Selected Acquisition Report (SAR)

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

P-8A Poseidon Multi-Mission Maritime Aircraft (P-8A)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

P-8A Poseidon Multi-Mission Maritime Aircraft (P-8A)

DoD Component

Navy

Responsible Office

Responsible Office

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Date Assigned May 29, 2012

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Progam Baseline (APB) dated October 22, 2010

Approved APB

Defense Acquisition Executive (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 Triton, formerly Broad Area Maritime Surveillance Unmanned Aircraft System (BAMS UAS), 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 Poseidon continues System Development & Demonstration (SDD) and is on track to meet all Key Performance Parameters (KPP). Initial Operational Test and Evaluation (IOT&E) was initiated September 2012 with planned completion in March 2013. Live Fire Test and Evaluation (LFT&E) is planned for completion in February 2013. Corrections for software test deficiencies identified as risk areas at Operational Test Readiness Review (OTRR) have been incorporated into the most recent software release, which has completed lab testing and is undergoing flight test through June 2013. The current fleet release software build is supporting successful, on-going fleet squadron transition training at Naval Air Station (NAS) Jacksonville, Florida. The first transition squadron is on track for first operational deployment in December 2013.

The program continues to execute the acquisition strategy approved at Milestone C (MS C) in August 2010. Three lots of Low Rate Initial Production (LRIP) aircraft, including twenty-four aircraft and associated trainers, spares and support equipment, are on contract with Boeing Defense Space and Security (BDS). The first, full lot of six LRIP aircraft, were delivered to the fleet on schedule and deliveries of LRIP Lot 2 aircraft have now commenced. In September 2012 the U.S. Navy (USN) ordered eleven LRIP Lot 3 aircraft and continues preparations for award of subsequent production lots. The program has continued to reduce unit costs for each aircraft production lot by executing Government Furnished Equipment (GFE) break-out strategies and implementing a Supplier Engagement Plan.

The delayed completion of IOT&E until March 2013 has introduced schedule pressures to meet the originally planned July 2013 Full Rate Production (FRP) Defense Acquisition Board (DAB). These schedule pressures place the timely award of the FY 2013 FRP production contract at risk, which could impact the current aircraft production delivery schedule and maintaining the P-3 to P-8 Fleet squadron transitions. In an effort to mitigate this risk the Navy is seeking support to change the MS C Acquisition Strategy to have the FY 2013 production contract address a fourth LRIP lot. This proposed change in strategy will be discussed at a FRP Readiness DAB scheduled in June 2013.

The P-8A Integrated Training Center (ITC) at NAS Jacksonville, Florida is meeting training requirements of the Fleet Replacement Squadron (FRS) and transitioning squadrons. The first operational squadron started P-8A transition in July 2012 and attained Safe for Flight (SFF) certification in January 2013. The second squadron began P-8A transition in February 2013. Naval Air Facility (NAF) Kadena, Japan site activation began in April 2012. Facility requirements, support equipment and spares deliveries to support site stand-up in December 2013 are a program focus.

There are two P-8A Memorandums of Understanding (MOU) in effect between the U.S. and Australia. The Increment 2 MOU, signed April 2009, authorizes Australian participation in P-8A Increment 2 development. The Production, Sustainment, and Follow-on Development (PSFD) MOU, signed March 2012, authorizes Australian procurement of Increment 2 capable P-8 aircraft, participation in development of common sustainment strategies for the life of the aircraft, and participation in development of new platform capabilities.

