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## Selected Acquisition Report (SAR)

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



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

As of FY 2020 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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**Sensitivity Originator**

No originator information is available at this time.

## 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)  
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)

## Program Information

**Program Name**

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

**DoD Component**

Navy

## Responsible Office

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## References

**SAR Baseline (Production Estimate)**

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

**Approved APB**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated February 7, 2018

## **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 2018, the Maritime Patrol & Reconnaissance Aircraft program office remained focused on P-8A aircraft production, development and integration of incremental upgrades to system capabilities, fleet sustainment, and strengthening P-8A partnerships with our allies.

P-8A aircraft deliveries continued on schedule in support of the U.S. Navy (USN) fleet squadron transition from P-3C to P-8A. Ten of eleven planned aircraft production lots and associated logistics and training support are on contract with Boeing Defense Space and Security. P-8A fleet transition training is complete for ten of twelve fleet squadrons and one fleet replacement squadron. Fleet transition training is on track to complete in FY 2020. As of March 11, 2019 USN fleet squadrons have taken delivery of 80 of 111 contracted aircraft, with deliveries averaging three weeks early.

P-8A Inc 1 baseline configuration and Inc 2 Anti-Submarine Warfare enhancements are fielded in the fleet. The Navy is on track to field Inc 2 High Altitude Anti-Submarine Warfare Weapon Capability (HAAWC) in FY 2020, as paced by HAAWC production. P-8A Inc 3 consists of four separate Engineering Change Proposals (ECPs) 4-7 which incrementally increases warfighting capability under the P-8A baseline Acquisition Strategy. Inc 3 ECP 4 delivered to the fleet in FY 2018. Inc 3 ECP 5 Net Enabled Weapon/Communications, delivers to the fleet in FY 2020.

In April 2018, Navy Resources and Requirements Review Board set warfighting inventory requirement at 138 P-8A aircraft, providing for Quick Reaction Capability aircraft and U.S. Naval Reserve recapitalization. The PB 2020 P-8A aircraft procurement funding profile is 117 aircraft.

P-8A Cooperative Partner and Foreign Military Sales (FMS) activities continue on track. The New Zealand Letter of Offer and Acceptance for four aircraft and training devices was signed July 9, 2018. In November 2018, South Korea was approved for an FMS case delivering six P-8A aircraft. As of March 11, 2019 the Royal Australian Air Force, partnered with the U.S. as a Joint Program has taken delivery of eight aircraft.

A P-8A acquisition strategy change was signed by the Assistant Secretary of the Navy (Research, Development and Acquisition) on February 25, 2019 approving changes to the March 2016 P-8A Acquisition Strategy to execute the P-8A technical data Memorandum of Agreement/Special Licensing Agreement (MOA/SLA) with The Boeing Company. The MOA/SLA provides government access to P-8A technical data for the life of the program.

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

History of Significant Developments Since Program Initiation	
History of Significant Developments Since Program Initiation	
Date	Significant Development Description
February 2000	The Broad Area Maritime and Littoral Armed Intelligence Surveillance and Reconnaissance Mission Needs Statement was validated and approved by the JROC.
April 2000	The P-8A Poseidon (formerly Multi-Mission Maritime Aircraft (MMA)) program received Milestone 0 approval to enter Concept Exploration.
January 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 2003	The MMA ORD/CDD was validated and approved by JROC.
June 2004	Milestone (MS) B ADM signed and the System Development and Demonstration contract awarded to Boeing for the 737-800 ERX based system.
June 2007	The P-8A program conducted the Critical Design Review.
December 2008	The Record of Decision was approved for basing 12 P-8A squadrons and one FRS at Naval Air Station (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 Increment 2 (Inc 2). The Inc 2 Memorandum of Understanding (MOU) authorizes Australian participation in P-8A Inc 2 development.
April 2009	The P-8A program completed the Interim Program Review and awarded the Advance Acquisition Contract for LRIP Advance Procurement (AP).
August 2010	The USD (AT&L) signed the MS C ADM granting authorization to: proceed with LRIP Lots I through III that included six aircraft in FY 2010, seven 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, Multi-Static Active Coherent, High Altitude ASW Weapon Capability, Rapid Capability Insertion, Acoustics Algorithms, and Tactical Operations Center updates.
January 2011	The LRIP Lot I contract was definitized for six aircraft.
November 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-8A aircraft, participation in development of common sustainment strategies for the life of the aircraft, and participation in development of new platform capabilities.
September 2012	The LRIP Lot III contract was definitized for 11 aircraft.
July 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 2013	The LRIP Lot IV contract was definitized for 13 aircraft.
November 2013	The P-8A achieved IOC.
December 2013	The P-8A commenced first Fleet operational deployment.
January 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 2014	The FRP I (Lot V) contract was definitized for 16 aircraft.

