Selected Acquisition Report (SAR)

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

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

As of FY 2017 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations for MDAP Programs

Acq O&M - Acquisition-Related Operations and Maintenance
ACAT - Acquisition Category
ADM - Acquisition Decision Memorandum
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
$B - Billions of Dollars
BA - Budget Authority/Budget Activity
Blk - Block
BY - Base Year
CAPE - Cost Assessment and Program Evaluation
CARD - Cost Analysis Requirements Description
CDD - Capability Development Document
CLIN - Contract Line Item Number
CPD - Capability Production Document
CY - Calendar Year
DAB - Defense Acquisition Board
DAE - Defense Acquisition Executive
DAMIR - Defense Acquisition Management Information Retrieval
DoD - Department of Defense
DSN - Defense Switched Network
EMD - Engineering and Manufacturing Development
EVM - Earned Value Management
FOC - Full Operational Capability
FMS - Foreign Military Sales
FRP - Full Rate Production
FY - Fiscal Year
FYDP - Future Years Defense Program
ICE - Independent Cost Estimate
IOC - Initial Operational Capability
Inc - Increment
JROC - Joint Requirements Oversight Council
$K - Thousands of Dollars
KPP - Key Performance Parameter
LRIP - Low Rate Initial Production
$M - Millions of Dollars
MDA - Milestone Decision Authority
MDAP - Major Defense Acquisition Program
MILCON - Military Construction
N/A - Not Applicable
O&M - Operations and Maintenance
ORD - Operational Requirements Document
OSD - Office of the Secretary of Defense
O&S - Operating and Support
PAUC - Program Acquisition Unit Cost

PB - President’s Budget
PE - Program Element
PEO - Program Executive Officer
PM - Program Manager
POE - Program Office Estimate
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
SCP - Service Cost Position
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting
U.S. - United States
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Information

Program Name

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

DoD Component

Navy

Responsible Office

CAPT Scott Dillon
PMA-290, Maritime Patrol & Reconnaissance Aircraft
Program Executive Office, Air Anti-Submarine Warfare, Assault and Special Mission Programs
22347 Cedar Point Rd, Building 2185, STE 3190, Unit 6
Patuxent River, MD 20670-1161

Phone: 301-757-5703
Fax: 301-757-5681
DSN Phone: 757-5703
DSN Fax: 757-5681
Date Assigned: May 29, 2012

william.dillon@navy.mil

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 February 5, 2014

Mission and Description

The primary roles of P-8A Poseidon Multi-mission Maritime Aircraft (P-8A) are persistent Anti-Submarine Warfare and Anti-Surface Warfare. The P-8A is the replacement system for the P-3C, Orion. The P-8A, 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 CPD #791-88-09, validated and approved on June 22, 2009. The P-8A system will sustain and improve the armed maritime and littoral Intelligence, Surveillance, and Reconnaissance capabilities for United States 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 Family of Systems that also includes the MQ-4C Triton Unmanned Aircraft System, the EP-3, and the Tactical Operations Center.

Executive Summary

Program Highlights Since Last Report: In 2015, the P-8A Poseidon program remained focused on aircraft production, deliveries, and site stand-up in support of fleet transition. Current program focus also includes procurement of depot and intermediate level maintenance capabilities, full scale fatigue testing, and continued integration and fleet delivery of pre-planned incremental capability upgrades. The first upgrade under P-8A Increment 2 (Inc 2) added a broad-area, multi-static acoustic ASW capability to the aircraft. This capability, referred to as Multi-Static Active Coherent (MAC), significantly increases the P-8A's ASW search rate in littoral environments. MAC completed Follow on Test and Evaluation in April 2015 and has been delivered to the fleet. The capability is scheduled to receive periodic future enhancements in order to pace the ASW threat. The U.S. Navy (USN) is on track to field additional Inc 2 MAC and High Altitude ASW Sensor capability in 2016, followed by a High Altitude ASW Weapon capability as part of the P-8A's on-going incremental upgrade strategy. The P-8 airframe full scale fatigue test program initiated the Advanced Airborne Sensor pod carriage phase in September 2015.

Aircraft production and delivery continues on schedule in support of the on-going transition of fleet squadrons from P-3C to P-8A. Six lots of production aircraft, including 62 aircraft, trainers, spares and support equipment, are on contract with Boeing Defense Space and Security. As of February 2016, fleet squadrons have taken delivery of 35 aircraft on or ahead of schedule. The P-8A Material Support Date (MSD), marking the transition of supply support responsibilities from the Prime Contractor to the Navy Supply System, was successfully achieved on October 1, 2015. The P-8A is successfully meeting flight line commitments post-MSD. The P-8A Integrated Training Center at Naval Air Station (NAS) Jacksonville, Florida continues to meet training requirements of the Fleet Replacement Squadron (FRS) and transitioning squadrons. Continuous 7th fleet operational deployments are underway. The first 5th fleet deployment will commence April 2016.

The sixth of ten planned annual production contracts was awarded August 27, 2015. This contract included the first four of eight Royal Australian Air Force P-8A aircraft, with the initial Australian delivery scheduled for November 2016. On November 23, 2015 the Prime Minister of the United Kingdom (UK) announced an intention to procure nine P-8As. The USN is supporting planning for this anticipated acquisition via a UK P-8A Technical Assistance case.

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

History of Significant Developments Since Program Initiation:

February 29, 2000: The Broad Area Maritime and Littoral Armed Intelligence Surveillance and Reconnaissance Mission Needs Statement was validated and approved by the JROC.

