Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-334

P-8A

As of December 31, 2010

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

P-8A Poseidon

DoD Component

Navy

Responsible Office

Responsible Office

CAPT Michael Moran
Dept of Navy, PEO(A)
PMA290, B2185, STE 3190, Unit 6
22347 Cedar Point Rd
Patuxent River, MD 20670-1161
michael.moran2@navy.mil

Phone 301-757-5703
Fax 301-757-5681
DSN Phone 757-5703
DSN Fax 757-5681

Date Assigned June 26, 2008

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 4, 2004

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated October 22, 2010

Mission and Description

The P-8A Poseidon, formerly known as the Multi-mission Maritime Aircraft (MMA), is based on the 737-800 ERX developed by The Boeing Company. The management of the contracted effort is located at The Boeing Company in Seattle, Washington. The system requirements are based on the P-8A Capability Production Document (CPD) #791-88-09, validated and approved on June 22, 2009. P-8A is the replacement system for the P-3C, Orion. The P-8A system will sustain and improve the armed maritime and littoral Intelligence, Surveillance, and Reconnaissance (ISR) capabilities for U.S. Naval forces in traditional, joint and combined roles to counter changing and emerging threats. The P-8A program is structured on an evolutionary systems replacement approach that aligns the processes employed for requirements definition, acquisition strategy, and system development into a dynamic and flexible means to attain the strategic vision for tomorrow's Naval forces. The P-8A is part of the Maritime Patrol and Reconnaissance Force (MPRF) Family of Systems (FoS) that also includes the MQ-4C Unmanned Aircraft System (UAS) Broad Area Maritime Surveillance (BAMS), the EP-3, and the Tactical Operations Center (TOC). The primary roles of P-8A are persistent Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASUW). The program will deliver the first increment of capability to the users in the quickest and most cost efficient manner.

Executive Summary

The P-8A program successfully completed Milestone C on August 11, 2010 and the Navy was granted the following approvals:

1. Authorization for the Navy to proceed with Low Rate Initial Production (LRIP) Lots 1, 2, and 3 for six aircraft in FY 2010, seven aircraft in FY 2011, and eleven aircraft in FY 2012.
2. Approved the Navy's request to obligate FY 2012 Advance Procurement funding for Full Rate Production (FRP) Lot 1.
3. Directed funding the P-8A Poseidon program to the Service Cost Position.
4. Approved the FRP entrance criteria.
5. Authorization for the Navy to proceed with Automatic Identification System, Multi-static Active Coherent, High Altitude Anti-Submarine Warfare Weapon Capability, Aircraft Rapid Capability Insertion Acoustics Algorithms, and Tactical Operations Center updates as Engineering Change Proposals within the baseline program.

The P-8A program completed the fabrication of three Stage I flight test aircraft and two ground test aircraft. The three Stage II flight test aircraft are undergoing fabrication and assembly using the same manufacturing facilities and processes that will be used to produce the fleet’s aircraft. LRIP I contract was definitized on January 21, 2011 for six aircraft. The Royal Australian Air Force joined the P-8A program in April 2009 as a cooperative partner in support of a future incremental capability improvement to the P-8A and is currently negotiating the Production, Sustainment and Follow-on Development Memorandum of Understanding.

The P-8A flight test program has achieved several major accomplishments. These include the successful launch of sonobuoys at the Atlantic Test Range, the completion of clean flutter test on the static ground test aircraft, and the successful completion of initial mission system ground and flight testing on the communications, navigation, radar and link systems.

On April 13, 2011, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) certified that the P-8A program now satisfies all of the provisions of section 2366b of title 10, United States Code. There are no remaining 2366b waivers associated with this program.