August 2015	The FRP II Lot VI P-8A production contract definitized for nine USN and four Royal Australian Air Force (RAAF) Lot VI aircraft.
January 2016	P-8A FRP Lot VII (FY 2016 Aircraft Procurement, Navy (APN)-1, quantity of 16 USN and four RAAF aircraft) production contract option awarded.
February 2016	Two additional USN P-8A FRP Lot VII aircraft procured following the Department of the Navy's Congressional notification of the use of Buy to Budget authority under 10 United States Code 2308 received on February 22, 2016. One aircraft was procured using FY 2014 APN-1, and one aircraft was procured using FY 2016 APN-1.
March 2016	USD (AT&L) approved an updated P-8A Acquisition Strategy, incorporating the Inc 3 capabilities into the baseline program as a series of Engineering Change Proposals.
April 2016	USD (AT&L) signed the ADM for P-8A Inc 3.
May 2016	The P-8A was re-designated to an ACAT 1C program by USD (AT&L).
June 2016	ASN (RDA) signed the APB to support the Inc 3 strategy change.
August 2016	United Kingdom (UK) Embassy informed Navy International Programs Office that UK signed P-8A Letters of Offer and Acceptance (LOAs) provided in June 2016. The FMS cases provides for nine P-8A aircraft, initial logistics support and maintenance trainer suite.
October 2016	The first RAAF aircraft delivered October 19, 2016 (~6 weeks early) in Boeing Seattle and repositioned to Canberra, Australia on November 15, 2016 Australian Eastern Daylight Time.
December 2016	U.S. Navy/Boeing signed a Memorandum of Agreement for P-8A production unit pricing for FRP Lots VIII-X for 49 aircraft (31 USN, four RAAF, nine UK, and five Norway).
March 2017	Norway P-8A LOA signature by the Director, Norway Defense Material Agency completed during a ceremony in Oslo, Norway on March 29, 2017 with US Embassy leadership in attendance. The FMS case provides for five P-8A aircraft, associated services and equipment.
March 2017	The FRP Lot VIII (FY2017 APN-1, quantity of 11 USN, four RAAF and two UK aircraft) production contract awarded.
December 2017	The P-8A FRP Lot IX (FY2018 APN-1, quantity of seven USN and three UK aircraft and segregable efforts) contract awarded.
February 2018	Awarded competitive seven year, \$2 billion P-8A Engine/Airframe Depot Repair/Overhaul contracts on February 1, 2018. First fleet P-8A inducted into the airframe depot on March 28, 2018 and completed September 2018. The first engine repair contract/induct conducted April 2018.
April 2018	Fleet successfully employed Air to Air Refueling (AAR) capability. First deployment of AAR capable P-8A's commenced April 2018.