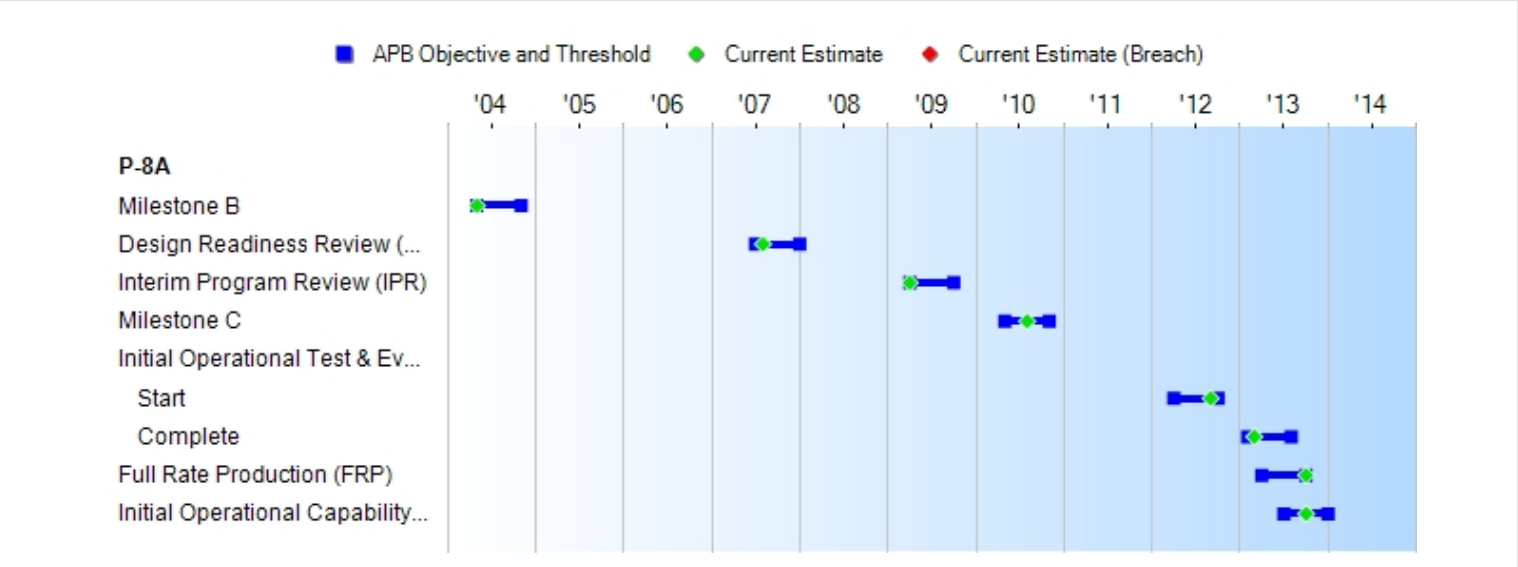
There are no significant software-related issues with this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
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 Prod 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	
Initial Operational Test & Evaluation (IOT&E)					
Start	APR 2012	APR 2012	OCT 2012	SEP 2012	(Ch-1)
Complete	FEB 2013	FEB 2013	AUG 2013	MAR 2013	(Ch-2)
Full Rate Production (FRP)	APR 2013	APR 2013	OCT 2013	OCT 2013	(Ch-3)
Initial Operational Capability (IOC)	JUL 2013	JUL 2013	JAN 2014	OCT 2013	(Ch-4)

Change Explanations

(Ch-1) IOT&E start current estimate changed from August 2012 to September 2012 to allow evaluation of another software build to correct identified deficiencies.

(Ch-2) IOT&E complete current estimate changed from February 2013 to March 2013 based on the actual completion of testing.

(Ch-3) FRP current estimate changed from June 2013 to October 2013 to accommodate completion of Live Fire Testing and other test-related reporting required in support of a FRP decision. The Department is currently considering an acquisition strategy change that would add a fourth LRIP lot in FY 2013. This proposed change in strategy is to be discussed at a Defense Acquisition Board (DAB) scheduled in June 2013. The outcome of the DAB will determine the final FRP date.

(Ch-4) Initial Operational Capability (IOC) current estimate changed from July 2013 to October 2013 due to Fleet recommended inclusion of the Operational Readiness Evaluation (ORE) of the first operational P-8A squadron as part of the IOC determination/definition. The ORE evaluates the mission readiness of the squadron. The inclusion of the ORE only constitutes a change in the interpretation of the Capability Production Document definition for IOC. There is no change in the Fleet transition schedule or the planned December 2013 first deployment.