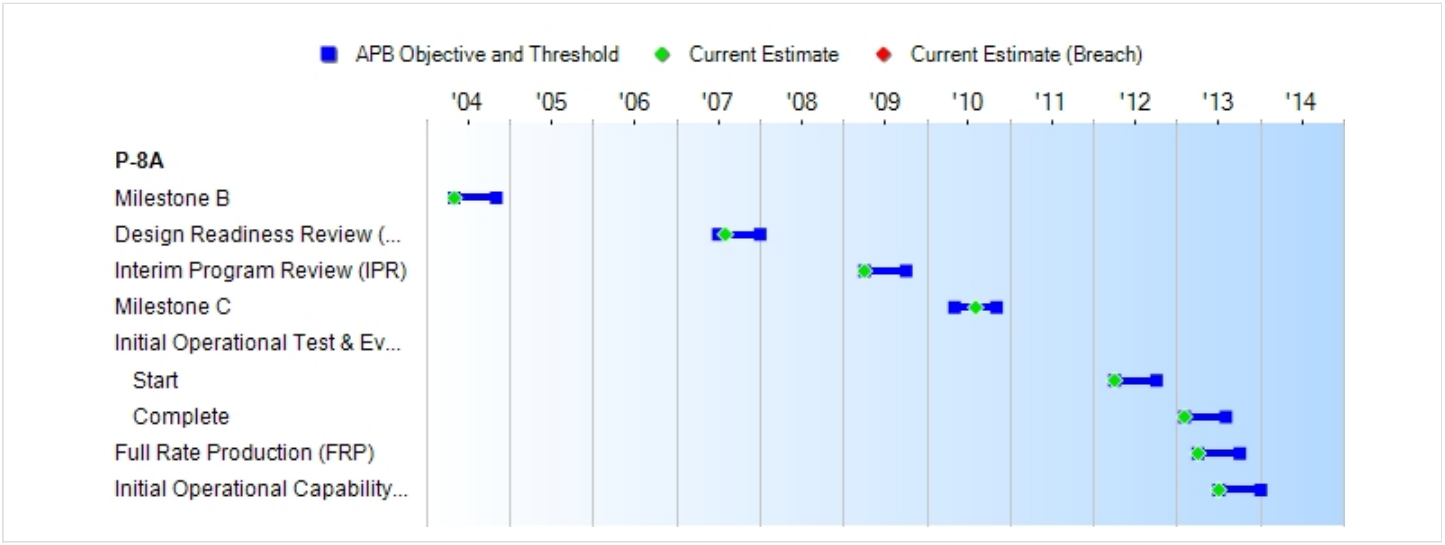
There are no significant software related issues with this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Dev Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone B	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Design Readiness Review (DRR)	JUL 2007	JUL 2007	JAN 2008	AUG 2007	
Interim Program Review (IPR)	APR 2009	APR 2009	OCT 2009	APR 2009	
Milestone C	MAY 2010	MAY 2010	NOV 2010	AUG 2010	(Ch-1)
Initial Operational Test & Evaluation (IOT&E)					
Start	APR 2012	APR 2012	OCT 2012	APR 2012	
Complete	FEB 2013	FEB 2013	AUG 2013	FEB 2013	
Full Rate Production (FRP)	APR 2013	APR 2013	OCT 2013	APR 2013	
Initial Operational Capability (IOC)	JUL 2013	JUL 2013	JAN 2014	JUL 2013	

Change Explanations

(Ch-1) Milestone C changed from May 2010 to August 2010 to reflect actual date of occurence.

Performance

Characteristics	SAR Baseline Dev Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate	
Interoperability Information Exchange Requirements (IER)	Accomplishment of all top-level IERs	N/A	N/A	N/A	N/A	(Ch-3)
Mission Radius/Endurance Subsurface attack (nm)	>=1,600	>=1,600/>=4	1,200/4	TBD	1,250	
Mixed Stores Loadout (ASW)(lbs)	12,500	12,500	10,000	TBD	22,000	
Initial On-station Altitude (ft)	>=40,000	49,000	25,000	TBD	36,000	
Operational Availability (ASW)	.8	.8	.8	TBD	.8 at IOC plus 2 years	
Force Protection (%)	N/A	100	100	TBD	100	(Ch-1)
Net-Ready	N/A	Fully support execution of joint operational activities	Fully support execution of joint critical operational activities	TBD	Fully support execution of joint operational activities	(Ch-2)

Requirements Source: Joint Requirements Oversight Council Memorandum 111-09 dated June 22, 2009 approved the P-8A Multi-mission Maritime Aircraft Increment 1 Capabilities Production Document (Serial # 791-88-09). In the Milestone C Acquisition Decision Memorandum, the USD(AT&L) authorized the following capabilities to be acquired as Engineering Change Proposals (ECPs) within the baseline program: Automatic Identification System, Multi-static Active Coherent, High Altitude Anti-Submarine Warfare (ASW) Weapon Capability and Sensors, Aircraft Rapid Capability Insertion (ARCI) Acoustics Algorithms, and Tactical Operations Center updates. These ECPs provide additional capabilities beyond the P-8A Increment 1 capability and will be incorporated in-line with production or via retrofit, subsequent to the program's Full Rate Production decision.

