



Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-292



GPS III

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

UNCLASSIFIED

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Program Information

Designation And Nomenclature (Popular Name)

Global Positioning System III (GPS IIIA)

DoD Component

Air Force

Responsible Office

Responsible Office

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References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated January 31, 2011

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated January 31, 2011

Mission and Description

GPS is a satellite-based radio navigation system that provides worldwide military and civil users satellite signals they can process to determine accurate position, velocity, and time. On May 8, 2000, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) approved entry into the initial modernization efforts for Navstar GPS. GPS III is the next generation space vehicle (SV) that will provide significant enhancements to complete the modernization of the constellation. GPS III complies with 10 United States Code (USC) § 2281, ensuring the continued sustainment and operation of GPS for military and civilian purposes, and 42 USC § 14712, continuing as an international standard available on a continuous worldwide basis free of direct user fees.

GPS is drafting a modified acquisition strategy to streamline Blocks IIIB and IIIC into one increment called SV09+. This approach will leverage larger buying quantities and to take advantage of economies of scale while continuing to focus on sustaining the GPS satellite constellation. The GPS Directorate will deliver GPS III vehicles 1-8 in the first increment, and follow-on vehicles 9+ in the next increment. As captured in a July 23, 2007 Memorandum, the Joint Requirement Oversight Council validated and endorsed the GPS III Capability Development Document for vehicles 1-8, validating the requirements for the GPS III program. For military users, the Acquisition Category ID GPS III program provides increased anti-jam power to the earth coverage M-code signals. In addition, the program will initiate a capability insertion plan to develop, qualify, integrate, demonstrate, and insert future capabilities using a low-risk, high confidence growth path. GPS III satellites will transmit a new civil signal (L1C), which is compatible with the European Galileo satellite navigation system signal, E1. L1C is also compatible with those signals planned for broadcast on Japan's Quazi-Zenith Satellite System, a system meant to augment GPS services. Once implemented, the common civil signal will be jointly broadcast by up to 60 satellites from both GPS and Galileo constellations, further increasing the accuracy and availability of civil Position Navigation and Timing (PNT) solutions.

The primary GPS III missions are positioning, navigation, and precise time transfer. Via a hosted payload, the program will also support the United States Nuclear Detonation (NUDET) Detection System (NDS) mission for worldwide monitoring and detection of nuclear events. GPS provides strategic and tactical support to the following Department of Defense (DoD) missions: Joint Operations by providing capabilities for 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 provides Precise Positioning Service (PPS) to military operations and force enhancement, anti-exploitation techniques to prevent unauthorized use of the GPS PPS signal, and Standard Positioning Service to a broad spectrum of civil users.

Executive Summary

GPS III secured Milestone C approval and was authorized to begin long lead procurement. An Acquisition Decision Memorandum (ADM), an updated Acquisition Strategy Document and an updated Acquisition Program Baseline were signed by the Milestone Decision Authority, USD(AT&L), on January 31, 2011. The program is proceeding with manufacturing and is on track for Space Vehicle 1 (SV-1) launch availability date in May 2014.

The new strategy reflects a change to the FY 2012 President's Budget which changed the GPS III buy schedule to a 2-2-2 profile. The program has recognized an increased cost risk due to decreased efficiency and economies from a reduced production rate. The impact of the change will be fully recognized during renegotiation with the prime contractor in FY 2012.

Significant progress has been made in manufacturing. The GPS Non-Flight Satellite Test Bed (GNST), a fully functioning, less redundant prototype, is the first vehicle through the assembly, integration and test flow. This pathfinder is a major risk reduction activity for SV-1. All planned boxes, mass simulators, and flight harness have been installed on the GNST with the exception of the Navigation Payload, which will be integrated and tested with a prototype payload in the second quarter of FY 2012. The GNST was delivered to the GPS Processing Facility in Denver, CO on December 12, 2011 after completing its test program in Newtown, PA. Final assembly, integration and test procedures will be completed in Denver. In addition to the progress of the GNST, SV-1 assembly with propulsion subsystem manufacturing began at Lockheed Martin's Stennis facility in December 2011.