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Mission Radius/Endurance Subsurface attack (nm)	>=1,600/>=4	>=1,600/>=4	1,200/4	1,251	1,250
Mixed Stores Loadout (ASW)(lbs)	12,500	12,500	10,000	TBD	22,000
Initial On-station Altitude (ft)	49,000	49,000	25,000	39,000	39,000
Operational Availability (ASW)	.8	.8	.8	.61	.8 at IOC plus 2 years
Force Protection (%)	100	100	100	100	100
Net-Ready	Fully support execution of joint operational activities	Fully support execution of joint operational activities	Fully support execution of joint critical operational activities	Fully support execution of joint operational activities (pending JITC certification)	Fully support execution of joint operational activities

Requirements Source: Capability Production Document (CPD) (Increment 1) dated June 22, 2009 and Capability Development Document (CDD) (Increment 2 and 3) dated June 25, 2010

Acronyms And Abbreviations

ASW - Anti-Submarine Warfare
ft - Feet
IOC - Initial Operational Capability
lbs - Pounds
nm - Nautical miles
TBD - To be determined

Change Explanations

None

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

Memo

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, Rapid Capability

Insertion (RCI) 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.

The Mission Radius Demonstrated Performance was changed from TBD to 1,251 as a result of Integrated Test and Evaluation (IT&E) actual performance achievements.

The Operational Availability Demonstrated Performance was changed from TBD to .61 as a result of Integrated Test and Evaluation (IT&E) actual performance achievements.

The Force Protection Demonstrated Performance was changed from TBD to 100% as a result of Integrated Test and Evaluation (IT&E) actual performance achievements.

The Net-Ready Demonstrated Performance was changed from fully support execution of joint operational activities to fully support execution of joint operational activities (pending JITC certification) as a result of Integrated Test and Evaluation (IT&E) actual performance achievements.

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, Rapid Capability Insertion (RCI) 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 MS 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 Spiral One Development	
	P-8A Multi-mission Maritime Aircraft Increment 2 (formerly Spiral 1)		

Procurement

APPN 1506	BA 01	PE 0204251N	(Navy)
	ICN 019300	P-8A Poseidon	
APPN 1506	BA 06	PE 0204251N	(Navy)
	ICN 060500	Spares and Repair Parts	

MILCON

APPN 1205	BA 01	PE 0212176N	(Navy)
	Project P252	P-8A Hangar & Apron Expansion	
	Naval Air Station Whidbey Island		
	Project P659	P-8 Training and Parking Apron Expansion	
	Naval Air Station Jacksonville Integrated Training Center		

APPN 1205	BA 01	PE 0703676N	(Navy)	
	Project P630	P-8/MMA Facilities Modification		(Sunk)
	Naval Air Station Jacksonville (Facilities Modifications)			
	Project P654	P-8A Hangar Upgrades		(Sunk)
	Naval Air Station Jacksonville			
APPN 1205	BA 01	PE 0712876N	(Navy)	
	Project P655	P-8A Hangar & Training Facility		
	Naval Air Station Sigonella			
	Project P955	P-8A Hangar & Training Facility		
	Naval Support Activity Bahrain			
APPN 1205	BA 01	PE 0805376N	(Navy)	
	Project P146	MMA Test Facilities, Renovation & Modn		(Sunk)
	Multi-mission Maritime Hangar Test Facility Modifications Naval Air Station Patuxent River			
	Project P147	MMA Technical Supt Facs, Pax River MD		(Sunk)
	Multi-mission Maritime Hangar Test Facility Build Naval Air Station Patuxent River			
APPN 1205	BA 01	PE 0805976N	(Navy)	
	Project P623	MMA Simulator Training Building		(Sunk)
	Naval Air Station Jacksonville (Build of Integrated Training Center)			
APPN 1205	BA 01	PE 0815976N	(Navy)	
	Project P251	P-8A Hangar & Training Facility		
	Naval Air Station Whidbey Island			
	Project P624	P-8A Training Facility		(Sunk)
	Naval Air Station Jacksonville			

Military Construction (MILCON) projects P-8A Hangar & Training Facility (P251) and P-8A Hangar & Apron Expansion (P252) at Naval Air Station (NAS) Whidbey Island replaced projects P-8A Hangar & Training Facility Phase 1 (P049) and P-8A Hangar & Training Facility Phase 2 (P067) at Joint Base Pearl Harbor Hickam.