Acronyms And Abbreviations

% - Percentage
ASW - Anti-Submarine Warfare
ft - Feet
IOC - Initial Operational Capability
lbs - Pounds
N/A - Not Applicable
nm - Nautical miles
TBD - To be determined

Change Explanations

(Ch-1) Force Protection was added with the approved Milestone (MS) C Acquisition Program Baseline (APB)

dated October 22, 2010

(Ch-2) Net Ready was added with the approved MS C APB dated October 22, 2010

(Ch-3) Interoperability Information Exchange Requirements were removed from the MS C APB dated October 22, 2010

Classified Performance information is provided in the classified annex to this submission.

Track To Budget

General Memo

The Research, Development, Test and Evaluation (RDT&E) cost parameters include the costs associated with Project Unit 2696 (Increment 1 System Development and Demonstration (SDD)), and Project Unit 3181 (Increment 2 next Phase of Capabilities (previously called Spiral One)). Project Unit 3181 capabilities will be integrated into the P-8A through Engineering Change Proposals (ECPs) as approved in the Milestone C (MS C) Acquisition Decision Memorandum (ADM) dated August 27, 2010. These ECPs are: Automatic Identification System, Multi-static Active Coherent, High Altitude Anti-submarine Warfare (ASW) Weapon Capability and Sensors, Aircraft Rapid Capability Insertion (ARCI) Acoustics Algorithms, and Tactical Operations Center updates. Project Unit 3218 (P-8A Increment 3 (previously called Spiral Two)) was not included in the Acquisition Program Baseline cost parameters established at Milestone C and are excluded from the funding reported in this SAR.

RDT&E

APPN 1319	BA 05	PE 0605500N	(Navy)
	Project 2696	P-8A Multi-mission Maritime Aircraft SDD	
	Project 3181	P-8A Multi-mission Maritime Aircraft Increment 2	

Procurement

APPN 1506	BA 01	PE 0204251N	(Navy)
	ICN 019300	Multi-mission Maritime Aircraft	
APPN 1506	BA 06	PE 0204251N	(Navy)
	ICN 060500	Multi-mission Maritime Aircraft	

MILCON

APPN 1205	BA 01	PE 0212176N	(Navy)
	Project 659	Multi-mission Maritime Aircraft	
	NAS Jacksonville Parking and Apron Expansion		
APPN 1205	BA 01	PE 0703676N	(Navy)
	Project 630	Multi-mission Maritime Aircraft	
	NAS Jacksonville Facilities Modifications		
	Project 654	Multi-mission Maritime Aircraft	
	NAS Jacksonville Hangar Upgrades		
APPN 1205	BA 01	PE 0712876N	(Navy)

Project 049 Multi-mission Maritime Aircraft
(Phase 1) Hawaii Hangar and training facility
Project 067 Multi-mission Maritime Aircraft
(Phase 2) Hawaii Hangar and training facility
Project 655 Multi-mission Maritime Aircraft
NAS Sigonella
Project 955 Multi-mission Maritime Aircraft
Naval Support Activity Bahrain

APPN 1205 BA 01 PE 0805376N (Navy)

Project 146 Multi-mission Maritime Aircraft
NAS Patuxent River Integrated Test Facility (Hangar)
Project 147 Multi-mission Maritime Aircraft
NAS Patuxent River Integrated Test Facility

APPN 1205 BA 01 PE 0815976N (Navy)

Project 623 Multi-mission Maritime Aircraft
NAS Jacksonville Integrated Training Center

