Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0305265F I GPS III Space Segment

Operational Systems Development

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	1,708.619	281.880	200.984	212.571	-	212.571	167.576	78.447	77.366	78.837	50.884	2,857.164
676007: DASS Integration, GPS	2.143	1.795	2.668	1.434	-	1.434	1.299	1.318	1.344	1.368	-	13.369
67A019: <i>GPS III</i>	1,706.476	280.085	198.316	211.137	-	211.137	166.277	77.129	76.022	77.469	50.884	2,843.795

MDAP/MAIS Code: 292

A. Mission Description and Budget Item Justification

The Global Positioning System (GPS) is a space based navigation system that fills validated Joint Service requirements for worldwide, accurate, common grid three dimensional positioning/navigation for military aircraft, ships, and ground personnel. The consistent accuracy, unaffected by location or weather and available in real time, significantly improves effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. GPS must comply with Title 10 United States Code (USC) 2281 which requires that the Secretary of Defense ensures that continued sustainment and operations of GPS for military and civilian purposes and 51 USC sec 50112 which requires that GPS complies with certain standards and facilitates international cooperation.

The system is composed of three segments: user equipment (funded under PE 0305164F), space (funded under this PE and PE 0305165F) and a control network (funded under PE 0305165F and PE 0603423F). The satellites broadcast high accuracy data using precisely synchronized signals which are received and processed by user equipment installed in military platforms. This equipment computes the platform position and velocity and provides steering vectors to target locations or navigation waypoints. The control segment provides daily updates to the navigation messages broadcast from the satellites to maintain system precision in three dimensions to 16 meters spherical error probable worldwide. Additionally, GPS supports the United States Nuclear Detonation (NUDET) Detection System (NDS) mission and provides strategic and tactical support to the following Department of Defense (DoD) missions: Joint Operations by providing capabilities for Positioning, Navigation, and Timing (PNT); Command, Control, Communications, and Intelligence; Special Operations; Military Operations in Urban Terrain; Defense-Wide Mission Support; Air Mobility; and Space Launch Orbital Support.

GPS III is the next generation Space Vehicle (SV) to join the GPS constellation. GPS III SVs will deliver significant enhancements, including a new civil (L1C) Galileo-compatible signal, and enhanced anti-jam power. SV11 will add two additional secondary payloads, Search and Rescue/GPS (SAR/GPS) and Laser Retroreflector Array (LRA). The SAR/GPS payload provided by Canada will fill a validated National Search and Rescue Committee requirement to provide enduring, space-based distress alerting capability to detect, locate, and relay distress alerts to fulfill its responsibilities under international agreements for Search and Rescue. SAR integration costs are funded by the Coast Guard. LRA, built by the Naval Research Lab (NRL) is a passive reflector that will improve accuracy and provide better ephemeris data. National Geospatial-Intelligence Agency (NGA) funds the integration costs of LRA.

RDT&E, AF PE 0305265F funds GPS III and will support research, development, test and evaluation of GPS III SV01-02, and risk-reducing simulators through a structured systems engineering approach that matures and delivers space vehicles for launch. Space Modernization Initiatives (SMI) focuses on space vehicle affordability and capability, addresses future requirements and resilience needs, and expands the industrial base to enhance future competition. For example, this

PE 0305265F: GPS III Space Segment Air Force

[#] The FY 2015 OCO Request will be submitted at a later date.

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 0305265F I GPS III Space Segment

includes the initial systems design work for incorporating space vehicle technology improvements on items such as second source atomic clocks, smart solar cells that provide 30% more efficiency, alternate transmitter assembly that provides increased power efficiency at a reduced recurring cost, lithium ion batteries which address battery obsolescence issues and offer substantial weight savings, and a dual space-ground link system (SGLS)/Unified S-Band (USB) communication channel to be compliant with the USB interface. RDT&E funds will also be used for GPS III SV09+ risk reduction towards obsolescence and affordability initiatives. GPS III SVs 03-08 are in the Production and Deployment Phase. The Air Force is seeking authorization to exercise the option for SV09-10 under the current contract as technical equivalents of GPS III SV01-08. The Air Force is also assessing the business case for the future use of a multi-year procurement (MYP) strategy for GPS III.