April 17, 2000: The P-8A Poseidon (formerly Multi-Mission Maritime Aircraft (MMA)) program received Milestone 0 approval to enter Concept Exploration.

January 18, 2002: P-8A received approval to enter the Component Advanced Development (CAD) work effort on January 18, 2002. CAD included competitively awarded contracts to Lockheed Martin for the Orion 21 concept (P-3 derivative) and to Boeing for the military derivative of the 737 aircraft.

December 3, 2003: The MMA ORD/CDD was validated and approved by JROC.

May 28, 2004: The USD (AT&L) approved the program and entry into System Development and Demonstration (SDD) after completing a successful Milestone (MS) B DAB Review.

June 4, 2004: MS B ADM signed.

June 14, 2004: The SDD contract was awarded to BDS (formerly, McDonnell Douglas Corporation, a wholly-owned subsidiary of The Boeing Company) for the 737-800 ERX based system. The contracted effort included the design and development of Systems Integration Labs and the design, development, and build of ground and flight test articles.

June 11-15, 2007: The P-8A program conducted the Critical Design Review.

August 27, 2007: The P-8A program completed the Design Readiness Review.

December 2007: The P-8A program initiated the fabrication of its first flight test aircraft at Spirit AeroSystems in Wichita, Kansas.

April 2008: The P-8A program conducted the Integration Readiness Review.

December 23, 2008: The Record of Decision was approved for basing 12 P-8A squadrons and 1 FRS at NAS Jacksonville, Florida, NAS Whidbey Island, Washington, and Marine Corps Base Hawaii at Kaneohe Bay, Hawaii.

April 2009: Australia joined as a cooperative partner of P-8A Inc 2. The Inc 2 Memorandum of Understanding (MOU) authorizes Australian participation in P-8A Inc 2 development.

April 13, 2009: The P-8A program completed the Interim Program Review and awarded the Advance Acquisition Contract (AAC) for LRIP Advance Procurement (AP).

May 2009: The P-8A program conducted Test Readiness Reviews for the first flight test aircraft and the first ground test aircraft for static test.

September 2009: The Operational Assessment was initiated utilizing the Weapon System Integration Lab.

August 27, 2010: The USD (AT&L) signed the MS C ADM granting authorization to: proceed with LRIP Lots I through III that included 6 aircraft in FY 2010, 7 aircraft in FY 2011, and 11 aircraft in FY 2012. In addition, the MS C ADM approved the request to obligate FY 2012 AP funding for FRP and authorized the Navy to proceed with Automatic Identification System, MAC, High Altitude ASW Weapon Capability, Rapid Capability Insertion, Acoustics Algorithms, and Tactical Operations Center updates.

January 21, 2011: The LRIP Lot I contract was definitized for six aircraft.

April 13, 2011: The USD (AT&L) documented in a Memorandum for the Record that the P-8A program satisfied the MS C ADM waived affordability and funding provisions of section 2366b of title 10, United States Code (U.S.C.). At MS C, the USD (AT&L) certified the program in accordance with section 2366b of Title 10, U.S.C., waiving two elements in that certification, namely 2366b(a)(l)(B) and 2366b(a)(1)(D), affordability and funding.

November 3, 2011: The LRIP Lot II contract was definitized for seven aircraft.

March 2012: The Production, Sustainment, and Follow-on Development MOU authorizes Australian procurement of Inc 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.

September 21, 2012: The LRIP Lot III contract was definitized for 11 aircraft.

February 2013: Live Fire Test and Evaluation was completed.

March 2013: The P-8A Poseidon successfully completed Initial Operational Test and Evaluation (IOT&E).

July 2013: The IOT&E report released by Commander, Operational Test and Evaluation Force rated the P-8A as operationally effective, operationally suitable, and recommended Fleet introduction.

July 15, 2013: In order to maintain fleet transition rates, the USD (AT&L) approved a change to the P-8A Acquisition Strategy to add a fourth lot of 13 LRIP aircraft in FY 2013.

July 30, 2013: The LRIP Lot IV contract was definitized for 13 aircraft.

September 2013: Integrated testing of deficiency corrections and the Harpoon Anti-Surface Warfare weapon integration were successfully completed.

December 2013: The P-8A achieved IOC and commenced first Fleet operational deployment.

January 3, 2014: The USD(AT&L) signed the FRP ADM approving the FRP decision.

February 2014: The Australian government announced its plan to purchase eight P-8A aircraft and supporting infrastructure.

February 25, 2014: The FRP I (Lot V) contract was definitized for 16 aircraft.

August 14, 2014: USN awarded the P-8A FRP II (Lot VI) AAC for AP funding for 8 USN and 4 Royal Australian Air Force (RAAF) aircraft. Contract value is $295.6M.

January 2, 2015: January 2, 2015: USN awarded a $60.7 million contract modification to BDS to the P-8A LRIP IV and FRP I Contract (N00019-12-C-0112) to incorporate recurring Advanced Airborne Sensor Capability Platform Integration Kits In-Line modifications to LRIP IV (13 aircraft) and FRP I (16 aircraft).

January 24, 2015: P-8A MAC operational evaluation was completed during a VX-1 detachment to Jacksonville, FL. Feedback indicated that all requirements to satisfy the Operational Test plan for P-8A Inc 2 ECP 1 were successfully completed.

February 12, 2015: Fleet Squadron (VP-5) returned home completing the second P-8A operational deployment.