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2010 $M			BY2010 $M	TY $M		
Appropriation	SAR Baseline Dev Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Production Objective	Current Estimate
RDT&E	7346.4	8019.1	8821.0	7997.6	6975.5	7951.7	7937.8
Procurement	22791.2	23519.1	25871.0	23517.0	24316.1	25654.7	25627.5
Flyaway	20003.8	--	--	19896.1	21361.1	--	21706.8
Recurring	20003.8	--	--	19630.6	21361.1	--	21417.8
Non Recurring	0.0	--	--	265.5	0.0	--	289.0
Support	2787.4	--	--	3620.9	2955.0	--	3920.7
Other Support	1569.6	--	--	3182.9	1667.5	--	3456.6
Initial Spares	1217.8	--	--	438.0	1287.5	--	464.1
MILCON	134.3	807.7	888.5	581.0	137.0	894.3	635.2
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	30271.9	32345.9	N/A	32095.6	31428.6	34500.7	34200.5

The current APB cost estimate provided sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule and programmatic risk and external interference. It was consistent with average resource expenditures on historical efforts of similar size, scope, and complexity and represents a notional 50% confidence level.

Quantity	SAR Baseline Dev Est	Current APB Production	Current Estimate
RDT&E	7	5	5
Procurement	108	117	117
Total	115	122	122

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2012 President's Budget / December 2010 SAR (TY$ M)

Appropriation	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
RDT&E	5742.1	927.3	604.5	313.1	183.0	137.1	30.7	0.0	7937.8
Procurement	2012.1	2063.0	2373.8	2871.3	3687.4	4616.0	5663.0	2340.9	25627.5
MILCON	76.1	0.0	32.1	0.0	123.3	288.7	115.0	0.0	635.2
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2012 Total	7830.3	2990.3	3010.4	3184.4	3993.7	5041.8	5808.7	2340.9	34200.5
PB 2011 Total	7833.0	2986.3	2920.7	3248.8	3984.5	5197.2	4485.5	3484.9	34140.9
Delta	-2.7	4.0	89.7	-64.4	9.2	-155.4	1323.2	-1144.0	59.6

Quantity	Undistributed	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
Development	5	0	0	0	0	0	0	0	0	5
Production	0	6	7	11	13	17	21	30	12	117
PB 2012 Total	5	6	7	11	13	17	21	30	12	122
PB 2011 Total	5	6	7	9	13	17	23	23	19	122
Delta	0	0	0	2	0	0	-2	7	-7	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

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	--	--	--	--	--	--	37.0
2003	--	--	--	--	--	--	65.3
2004	--	--	--	--	--	--	66.3
2005	--	--	--	--	--	--	470.9
2006	--	--	--	--	--	--	927.0
2007	--	--	--	--	--	--	1100.0
2008	--	--	--	--	--	--	860.2
2009	--	--	--	--	--	--	1089.7
2010	--	--	--	--	--	--	1125.7
2011	--	--	--	--	--	--	927.3
2012	--	--	--	--	--	--	604.5
2013	--	--	--	--	--	--	313.1
2014	--	--	--	--	--	--	183.0
2015	--	--	--	--	--	--	137.1
2016	--	--	--	--	--	--	30.7
Subtotal	**5**	**--**	**--**	**--**	**--**	**--**	**7937.8**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

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	--	--	--	--	--	--	43.1
2003	--	--	--	--	--	--	75.0
2004	--	--	--	--	--	--	74.1
2005	--	--	--	--	--	--	512.9
2006	--	--	--	--	--	--	979.0
2007	--	--	--	--	--	--	1134.1
2008	--	--	--	--	--	--	871.1
2009	--	--	--	--	--	--	1090.3
2010	--	--	--	--	--	--	1113.6
2011	--	--	--	--	--	--	904.7
2012	--	--	--	--	--	--	580.8
2013	--	--	--	--	--	--	295.9
2014	--	--	--	--	--	--	170.1
2015	--	--	--	--	--	--	125.3
2016	--	--	--	--	--	--	27.6
Subtotal	**5**	**--**	**--**	**--**	**--**	**--**	**7997.6**

Annual Funding TY$
1506 | Procurement | Aircraft Procurement, Navy

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
2009	--	109.1	--	--	109.1	--	109.1
2010	6	1442.6	--	44.6	1487.2	415.8	1903.0
2011	7	1620.9	--	--	1620.9	442.1	2063.0
2012	11	1952.2	--	73.2	2025.4	348.4	2373.8
2013	13	2332.4	--	24.8	2357.2	514.1	2871.3
2014	17	3058.3	--	--	3058.3	629.1	3687.4
2015	21	3930.5	--	41.6	3972.1	643.9	4616.0
2016	30	5065.7	--	--	5065.7	597.3	5663.0
2017	12	1906.1	--	104.8	2010.9	330.0	2340.9
Subtotal	**117**	**21417.8**	**--**	**289.0**	**21706.8**	**3920.7**	**25627.5**