Initial deliveries of the GPS Software Simulator were delivered to the Next Generation Operational Control System (OCX) on June 22, 2011 and November 28, 2011, a critical step for continued integration in development of future GPS Space and Ground Systems. The communication unit Software Integration Qualification Test was also completed August 24, 2011.

The program does not have any significant software issues at this time.

Threshold Breaches

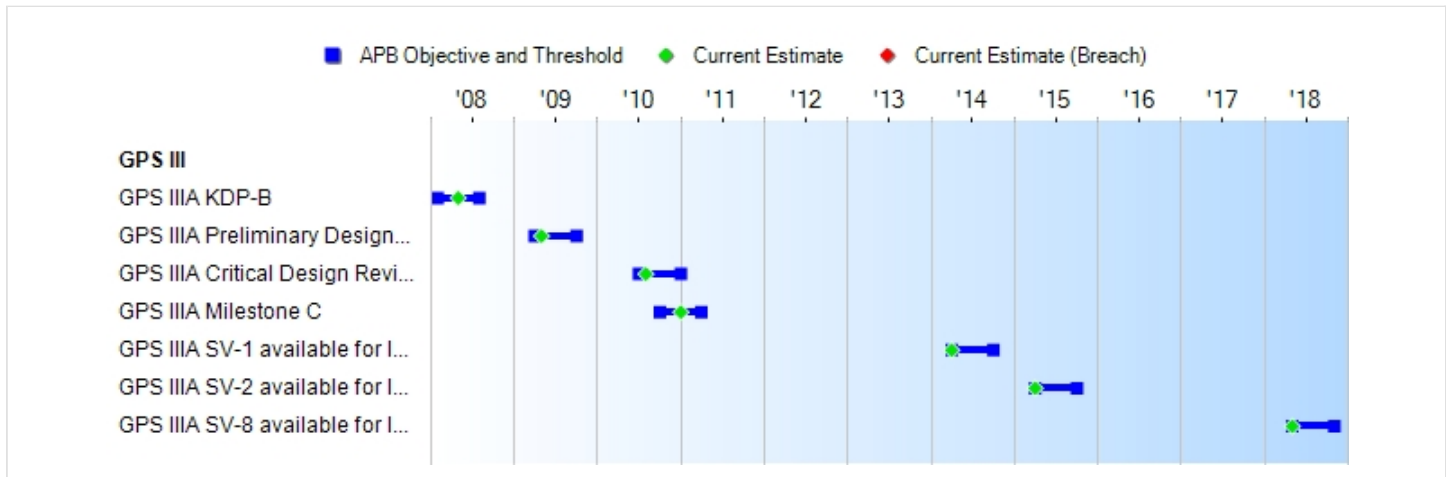
APB Breaches

Schedule		<input type="checkbox"/>
Performance		<input type="checkbox"/>
Cost	RDT&E	<input type="checkbox"/>
	Procurement	<input type="checkbox"/>
	MILCON	<input type="checkbox"/>
	Acq O&M	<input type="checkbox"/>
Unit Cost	PAUC	<input type="checkbox"/>
	APUC	<input type="checkbox"/>

Nunn-McCurdy Breaches

Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
GPS IIIA KDP-B	FEB 2008	FEB 2008	AUG 2008	MAY 2008
GPS IIIA Preliminary Design Review	APR 2009	APR 2009	OCT 2009	MAY 2009
GPS IIIA Critical Design Review	JUL 2010	JUL 2010	JAN 2011	AUG 2010
GPS IIIA Milestone C	OCT 2010	OCT 2010	APR 2011	JAN 2011
GPS IIIA SV-1 available for launch	APR 2014	APR 2014	OCT 2014	APR 2014
GPS IIIA SV-2 available for launch	APR 2015	APR 2015	OCT 2015	APR 2015
GPS IIIA SV-8 available for launch	MAY 2018	MAY 2018	NOV 2018	MAY 2018

Acronyms And Abbreviations

GPS - Global Positioning System
 KDP - Key Decision Point
 SV - Space Vehicle

Change Explanations

None

Memo

GPS III consists of what was previously known as GPS IIIA (SVs 01-08).