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	8019.1	8019.1	8821.0	8170.8	7951.7	7951.7	8190.2
Procurement	23519.1	23519.1	25871.0	23255.7	25654.7	25654.7	26344.6
Flyaway	19403.5	--	--	19542.3	21213.3	--	22184.1
Recurring	19128.2	--	--	19153.7	20917.2	--	21738.6
Non Recurring	275.3	--	--	388.6	296.1	--	445.5
Support	4115.6	--	--	3713.4	4441.4	--	4160.5
Other Support	3435.4	--	--	3318.4	3723.2	--	3733.9
Initial Spares	680.2	--	--	395.0	718.2	--	426.6
MILCON	807.7	807.7	888.5	358.3	894.3	894.3	400.2
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	32345.9	32345.9	N/A	31784.8	34500.7	34500.7	34935.0

Confidence Level for Current APB Cost 50% - The current Acquisition Program Baseline (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 Prod Est	Current APB Production	Current Estimate
RDT&E	5	5	5
Procurement	117	117	117
Total	122	122	122

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2014 President's Budget / December 2012 SAR (TY$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	7216.7	399.8	239.4	228.4	69.8	25.4	10.7	0.0	8190.2
Procurement	6233.9	2837.1	3525.1	3646.2	3344.1	2817.8	2173.8	1766.6	26344.6
MILCON	107.3	0.0	105.9	117.7	69.3	0.0	0.0	0.0	400.2
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	13557.9	3236.9	3870.4	3992.3	3483.2	2843.2	2184.5	1766.6	34935.0
PB 2013 Total	13581.8	3236.9	4005.1	4710.9	3992.2	2527.0	2376.7	0.0	34430.6
Delta	-23.9	0.0	-134.7	-718.6	-509.0	316.2	-192.2	1766.6	504.4

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	5	0	0	0	0	0	0	0	0	5
Production	0	24	13	16	16	16	14	10	8	117
PB 2014 Total	5	24	13	16	16	16	14	10	8	122
PB 2013 Total	5	24	13	17	20	20	13	10	0	122
Delta	0	0	0	-1	-4	-4	1	0	8	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	--	--	--	--	--	--	860.0
2009	--	--	--	--	--	--	1089.7
2010	--	--	--	--	--	--	1125.5
2011	--	--	--	--	--	--	893.6
2012	--	--	--	--	--	--	581.4
2013	--	--	--	--	--	--	399.8
2014	--	--	--	--	--	--	239.4
2015	--	--	--	--	--	--	228.4
2016	--	--	--	--	--	--	69.8
2017	--	--	--	--	--	--	25.4
2018	--	--	--	--	--	--	10.7
Subtotal	**5**	**--**	**--**	**--**	**--**	**--**	**8190.2**

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	--	--	--	--	--	--	512.8
2006	--	--	--	--	--	--	979.0
2007	--	--	--	--	--	--	1134.0
2008	--	--	--	--	--	--	870.7
2009	--	--	--	--	--	--	1089.1
2010	--	--	--	--	--	--	1108.2
2011	--	--	--	--	--	--	857.4
2012	--	--	--	--	--	--	547.0
2013	--	--	--	--	--	--	369.0
2014	--	--	--	--	--	--	216.8
2015	--	--	--	--	--	--	203.0
2016	--	--	--	--	--	--	60.9
2017	--	--	--	--	--	--	21.7
2018	--	--	--	--	--	--	9.0
Subtotal	**5**	**--**	**--**	**--**	**--**	**--**	**8170.8**

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	1360.6	--	54.3	1414.9	392.5	1807.4
2011	7	1390.6	--	21.4	1412.0	589.3	2001.3
2012	11	2008.4	--	29.9	2038.3	277.8	2316.1
2013	13	2336.1	--	48.1	2384.2	452.9	2837.1
2014	16	2833.6	--	30.9	2864.5	660.6	3525.1
2015	16	2924.9	--	38.1	2963.0	683.2	3646.2
2016	16	2913.2	--	16.8	2930.0	414.1	3344.1
2017	14	2554.7	--	34.2	2588.9	228.9	2817.8
2018	10	1908.2	--	85.0	1993.2	180.6	2173.8
2019	8	1399.2	--	86.8	1486.0	280.6	1766.6
Subtotal	**117**	**21738.6**	**--**	**445.5**	**22184.1**	**4160.5**	**26344.6**