Annual Funding BY$
1506 | Procurement | Aircraft Procurement, Navy

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
2009	--	108.2	--	--	108.2	--	108.2
2010	6	1412.4	--	43.7	1456.1	407.0	1863.1
2011	7	1563.6	--	--	1563.6	426.5	1990.1
2012	11	1853.3	--	69.5	1922.8	330.8	2253.6
2013	13	2177.6	--	23.2	2200.8	479.9	2680.7
2014	17	2807.6	--	--	2807.6	577.5	3385.1
2015	21	3548.0	--	37.6	3585.6	581.2	4166.8
2016	30	4496.3	--	--	4496.3	530.1	5026.4
2017	12	1663.6	--	91.5	1755.1	287.9	2043.0
Subtotal	**117**	**19630.6**	**--**	**265.5**	**19896.1**	**3620.9**	**23517.0**

Cost Quantity Information
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2010 $M
2009	--	--
2010	6	1385.5
2011	7	1538.4
2012	11	1770.0
2013	13	2099.9
2014	17	2726.5
2015	21	3378.1
2016	30	4787.4
2017	12	1944.8
Subtotal	**117**	**19630.6**

Annual Funding TY$
1205 | MILCON | Military Construction, Navy and Marine Corps

Fiscal Year	Total Program TY $M
2006	5.7
2007	16.3
2008	--
2009	48.2
2010	5.9
2011	--
2012	32.1
2013	--
2014	123.3
2015	288.7
2016	115.0
Subtotal	**635.2**

Annual Funding BY$
1205 | MILCON | Military Construction, Navy and Marine Corps

Fiscal Year	Total Program BY 2010 $M
2006	5.9
2007	16.6
2008	--
2009	47.7
2010	5.8
2011	--
2012	30.4
2013	--
2014	112.9
2015	259.9
2016	101.8
Subtotal	**581.0**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	6/4/2004	8/27/2010
Approved Quantity	34	24
Reference	ADM (MS B)	ADM (MS C)
Start Year	2010	2010
End Year	2012	2012

The Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) approved a Low Rate Initial Production (LRIP) quantity at Milestone (MS) B not to exceed 34 aircraft, which exceeds 10% of total production quantity. The FY 2012 President's Budget funds a total of 24 LRIP aircraft. The LRIP quantity requested is necessary to establish the initial production base and achieve an orderly and efficient increase in the production rate and industrial workforce.