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Backward Compatibility	All modifications made to the existing GPS Space Segment and Control Segment shall allow continued operation of existing ICD-GPS-200 and 700, IS-GPS-705, and SS-GPS-001 compliant User Equipment (UE) and continued operation of legacy receivers (to include Federal augmentation system receivers).	All modifications made to the existing GPS Space Segment and Control Segment shall allow continued operation of existing ICD-GPS-200 and 700, IS-GPS-705, and SS-GPS-001 compliant User Equipment (UE) and continued operation of legacy receivers (to include Federal augmentation system receivers).	All modifications made to the existing GPS Space Segment and Control Segment shall allow continued operation of existing ICD-GPS-200 and 700, IS-GPS-705, and SS-GPS-001 compliant User Equipment (UE) and continued operation of legacy receivers (to include Federal augmentation system receivers).	TBD	All modifications made to the existing GPS Space Segment and Control Segment shall allow continued operation of existing ICD-GPS-200 and 700, IS-GPS-705, and SS-GPS-001 compliant User Equipment (UE) and continued operation of legacy receivers (to include Federal augmentation system receivers).
User Range Error (meters)	.2	.2	1.1	TBD	1
Net-Ready	The system must fully support execution of all joint operational activities identified in the applicable joint and system integrated architectures and the	The system must fully support execution of all joint operational activities identified in the applicable joint and system integrated architectures and the	The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the	TBD	The system must fully support execution of all joint operational activities identified in the applicable joint and system integrated architectures and the

	system must satisfy the technical requirements for Net-Centric military operations.	system must satisfy the technical requirements for Net-Centric military operations.	system must satisfy the technical requirements for transition to Net-Centric military operations.		system must satisfy the technical requirements for Net-Centric military operations.
Satellite Availability	0.984	0.984	0.984	TBD	0.984
Boosted Earth-Coverage M-Code Power (dBW)	-148	-148	-153	TBD	-153
Minimum L1C Signal Power	-157	-157	-157	TBD	-157
Position and Time Transfer Integrity (Probability of Misleading SIS Information)	0.00000001	0.00000001	0.00001	TBD	0.00000001

Requirements Source:

The Capability Design Document (CDD) for Increment A was approved by Joint Requirements Oversight Council Memorandum (JROCM) 230-06 dated November 6, 2006

Acronyms And Abbreviations

dBW - Decibel-watt
GPS - Global Positioning System
ICD - Interface Control Document
IS - Interface Specifications
SIS - Signal in Space
SS - System Specifications

Change Explanations

None

Track To Budget

RDT&E

APPN 3600	BA 07	PE 0305265F	(Air Force)
	Project 67A019		(Shared)
	The shared funding line includes funding for SV09+ beginning in FY 2008, however the SV09+ funds are not included in this SAR.		
APPN 3600	BA 04	PE 0603421F	(Air Force)
	Project 644993		(Sunk)

Procurement

APPN 3020	BA 05	PE 0305265F	(Air Force)
	ICN GPSIII		(Shared)

The shared funding line includes funding for SV09+ beginning in FY 2014 (long lead) which is not reported in this SAR.

The Missile Procurement Air Force (MPAF) funding profile above represents funding for satellites 3 through 8 as displayed in the associated P-5 exhibit in the FY13 President's Budget. MPAF funds for satellites 9 and beyond are excluded above, but are reflected in the associated P-5 exhibit in the FY13 President's Budget.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2010 \$M			BY2010 \$M	TY \$M		
	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	2623.9	2623.9	2886.3	2561.9	2653.8	2653.8	2607.3
Procurement	1519.0	1519.0	1670.9	1447.9	1616.0	1616.0	1562.0
Flyaway	1519.0	--	--	1447.9	1616.0	--	1562.0
Recurring	1519.0	--	--	1447.9	1616.0	--	1562.0
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	0.0	--	--	0.0	0.0	--	0.0
Other Support	0.0	--	--	0.0	0.0	--	0.0
Initial Spares	0.0	--	--	0.0	0.0	--	0.0
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	4142.9	4142.9	N/A	4009.8	4269.8	4269.8	4169.3

The Base Year (BY) of the program has changed from BY 2000 to BY 2010 as a result of the approval of the Milestone C Acquisition Program Baseline (APB) on January 21, 2011.

