) and implement the new STRATCOM/SAASM operations concept.

This program is in Budget Activity 7 - Operational Systems Development because it supports operational systems.

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B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	34.471	17.893	14.950	-	14.950
Current President's Budget	33.404	17.704	14.335	-	14.335
Total Adjustments	-1.067	-0.189	-0.615	-	-0.615
• Congressional General Reductions	-	-0.189			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.335	-			
• Other Adjustments	-0.732	-	-0.615	-	-0.615

Change Summary Explanation

FY11: SBIR (-0.335); Congressional General Reductions (-0.267); Reallocation of funding to higher Department priorities (-0.465)

FY12: FFRDC: (-0.189)

FY13: Reallocation of funding to higher Department priorities: (-0.615)

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: OCS	33.404	17.704	14.335
Description: Development of GPS Block II Operational Control System (OCS).			
FY 2011 Accomplishments: Operational Control Segment Ops Acceptance and Turnover; provided ground segment upgrades. System Engineering & Integration (SE&I) and Program Support.			
FY 2012 Plans: Continue with ground segment upgrades, System Engineering & Integration (SE&I) and Program Support.			
FY 2013 Plans: Complete ground segment upgrades, System Engineering & Integration (SE&I) and Program Support.			
Accomplishments/Planned Programs Subtotals			
	33.404	17.704	14.335

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D. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• P-22: <i>MPAF, PE 0305165F, Global Positioning System (Space)</i>	64.252	107.689	58.147	0.000	58.147	77.602	7.328	0.000	0.000	0.000	4,279.601
• P-42: <i>OPAF, PE 0305165F, Navstar GPS Space</i>	0.000	0.000	0.000	0.000	0.000	7.500	8.071	2.026	0.000	0.000	17.597
• P-47: <i>OPAF, PE 0305165F, Space Mods Space</i>	7.221	7.202	7.353	0.000	7.353	0.000	0.000	0.000	0.000	Continuing	Continuing
• P-71: <i>OPAF, PE 0305165F, Spares and Repair Parts</i>	0.357	0.377	0.388	0.000	0.388	0.394	0.404	0.412	0.417	Continuing	Continuing

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 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).

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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Air Force **DATE:** February 2012

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Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
OCS Development & IIF Modernization	C/Various	Boeing:Seal Beach, CA	1,466.463	4.866	Nov 2011	-		-		-	0.000	1,471.329	0.000
IIF Development	C/Various	Boeing:Seal Beach, CA	76.272	-		-		-		-	0.000	76.272	0.000
Control Segment Support	MIPR	Various:Various,	37.077	3.783	Nov 2011	-		-		-	0.000	40.860	0.000
Completed GPS Development Efforts	Various	Various:Various	165.983	-		-		-		-	0.000	165.983	0.000
OCS Prime Contract	C/Various	Boeing:Seal Beach, CA	-	-		10.405	Nov 2012	-		10.405	0.000	10.405	0.000
Subtotal			1,745.795	8.649		10.405		-		10.405	0.000	1,764.849	0.000

Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering/Support	C/CPAF	Various:Various,	75.320	0.333	Nov 2011	-		-		-	0.000	75.653	0.000
FFRDC	Various	Aerospace:El Segundo, CA	2.780	0.764	Nov 2011	-		-		-	0.000	3.544	0.000
Directorate Support	Various	Various:Various,	-	-		0.143	Nov 2012	-		0.143	0.000	0.143	0.000
Subtotal			78.100	1.097		0.143		-		0.143	0.000	79.340	0.000

Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Completed GPS T&E Efforts	Various	Various:Various	4.588	-		-		-		-	0.000	4.588	0.000
Integrated System Test (IST)	PO	Various:Various,	-	3.635	Jan 2012	-		-		-	0.000	3.635	0.000
Subtotal			4.588	3.635		-		-		-	0.000	8.223	0.000

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force		DATE: February 2012
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SAASM Capability Complete	1	2011	2	2011
Certification for SAASM Multi-Service Operational Test & Evaluation (MOT&E)	4	2011	2	2012
Critical Ops Modifications	4	2011	2	2013