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	--	107.8	--	--	107.8	--	107.8
2010	6	1314.1	--	52.4	1366.5	379.1	1745.6
2011	7	1311.6	--	20.2	1331.8	555.8	1887.6
2012	11	1858.1	--	27.7	1885.8	257.0	2142.8
2013	13	2120.5	--	43.7	2164.2	411.0	2575.2
2014	16	2524.1	--	27.5	2551.6	588.5	3140.1
2015	16	2556.8	--	33.3	2590.1	597.3	3187.4
2016	16	2499.1	--	14.4	2513.5	355.3	2868.8
2017	14	2150.7	--	28.8	2179.5	192.7	2372.2
2018	10	1576.5	--	70.2	1646.7	149.2	1795.9
2019	8	1134.4	--	70.4	1204.8	227.5	1432.3
Subtotal	**117**	**19153.7**	**--**	**388.6**	**19542.3**	**3713.4**	**23255.7**

Cost Quantity Information
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2010 $M
2009	--	--
2010	6	1269.3
2011	7	1306.8
2012	11	1788.9
2013	13	2051.4
2014	16	2540.7
2015	16	2556.5
2016	16	2535.6
2017	14	2218.9
2018	10	1609.2
2019	8	1276.4
Subtotal	**117**	**19153.7**

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	31.2
2013	--
2014	105.9
2015	117.7
2016	69.3
Subtotal	**400.2**

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	47.5
2010	5.7
2011	--
2012	28.6
2013	--
2014	93.4
2015	101.8
2016	58.8
Subtotal	**358.3**

Low Rate Initial Production

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

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the necessity to establish the initial production base and to achieve an orderly and efficient increase in both the production rate and industry workforce.

Foreign Military Sales

None

Nuclear Cost

None

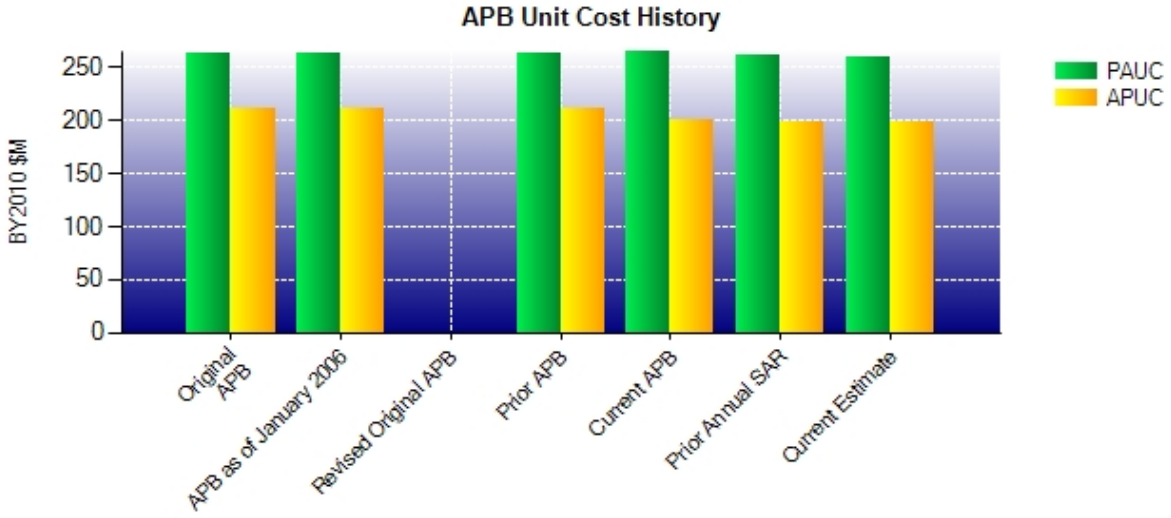
Unit Cost

Unit Cost Report

	BY2010 $M	BY2010 $M	
Unit Cost	**Current UCR Baseline (OCT 2010 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	32345.9	31784.8	
Quantity	122	122	
Unit Cost	265.130	260.531	-1.73
Average Procurement Unit Cost (APUC)			
Cost	23519.1	23255.7	
Quantity	117	117	
Unit Cost	201.018	198.767	-1.12