## Threshold Breaches

### APB Breaches

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

### Nunn-McCurdy Breaches

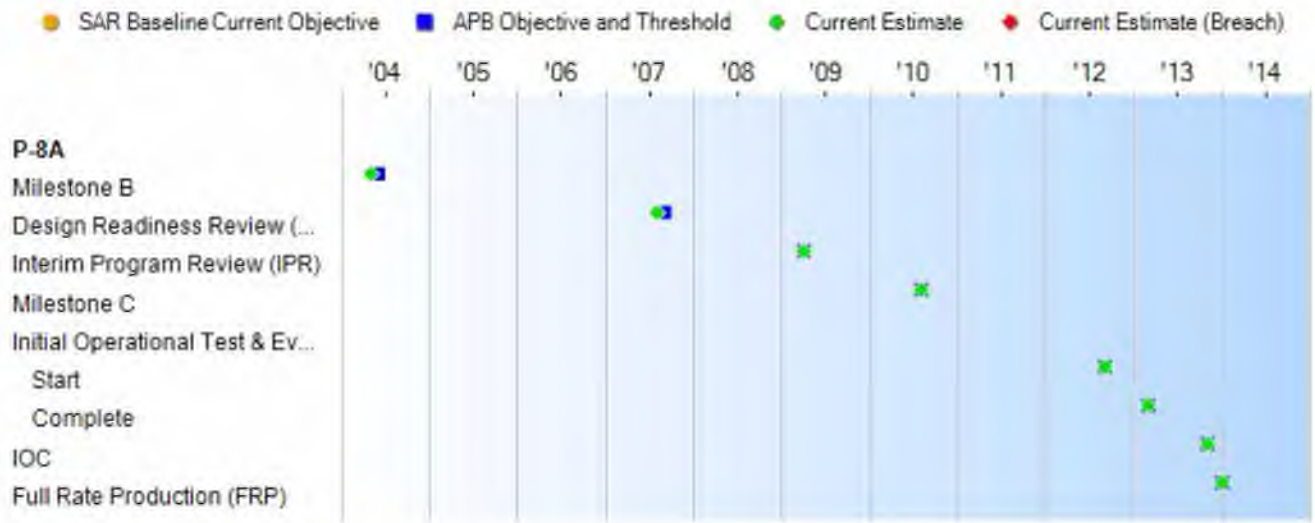
#### Current UCR Baseline

PAUC	None
APUC	None

#### Original UCR Baseline

PAUC	None
APUC	None

### Schedule



Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold	Current Estimate	Current Estimate (Breach)
Milestone B	May 2004	Jun 2004	Jun 2004	May 2004
Design Readiness Review (DRR)	Jul 2007	Sep 2007	Sep 2007	Aug 2007
Interim Program Review (IPR)	Apr 2009	Apr 2009	Apr 2009	Apr 2009
Milestone C	May 2010	Aug 2010	Aug 2010	Aug 2010
Initial Operational Test & Evaluation (IOT&E)				
Start	Apr 2012	Sep 2012	Sep 2012	Sep 2012
Complete	Feb 2013	Mar 2013	Mar 2013	Mar 2013
IOC	Jul 2013	Nov 2013	Nov 2013	Nov 2013
Full Rate Production (FRP)	Apr 2013	Jan 2014	Jan 2014	Jan 2014

**Change Explanations**

None

## Performance

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold	Demonstrated Performance	Current Estimate	
<b>Mission Radius/Endurance Subsurface attack (nm)</b>				
>=1,600/>=4	>=1,600/>=4	1,200/4	1,262/4	1,262/4 (Ch-1)
<b>Mixed Stores Loadout (ASW)(lbs)</b>				
12,500	12,500	10,000	13,275	25,000
<b>Initial On-station Altitude (ft)</b>				
49,000	49,000	25,000	39,000	39,000
<b>Operational Availability (ASW)</b>				
.8	(O = T) .8	.8	TBD	.8
<b>Force Protection (%)</b>				
100	(O = T) 100	100	100	100
<b>Net-Ready</b>				
Fully support execution of joint operational activities	Fully support execution of joint operational activities	Fully support execution of joint critical operational activities	Met initial NR KPP compliance per MS-B exit criteria. Demonstration of full NR compliance is TBD.	Fully support execution of joint critical operational activities by Increment 3 IOC.
<b>Net Enabled ASUW Weapon</b>				
N/A	Capability to act in the CC and 3PS roles in the NEW architecture including launching the weapon, in-flight control of the weapon, terminal guidance of the weapon, transferring/receiving control to/from another platform, and designating or acting as a 3PS.	Capability to act in the CC role in the NEW architecture including launching the weapon, in-flight control of the weapon, and terminal guidance of the weapon.	TBD	Capability to act in the CC and 3PS roles in the NEW architecture including launching the weapon, in-flight control of the weapon, terminal guidance of the weapon, transferring/receiving control to/from another platform, and designating or acting as a 3PS.
<b>Operational Availability (Ao ASUW)</b>				
N/A	Ao ASUW > 0.8	Ao ASUW = 0.8	TBD	Ao ASUW > 0.8

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

**Requirements Reference**

CPD (Increment 1), Change 2, dated May 8, 2012 and CDD (Increment 2 and 3) dated April 4, 2016

**Change Explanations**

(Ch-1) Current estimate and demonstrated performance value expanded to include the 4 hour endurance as documented in P-8A Development Test / Operational Test Transition Report dated August 22, 2012.