The Milestone C APB was established at the 60% confidence level. This estimate is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Directorate has been successful.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E		2	2
Procurement		6	6
Total		8	8

Cost and Funding

Funding Summary

Appropriation and Quantity Summary FY2013 President's Budget / December 2011 SAR (TY\$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	1697.0	451.4	268.4	114.6	31.7	9.7	11.4	23.1	2607.3
Procurement	80.0	514.0	492.8	403.3	5.2	26.2	23.2	17.3	1562.0
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2013 Total	1777.0	965.4	761.2	517.9	36.9	35.9	34.6	40.4	4169.3
PB 2012 Total	1907.5	965.8	776.8	532.9	45.9	46.1	34.7	40.4	4350.1
Delta	-130.5	-0.4	-15.6	-15.0	-9.0	-10.2	-0.1	0.0	-180.8

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	2	0	0	0	0	0	0	0	0	2
Production	0	0	2	2	2	0	0	0	0	6
PB 2013 Total	2	0	2	2	2	0	0	0	0	8
PB 2012 Total	2	0	2	2	2	0	0	0	0	8
Delta	0	0	0	0	0	0	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY\$

3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2002	--	--	--	--	--	--	51.5
2003	--	--	--	--	--	--	39.7
2004	--	--	--	--	--	--	--
2005	--	--	--	--	--	--	21.2
2006	--	--	--	--	--	--	51.4
2007	--	--	--	--	--	--	195.2
2008	--	--	--	--	--	--	189.6
2009	--	--	--	--	--	--	354.0
2010	--	--	--	--	--	--	386.2
2011	--	--	--	--	--	--	408.2
2012	--	--	--	--	--	--	451.4
2013	--	--	--	--	--	--	268.4
2014	--	--	--	--	--	--	114.6
2015	--	--	--	--	--	--	31.7
2016	--	--	--	--	--	--	9.7
2017	--	--	--	--	--	--	11.4
2018	--	--	--	--	--	--	5.0
2019	--	--	--	--	--	--	2.4
2020	--	--	--	--	--	--	2.4
2021	--	--	--	--	--	--	2.4
2022	--	--	--	--	--	--	2.4
2023	--	--	--	--	--	--	2.4
2024	--	--	--	--	--	--	2.4
2025	--	--	--	--	--	--	2.4
2026	--	--	--	--	--	--	1.3
Subtotal	2	--	--	--	--	--	2607.3

Annual Funding BY\$

3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 \$M	Non End Item Recurring Flyaway BY 2010 \$M	Non Recurring Flyaway BY 2010 \$M	Total Flyaway BY 2010 \$M	Total Support BY 2010 \$M	Total Program BY 2010 \$M
2002	--	--	--	--	--	--	60.1
2003	--	--	--	--	--	--	45.7
2004	--	--	--	--	--	--	--
2005	--	--	--	--	--	--	23.2
2006	--	--	--	--	--	--	54.6
2007	--	--	--	--	--	--	202.0
2008	--	--	--	--	--	--	192.4
2009	--	--	--	--	--	--	354.4
2010	--	--	--	--	--	--	381.8
2011	--	--	--	--	--	--	395.5
2012	--	--	--	--	--	--	429.6
2013	--	--	--	--	--	--	251.3
2014	--	--	--	--	--	--	105.5
2015	--	--	--	--	--	--	28.7
2016	--	--	--	--	--	--	8.6
2017	--	--	--	--	--	--	9.9
2018	--	--	--	--	--	--	4.3
2019	--	--	--	--	--	--	2.0
2020	--	--	--	--	--	--	2.0
2021	--	--	--	--	--	--	1.9
2022	--	--	--	--	--	--	1.9
2023	--	--	--	--	--	--	1.9
2024	--	--	--	--	--	--	1.8
2025	--	--	--	--	--	--	1.8
2026	--	--	--	--	--	--	1.0
Subtotal	2	--	--	--	--	--	2561.9

Annual Funding TY\$

3020 | Procurement | Missile Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2010	--	80.0	--	--	80.0	--	80.0
2011	--	--	--	--	--	--	--
2012	2	514.0	--	--	514.0	--	514.0
2013	2	492.8	--	--	492.8	--	492.8
2014	2	403.3	--	--	403.3	--	403.3
2015	--	5.2	--	--	5.2	--	5.2
2016	--	26.2	--	--	26.2	--	26.2
2017	--	23.2	--	--	23.2	--	23.2
2018	--	17.3	--	--	17.3	--	17.3
Subtotal	6	1562.0	--	--	1562.0	--	1562.0