March 3, 2015: Fleet Squadron (VP-10) began P-3 to P-8 transition training along with the RAAF Exchange Cadre.

August 27, 2015: The FRP II Lot VI P-8A production contract definitized for $1.5 billion. The contract includes 9 USN and 4 Australian Lot VI aircraft, as well as a priced option for 16 USN and 4 Australian Lot VII aircraft.

September 2015: Fleet Squadron (VP-16) commenced the fourth consecutive seven month P-8A operational deployment. VP-16 began operational deployment to PACOM AOR, marking the first return P-8 deployer.

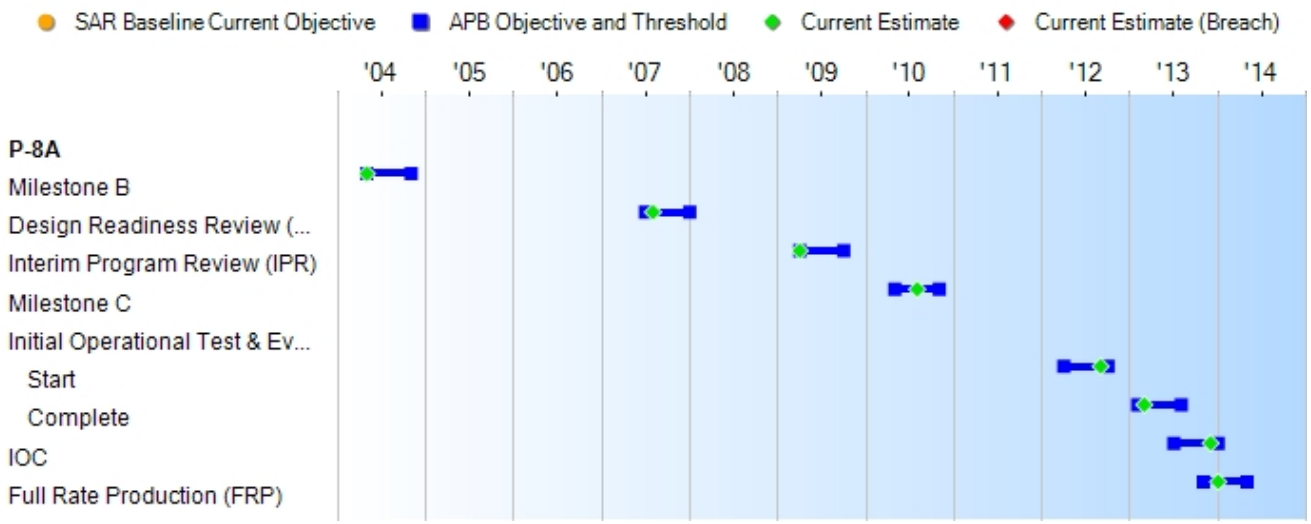
October 2015: Fleet Squadron (VP-26) began P-3 to P-8A transition training.

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



Schedule Events				
Events	**SAR Baseline Production Estimate**	**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
Complete	Feb 2013	Feb 2013	Aug 2013	Mar 2013
IOC	Jul 2013	Jul 2013	Jan 2014	Dec 2013
Full Rate Production (FRP)	Apr 2013	Nov 2013	May 2014	Jan 2014

Change Explanations

None

Performance

Performance Characteristics				
SAR Baseline Production Estimate	**Current APB Production Objective/Threshold**		**Demonstrated Performance**	**Current Estimate**
Mission Radius/Endurance Subsurface attack (nm)				
>=1,600/>=4	>=1,600/>=4	1,200/4	1,262	1,262
Mixed Stores Loadout (ASW)(lbs)				
12,500	12,500	10,000	13,275	25,000
Initial On-station Altitude (ft)				
49,000	49,000	25,000	39,000	39,000
Operational Availability (ASW)				
.8	(Objective = Threshold) .8	.8	.85	.8 at IOC plus 2 years
Force Protection (%)				
100	(Objective = Threshold) 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. JITC certification letter signed October 25, 2013.	Fully support execution of joint operational activities

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

Requirements Reference

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

Change Explanations

None

Notes

JROC Memorandum 111-09 dated June 22, 2009 approved the P-8A Increment 1 CPD (Serial # 791-88-09). In the Milestone C ADM, the USD(AT&L) authorized the following capabilities to be acquired as ECPs within the baseline program: Automatic Identification System, Multi-static Active Coherent, High Altitude Anti-Submarine Warfare Weapon Capability and Sensors, Rapid Capability Insertion 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.

Operational Availability (ASW) demonstrated performance improved to .85 based upon monthly actuals of deployed squadrons since IOC.

Acronyms and Abbreviations

ASW - Anti-Submarine Warfare
ECP - Engineering Change Proposal
ft - Feet
JITC - Joint Interoperability Test Command
lbs - Pounds
nm - Nautical miles

Track to Budget

General Notes

The RDT&E cost parameters include the costs associated with Project Unit 2696 (Increment 1 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 ADM, dated August 27, 2010. These ECPs are: Automatic Identification System, Multi-static Active Coherent, High Altitude Anti-submarine Warfare Weapon Capability and Sensors, Rapid Capability Insertion Acoustics Algorithms, and Tactical Operations Center updates. Project Unit 3218 (P-8A Increment 3 (previously called Spiral Two)) was not included in the APB cost parameters established at Milestone C and are excluded from the funding reported in this SAR.