Additionally the program includes engineering studies and analyses, trade studies, system development, test and evaluation efforts, integrated logistics support products, on-orbit support, and mission operations supporting civil and military applications that protect U.S. military and allies' use of GPS.

This program is a Budget Activity 7 - Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	318.992	221.276	215.224	-	215.224
Current President's Budget	281.880	200.984	212.571	-	212.571
Total Adjustments	-37.112	-20.292	-2.653	-	-2.653
 Congressional General Reductions 	-0.421	-0.292			
 Congressional Directed Reductions 	-	-20.000			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-9.601	-			
Other Adjustments	-27.090	-	-2.653	-	-2.653

Change Summary Explanation

FY13: -\$27.090M seguestration reduction

FY14: -\$20.000M Congressional reduction for ahead of need.

FY15: -\$2.653M inflation adjustment

PE 0305265F: GPS III Space Segment

Air Force Page 2 of 14 R-1 Line #221

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force										Date: Marc	ch 2014	
Appropriation/Budget Activity 3600 / 7					, , , ,					Number/Name) DASS Integration, GPS		
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
676007: DASS Integration, GPS	2.143	1.795	2.668	1.434	-	1.434	1.299	1.318	1.344	1.368	-	13.369
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Search and Rescue GPS (SAR/GPS) is an approved secondary payload on GPS III beginning with Space Vehicle (SV) 11. SAR/GPS fills validated National Search and Rescue Committee requirements to provide enduring, space-based distress alerting capability to detect, locate, and relay distress alerts to fulfill its responsibilities under international agreements for Search and Rescue.

In addition, the USAF has on-going requirements to rescue US Military personnel in harm's way per Air Force Doctrine Document 2-1.6. The implementation of a US Mid Earth Orbiting Search and Rescue Space Segment is via a Canadian-Provided 406 MHz SAR repeater on GPS III SVs. This system presents a cost effective, low-risk opportunity that accommodates existing and planned 406 MHz beacons across the globe. Per NSPD-39, USAF and USCG, the US operators of the civil COSPAS/ SARSAT system and the international search and rescue system, share costs (50/50) associated with integrating the Canadian provided SAR repeater to GPS III beginning with SV11. Costs presented in this document represent the USAF 50% Share.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: SAR/GPS	1.795	2.668	1.434
Description: Nonrecurring costs for systems engineering activities to integrate the payload onto the GPS III SVs starting with SV11.			
FY 2013 Accomplishments: Continued design and development of SAR/GPS antennas, associated hardware and cabling, and space vehicle software; system engineering associated with integrating SAR payload onto the GPS III SVs; enterprise-level System Engineering, Integration, Test, and Program Management (SEIT/PM); completed an approved delta Preliminary Design Review (dPDR) for integrating the SAR/GPS design. Costs do not include development and production of Canadian payload unit.			
FY 2014 Plans: Design and develop SAR/GPS antennas, associated hardware and cabling, and space vehicle software; system engineering associated with integrating SAR payload onto the GPS III SVs; system engineering and program management (SE/PM), associated with integrating SAR payload onto the GPS III SVs; enterprise-level SEIT/PM; and interface control work; continuing to mature the design to culminate into a Critical Design Review in FY16. Costs do not include development and production of Canadian payload unit.			
FY 2015 Plans:			

PE 0305265F: GPS III Space Segment Air Force

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force			Date: March 2014
1	R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment	, ,	lumber/Name) DASS Integration, GPS
300077	FE 0303203FT GF3 III Space Segment	07000112	PASS Integration, GFS