Foreign Military Sales

None

Nuclear Cost

None

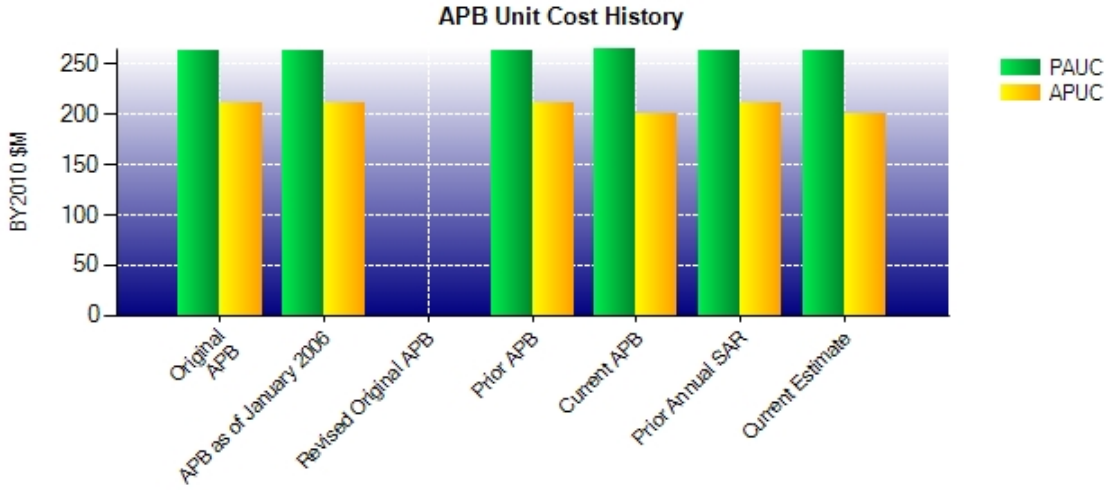
Unit Cost

Unit Cost Report

Unit Cost	BY2010 $M Current UCR Baseline (OCT 2010 APB)	BY2010 $M Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	32345.9	32095.6	
Quantity	122	122	
Unit Cost	265.130	263.079	-0.77
Average Procurement Unit Cost (APUC)			
Cost	23519.1	23517.0	
Quantity	117	117	
Unit Cost	201.018	201.000	-0.01

Unit Cost	BY2010 $M Original UCR Baseline (JUN 2004 APB)	BY2010 $M Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	30271.9	32095.6	
Quantity	115	122	
Unit Cost	263.234	263.079	-0.06
Average Procurement Unit Cost (APUC)			
Cost	22791.2	23517.0	
Quantity	108	117	
Unit Cost	211.030	201.000	-4.75

Unit Cost History



		BY2010 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUN 2004	263.234	211.030	273.292	225.149
APB as of January 2006	JUN 2004	263.234	211.030	273.292	225.149
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	JUN 2004	263.234	211.030	273.292	225.149
Current APB	OCT 2010	265.130	201.018	282.793	219.271
Prior Annual SAR	DEC 2009	262.619	210.481	279.843	229.437
Current Estimate	DEC 2010	263.079	201.000	280.332	219.038

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
273.292	3.591	-4.044	5.221	8.451	-13.784	0.000	7.605	7.040	280.332

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
225.149	1.639	-3.468	5.332	0.000	-17.544	0.000	7.930	-6.111	219.038

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	MAY 2004	N/A	MAY 2004
Milestone C	N/A	MAY 2010	N/A	AUG 2010
IOC	N/A	JUL 2013	N/A	JUL 2013
Total Cost (TY $M)	N/A	31428.6	N/A	34200.5
Total Quantity	N/A	115	N/A	122
Prog. Acq. Unit Cost (PAUC)	N/A	273.292	N/A	280.332

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	6975.5	24316.1	137.0	31428.6
Previous Changes				
Economic	+228.2	+185.0	+2.8	+416.0
Quantity	-201.0	+1620.6	--	+1419.6
Schedule	+13.0	+696.4	+0.1	+709.5
Engineering	+165.4	--	+27.9	+193.3
Estimating	-10.1	+149.0	-42.0	+96.9
Other	--	--	--	--
Support	--	-123.0	--	-123.0
Subtotal	+195.5	+2528.0	-11.2	+2712.3
Current Changes				
Economic	+15.2	+6.8	+0.1	+22.1
Quantity	--	--	--	--
Schedule	--	-72.5	--	-72.5
Engineering	+322.1	--	+515.6	+837.7
Estimating	+429.5	-2201.7	-6.3	-1778.5
Other	--	--	--	--
Support	--	+1050.8	--	+1050.8
Subtotal	+766.8	-1216.6	+509.4	+59.6
Total Changes	+962.3	+1311.4	+498.2	+2771.9
CE - Cost Variance	7937.8	25627.5	635.2	34200.5
CE - Cost & Funding	7937.8	25627.5	635.2	34200.5

Summary Base Year 2010 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	7346.4	22791.2	134.3	30271.9
Previous Changes				
Economic	--	--	--	--
Quantity	-175.4	+1240.5	--	+1065.1
Schedule	+11.1	+547.3	-0.2	+558.2
Engineering	+130.8	--	+23.0	+153.8
Estimating	-22.9	+130.8	-33.9	+74.0
Other	--	--	--	--
Support	--	-83.5	--	-83.5
Subtotal	-56.4	+1835.1	-11.1	+1767.6
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	-27.6	--	-27.6
Engineering	+302.8	--	+463.8	+766.6
Estimating	+404.8	-2010.4	-6.0	-1611.6
Other	--	--	--	--
Support	--	+928.7	--	+928.7
Subtotal	+707.6	-1109.3	+457.8	+56.1
Total Changes	+651.2	+725.8	+446.7	+1823.7
CE - Cost Variance	7997.6	23517.0	581.0	32095.6
CE - Cost & Funding	7997.6	23517.0	581.0	32095.6