RDT&E

Appn		BA	PE
Navy	1319	05	0605500N

Project	Name
2696	Multi-mission Maritime Aircraft
3181	P-8A Spiral One Development
Notes:	P-8A Multi-mission Maritime Aircraft Increment 2 (formerly Spiral 1)

Procurement

Appn		BA	PE
Navy	1506	01	0204251N

Line Item	Name
0193	P-8A Poseidon

Appn		BA	PE
Navy	1506	06	0204251N

Line Item	Name
0605	Spares and Repair Parts

MILCON

Appn		BA	PE
Navy	1205	01	0212176N

Project	Name
P116	P-8A Detachment Support Facility
Notes:	Joint Base Pearl Harbor Hickam
P259	P-8A Aircraft Apron and Support Facility
Notes:	Naval Air Station Whidbey Island
P334	P-8 Fleet Support Facility Addition
Notes:	Naval Air Station Jacksonville
P659	P-8 Training and Parking

Apron Expansion

Notes: Naval Air Station Jacksonville Integrated Training Center

---

Navy 1205 01 0703676N

Project	Name	
P630	P-8/MMA Facilities Modification	(Sunk)
Notes:	Naval Air Station Jacksonville (Facilities Modifications)	
P654	P-8A Hangar Upgrades	
Notes:	Naval Air Station Jacksonville	

Navy 1205 01 0712876N

Project	Name
P655	P-8A Hangar & Training Facility
Notes:	Naval Air Station Sigonella
P955	P-8A Hangar & Training Facility
Notes:	Naval Support Activity Bahrain

Navy 1205 01 0805376N

Project	Name	
P146	MMA Test Facilities, Renovation & Modn	(Sunk)
Notes:	Multi-mission Maritime Hangar Test Facility Modifications Naval Air Station Patuxent River	
P147	MMA Technical Supt Facs, Pax River MD	(Sunk)
Notes:	Multi-mission Maritime Hangar Test Facility Build Naval Air Station Patuxent River	

Navy 1205 01 0805976N

Project	Name	
P623	MMA Simulator Training Building	(Sunk)
Notes:	Naval Air Station Jacksonville (Build of Integrated Training Center)	

Navy 1205 01 0815976N

Project	Name	
P251	P-8A Hangar & Training Facility	
Notes:	Naval Air Station Whidbey Island	
P624	P-8A Training Facility	(Sunk)
Notes:	Naval Air Station Jacksonville	

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2010 $M			BY 2010 $M	TY $M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	8019.1	8303.1	9133.4	8219.6	7951.7	8341.5	8222.7
Procurement	23519.1	21912.5	24103.8	21508.5	25654.7	24954.2	23833.9
Flyaway	--	--	--	17570.6	--	--	19487.0
Recurring	--	--	--	16885.9	--	--	18705.2
Non Recurring	--	--	--	684.7	--	--	781.8
Support	--	--	--	3937.9	--	--	4346.9
Other Support	--	--	--	3474.0	--	--	3847.9
Initial Spares	--	--	--	463.9	--	--	499.0
MILCON	807.7	381.3	419.4	317.9	894.3	428.7	347.5
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	32345.9	30596.9	N/A	30046.0	34500.7	33724.4	32404.1

Confidence Level

Confidence Level of cost estimate for current APB: 50%

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 based on historical actual cost data and represents a notional 50% confidence level when established. The 50% confidence level does not account for sequestration impacts.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	5	5	5
Procurement	117	109	109
Total	122	114	114

Quantity Notes

Warfighting requirement is 117 production aircraft.

Cost and Funding

Funding Summary

Appropriation Summary									
FY 2017 President's Budget / December 2015 SAR (TY$ M)									
Appropriation	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
RDT&E	8003.7	142.3	57.1	18.8	0.8	0.0	0.0	0.0	8222.7
Procurement	14228.3	3229.9	2108.1	1532.9	2637.5	97.2	0.0	0.0	23833.9
MILCON	264.3	83.2	0.0	0.0	0.0	0.0	0.0	0.0	347.5
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2017 Total	22496.3	3455.4	2165.2	1551.7	2638.3	97.2	0.0	0.0	32404.1
PB 2016 Total	22495.9	3505.6	2487.5	2475.6	1712.1	0.0	0.0	0.0	32676.7
Delta	0.4	-50.2	-322.3	-923.9	926.2	97.2	0.0	0.0	-272.6

Quantity Summary										
FY 2017 President's Budget / December 2015 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Development	5	0	0	0	0	0	0	0	0	5
Production	0	62	17	11	6	13	0	0	0	109
PB 2017 Total	5	62	17	11	6	13	0	0	0	114
PB 2016 Total	5	62	16	12	12	7	0	0	0	114
Delta	0	0	1	-1	-6	6	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2002	--	--	--	--	--	--	37.2
2003	--	--	--	--	--	--	65.3
2004	--	--	--	--	--	--	66.1
2005	--	--	--	--	--	--	470.9
2006	--	--	--	--	--	--	927.0
2007	--	--	--	--	--	--	1100.0
2008	--	--	--	--	--	--	860.2
2009	--	--	--	--	--	--	1089.7
2010	--	--	--	--	--	--	1125.7
2011	--	--	--	--	--	--	893.6
2012	--	--	--	--	--	--	576.8
2013	--	--	--	--	--	--	358.5
2014	--	--	--	--	--	--	220.1
2015	--	--	--	--	--	--	212.6
2016	--	--	--	--	--	--	142.3
2017	--	--	--	--	--	--	57.1
2018	--	--	--	--	--	--	18.8
2019	--	--	--	--	--	--	0.8
Subtotal	5	--	--	--	--	--	8222.7