Annual Funding BY\$**3020 | Procurement | Missile Procurement, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 \$M	Non End Item Recurring Flyaway BY 2010 \$M	Non Recurring Flyaway BY 2010 \$M	Total Flyaway BY 2010 \$M	Total Support BY 2010 \$M	Total Program BY 2010 \$M
2010	--	78.1	--	--	78.1	--	78.1
2011	--	--	--	--	--	--	--
2012	2	484.1	--	--	484.1	--	484.1
2013	2	456.3	--	--	456.3	--	456.3
2014	2	367.1	--	--	367.1	--	367.1
2015	--	4.6	--	--	4.6	--	4.6
2016	--	23.0	--	--	23.0	--	23.0
2017	--	20.0	--	--	20.0	--	20.0
2018	--	14.7	--	--	14.7	--	14.7
Subtotal	6	1447.9	--	--	1447.9	--	1447.9

The Missile Procurement Air Force (MPAF) funding profile above represents funding for satellites 3 through 8 as displayed in the associated P-5 exhibit in the FY13 President's Budget. MPAF funds for satellites 9 and beyond are excluded above, but are reflected in the associated P-5 exhibit in the FY13 President's Budget.

Cost Quantity Information**3020 | Procurement | Missile Procurement, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2010 \$M
2010	--	--
2011	--	--
2012	2	482.6
2013	2	482.6
2014	2	482.7
2015	--	--
2016	--	--
2017	--	--
2018	--	--
Subtotal	6	1447.9

Low Rate Initial Production

There is no LRIP for this program.

Foreign Military Sales

None

Nuclear Cost

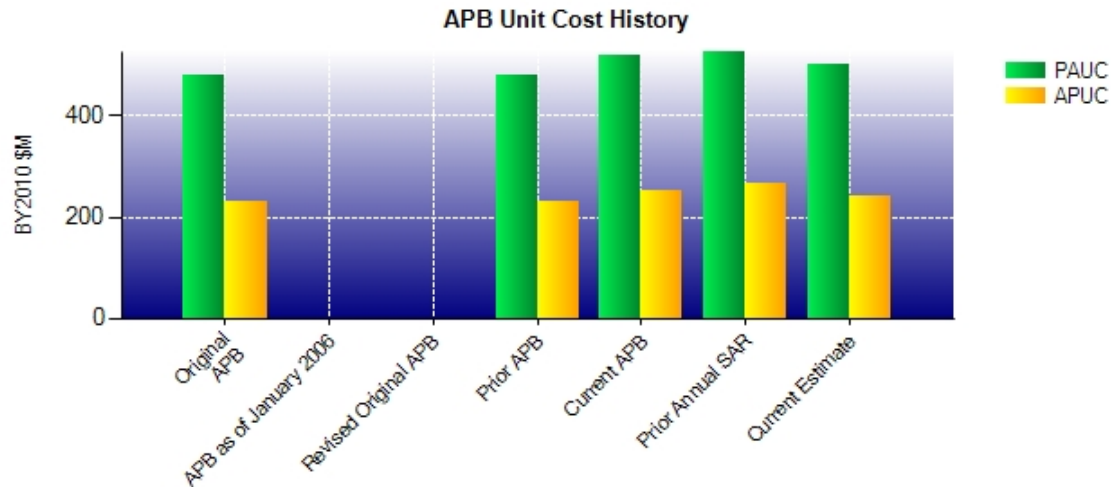
None

Unit Cost**Unit Cost Report**

	BY2010 \$M	BY2010 \$M	
Unit Cost	Current UCR Baseline (JAN 2011 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	4142.9	4009.8	
Quantity	8	8	
Unit Cost	517.862	501.225	-3.21
Average Procurement Unit Cost (APUC)			
Cost	1519.0	1447.9	
Quantity	6	6	
Unit Cost	253.167	241.317	-4.68