Previous Estimate: December 2009

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+15.2
Inclusion of Increment 2 (Project Unit 3181) (Engineering)	+302.8	+322.1
Adjustment for current and prior escalation. (Estimating)	-14.6	-14.4
Estimate increase for Milestone C assumptions includes updated Estimate at Completion, additional correction of deficiencies and revision of Government estimate. (Estimating)	+419.4	+443.9
RDT&E Subtotal	+707.6	+766.8

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+6.8
Acceleration of procurement buy profile. Aircraft redistributed across buy profile - increase from 9 to 11 aircraft in FY 2012; decrease from 23 to 21 aircraft in FY 2015; increase from 23 to 30 aircraft in FY 2016; and decrease from 19 to 12 aircraft in FY 2017. (Schedule)	0.0	-38.1
Additional Schedule Variance related to changes in the schedule profile associated with Advanced Procurement. (Schedule)	-27.6	-34.4
Adjustment for current and prior escalation. (Estimating)	-3.9	-4.1
Revision of material estimate due to reduction in estimate for base commercial aircraft pricing, industry profit, and Avionics Obsolescence. (Estimating)	-3142.3	-3448.9
Revision of labor estimate to incorporate new labor hour, labor rate, and learning curve assumptions. (Estimating)	+914.0	+1006.9
Revision of estimate accounts for Production Tooling, Avionics Obsolescence and Production Line Shutdown. (Estimating)	+221.8	+244.4
Adjustment for current and prior escalation. (Support)	-1.2	-1.2
Increase in Other Support due to Depot Support Equipment assumptions; support strategy changed from the Original Equipment Manufacturer providing Depot Support Equipment to the Government providing it. (Support)	+841.9	+953.6
Increase in Initial Spares due to updated Naval Inventory Control Point controls and revised Initial Spares Item List supplied by Boeing for Milestone C. (Support)	+88.0	+98.4
Procurement Subtotal	-1109.3	-1216.6

MILCON	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+0.1
Hangar modifications for Naval Air Station Jacksonville. (Engineering)	+5.8	+6.1
Training and Parking Area Expansion at Naval Air Station Jacksonville. (Engineering)	+21.2	+23.2
Addition of a Main Operating Base and two Principal Deployment Sites. (Engineering)	+436.8	+486.3
Refinement of estimate for Integrated Training Center at Naval Air Station Jacksonville. (Estimating)	-5.9	-6.2
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
MILCON Subtotal	+457.8	+509.4

Contracts

Appropriation: RDT&E	
Contract Name	**MMA SDD**
Contractor	The Boeing Company
Contractor Location	Seattle, WA 98124-2499
Contract Number, Type	N00019-04-C-3146, CPAF
Award Date	June 14, 2004
Definitization Date	June 14, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
3890.0	N/A	3	4986.4	N/A	3	6155.2	6378.4

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/27/2011)	-225.0	-34.5
Previous Cumulative Variances	-146.1	-65.3
Net Change	-78.9	+30.8

Cost And Schedule Variance Explanations

The unfavorable net change to the cost variance of -$78.9M is attributed to a higher than anticipated level of resources required for Manufacturing Operations and greater Test and Evaluation and Ground Test effort than planned.

The favorable net change to the schedule variance of $30.8M is attributed to the correction of understated performance reported in December 2009, the implementation of an authorized schedule single point adjustment to reflect an updated Flight Test Plan and the recovery of previously late supplier deliveries (primarily Structural Certification and Aircraft Systems and Training Systems).

Contract Comments

The increase to the initial contract price from $3890.0M to $4986.4M is a result of contract modifications that addressed software development risks identified during Component Advanced Development, approved Over Target Baseline (OTB) requests from Boeing, the addition of three Stage II aircraft to support Initial Operational Test and Evaluation (IOT&E), and resolution of the Boeing machinists union strike.

