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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force										Date: February 2015		
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							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	1,710.414	195.950	211.907	180.902	-	180.902	154.630	76.731	78.176	79.575	170.134	2,858.419
676007: SAR- GPS	3.938	2.583	1.434	1.290	-	1.290	1.308	1.333	1.357	1.381	-	14.624
67A019: GPS III	1,706.476	193.367	210.473	179.612	-	179.612	153.322	75.398	76.819	78.194	170.134	2,843.795
Program 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. Two auxiliary payloads, Search and Rescue/GPS (SAR/GPS) and Laser Retroreflector Array (LRA) will be added no earlier than SV11. 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.												
This program funds GPS III and supports research, development, test and evaluation of GPS III SV01-02, and risk-reducing simulators through a systems engineering approach that matures and delivers SVs for launch.												

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force	Date: February 2015
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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 0305265F / <i>GPS III Space Segment</i>
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Additionally, the program includes SV01-02 engineering studies and analyses, trade studies, system development, test and evaluation efforts, integrated logistics support products, on-orbit support, and mission operations support for civil and military applications that protect U.S. military and allied use of GPS. Starting in FY14, all Space Modernization Initiatives (SMI) funding is re-allocated to cover SV01-02 development overruns.

Options for an alternate production source competition continue to be explored by USD(AT&L) for SVs no earlier than SV11. The Air Force's notional plan includes FY15-16 funding to mature up to three contractors' GPS production designs to facilitate a full and open competition in FY17 for up to 22 GPS III SVs with an expected contract award in FY17-FY18.

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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	200.984	212.571	167.576	-	167.576
Current President's Budget	195.950	211.907	180.902	-	180.902
Total Adjustments	-5.034	-0.664	13.326	-	13.326
• Congressional General Reductions	-	-0.664			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-5.034	-			
• Other Adjustments	-	-	13.326	-	13.326

Change Summary Explanation

FY16: +\$13.326M to fund contingency operations.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment				Project (Number/Name) 676007 / SAR- GPS			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
676007: SAR- GPS	3.938	2.583	1.434	1.290	-	1.290	1.308	1.333	1.357	1.381	-	14.624
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Search and Rescue GPS (SAR/GPS) is an approved auxiliary payload on GPS III beginning no earlier than SV11. 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 (MEO) 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 no earlier than SV11. Costs presented in this document represent the USAF 50% Share.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: SAR/GPS	2.583	1.434	1.290
Description: Nonrecurring costs for systems engineering activities to integrate the payload onto the GPS III SVs starting no earlier than SV11.			
FY 2014 Accomplishments: Continued design and development of SAR/GPS antennas, associated hardware and cabling, and SV 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. Costs do not include development and production of Canadian payload unit.			
FY 2015 Plans: 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. Costs do not include development and production of Canadian payload unit.			
FY 2016 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment				Project (Number/Name) 676007 / SAR- GPS				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Complete design and development of 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. Costs do not include development and production of Canadian payload unit.												
Accomplishments/Planned Programs Subtotals										2.583	1.434	1.290
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
• MPAF: BA05: Line Item # GPSIII: GPS III TOA	450.238	315.398	199.218	-	199.218	257.697	767.498	906.239	902.397	3,872.270	7,670.955	
• USCG: U.S. Coast Guard	2.915	2.915	2.915	-	2.915	2.915	2.915	2.915	2.915	2.915	23.320	
• NGA: National Geospatial- Intelligence Agency	0.100	0.200	1.000	-	1.000	1.500	1.500	1.500	1.500	3.400	10.700	
Remarks												
D. Acquisition Strategy												
SAR/GPS will be integrated as part of the GPS III program and the Air Force is conducting market research to review the industrial base for alternate sources to procure GPS III satellite vehicles (SVs).												
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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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force													Date: February 2015		
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 7				PE 0305265F / GPS III Space Segment				676007 / SAR- GPS							
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Search and Rescue SAR/ GPS	C/CPIF	Lockheed Martin : Newtown, PA	3.938	2.583	Dec 2013	1.434	Dec 2014	1.290	Dec 2015	-		1.290	5.379	14.624	-
Subtotal			3.938	2.583		1.434		1.290		-		1.290	5.379	14.624	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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			-	-		-		-		-		-	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			3.938	2.583		1.434		1.290		-		1.290	5.379	14.624	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force	Date: February 2015
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305265F / <i>GPS III Space Segment</i>	Project (Number/Name) 676007 / <i>SAR- GPS</i>
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	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
GPS III Production Readiness Decision (Phase 1)																												
GPS III Follow-On Production Buy Decision (Phase 2)																												
GPS III Delta Critical Design Review (dCDR)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force	Date: February 2015
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305265F / <i>GPS III Space Segment</i>	Project (Number/Name) 676007 / <i>SAR- GPS</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GPS III Production Readiness Decision (Phase 1)	2	2015	3	2015
GPS III Follow-On Production Buy Decision (Phase 2)	1	2017	1	2017
GPS III Delta Critical Design Review (dCDR)	2	2019	2	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment				Project (Number/Name) 67A019 / GPS III			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
67A019: GPS III	1,706.476	193.367	210.473	179.612	-	179.612	153.322	75.398	76.819	78.194	170.134	2,843.795
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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.