**Notes**

P-8A FOT&E Operational Availability (Ao) ASW demonstrated performance results under review.

**Acronyms and Abbreviations**

3PS - Third Person Source  
Ao - Operational Availability  
ASUW - Anti-Surface Warfare  
ASW - Anti-Submarine Warfare  
CC - Current Controller  
FOT&E - Follow-on Test and Evaluation  
ft - Feet  
JITC - Joint Interoperability Test Command  
lbs - Pounds  
NEW - Network Enabled Weapon  
nm - Nautical miles

## Track to Budget

### General Notes

The RDT&E cost parameters include the costs associated with Project Unit 2696 (Inc 1 System Development and Demonstration), Project Unit 3181 (Inc 2 next Phase of Capabilities (previously called Spiral One)) and Project Unit 3218 (P-8A Inc 3 (previously called Spiral Two)). Inc 2 capabilities were 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 (MAC); High Altitude Anti-submarine Warfare Weapon Capability and Sensors; Rapid Capability Insertion; and Tactical Operations Center updates. Inc 3 capability was added to the APB cost parameters in accordance with the P-8A APB signed June 8, 2016. Inc 3 capability integration includes: ECP 4 Ultra High Frequency Satellite Communications (SATCOM) Demand Assigned Multiple Access integrated waveform & Targeting Capability upgrades; ECP 5 includes Link-16 message [Net Enabled Weapon (J11), third party targeting (J12), and Electronic Warfare coordination (J14)], High Frequency radio Internet Protocol, Integrated Broadcast Service (IBS) filtering, new IBS receiver, and Harpoon II+ upgrade; ECP 6 incorporates Net Ready KPP, a Combat System architecture upgrade, ASW Signals Intelligence, Higher than Secret processing, enhanced track management (Minotaur) and Wideband SATCOM; and ECP 7 incorporates Enhanced MAC capabilities via the Combat System architecture.

Track to budget change reflects MILCON changes in this report. MILCON projects Advanced Airborne Sensor (AAS) Tactical Operations Center Okinawa (P512), AAS Fleet Support Activity Naval Air Station Whidbey Island (P253), AAS MILCON Design Funds (P044), and AAS Fleet Maintenance Facility (P992) moved from Active Appropriations to Sunk Appropriations.

### RDT&E

Appn	BA	PE
Navy	1319 05	0605500N
	<b>Project</b>	<b>Name</b>
	2696	Multi-mission Maritime Aircraft (Shared)
	3181	P-8A Spiral One Development (Shared) (Sunk)
	<b>Notes:</b>	P-8A Multi-mission Maritime Aircraft Increment 2 (formerly Spiral 1)
	3218	P-8A Spiral Two Development (Shared) (Sunk)
	<b>Notes:</b>	P-8A Multi-mission Maritime Aircraft Increment 3 (formerly Spiral 2)
Navy	1319 05	0605504N
	<b>Project</b>	<b>Name</b>
	3218	P-8A Spiral Two Development
	<b>Notes:</b>	P-8A Multi-mission Maritime Aircraft Increment 3 (formerly Spiral 2)

### Procurement

Appn	BA	PE
Navy	1506 01	0204251N
	<b>Line Item</b>	<b>Name</b>
	0193	P-8A Poseidon
Navy	1506 06	0204251N



Line Item	Name
0605	Spares and Repair Parts (Shared)

## MILCON

Appn	BA	PE
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Navy 1205 01 0203176N

Project	Name
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P512 AAS Tactical Operations Center (Sunk)

**Notes:** AAS TOC (COMFLTACT Okinawa)

Navy 1205 01 0212176N

Project	Name
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P116 P-8A Detachment Support Facility (Sunk)

**Notes:** Joint Base Pearl Harbor Hickam

P253 AAS Fleet Support Activity (Sunk)