	BY2010 $M	BY2010 $M	
Unit Cost	**Original UCR Baseline (JUN 2004 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	30271.9	31784.8	
Quantity	115	122	
Unit Cost	263.234	260.531	-1.03
Average Procurement Unit Cost (APUC)			
Cost	22791.2	23255.7	
Quantity	108	117	
Unit Cost	211.030	198.767	-5.81

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 2011	260.830	198.656	282.218	220.640
Current Estimate	DEC 2012	260.531	198.767	286.352	225.168

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	
273.292	3.671	-4.044	5.221	10.630	-17.830	0.000	11.853	9.501	282.793

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
282.793	6.826	0.000	3.680	-1.206	-2.534	0.000	-3.207	3.559	286.352

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	
225.149	1.793	-3.468	5.332	0.000	-21.894	0.000	12.359	-5.878	219.271

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
219.271	6.409	0.000	3.215	0.956	-1.338	0.000	-3.344	5.898	225.168

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	MAY 2004	MAY 2004
Milestone C	N/A	MAY 2010	MAY 2010	AUG 2010
IOC	N/A	JUL 2013	JUL 2013	OCT 2013
Total Cost (TY $M)	N/A	31428.6	34500.7	34935.0
Total Quantity	N/A	115	122	122
Prog. Acq. Unit Cost (PAUC)	N/A	273.292	282.793	286.352

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	7951.7	25654.7	894.3	34500.7
Previous Changes				
Economic	+40.3	+357.9	+11.5	+409.7
Quantity	--	--	--	--
Schedule	+72.9	+166.6	--	+239.5
Engineering	+76.3	--	-335.3	-259.0
Estimating	-78.0	+256.4	-18.0	+160.4
Other	--	--	--	--
Support	--	-620.7	--	-620.7
Subtotal	+111.5	+160.2	-341.8	-70.1
Current Changes				
Economic	+22.5	+391.9	+8.8	+423.2
Quantity	--	--	--	--
Schedule	--	+209.5	--	+209.5
Engineering	--	+111.9	--	+111.9
Estimating	+104.5	-413.0	-161.1	-469.6
Other	--	--	--	--
Support	--	+229.4	--	+229.4
Subtotal	+127.0	+529.7	-152.3	+504.4
Adjustments	--	--	--	--
Total Changes	+238.5	+689.9	-494.1	+434.3
CE - Cost Variance	8190.2	26344.6	400.2	34935.0
CE - Cost & Funding	8190.2	26344.6	400.2	34935.0

Summary Base Year 2010 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	8019.1	23519.1	807.7	32345.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	+68.1	+78.4	--	+146.5
Engineering	+68.4	--	-295.6	-227.2
Estimating	-74.9	+254.7	-14.2	+165.6
Other	--	--	--	--
Support	--	-609.5	--	-609.5
Subtotal	+61.6	-276.4	-309.8	-524.6
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	+80.4	--	+80.4
Engineering	--	+94.0	--	+94.0
Estimating	+90.1	-368.7	-139.6	-418.2
Other	--	--	--	--
Support	--	+207.3	--	+207.3
Subtotal	+90.1	+13.0	-139.6	-36.5
Adjustments	--	--	--	--
Total Changes	+151.7	-263.4	-449.4	-561.1
CE - Cost Variance	8170.8	23255.7	358.3	31784.8
CE - Cost & Funding	8170.8	23255.7	358.3	31784.8

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+22.5
Adjustment for current and prior escalation. (Estimating)	-15.5	-16.4
Revised estimate to reflect actuals. (Estimating)	-22.2	-23.5
Increase due to correction of high priority deficiencies identified during Operational Test and Evaluation (OT&E). (Estimating)	+108.7	+122.9
Additional funding for OT&E to achieve Increment 2 Initial Operational Capability (IOC). (Estimating)	+19.1	+21.5
RDT&E Subtotal	+90.1	+127.0