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Continue to design and develop SAR/GPS antennas, associated hardware and cabling, and space vehicle software; systems engineering associated with integrating SAR payload onto the GPS III SVs; enterprise-level SEIT/PM; continue to mature the design to culminate into a Critical Design Review in FY16. Costs do not include development and production of Canadian payload unit.			
Accomplishments/Planned Programs Subtotals	1.795	2.668	1.434

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 MPAF: BA05: Line Item 	492.260	450.238	292.397	-	292.397	414.982	854.612	814.663	914.139	4,782.520	9,015.811
# GPSIII: <i>GPS III TOA</i>											
 USCG: U.S. Coast Guard 	2.915	2.915	2.915	-	2.915	2.915	2.915	2.915	2.915	5.830	26.235
 NGA: National Geospatial- 	0.078	0.100	0.200	-	0.200	1.000	1.500	1.500	1.500	4.900	10.778
Intelligence Agency											

Remarks

D. Acquisition Strategy

SAR/GPS will be integrated as part of the GPS III program and follows the GPS III acquisition strategy with funding provided by USCG and USAF.

E. 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.

PE 0305265F: GPS III Space Segment

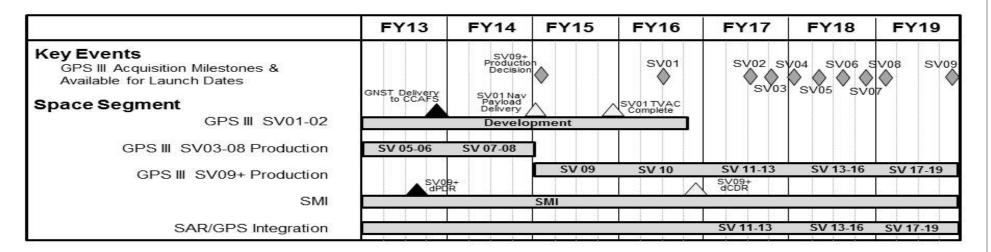
Air Force

Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2015 Air F	orce								Date:	March 20	14	
Appropriation/Budg 3600 / 7	et Activity	1										(Numbe	r/ Name) ntegration	, GPS	
Product Developme	nt (\$ in M	illions)		FY 2013		FY 2014		FY 2015 Base			2015 CO	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 o Contrac
Search and Rescue SAR/ GPS	C/CPIF	Lockheed Martin : Newtown, PA	2.143	1.795	Dec 2012	2.668	Dec 2013	1.434	Dec 2014	-		1.434	5.329	13.369	-
		Subtotal	2.143	1.795		2.668		1.434		-		1.434	5.329	13.369	-
Support (\$ in Million	ıs)			FY 2	2013	FY 2	2014		2015 ise		2015 CO	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	Total Cost	Target Value o Contrac
		Subtotal	-	-		-		-		-		-	-	-	-
Test and Evaluation	(\$ in Milli	ions)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	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 o Contrac
	.,	Subtotal	-	-		-		-		-		-	-	-	-
Management Service	es (\$ in M	lillions)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	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	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-		-	-	-	
			Prior						2015		2015	FY 2015	Cost To	Total	Target Value o
			Years	FY 2	2013	FY 2	2014	Ва	ise	0	CO	Total	Complete	Cost	Contrac

Remarks

PE 0305265F: GPS III Space Segment

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force		Date: March 2014	
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)	
3600 / 7	PE 0305265F I GPS III Space Segment	676007 I DASS Integration, GPS	



CDR - Critical Design Review
CCAFS - Cape Canaveral Air Force Station
d - Delta
GNST - GPS Non-flight Satellite Test Bed

PDR - Preliminary Design Review
SMI - Space Modernization Initiative
SAR - Search and Rescue
SV - Space Vehicle

TVAC - Thermal Vacuum

PE 0305265F: GPS III Space Segment

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force		Date: March 2014	
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 7	PE 0305265F I GPS III Space Segment	676007 <i>I D</i>	DASS Integration, GPS

Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
GPS III SV 09+ Delta Preliminary Design Review (dPDR)	3	2013	3	2013
GPS III SV09+ Follow-On Production Decision	1	2015	1	2015
GPS III SV 09+ Delta Critical Design Review (dCDR)	4	2016	4	2016

PE 0305265F: GPS III Space Segment

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force Date: March 2014											ch 2014	
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment Project (N 67A019 / 0					Number/Name) GPS III					
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
67A019: <i>GPS III</i>	1,706.476	280.085	198.316	211.137	-	211.137	166.277	77.129	76.022	77.469	50.884	2,843.795
Quantity of RDT&E Articles	-	-	-	-	-	_	-	-	-	-		

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

GPS III is the next generation Space Vehicle (SV) supporting the GPS constellation. GPS III SVs will deliver significant enhancements, including a new civil (L1C) Galileo-compatible signal, enhanced anti-jam power, and a growth path to full warfighter capabilities. GPS III SV03-08 is in the Production & Deployment Phase.

Funds in this project are for GPS III SV01-08 design and development and will support research, development, test and evaluation of GPS III SV01-02, and risk-reducing simulators through a structured systems engineering approach that matures and delivers space vehicles for launch. Space Modernization Initiatives (SMI) focuses on space vehicle affordability and capability, addresses future requirements and resilience needs, and expands the industrial base to enhance future competition. For example, this includes the initial systems design work for incorporating space vehicle technology improvements on items such as second source atomic clocks, smart solar cells that provides 30% more efficiency, alternate transmitter assembly that provides increased power efficiency at a reduced recurring cost, lithium ion batteries which address battery obsolescence issues and also offer a substantial weight savings, and a dual space-ground link system (SGLS)/Unified S-Band (USB) communication channel to be compliant with the USB interface.

Additionally, the program includes enterprise studies and analyses, trade studies, system development, test and evaluation efforts, integrated logistics support products, on-orbit support, and mission operations supporting civil applications that protect U.S. military and allies' use of GPS.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: GPS III SV01-2	225.649	183.722	162.955
Description: Development, test and evaluation of two GPS III space vehicles and associated simulators, engineering studies and analyses, trade studies, system development, test and evaluation efforts, and integrated logistics support products.			
FY 2013 Accomplishments: Continued GPS III Space Vehicle (SV) development, SE&I, technical and program support. Completed flight software (FSW) qualification for the on-board computer, delivered SV01 and SV02 communication flight units, and the GPS Non-Flight Satellite Testbed (GNST) mate of system and core modules. Delivered GPS Satellite Simulators (GSS), and shipped GNST to Cape Canaveral Air Force Station (CCAFS).			
FY 2014 Plans:			

PE 0305265F: GPS III Space Segment Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force		Date: N	March 2014	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305265F / GPS /// Space Segment	Project (Number/l 67A019 / GPS III	Name)	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Continue GPS III SV development, SE&I, technical and program support. the GPS III development program, primarily in the GPS III SV01 Navigatio		n of		
FY 2015 Plans: Continue GPS III space vehicle development, SE&I, technical and program (NPE). Complete SV01 Thermal Vacuum (TVAC) testing and complete al		nt		
Title: Space Modernization Initiative (SMI)		43.400	-	32.90
Description: Development activities to support the integration of redesign issues related to design, systems engineering, program management, obscapability maturation and risk reduction.				
FY 2013 Accomplishments: Addressed affordability/obsolescence issues and initial system designs of reduction efforts. Additional activities included large solar cell, lithium ion liband capability work. GPS III SV09+ completed a delta Preliminary Design	fe testing, new hosted payload integration, and dua			
FY 2014 Plans: N/A				
FY 2015 Plans: Continue integration activities to support NDS, and SAR/GPS. Address aff designs of future capabilities, capability maturation and risk reduction effor activities to assess design maturity for the implementation of technology in batteries, alternate transmitter assembly, dual space-ground link system of the continuous continuous capabilities.	ts. Complete delta Critical Design Review (dCDR) approvements for items such as clocks, Lithium ion			
Title: Systems Engineering/Launch/On-Orbit Support & Testing		11.036	14.594	15.28
Description: Support costs include such activities as development of Laurground communications, on-orbit checkout, storage, testing, and system e		I		
FY 2013 Accomplishments: Continued systems engineering and integration support to the development and Evolved Expendable Launch Vehicle (EELV) early integration and mis Continued processing and technical support for the launch processing facilities.	sion unique items to support launch processing.	NFS		
FY 2014 Plans: Continue systems engineering and integration support to the development (EELV) early integration and mission unique items to support launch process.				