**Notes:** AAS Fleet Support Activity (NAS WI)

P259 P-8A Aircraft Apron and Support Facility (Sunk)

**Notes:** Naval Air Station Whidbey Island

P334 P-8 Fleet Support Facility Addition (Sunk)

**Notes:** Naval Air Station Jacksonville

P659 P-8 Training and Parking Apron Expansion (Sunk)

**Notes:** Naval Air Station Jacksonville Integrated Training Center

Navy 1205 01 0703676N

Project	Name
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P630 P-8/MMA Facilities Modification (Sunk)

**Notes:** Naval Air Station Jacksonville (Facilities Modifications)

P654 P-8A Hangar Upgrades (Sunk)

**Notes:** Naval Air Station Jacksonville

Navy 1205 01 0712876N

Project	Name
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P655 P-8A Hangar & Training Facility (Sunk)

**Notes:** Naval Air Station Sigonella

P955 P-8A Hangar & Training Facility (Sunk)

**Notes:** Naval Support Activity Bahrain

P992 AAS Fleet Maintenance Activity & TOC (Sunk)

**Notes:** AAS Fleet Maintenance Activity

## &amp; TOC

Navy	1205	01	0805376N	
	<b>Project</b>		<b>Name</b>	
	P146		MMA Test Facilities, Renovation & Modernization	(Sunk)
			<b>Notes:</b> Multi-mission Maritime Hangar Test Facility Modifications Naval Air Station Patuxent River	
	P147		MMA Technical Supt Facs, Pax River MD	(Sunk)
			<b>Notes:</b> Multi-mission Maritime Hangar Test Facility Build Naval Air Station Patuxent River	
Navy	1205	01	0805976N	
	<b>Project</b>		<b>Name</b>	
	P623		MMA Simulator Training Building	(Sunk)
			<b>Notes:</b> Naval Air Station Jacksonville (Build of Integrated Training Center)	
Navy	1205	01	0815976N	
	<b>Project</b>		<b>Name</b>	
	P251		P-8A Hangar & Training Facility	(Sunk)
			<b>Notes:</b> Naval Air Station Whidbey Island	
	P624		P-8A Training Facility	(Sunk)
			<b>Notes:</b> Naval Air Station Jacksonville	
Navy	1205	03	0901211N	
	<b>Project</b>		<b>Name</b>	
	P044		AAS MILCON Design Funds	(Sunk)
			<b>Notes:</b> AAS MILCON Design Funds	

## 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	9232.5	10155.8	9304.7	7951.7	9406.2	9523.5
Procurement	23519.1	21508.5	23659.4	22136.0	25654.7	23833.9	24659.1
Flyaway	--	--	--	18126.4	--	--	20214.6
Recurring	--	--	--	17472.1	--	--	19462.9
Non Recurring	--	--	--	654.3	--	--	751.7
Support	--	--	--	4009.6	--	--	4444.5
Other Support	--	--	--	3450.6	--	--	3832.7
Initial Spares	--	--	--	559.0	--	--	611.8
MILCON	807.7	365.8	402.4	364.2	894.3	406.4	406.4
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	32345.9	31106.8	N/A	31804.9	34500.7	33646.5	34589.0

#### Current APB Cost Estimate Reference

The POE is an update to the P-8A FRP SCP and is supported by the methods employed by the Naval Air Systems Command Cost Team (AIR-4.2). The estimate reference is dated March 01, 2016

#### Cost Notes

No cost estimate for the program has been completed in the previous year.

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

#### Quantity Notes

In April 2018, Navy Resources and Requirements Review Board set warfighting inventory requirement at 138 P-8A aircraft, providing for Quick Reaction Capability aircraft and U.S. Naval Reserve recapitalization.