	BY2010 \$M	BY2010 \$M	
Unit Cost	Original UCR Baseline (MAY 2008 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	3840.8	4009.8	
Quantity	8	8	
Unit Cost	480.100	501.225	+4.40
Average Procurement Unit Cost (APUC)			
Cost	1381.0	1447.9	
Quantity	6	6	
Unit Cost	230.167	241.317	+4.84

Unit Cost History



	Date	BY2010 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	MAY 2008	480.100	230.167	500.288	248.383
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	MAY 2008	480.100	230.167	500.288	248.383
Current APB	JAN 2011	517.862	253.167	533.725	269.333
Prior Annual SAR	DEC 2010	527.200	265.700	543.762	282.667
Current Estimate	DEC 2011	501.225	241.317	521.162	260.333

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
500.288	-9.013	0.000	0.775	0.000	63.063	-9.513	-11.875	33.437	533.725

Current SAR Baseline to Current Estimate (TY \$M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
533.725	5.375	0.000	0.000	0.000	-17.938	0.000	0.000	-12.563	521.162

Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
248.383	-6.450	0.000	1.033	0.000	54.933	-12.733	-15.833	20.950	269.333

Current SAR Baseline to Current Estimate (TY \$M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
269.333	3.983	0.000	0.000	0.000	-12.983	0.000	0.000	-9.000	260.333

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	FEB 2008	FEB 2008	MAY 2008
Milestone C	N/A	SEP 2009	OCT 2010	JAN 2011
IOC	N/A	N/A	N/A	N/A
Total Cost (TY \$M)	N/A	4002.3	4269.8	4169.3
Total Quantity	N/A	8	8	8
Prog. Acq. Unit Cost (PAUC)	N/A	500.288	533.725	521.162

Cost Variance**Cost Variance Summary**

Summary Then Year \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	2653.8	1616.0	--	4269.8
Previous Changes				
Economic	+0.6	+3.6	--	+4.2
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-0.3	+76.4	--	+76.1
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+0.3	+80.0	--	+80.3
Current Changes				
Economic	+18.5	+20.3	--	+38.8
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-65.3	-154.3	--	-219.6
Other	--	--	--	--
Support	--	--	--	--
Subtotal	-46.8	-134.0	--	-180.8
Total Changes	-46.5	-54.0	--	-100.5
CE - Cost Variance	2607.3	1562.0	--	4169.3
CE - Cost & Funding	2607.3	1562.0	--	4169.3

Summary Base Year 2010 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	2623.9	1519.0	--	4142.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-0.5	+75.2	--	+74.7
Other	--	--	--	--
Support	--	--	--	--
Subtotal	-0.5	+75.2	--	+74.7
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-61.5	-146.3	--	-207.8
Other	--	--	--	--
Support	--	--	--	--
Subtotal	-61.5	-146.3	--	-207.8
Total Changes	-62.0	-71.1	--	-133.1
CE - Cost Variance	2561.9	1447.9	--	4009.8
CE - Cost & Funding	2561.9	1447.9	--	4009.8

Previous Estimate: December 2010

RDT&E	\$M	
	Base Year	Then Year
Current Change Explanations		
Revised escalation indices. (Economic)	N/A	+18.5
Decrease due to Congressional Reduction in FY 2012. (Estimating)	-5.0	-5.0
Decrease due to congressionally directed Federally Funded Research and Development Center Reduction in FY 2012. (Estimating)	-10.7	-11.0
Decrease due to Program Management Administration (PMA) efficiencies. (Estimating)	-28.1	-30.8
Adjustment due to economic variance. (Estimating)	-6.3	-6.7
Adjustment for current and prior escalation. (Estimating)	-11.4	-11.8
RDT&E Subtotal	-61.5	-46.8

Procurement	\$M	
	Base Year	Then Year
Current Change Explanations		
Revised escalation indices. (Economic)	N/A	+20.3
Decrease due to Congressional reduction in FY 2012. (Estimating)	-117.4	-122.5
Updated estimating technique. (Estimating)	+7.2	+7.6
Decrease due to PMA efficiencies. (Estimating)	-17.3	-19.1
Adjustment due to economic variance. (Estimating)	-11.4	-12.5
Adjustment for current and prior escalation. (Estimating)	-7.4	-7.8
Procurement Subtotal	-146.3	-134.0