RDT&E, AF PE 0305265F funds GPS III and supports research, development, test and evaluation of GPS III SV01-02, and risk-reducing simulators through a systems engineering approach that matures and delivers SVs for launch. Space Modernization Initiative (SMI) funding ended in FY13. All future SMI funding has been re-allocated to cover GPS III SV01-02 development cost overrun. Any future SMI will be suspended until GPS III future SV acquisition options finalize.

In an effort to implement Better Buying Power 3.0 to control production costs the Air Force intends to create a competitive environment. Options for the GPS III Production Readiness competition continue to be explored by USD(AT&L) for SVs no earlier than SV11. The Air Force's notional plan is for a two-phased competition process. Phase one is a Production Readiness competition for up to three firm-fixed price contracts to gain insight into competitors' production designs for a GPS III SV competition in Phase two. Phase two will be a full and open competition for up to 22 GPS III Production SVs with an expected award in FY18.

This PE includes SV01-02 engineering studies and analyses, trade studies, system development, test and evaluation efforts, integrated logistics support products, on-orbit support, and mission operations support for civil and military applications that protect U.S. military and allied use of GPS.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: GPS III SV01-2	184.244	198.145	129.449
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 2014 Accomplishments: Continued GPS III SV development, SE&I, technical and program support. Delivered 97% of SV01 & 82% of SV02 hardware. Completed assembly and integration of the SV01 Mission Data Unit (MDU) & initiated assembly level test. Installed all SV01 transmitters onto the Navigation Payload. Integrated the Network Communications & Nuclear Detonation Detection System (NDS) payloads onto SV02.			
FY 2015 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment		Project (Number/Name) 67A019 / GPS III	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
Continue GPS III space vehicle development, SE&I, technical and program support. Deliver SV01 Navigation Payload and final bus assemblies. Complete SV01 system module core mate. Complete flight software qualification for the MDU. Complete SV01 Thermal Vacuum (TVAC) testing and complete all qualification testing. Deliver SV02 Navigation Payload.					
FY 2016 Plans: Continue GPS III space vehicle development, SE&I, technical and program support. Complete SV01 Available For Launch (AFL) activities. Complete SV02 Thermal Vacuum (TVAC) testing and complete all qualification testing.					
Title: Production Readiness Description: Options for the GPS III competition for future SVs continue to be explored by USD(AT&L). The Air Force's notional plan is for a two-phased competition process. Phase one is a Production Readiness competition for up to three firm-fixed price contracts to mature competitor's production designs for a GPS III SV competition in Phase two. Phase two will be a full and open Competition for up to 22 GPS III Production SVs starting no earlier than SV11 with an expected award in FY17-FY18. FY 2014 Accomplishments: N/A FY 2015 Plans: Begin funding to explore options with USD (AT&L) for a GPS III competition starting no earlier than SV11. FY 2016 Plans: Based on USD(AT&L) decision for GPS III beginning no earlier than SV11, notionally FY16 funds will mature up to three contractor's GPS III SV Production designs to facilitate a full and open competition in FY18 for up to 22 GPS.			-	3.500	41.900
Title: Systems Engineering/Launch/On-Orbit Support & Testing Description: Support costs include such activities as development of Launch & Checkout System (LCS) to ensure space and ground communications, on-orbit checkout, storage, testing, and system engineering. FY 2014 Accomplishments: Continued systems engineering and integration support to the development of SV01-02. Evolved Expendable Launch Vehicle (EELV) early integration and mission unique items to support launch processing. Continued development of GPS Launch and Checkout System (LCS) to command and control GPS III SVs after launch. Continued processing and technical support for the launch processing facility at CCAFS. FY 2015 Plans: Continue systems engineering and integration support to the development of SV01-02, and Evolved Expendable Launch Vehicle (EELV) early integration and mission unique items to support launch processing. Complete development of GPS Launch and			9.123	8.828	8.263