## Cost and Funding

### Funding Summary

Appropriation Summary									
FY 2020 President's Budget / December 2018 SAR (TY\$ M)									
Appropriation	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
RDT&E	8646.7	171.3	177.2	145.2	123.5	126.0	133.6	0.0	9523.5
Procurement	21393.0	1979.1	1206.7	80.3	0.0	0.0	0.0	0.0	24659.1
MILCON	351.6	54.8	0.0	0.0	0.0	0.0	0.0	0.0	406.4
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2020 Total	30391.3	2205.2	1383.9	225.5	123.5	126.0	133.6	0.0	34589.0
PB 2019 Total	29917.5	2243.8	1845.0	246.4	129.0	131.6	0.0	0.0	34513.3
Delta	473.8	-38.6	-461.1	-20.9	-5.5	-5.6	133.6	0.0	75.7

Quantity Summary										
FY 2020 President's Budget / December 2018 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Development	5	0	0	0	0	0	0	0	0	5
Production	0	101	10	6	0	0	0	0	0	117
PB 2020 Total	5	101	10	6	0	0	0	0	0	122
PB 2019 Total	5	98	10	9	0	0	0	0	0	122
Delta	0	3	0	-3	0	0	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	--	--	--	--	--	--	37.0
2003	--	--	--	--	--	--	65.3
2004	--	--	--	--	--	--	66.3
2005	--	--	--	--	--	--	470.9
2006	--	--	--	--	--	--	927.0
2007	--	--	--	--	--	--	1100.0
2008	--	--	--	--	--	--	860.0
2009	--	--	--	--	--	--	1089.7
2010	--	--	--	--	--	--	1125.7
2011	--	--	--	--	--	--	895.6
2012	--	--	--	--	--	--	580.8
2013	--	--	--	--	--	--	377.7
2014	--	--	--	--	--	--	247.4
2015	--	--	--	--	--	--	282.8
2016	--	--	--	--	--	--	227.6
2017	--	--	--	--	--	--	160.1
2018	--	--	--	--	--	--	132.8
2019	--	--	--	--	--	--	171.3
2020	--	--	--	--	--	--	177.2
2021	--	--	--	--	--	--	145.2
2022	--	--	--	--	--	--	123.5
2023	--	--	--	--	--	--	126.0
2024	--	--	--	--	--	--	133.6
Subtotal	5	--	--	--	--	--	9523.5

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	--	--	--	--	--	--	43.1
2003	--	--	--	--	--	--	75.0
2004	--	--	--	--	--	--	74.1
2005	--	--	--	--	--	--	512.8
2006	--	--	--	--	--	--	979.0
2007	--	--	--	--	--	--	1134.0
2008	--	--	--	--	--	--	870.7
2009	--	--	--	--	--	--	1089.2
2010	--	--	--	--	--	--	1108.6
2011	--	--	--	--	--	--	861.4
2012	--	--	--	--	--	--	549.5
2013	--	--	--	--	--	--	353.6
2014	--	--	--	--	--	--	228.4
2015	--	--	--	--	--	--	257.8
2016	--	--	--	--	--	--	203.9
2017	--	--	--	--	--	--	140.8
2018	--	--	--	--	--	--	114.5
2019	--	--	--	--	--	--	144.7
2020	--	--	--	--	--	--	146.8
2021	--	--	--	--	--	--	117.9
2022	--	--	--	--	--	--	98.3
2023	--	--	--	--	--	--	98.4
2024	--	--	--	--	--	--	102.2
Subtotal	5	--	--	--	--	--	9304.7

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	--	29.3	2006.8	280.8	2287.6	
2013	13	2252.9	--	32.3	2285.2	454.4	2739.6	
2014	17	2603.6	--	54.0	2657.6	558.6	3216.2	
2015	9	1312.7	--	62.8	1375.5	795.8	2171.3	
2016	17	2714.0	--	72.5	2786.5	444.8	3231.3	
2017	11	1635.3	--	78.1	1713.4	269.6	1983.0	
2018	10	1601.6	--	84.7	1686.3	264.0	1950.3	
2019	10	1660.3	--	85.5	1745.8	233.3	1979.1	
2020	6	853.3	--	86.4	939.7	267.0	1206.7	
2021	--	--	--	80.3	80.3	--	80.3	
Subtotal	117	19462.9	--	751.7	20214.6	4444.5	24659.1	