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+391.9
Stretch-out of procurement buy profile from FY 2014 - FY 2018 to FY 2019. (Schedule)	0.0	+108.2
Additional schedule variance associated with the shift of 8 aircraft. (Schedule)	+80.4	+101.3
Adjustment for current and prior escalation. (Estimating)	-75.2	-81.3
Additional funding to incorporate Advanced Airborne Sensor aircraft kits. (Engineering)	+94.0	+111.9
Revised estimate to reflect the application of new inflation indices. (Estimating)	-128.5	-153.8
Revised estimate to reflect actuals. (Estimating)	-115.8	-121.7
Decrease to the non-recurring cost estimate to capture updates to obsolescence and production line shutdown. (Estimating)	-49.2	-56.2
Adjustment for current and prior escalation. (Support)	-15.4	-16.6
Increase in Other Support costs due to revised estimate for Production Engineering and technical publications due to the additional year of procurement. (Support)	+191.4	+209.5
Increase in Initial Spares estimate. (Support)	+31.3	+36.5
Procurement Subtotal	+13.0	+529.7

MILCON	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+8.8
Adjustment for current and prior escalation. (Estimating)	-0.4	-0.4
Decease of cost estimate for modification projects planned at Joint Base Pearl Harbor; adjusted based on planned usage. (Estimating)	-131.1	-151.4
Revised estimate to reflect actuals. (Estimating)	-8.1	-9.3
MILCON Subtotal	-139.6	-152.3

Contracts

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	4601.3	4761.4	24	4601.3	4601.3

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/28/2013)	+24.9	+7.2
Previous Cumulative Variances	+7.4	-5.5
Net Change	+17.5	+12.7

Cost And Schedule Variance Explanations

The favorable net change in the cost variance is due to less Technical Subcontract Management (TSM) engineering effort and Installation and Check-Out (I&CO) shipside support required than originally planned on the Air Vehicle Airframe team, System Engineering Integrated Team (SEIT) and Quality.

The favorable net change in the schedule variance is due to the recovery of previously late supplier deliveries.

General Contract Variance Explanation

Contract performance reflects Low Rate Initial Production (LRIP) I and II Earned Value Management (EVM) data. LRIP III will start reporting EVM after the 2013 Integrated Baseline Review (IBR) is complete.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to additional awards to Boeing Defense Space and Security for Advance Procurement (AP) and LRIP lots I through III and associated spares, support equipment, technical data/publications, tools, training devices, and long lead materials.

Appropriation: Procurement

Contract Name	**P-8A Production Contract**
Contractor	The Boeing Company
Contractor Location	Kent, WA 98032-2316
Contract Number, Type	N00019-12-C-0112, FFP
Award Date	August 31, 2012
Definitization Date	

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
244.9	N/A	N/A	244.9	N/A	N/A	244.9	244.9

Cost And Schedule Variance Explanations

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

Contract Comments

This is the first time this contract is being reported.

The P-8A Production contract is a sole source fixed-price type award to Boeing Defense Space and Security (BDS), which includes the advanced procurement of material to maintain the P-8A planned production schedule. This contract will be definitized annually for each production lot, along with the procurement of required spares, support, equipment, technical data/publications and training devices. Initial contract award in August 2012 was for Advance Procurement (AP).

The delayed completion of Initial Operational Test and Evaluation (IOT&E) until March 2013 has introduced schedule pressures to meet the originally planned July 2013 Full Rate Production (FRP) Defense Acquisition Board (DAB). These schedule pressures place the timely award of the FY 2013 FRP production contract at risk, which could impact the current aircraft production delivery schedule and maintaining the P-3 to P-8 Fleet squadron transitions. In an effort to mitigate this risk the Navy is seeking support to change the Milestone C Acquisition Strategy to have the FY 2013 production contract address a fourth Low Rate Initial Production (LRIP) lot. This proposed change in strategy will be discussed at a FRP Readiness DAB scheduled in June 2013.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	5	5	5	100.00%
Production	8	8	117	6.84%
Total Program Quantities Delivered	13	13	122	10.66%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	34935.0	Years Appropriated	12
Expenditures To Date	10529.5	Percent Years Appropriated	66.67%
Percent Expended	30.14%	Appropriated to Date	16794.8
Total Funding Years	18	Percent Appropriated	48.07%

The above data is current as of 5/3/2013.