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2010 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2002	--	--	--	--	--	--	43.4
2003	--	--	--	--	--	--	75.0
2004	--	--	--	--	--	--	73.9
2005	--	--	--	--	--	--	512.8
2006	--	--	--	--	--	--	979.0
2007	--	--	--	--	--	--	1134.0
2008	--	--	--	--	--	--	870.9
2009	--	--	--	--	--	--	1089.2
2010	--	--	--	--	--	--	1108.6
2011	--	--	--	--	--	--	859.5
2012	--	--	--	--	--	--	545.7
2013	--	--	--	--	--	--	335.7
2014	--	--	--	--	--	--	203.2
2015	--	--	--	--	--	--	193.8
2016	--	--	--	--	--	--	127.7
2017	--	--	--	--	--	--	50.3
2018	--	--	--	--	--	--	16.2
2019	--	--	--	--	--	--	0.7
Subtotal	5	--	--	--	--	--	8219.6

Annual Funding 1506 | Procurement | Aircraft Procurement, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2009	--	109.1	--	--	109.1	--	109.1
2010	6	1360.6	--	54.3	1414.9	383.9	1798.8
2011	7	1382.0	--	31.5	1413.5	492.3	1905.8
2012	11	1977.5	--	29.4	2006.9	280.8	2287.7
2013	13	2252.9	--	32.3	2285.2	454.4	2739.6
2014	16	2603.6	--	53.9	2657.5	558.5	3216.0
2015	9	1312.7	--	62.8	1375.5	795.8	2171.3
2016	17	2713.9	--	72.5	2786.4	443.5	3229.9
2017	11	1729.2	--	89.1	1818.3	289.8	2108.1
2018	6	1271.3	--	97.4	1368.7	164.2	1532.9
2019	13	1992.4	--	161.4	2153.8	483.7	2637.5
2020	--	--	--	97.2	97.2	--	97.2
Subtotal	109	18705.2	--	781.8	19487.0	4346.9	23833.9

Annual Funding 1506 | Procurement | Aircraft Procurement, Navy							
Fiscal Year	Quantity	BY 2010 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2009	--	107.8	--	--	107.8	--	107.8
2010	6	1317.1	--	52.6	1369.7	371.7	1741.4
2011	7	1311.8	--	29.9	1341.7	467.4	1809.1
2012	11	1850.6	--	27.5	1878.1	262.8	2140.9
2013	13	2085.9	--	29.9	2115.8	420.7	2536.5
2014	16	2379.6	--	49.3	2428.9	510.5	2939.4
2015	9	1182.0	--	56.5	1238.5	716.6	1955.1
2016	17	2402.1	--	64.2	2466.3	392.6	2858.9
2017	11	1502.0	--	77.4	1579.4	251.7	1831.1
2018	6	1083.0	--	83.0	1166.0	139.9	1305.9
2019	13	1664.0	--	134.8	1798.8	404.0	2202.8
2020	--	--	--	79.6	79.6	--	79.6
Subtotal	109	16885.9	--	684.7	17570.6	3937.9	21508.5

FY 2020 Non-Recurring Flyaway reflects $78 million in Production Line Shutdown cost.

Cost Quantity Information 1506 | Procurement | Aircraft Procurement, Navy		
Fiscal Year	**Quantity**	**End Item Recurring Flyaway (Aligned With Quantity) BY 2010 $M**
2009	--	--
2010	6	1271.9
2011	7	1305.4
2012	11	1777.1
2013	13	2032.2
2014	16	2360.8
2015	9	1481.5
2016	17	2132.5
2017	11	1643.6
2018	6	985.7
2019	13	1895.2
2020	--	--
Subtotal	109	16885.9

Annual Funding 1205 | MILCON | Military Construction, Navy and Marine Corps	
Fiscal Year	**TY $M**
	Total Program
2006	5.8
2007	16.3
2008	--
2009	48.2
2010	5.9
2011	--
2012	31.2
2013	--
2014	100.7
2015	56.2
2016	83.2
Subtotal	347.5

Annual Funding 1205 | MILCON | Military Construction, Navy and Marine Corps	
Fiscal Year	**BY 2010 $M**
	Total Program
2006	6.0
2007	16.6
2008	--
2009	47.5
2010	5.7
2011	--
2012	28.9
2013	--
2014	90.8
2015	49.9
2016	72.5
Subtotal	317.9

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	6/4/2004	7/15/2013
Approved Quantity	34	37
Reference	Milestone B ADM	LRIP Lot IV ADM
Start Year	2010	2010
End Year	2012	2013

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. 35 of 37 LRIP aircraft have been delivered.