Contracts

Appropriation: RDT&E

Contract Name **Global Positioning System (GPS) III (Development)**
 Contractor Lockheed Martin Corporation
 Contractor Location Newton, PA 18940
 Contract Number, Type FA8807-08-C-0010, CPIF/CPAF
 Award Date May 15, 2008
 Definitization Date May 15, 2008

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1386.9	N/A	2	1403.0	N/A	2	1412.6	1574.8

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (11/30/2011)	-189.3	-35.5
Previous Cumulative Variances	-75.8	-46.3
Net Change	-113.5	+10.8

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to inefficiencies in Satellite Vehicle Bus (BUS), Communications Payload (COM), Navigation Payload (NPE) and Assembly, Integration and Test Integrated Product Teams. BUS required additional resources to complete interface control documents, specifications, unplanned drawings, unique payload design and requirements. Additionally BUS experienced cost performance issues on the Inertial Measurement Unit (IMU) due to technical complexity and issues with Field Programmable Gate Array implementation. A cost cap has been placed on the IMU subcontractor. COM has experienced cost growth due to the increased efforts required to definitize suppliers and service agreements, increased Program Management support of unanticipated contract actions, as well as increased material expenditures due to Parts, Materials, and Processes (PMP) efforts to produce Technical Operating Report compliant Source Control Drawings. Radiation Lot Acceptance Testing has also required significantly greater than planned effort to complete, completion expected second quarter of FY 2012. NPE has required additional resources to complete PMP efforts along with increased Material costs. In addition, NPE has experienced cost growth due to the Voltage Control Crystal Oscillator subcontractor performance and material procurement costs, Survivability and Reliability, Mission Data Unit design tasks, as well as software script development and crypto integration.

The favorable net change in the schedule variance is due to significant recovery of previously delayed material purchases and supplier/vendor contract definitizations in 2011.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to increased scope that was exercised in December 2010, as well as other studies/impacts/changes.

The current Program Management Estimated Price at Complete represents the government's estimated cost for the current GPS III to cover potential developmental risks.

The initial contract price previously posted was inaccurate and this SAR shows the corrected price.

Appropriation: Procurement

Contract Name **Global Positioning System (GPS) III (Production)**
 Contractor Lockheed Martin Corporation
 Contractor Location Newton, PA 18940
 Contract Number, Type FA8807-08-C-0010/2, CPIF
 Award Date May 15, 2008
 Definitization Date May 15, 2008

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
79.5	N/A	N/A	79.5	N/A	N/A	80.3	80.3

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (11/30/2011)	0.0	+4.4
Previous Cumulative Variances	--	--
Net Change	+0.0	+4.4

Cost And Schedule Variance Explanations

The favorable cumulative schedule variance is due to material purchases being ahead of schedule in the satellite bus, communications and navigation areas.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	6	0.00%
Total Program Quantities Delivered	0	0	8	0.00%

Expenditures and Appropriations (TY \$M)			
Total Acquisition Cost	4169.3	Years Appropriated	11
Expenditures To Date	1737.3	Percent Years Appropriated	44.00%
Percent Expended	41.67%	Appropriated to Date	2742.4
Total Funding Years	25	Percent Appropriated	65.78%

Expenditures To Date information provided as of January 4, 2012.

Operating and Support Cost

Assumptions And Ground Rules

There are currently no GPS III Operating and Support costs.

Costs BY2010 \$K		
Cost Element	GPS III Avg Annual Cost for 24 Satellite Constellation	No Antecedant
Unit-Level Manpower	--	--
Unit Operations	--	--
Maintenance	--	--
Sustaining Support	--	--
Continuing System Improvements	--	--
Indirect Support	--	--
Other	--	--
Total Unitized Cost (Base Year 2010 \$)	--	--

Total O&S Costs \$M	GPS III	No Antecedant
Base Year	--	--
Then Year	--	--

There are currently no GPS III Operating and Support (O&S) costs. The O&S responsibility for GPS III is accomplished within the Next Operational Control System (OCX), specifically through software maintenance/upgrade. Once the satellite is launched, there is no sustainment being accomplished within the GPS III program.