Although Research Development Test and Evaluation (RDT&E) deliveries commenced with the first flight test aircraft (airworthiness, T-1), it is not included in the Planned or Actual deliveries since it is not a fully configured end item. The RDT&E delivered quantities include: the second flight test aircraft (mission equipped, T-2); the third flight test aircraft (mission equipped for weapon separation testing, T-3); and T-4, T-5 and T-6, System Development and Demonstration (SDD) Stage II production representative aircraft supporting Initial Operational Test and Evaluation (IOT&E). The Fleet Replacement Squadron has taken delivery of eight Low Rate Initial Production (LRIP) aircraft supporting initial Fleet Transition training.

Operating and Support Cost

P-8A

Assumptions and Ground Rules

Cost Estimate Reference:

All costs were estimated in constant FY 2010 dollars, the Base Year (BY) of the estimate. The Operating and Support (O&S) estimate is dated January 30, 2012. The source of the estimate is Naval Air Systems Command (NAVAIR) 4.2 O&S cost estimate. The P-8A O&S cost estimate will be updated to support the Full Rate Production (FRP) Service Cost Position (SCP) planned in 2013.

Sustainment Strategy:

P-8A O&S costs are based on two-level maintenance. Aircraft quantities are: P-8A = 117 (Total Aircraft Inventory (TAI)) and 96 (Primary Authorized Aircraft (PAA) less test assets); Flight hours per aircraft per year are: P-8A = 620. The calculation is based on summing the total operational flight hours and dividing by total number of operational aircraft. Life cycle is phase-in plus 25 years, plus phase-out years of operation per aircraft. P-8A operations are based on one Fleet Replacement Squadron (FRS) squadron (12 aircraft) and 12 Fleet squadrons (seven aircraft each). Estimate duration: start year = 2012, end year = 2045, total years = 34. Estimate uses November 2009 Manpower Estimate Report (MER); MER requirement was adjusted to an authorized level, based on P-3C actual manpower by work center.

Antecedent Information:

P-3C O&S costs are based on a three-level maintenance system. P-3C data was pulled from the Aircraft Type Model Series Report (ATMSR) in the Navy Visibility and Management of Operating and Support Costs (VAMOSC) database on January 3, 2012 (BY 2010 dollars). Indirect support for P-3C was estimated based on a ratio of mission personnel and intermediate maintenance government labor. Aircraft quantities are: P-3C = 142 (TAI) and 138 (PAA) (P-3C Source: Aircraft Program Data file (APDF)). Flight hours per aircraft per year are: P-3C = 486. The calculation is based on summing the total operational flight hours and dividing by total number of operational aircraft. The P-3C flight hours are artificially restricted due to Health of Naval Aviation (HONA) decisions to manage P-3C operational service life.

Unitized O&S Costs BY2010 $K		
Cost Element	**P-8A Average Annual Cost Per Aircraft**	**P-3C (Antecedent) Average Annual Cost Per Aircraft**
Unit-Level Manpower	3.604	4.853
Unit Operations	2.616	1.596
Maintenance	4.324	3.155
Sustaining Support	0.993	0.224
Continuing System Improvements	1.107	2.812
Indirect Support	1.303	1.155
Other	0.000	0.000
Total	13.947	13.795

Unitized Cost Comments:
This estimate reflects:

1. Flight hours per aircraft per year calculation reflects phase-in and phase-out of aircraft.

2. 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: 2,485 aircraft years).

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		**Current Estimate**	
	P-8A		**P-8A**	**P-3C (Antecedent)**
Base Year	32909.8	36200.8	34658.4	34280.0
Then Year	50635.3	N/A	53406.4	N/A

Total O&S Costs Comments:
No cost variance from the December 2011 SAR. O&S cost estimate will be updated for the P-8A Full Rate Production (FRP) Service Cost Position (SCP) planned in 2013.

Disposal Costs

The Rough Order of Magnitude (ROM) estimated cost of the demilitarization/disposal phase for the remaining aircraft is $12.636M (BY 2010) / $24.188 (Then Year). The estimate will be refined as the System Disposal Plan Annex to the Life Cycle Sustainment Plan is developed.