Foreign Military Sales

None

Nuclear Costs

None

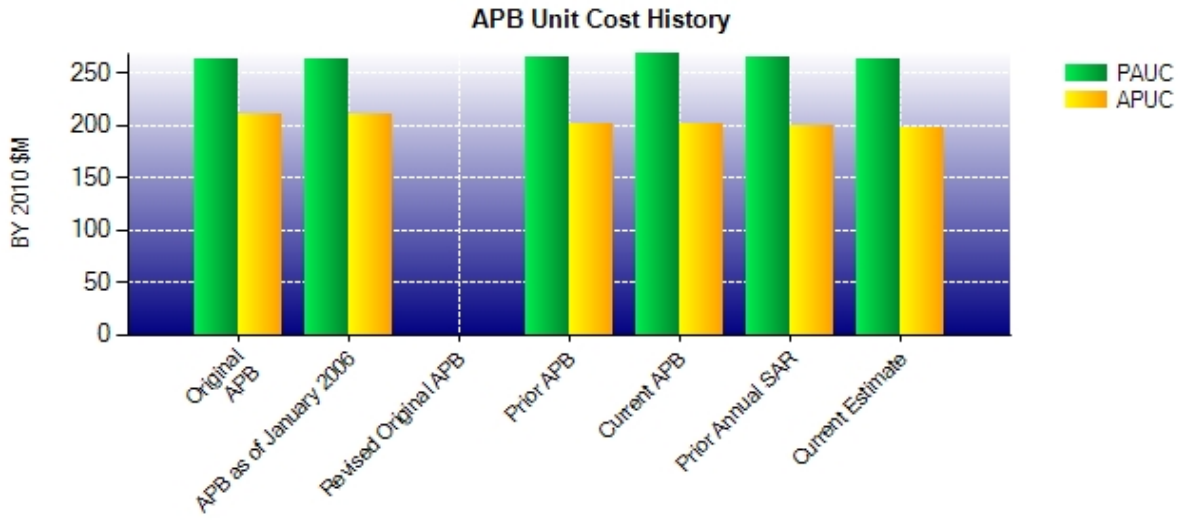
Unit Cost

Unit Cost Report

Item	BY 2010 $M Current UCR Baseline (Feb 2014 APB)	BY 2010 $M Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost			
Cost	30596.9	30046.0	
Quantity	114	114	
Unit Cost	268.394	263.561	-1.80
Average Procurement Unit Cost			
Cost	21912.5	21508.5	
Quantity	109	109	
Unit Cost	201.032	197.326	-1.84

Item	BY 2010 $M Original UCR Baseline (Jun 2004 APB)	BY 2010 $M Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost			
Cost	30271.9	30046.0	
Quantity	115	114	
Unit Cost	263.234	263.561	+0.12
Average Procurement Unit Cost			
Cost	22791.2	21508.5	
Quantity	108	109	
Unit Cost	211.030	197.326	-6.49

Unit Cost History



Item	Date	BY 2010 $M		TY $M	
		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	Oct 2010	265.130	201.018	282.793	219.271
Current APB	Feb 2014	268.394	201.032	295.828	228.938
Prior Annual SAR	Dec 2014	264.810	198.719	286.638	221.197
Current Estimate	Dec 2015	263.561	197.326	284.246	218.660

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)									
Initial PAUC Development Estimate	Changes								PAUC Production Estimate
	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 Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
282.793	1.974	6.156	4.568	-1.088	-9.206	0.000	-0.951	1.453	284.246

Initial SAR Baseline to Current SAR Baseline (TY $M)									
Initial APUC Development Estimate	Changes								APUC Production Estimate
	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 Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
219.271	1.604	1.777	4.098	1.589	-8.685	0.000	-0.994	-0.611	218.660

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	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	Dec 2013
Total Cost (TY $M)	N/A	31428.6	34500.7	32404.1
Total Quantity	N/A	115	122	114
PAUC	N/A	273.292	282.793	284.246

Cost Variance

Summary TY $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Production Estimate)	7951.7	25654.7	894.3	34500.7
Previous Changes				
Economic	+41.7	+299.0	+15.0	+355.7
Quantity	--	-1560.4	--	-1560.4
Schedule	+72.9	+433.8	+1.1	+507.8
Engineering	+76.3	+111.9	-373.5	-185.3
Estimating	+80.2	-755.6	-193.5	-868.9
Other	--	--	--	--
Support	--	-72.9	--	-72.9
Subtotal	+271.1	-1544.2	-550.9	-1824.0
Current Changes				
Economic	-4.9	-124.2	-1.6	-130.7
Quantity	--	--	--	--
Schedule	--	+12.9	--	+12.9
Engineering	--	+61.3	--	+61.3
Estimating	+4.8	-191.1	+5.7	-180.6
Other	--	--	--	--
Support	--	-35.5	--	-35.5
Subtotal	-0.1	-276.6	+4.1	-272.6
Total Changes	+271.0	-1820.8	-546.8	-2096.6
CE - Cost Variance	8222.7	23833.9	347.5	32404.1
CE - Cost & Funding	8222.7	23833.9	347.5	32404.1

Summary BY 2010 $M				
Item	**RDT&E**	**Procurement**	**MILCON**	**Total**
SAR Baseline (Production Estimate)	8019.1	23519.1	807.7	32345.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	-1276.4	--	-1276.4
Schedule	+68.1	+111.7	-0.4	+179.4
Engineering	+68.4	+94.0	-328.6	-166.2
Estimating	+59.5	-642.2	-165.9	-748.6
Other	--	--	--	--
Support	--	-145.8	--	-145.8
Subtotal	+196.0	-1858.7	-494.9	-2157.6
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	-2.8	--	-2.8
Engineering	--	+50.7	--	+50.7
Estimating	+4.5	-167.9	+5.1	-158.3
Other	--	--	--	--
Support	--	-31.9	--	-31.9
Subtotal	+4.5	-151.9	+5.1	-142.3
Total Changes	+200.5	-2010.6	-489.8	-2299.9
CE - Cost Variance	8219.6	21508.5	317.9	30046.0
CE - Cost & Funding	8219.6	21508.5	317.9	30046.0