Appropriation: Procurement

Contract Name	**P-8A Production Contract for LRIP**
Contractor	The Boeing Company
Contractor Location	Kent, WA 98032-2316
Contract Number, Type	N00019-09-C-0022, FPIF/FFP
Award Date	April 13, 2009
Definitization Date	January 21, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
109.1	109.1	N/A	1774.9	1827.1	6	1774.9	1774.9

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPIF/FFP contract.

Contract Comments

The P-8A Low Rate Initial Production (LRIP) contract is a sole source fixed price type award to Boeing that includes the advanced procurement of material to maintain the P-8A planned production schedule which is definitized annually for each LRIP lot, along with the procurement of required spares, support, equipment, technical data/publications and training devices. Initial contract award in April 2009 was for LRIP I advance procurement. Change from initial contract price to current contract price reflects the addition of advanced procurement funding for LRIP II in September 2010 and definitization on 6 aircraft for LRIP I, spares, support equipment, technical data/publications and training devices in January 2011. The definitized aircraft Contract Line Item Number (CLIN) is Fixed Price Incentive Fee (FPIF) with an associated ceiling and the remaining CLINs are Firm Fixed Price (FFP).

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	2	2	5	40.00%
Production	0	0	117	0.00%
Total Program Quantities Delivered	2	2	122	1.64%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	34200.5	Years Appropriated	10
Expenditures To Date	6390.4	Percent Years Appropriated	62.50%
Percent Expended	18.69%	Appropriated to Date	10820.6
Total Funding Years	16	Percent Appropriated	31.64%

Deliveries and Expenditures are current as of March, 2011.

Operating and Support Cost

Assumptions And Ground Rules

The Operations and Support (O&S) estimate is the Milestone (MS) C Service Cost Position (SCP) from August 2010. All costs were estimated in constant Fiscal Year (FY) 2010 dollars, the Base Year (BY) of the estimate.

P-8A operating and support costs are based on 2-level maintenance. P-3C operating and support costs are based on a 3-level maintenance system. P-3C data was pulled from Aircraft Type Model Series Report (ATMSR) March 1, 2010 (BY 2010). Indirect support for P-3C was estimated based on a ratio of mission personnel and intermediate maintenance government labor. Life cycle is phase-in plus 25 years, plus phase out years of operation per aircraft. Aircraft quantities are: P-8A = 117; P-3C = 131 (Source: FY 2008, Aircraft Program Data File (APDF)). Flight hours per aircraft per year are: P-8A = 597; P-3C = 486.

This estimate has been updated as follows:
- The quantity of P-8A aircraft has increased from 108 to 117.
- 1 Fleet Replacement Squadron (12 aircraft); 12 Fleet Squadrons (7 aircraft each)
- Estimate duration: start year = 2012, end year = 2045, total years = 34
- Attrition: 6 aircraft
- Updated with 2010 inflation rates, mission personnel labor rates, and indirect labor rates.
- November 2009 Manpower Estimate Report (MER) which removes Contractor Logistics Support (CLS) and increases squadron size from 6 to 7 aircraft.
- MER requirement was adjusted to an authorized level, based on P-3C actual manpower by work center.
- Engine depot overhauls increased from 2 to 3 per lifetime.
- Updated Modifications to include all modifications, not just Safety of Flight.
- Includes Repair of Repairables.

The dollars per aircraft are derived by taking the total O&S cost by element and dividing it by the total operating aircraft years (P-8A: 2,482 aircraft years).

Although the per aircraft costs appear to favor the P-3C, the P-8A will provide improved capabilities with less flight hours and fewer aircraft. As an example, the average annual O&S cost comparison of the current P-3 fleet in FY 2009 to a midlife P-8 fleet is: P-3C = $1,662M/Year (BY 2010$); P-8A = $1,224M/Year (BY 2010$).

Costs BY2010 $M		
Cost Element	**P-8A Average Annual Cost Per Aircraft**	**P-3C Average Annual Cost Per Aircraft**
Unit-Level Manpower	3.564	4.245
Unit Operations	2.592	1.276
Maintenance	3.930	3.102
Sustaining Support	0.978	0.167
Continuing System Improvements	1.065	2.922
Indirect Support	1.131	0.648
Other	0.000	0.000
Total Unitized Cost (Base Year 2010 $)	13.260	12.360

Total O&S Costs $M	P-8A	P-3C
Base Year	32909.8	0.0
Then Year	50635.3	0.0