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										Date: February 2015		
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment				Project (Number/Name) 67A019 / GPS III				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Checkout System (LCS) to command and control the GPS III SVs after launch. Continue processing and technical support for the launch processing facility at CCAFS.												
FY 2016 Plans: Continue systems engineering and integration support to the development of SV01-02, and Evolved Expendable Launch Vehicle (EELV) early integration and mission unique items to support launch processing. Continue processing and technical support for the launch processing facility at CCAFS.												
Accomplishments/Planned Programs Subtotals										193.367	210.473	179.612
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
• MPAF: BA05: Line Item # GPSIII: GPS III TOA	450.238	315.398	199.218	-	199.218	257.697	767.498	906.239	902.397	3,872.270	7,670.955	
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.												
In an effort to implement Better Buying Power 3.0 to control production costs the Air Force intends to create a competitive environment. Options for the GPS III Production Readiness competition starting no earlier than SV11 continue to be explored by USD(AT&L). The Air Force's notional plan is for a two-phased competition process. Phase one is a Production Readiness competition for up to three firm-fixed price contracts to mature competitors' production designs for a GPS III SV competition in Phase two. Phase two will be a full and open competition for up to 22 GPS III Production SVs with an expected award in FY17-FY18.												
The GPS directorate received USD(AT&L) approval to purchase GPS III SV09-10 at the December 2014 Defense Acquisition Board in order to sustain the constellation while competitive options are pursued. The GPS III SV09-10 purchase will be on the current Lockheed Martin contract as technical equivalents of SV01-08.												
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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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment				Project (Number/Name) 67A019 / GPS III					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Block III Development	C/CPIF	Lockheed Martin : Newtown, PA	1,376.888	169.111	Dec 2013	172.365	Dec 2014	106.239	Dec 2015	-		106.239	388.286	2,212.889	-
Enterprise Studies	C/CPAF	SAIC : Huntington Beach, CA	31.187	3.074	Dec 2013	3.818	Nov 2014	3.293	Nov 2015	-		3.293	36.000	77.372	-
Modernization/SE & Technical Support	Various	Various : Various,	92.487	-		-		-		-		-	-	92.487	-
Launch & Checkout System (LCS)	C/CPIF	Raytheon : Aurora, CO	19.000	-		-		-		-		-	-	19.000	-
Launch Services	C/CPFF	ULA : Centennial, CO	2.418	1.272	Mar 2014	-		-		-		-	-	3.690	-
Launch Support	RO	45th : Cape Canaveral, FL	1.405	0.920	Mar 2014	1.560	Mar 2015	2.370	Mar 2016	-		2.370	0.930	7.185	-
SMI	C/CPIF	Lockheed : Newtown, PA	43.400	-	Dec 2013	-	Dec 2014	-	Dec 2015	-		-	-	43.400	-
Production Readiness	C/CPAF	TBD : TBD,	0.000	-		3.500	Aug 2015	41.900	Feb 2016	-		41.900	-	45.400	-
Subtotal			1,566.785	174.377		181.243		153.802		-		153.802	425.216	2,501.423	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 : ,	4.559	3.857	May 2014	3.450	May 2015	2.600	May 2016	-		2.600	9.950	24.416	-
Subtotal			4.559	3.857		3.450		2.600		-		2.600	9.950	24.416	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												Date: February 2015			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment				Project (Number/Name) 67A019 / GPS III					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Program Office Engineering Support (FFRDC)	RO	Aerospace : El Segundo, CA	48.832	5.760	Dec 2013	11.876	Dec 2014	12.580	Dec 2015	-		12.580	64.143	143.191	-
PMA	Various	Various : Various,	86.300	9.373	Apr 2014	13.904	Apr 2015	10.630	Apr 2016	-		10.630	54.558	174.765	-
Subtotal			135.132	15.133		25.780		23.210		-		23.210	118.701	317.956	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1,706.476	193.367		210.473		179.612		-		179.612	553.867	2,843.795	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force			Date: February 2015		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0305265F / GPS III Space Segment			Project (Number/Name) 67A019 / GPS III

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
GPS III Space Vehicle (SV) 01 Navigation Payload (PL) Delivered																												
GPS III Production Readiness Decision (Phase 1)																												
GPS III Laser Retro-reflector Array (LRA) Critical Design Review (CDR)																												
GPS III SV11+ Global Burst Detector (GBD) PL Redesign Preliminary Design Review																												
GPS III SV01 Complete Thermal Vacuum Testing																												
GPS III SV01 Available for Launch																												
SAR/GPS Payload Critical Design Review (CDR)																												
GPS III SV02 Available for Launch																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305265F / <i>GPS III Space Segment</i>	Project (Number/Name) 67A019 / <i>GPS III</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GPS III Space Vehicle (SV) 01 Navigation Payload (PL) Delivered	1	2015	1	2015
GPS III Production Readiness Decision (Phase 1)	2	2015	2	2015
GPS III Laser Retro-reflector Array (LRA) Critical Design Review (CDR)	2	2015	2	2015
GPS III SV11+ Global Burst Detector (GBD) PL Redesign Preliminary Design Review	4	2015	4	2015
GPS III SV01 Complete Thermal Vacuum Testing	4	2015	4	2015
GPS III SV01 Available for Launch	2	2016	2	2016
SAR/GPS Payload Critical Design Review (CDR)	3	2016	3	2016
GPS III SV02 Available for Launch	2	2017	2	2017