Previous Estimate: December 2014

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-4.9
Revised estimate to reflect prior year actuals. (Estimating)	-5.6	-6.3
Adjustment due to FY 2017 PB funding realignment. (Estimating)	+5.9	+6.6
Adjustment for current and prior escalation. (Estimating)	+4.2	+4.5
RDT&E Subtotal	+4.5	-0.1

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-124.2
Schedule Variance resulting from re-phasing aircraft (FY 2016 +1, FY 2017 -1, FY 2018 -6, FY 2019 +6). (Schedule)	0.0	+17.5
Additional Schedule Variance due to re-phasing aircraft in FY 2016-2019. (Schedule)	-2.8	-4.6
Revised estimate to reflect increase in Ancillary Equipment. (Engineering)	+50.7	+61.3
Revised estimate to reflect increase to Non-Recurring Engineering for forward fit of product configuration changes and movement of Production Line Shutdown cost from Support. (Estimating)	+89.6	+107.2
Revised estimate to reflect decrease due to cost estimating methodology update (Boeing Commercial Aircraft effort). (Estimating)	-212.1	-242.6
Revised estimate to reflect decrease due to Program Management Office adjustments from Lots 6 and 7 negotiations. (Estimating)	-87.6	-103.1
Revised estimate to reflect decrease due to Government Furnished Equipment APY-10 Radar contract settlement. (Estimating)	-6.7	-7.4
Adjustment for current and prior escalation. (Estimating)	+48.9	+54.8
Adjustment for current and prior escalation. (Support)	+13.2	+14.0
Decrease in Other Support reflects updated actuals for Peculiar Ground Support Equipment, Peculiar Training Equipment and Production Line Shutdown. (Support)	-52.8	-58.2
Increase in Initial Spares allocation. (Support)	+7.7	+8.7
Procurement Subtotal	-151.9	-276.6

MILCON	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-1.6
Revised estimate to reflect prior year actuals. (Estimating)	+3.7	+4.1
Adjustment for current and prior escalation. (Estimating)	+1.4	+1.6
MILCON Subtotal	+5.1	+4.1

Contracts

Contract Identification

Appropriation: Procurement

Contract Name: P-8A Production Contract for LRIP Lot IV

Contractor: The Boeing Company

Contractor Location: 7755 East Marginal Way
Seattle, WA 98108

Contract Number: N00019-12-C-0112/0

Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Firm Fixed Price (FFP)

Award Date: August 31, 2012

Definitization Date: July 31, 2013

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
244.9	244.9	N/A	1969.4	2012.5	13	1969.4	1969.4

Target Price Change Explanation

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 Advanced Procurement and LRIP Lot IV and associated spares, support equipment, technical data/publications, tools, training devices, and long lead materials.

Contract Variance		
Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (10/26/2015)	+7.1	-11.0
Previous Cumulative Variances	-5.6	-17.5
Net Change	+12.7	+6.5

Cost and Schedule Variance Explanations

The favorable net change in the cost variance is due to production operations manufacturing resources have been temporarily reallocated to support other contracts. Program and engineering less than originally planned due to efficiencies in the early stages of Lot 4 engineering.

The favorable net change in the schedule variance is due to early aircraft delivery and recovery of previously late high value material deliveries.

Notes

Cost and Schedule Variances reflect LRIP Lot IV performance. 11 of 13 LRIP Lot IV aircraft delivered.

This contract is more than 90% complete; therefore, this is the final report for this contract.

Contract Identification

Appropriation: Procurement

Contract Name: P-8A Production Contract for FRP Lot V

Contractor: The Boeing Company

Contractor Location: 7755 East Marginal Way South
Seattle, WA 98105

Contract Number: N00019-12-C-0112/1

Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Firm Fixed Price (FFP)

Award Date: July 31, 2013

Definitization Date: February 25, 2014

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
300.7	300.7	N/A	2339.6	2389.3	16	2339.6	2339.6

Target Price Change Explanation

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 Advanced Procurement and FRP Lot V and associated spares, support equipment, technical data/publications, tools, training devices, and long lead materials.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FPIF/FFP) contract.

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because a Class Deviation from Defense Federal Acquisition Regulation Supplement Subpart 234.2 was approved by the Deputy Assistant Secretary of the Navy (Acquisition and Procurement) on September 30, 2014. This Class Deviation authorizes the removal of EVM requirements from the P-8A FRP Lots V - VII contracts.

Notes

The first aircraft delivery is projected for May 2016.

Contract Identification

Appropriation: Procurement

Contract Name: P-8A Production Contract for FRP Lot VI

Contractor: The Boeing Company

Contractor Location: 7755 East Marginal Way South
Seattle, WA 98105

Contract Number: N00019-14-C-0067/0

Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Firm Fixed Price (FFP)

Award Date: August 14, 2014

Definitization Date: August 27, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
295.6	N/A	N/A	1227.4	1234.6	9	1227.4	1227.4

Target Price Change Explanation

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 Advanced Procurement and FRP Lot VI and associated spares, support equipment, technical data/publications, tools, training devices, and long lead materials.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FPIF/FFP) contract.

General Contract Variance Explanation

Cost and schedule variances are not reported for this contract, because a Class Deviation from Defense Federal Acquisition Regulation Supplement Subpart 234.2 was approved by the Deputy Assistant Secretary of the Navy (Acquisition and Procurement) on September 30, 2014. This Class Deviation authorizes the removal of EVM requirements from the P-8A FRP Lots V - VII contracts.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	5	5	5	100.00%
Production	35	35	109	32.11%
Total Program Quantity Delivered	40	40	114	35.09%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	32404.1	Years Appropriated	15
Expended to Date	17351.8	Percent Years Appropriated	78.95%
Percent Expended	53.55%	Appropriated to Date	25951.7
Total Funding Years	19	Percent Appropriated	80.09%

The above data is current as of February 29, 2016.