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	467.3	1809.0	
2012	11	1850.5	--	27.4	1877.9	262.7	2140.6	
2013	13	2085.6	--	29.9	2115.5	420.7	2536.2	
2014	17	2379.2	--	49.3	2428.5	510.5	2939.0	
2015	9	1181.7	--	56.5	1238.2	716.4	1954.6	
2016	17	2393.6	--	63.9	2457.5	392.3	2849.8	
2017	11	1413.7	--	67.5	1481.2	233.1	1714.3	
2018	10	1357.0	--	71.8	1428.8	223.7	1652.5	
2019	10	1379.2	--	71.0	1450.2	193.8	1644.0	
2020	6	694.9	--	70.4	765.3	217.4	982.7	
2021	--	--	--	64.1	64.1	--	64.1	
Subtotal	117	17472.1	--	654.3	18126.4	4009.6	22136.0	



FY 2021 Non-Recurring Flyaway reflects \$80.3 (TY \$M) 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	1272.1
2011	7	1306.5
2012	11	1780.1
2013	13	2037.3
2014	17	2373.1
2015	9	1426.1
2016	17	2224.8
2017	11	1538.1
2018	10	1356.1
2019	10	1361.9
2020	6	796.0
2021	--	--
Subtotal	117	17472.1

Annual Funding 1205   MILCON   Military Construction, Navy and Marine Corps		
Fiscal Year	TY \$M	
	Total Program	
2006		5.7
2007		16.3
2008		--
2009		48.2
2010		5.9
2011		--
2012		31.2
2013		--
2014		100.7
2015		56.2
2016		83.2
2017		--
2018		4.2
2019		54.8
Subtotal		406.4

Annual Funding 1205   MILCON   Military Construction, Navy and Marine Corps		
Fiscal Year	BY 2010 \$M	
	Total Program	
2006		5.9
2007		16.6
2008		--
2009		47.5
2010		5.7
2011		--
2012		28.9
2013		--
2014		90.8
2015		49.3
2016		71.6
2017		--
2018		3.5
2019		44.4
Subtotal		364.2

## Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	6/4/2004	7/15/2013
<b>Approved Quantity</b>	34	37
<b>Reference</b>	Milestone B ADM	LRIP Lot IV ADM
<b>Start Year</b>	2010	2010
<b>End Year</b>	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. All 37 LRIP aircraft have been delivered.

## Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Description
South Korea	11/28/2018	6	1615.7	The South Korea Letter of Offer and Acceptance for six aircraft and initial support was signed November 28, 2018.
New Zealand	7/9/2018	4	1097.0	The New Zealand Letter of Offer and Acceptance for four aircraft and training devices was signed July 9, 2018.
Norway	3/29/2017	5	1246.8	The Norway FMS Letter of Offer and Acceptance for five aircraft, associated services and equipment was signed March 29, 2017.
United Kingdom	7/26/2016	9	2385.2	Total cost based on Letter of Offer and Acceptance signed July 26, 2016. FMS Case UK-P-SAN provides for the procurement of nine aircraft and initial support. FMS Case UK-P-LVK provides for trainers and FMS Case UK-P-TGO provides for training.

### Notes

The five Norway FMS P-8A aircraft will deliver in late calendar year (CY) 2021.

The UK FMS P-8A aircraft delivery schedule is two P-8A Lot VIII aircraft (CY 2019) with the 1st aircraft delivering in October 2019, three P-8A Lot IX aircraft (CY 2020), and four P-8A Lot X aircraft (CY 2021).

The four New Zealand FMS P-8A aircraft deliveries will begin in late summer CY 2022.