PE 0305265F: GPS III Space Segment Air Force

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Date: March 2014

280.085

198.316

211.137

Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number	/Name)	
3600 / 7	PE 0305265F I GPS III Space Segment	67A019 <i>I GPS III</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Checkout System (LCS) to command and control GPS III SVs after launch processing facility at CCAFS.	launch. Continue processing and technical support for t	he		
FY 2015 Plans: Continue systems engineering and integration support to the development (EELV) early integration and mission unique items to support launch				

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

launch processing facility at CCAFS.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	000	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 MPAF: BA05: Line Item 	492.260	450.238	292.397	-	292.397	414.982	854.612	814.663	914.139	4,782.520	9,015.811
# GPSIII: <i>GPS III TOA</i>											
 DOT: DOT (FAA) Civil Funding 	6.400	-	-	-	-	-	-	-	-	-	6.400

Accomplishments/Planned Programs Subtotals

Remarks

D. Acquisition Strategy

The GPS III next generation space segment rapidly and affordably responds to warfighter capability requirements. The acquisition approach utilizes a disciplined systems engineering approach which focuses on mitigating cost and schedule risk through a lower risk incremental delivery of mature technologies. This approach focuses on mission success and on time delivery. The GPS III SVs will have GPS IIF capabilities plus up to a 3x-8x increase in anti-jam signal power, 3x improved accuracy, 3+ year increased design life, a new civil (L1C) signal compatible with the European Galileo system and a satellite bus capable of supporting future SV capability additions.

E. 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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PE 0305265F: GPS III Space Segment

Air Force Page 10 of 14 R-1 Line #221

Checkout System (LCS) to command and control the GPS III SVs after launch. Continue processing and technical support for the

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Project (Number/Name)

3600 / 7 PE 0305265F / GPS III Space Segment 67A019 / GPS III

Product Developme	ent (\$ in Mi	illions)		FY 2	2013	FY 2	2014		2015 ise		2015 CO	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	Total Cost	Target Value of Contract
Block III Development	C/CPIF	Lockheed Martin : Newtown, PA	1,452.720	204.253	Feb 2013	164.685	Dec 2013	138.951	Dec 2014	-		138.951	91.528	2,052.137	-
Enterprise Studies	C/CPAF	SAIC : Huntington Beach, CA	26.444	4.743	Mar 2013	3.074	Dec 2013	3.182	Nov 2014	-		3.182	2.939	40.382	-
Modernization/SE & Technical Support	Various	Various : Various,	92.487	-		-		-		-		-	-	92.487	-
Launch & Checkout System (LCS)	C/CPIF	Raytheon : Aurora, CO	19.000	-		5.000	Jan 2014	4.000	Jan 2015	-		4.000	3.000	31.000	-
Launch Services	C/CPFF	ULA : Centennial, CO	1.058	1.360	Apr 2013	1.270	Mar 2014	0.240	Mar 2015	-		0.240	2.369	6.297	-
Launch Support	RO	45th : Cape Canaveral, FL	0.160	1.245	Apr 2013	1.300	Mar 2014	2.160	Mar 2015	-		2.160	4.975	9.840	-
SMI	C/CPIF	Lockheed : Newtown, PA	0.000	43.400	Mar 2013	-	Dec 2013	32.900	Dec 2014	-		32.900	338.287	414.587	-
		Subtotal	1,591.869	255.001		175.329		181.433		-		181.433	443.098	2,646.730	-

Remarks

SMI funding in FY12 is captured in the prime contractor line. Starting in FY13, SMI is broken out separately.