Although 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 Stage II production representative aircraft. The fleet has taken delivery of 35 total LRIP Lots I - IV aircraft supporting initial fleet transition training and operational deployment. All aircraft have been delivered early or on-time to contracted delivery dates.

Operating and Support Cost

Cost Estimate Details

Date of Estimate:	January 27, 2016
Source of Estimate:	POE
Quantity to Sustain:	109
Unit of Measure:	Aircraft
Service Life per Unit:	25.00 Years
Fiscal Years in Service:	FY 2012 - FY 2044

All five of the P-8A RDT&E-funded development aircraft will remain as test articles (SDD aircraft) and are funded within the Continuing System Improvements cost element. The Quantity to Sustain number of 109 reflects the 109 procurement funded aircraft.

Flight hours per aircraft per year are: P-8A = 677. The calculation is based on summing the total operational flight hours and dividing by total operational aircraft. P-8A operations are based on: one Fleet Replacement Squadron (12 aircraft) and 12 Fleet squadrons (6-7 aircraft each).

Sustainment Strategy

P-8A O&S costs are based on limited 3-level maintenance. Post-Material Support Date contracts will be managed by Naval Supply Systems Command and the Defense Logistics Agency. Intermediate level maintenance is currently estimated for 84 parts with additional intermediate level capability assessments ongoing.

Antecedent Information

P-3C O&S costs are based on a 3-level maintenance system. P-3C data was pulled from the Naval Visibility and Management of Operating and Support Cost database Aircraft Type Model Series Report in December 2015 (BY 2010 dollar average for FY 2004-FY 2014). Aircraft quantities: P-3C = 150 Total Aircraft Inventory and 141 Primary Authorized Aircraft. Flight hours per aircraft per year are: P-3C = 502. The calculation is based on summing the total operational flight hours and dividing by total operational aircraft. The annual P-3C sustainment cost (2004-2014 average) is $1.68 CY 2010 $B while the annual P-8A sustainment cost is $1.36 CY 2010 $B resulting in an annual cost avoidance of $0.32 CY 2010 $B.

Indirect support for P-3C was estimated based on a ratio of mission personnel and intermediate maintenance government labor. Indirect support calculation now in alignment with P-8A calculation, by multiplying the Mission Personnel cost by a factor of 46.68%, which was determined by dividing the annual steady state P-8A Indirect Cost by the P-8A Mission Personnel cost.

Annual O&S Costs BY2010 $M		
Cost Element	**P-8A Average Annual Cost Per Aircraft**	**P-3C (Antecedent) Average Annual Cost Per Aircraft**
Unit-Level Manpower	4.161	3.733
Unit Operations	2.771	1.559
Maintenance	4.844	2.874
Sustaining Support	0.919	0.188
Continuing System Improvements	0.834	1.801
Indirect Support	2.078	1.743
Other	0.000	0.000
Total	15.607	11.898

This estimate that has been reviewed and updated as follows:

1. PB 2017 quantity profile.

2. Updated parts list and aircraft configuration information from Interim Support Items List Rev N.

3. 2016 inflation rates, Naval Supply Systems Command rates, mission personnel labor rates, and indirect labor rates.

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

Item	Total O&S Cost $M			
	P-8A			P-3C (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	34917.5	38409.3	35052.7	26663.4
Then Year	50434.9	N/A	50397.7	N/A

Equation to Translate Annual Cost to Total Cost

The annual cost per aircraft is derived by taking the total O&S cost by element and dividing it by the total operating aircraft years. ($35,053 BY 2010 $M Total O&S Cost / 2,246 P-8A aircraft years = $15.607 BY 2010 $M Cost per aircraft per year).

O&S Cost Variance		
Category	**BY 2010 $M**	**Change Explanations**
Prior SAR Total O&S Estimates - Dec 2014 SAR	33325.2	
Programmatic/Planning Factors	261.9	Increase for aircraft procurement schedule, Flying Hour Program (FHP) adjustments including Intermediate Level stand-up and phasing of aircraft delivery and flight hours, and change of sustainment Program Related Engineering and Program Related Logistics efforts within production phase.

Cost Estimating Methodology	-435.3	Decrease for incorporation of actuals and budget data.
Cost Data Update	603.7	Increase for updated consumable prices and repair prices, license costs, and engine depot costs.
Labor Rate	206.7	Increase for Military Pay rates and indirect rates.
Energy Rate	-305.6	Decrease for updated fuel $/gal rate.
Technical Input	1396.1	Increase for new and deleted parts, quantity per aircraft and aircraft configuration, updated Reliability and Maintainability, additional crew member for sixth workstation and airframe and engine depot overhaul schedule.
Other	0.0	
Total Changes	1727.5	
Current Estimate	35052.7	

The updated estimate is roughly a 5.2% increase from the December 2014 SAR estimate, from $33.325B CY 2010 $B to $35.053B CY 2010 $B

Disposal Estimate Details

Date of Estimate: January 27, 2016

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2010 $M): Total costs for disposal of all Aircraft are 27.5

This Rough Order of Magnitude estimate will be refined as the System Disposal Plan Annex to the Life Cycle Sustainment Plan is developed.