Support (\$ in Million	s)			FY	2013	FY 2	2014		2015 ase		2015 CO	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 Milli	ons)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise	FY 2		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
T&E	Various	Various : ,	0.871	3.688	May 2013	3.950	May 2014	5.700	May 2015	-		5.700	-	14.209	-
		Subtotal	0.871	3.688		3.950		5.700		-		5.700	-	14.209	-

PE 0305265F: GPS III Space Segment Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force

Appropriation/Budget Activity

3600 / 7

R-1 Program Element (Number/Name)
PE 0305265F / GPS III Space Segment
67A019 / GPS III

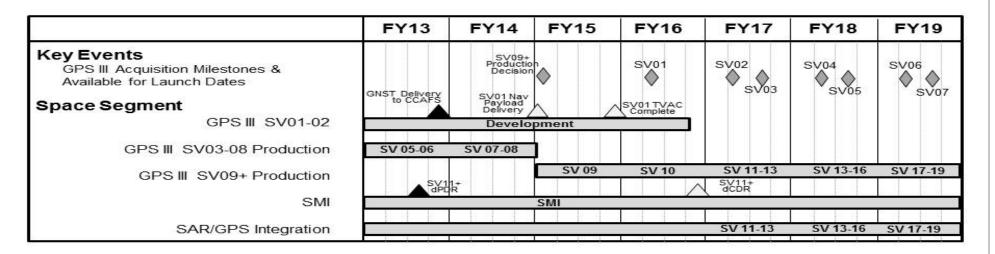
Management Servic	es (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2015 Base				FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Office Engineering Support (FFRDC)	RO	Aerospace : El Segundo, CA	36.692	12.140	Jan 2013	8.733	Dec 2013	12.000	Dec 2014	-		12.000	4.683	74.248	-
PMA	Various	Various : Various,	77.044	9.256	Apr 2013	10.304	Apr 2014	12.004	Apr 2015	-		12.004	-	108.608	-
		Subtotal	113.736	21.396		19.037		24.004		-		24.004	4.683	182.856	-

	Prior Years	FY 2	2013	FY 2	2014	FY 2 Ba		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	1,706.476	280.085		198.316		211.137	-		211.137	447.781	2,843.795	-

Remarks

PE 0305265F: GPS III Space Segment

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force		Date: March 2014	
Appropriation/Budget Activity	R-1 Program Element (Number/Name) PE 0305265E / GPS /// Space Segment	Project (Number/Name)	
3600 / 7	PE 0305265F I GPS III Space Segment	67A019 I GPS III	



CDR - Critical Design Review
CCAFS - Cape Canaveral Air Force Station
d - Delta
CNST - GPS Non-flight Satellite Test Bed

PDR - Preliminary Design Review
SMI - Space Modernization Initiative
SAR - Search and Rescue
SV - Space Vehicle

TVAC - Thermal Vacuum

PE 0305265F: GPS III Space Segment

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 7	PE 0305265F I GPS III Space Segment	67A019 / G	GPS III

Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
GPS III SV 09+ Delta Preliminary Design Review (dPDR)	3	2013	3	2013	
GPS Non-Flight satellite test-bed (GNST) delivery to CCAFS	4	2013	4	2013	
GPS III SV 09+ Follow-on Production Decision	1	2015	1	2015	
GPS III Space Vehicle (SV) 01 Navigation Payload Delivered	1	2015	1	2015	
GPS III Space Vehicle SV01 Complete Thermal Vacuum Testing	4	2015	4	2015	
GPS III Satellite Vehicle SV01 available for launch	2	2016	2	2016	
GPS III SV 11+ Delta Critical Design Review (dCDR)	4	2016	4	2016	
GPS III SV02 available for launch	2	2017	2	2017	

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