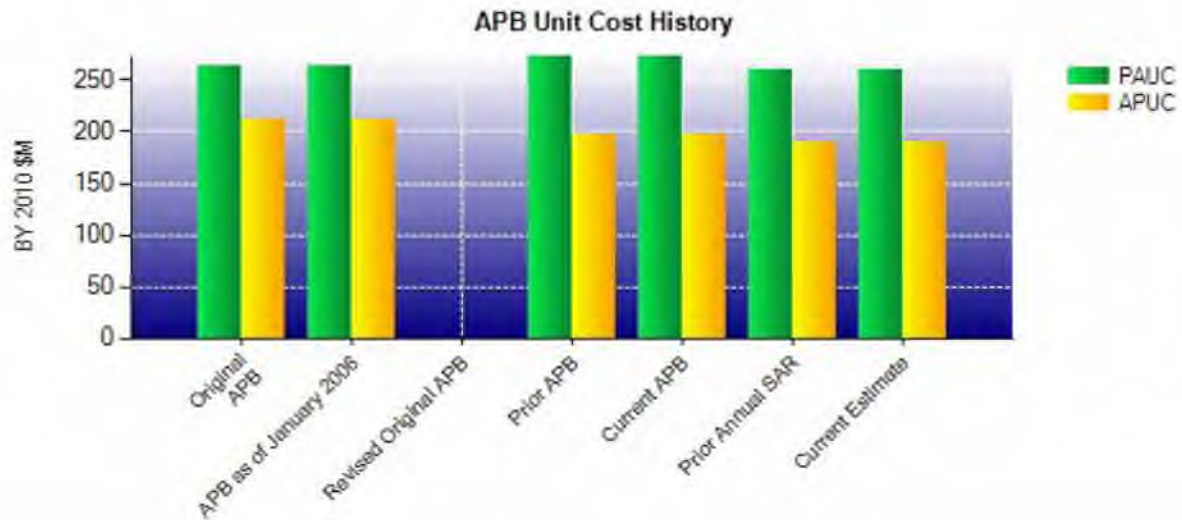
The six South Korea FMS P-8A aircraft deliveries will begin in fall of CY 2022.

## Nuclear Costs

None

**Unit Cost**

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2010 \$M	BY 2010 \$M	% Change
	Current UCR Baseline (Feb 2018 APB)	Current Estimate (Dec 2018 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	31106.8	31804.9	
Quantity	114	122	
Unit Cost	272.867	260.696	-4.46
<b>Average Procurement Unit Cost</b>			
Cost	21508.5	22136.0	
Quantity	109	117	
Unit Cost	197.326	189.197	-4.12
Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2010 \$M	BY 2010 \$M	% Change
	Original UCR Baseline (Jun 2004 APB)	Current Estimate (Dec 2018 SAR)	
<b>Program Acquisition Unit Cost</b>			
Cost	30271.9	31804.9	
Quantity	115	122	
Unit Cost	263.234	260.696	-0.96
<b>Average Procurement Unit Cost</b>			
Cost	22791.2	22136.0	
Quantity	108	117	
Unit Cost	211.030	189.197	-10.35



APB 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	Jun 2016	272.446	197.326	294.627	218.660
Current APB	Feb 2018	272.867	197.326	295.145	218.660
Prior Annual SAR	Dec 2017	260.779	189.768	282.896	210.888
Current Estimate	Dec 2018	260.696	189.197	283.516	210.762

**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	2.341	-0.185	3.502	8.310	-13.099	0.000	-0.146	0.723		283.516

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	1.974	-0.192	3.517	1.115	-14.771	0.000	-0.152	-8.509	210.762

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A		N/A	N/A	N/A
Milestone B		N/A	May 2004	May 2004
Milestone C		N/A	May 2010	May 2010
IOC		N/A	Jul 2013	Jul 2013
Total Cost (TY \$M)		N/A	31428.6	34500.7
Total Quantity		N/A	115	122
PAUC		N/A	273.292	282.793



**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	+30.9	+146.7	+13.9	+191.5
Quantity	--	-22.5	--	-22.5
Schedule	+72.9	+428.6	+1.1	+502.6
Engineering	+1198.0	+130.4	-314.6	+1013.8
Estimating	+179.5	-1642.7	-188.3	-1651.5
Other	--	--	--	--
Support	--	-21.3	--	-21.3
Subtotal	+1481.3	-980.8	-487.9	+12.6
Current Changes				
Economic	+8.0	+84.3	+1.8	+94.1
Quantity	--	--	--	--
Schedule	-58.2	-17.1	--	-75.3
Engineering	--	--	--	--
Estimating	+140.7	-85.5	-1.8	+53.4
Other	--	--	--	--
Support	--	+3.5	--	+3.5
Subtotal	+90.5	-14.8	--	+75.7
Total Changes	+1571.8	-995.6	-487.9	+88.3
CE - Cost Variance	9523.5	24659.1	406.4	34589.0
CE - Cost & Funding	9523.5	24659.1	406.4	34589.0

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	--	+8.8	--	+8.8
Schedule	+68.1	+67.0	-0.4	+134.7
Engineering	+1023.2	+109.2	-280.3	+852.1
Estimating	+135.9	-1391.4	-161.2	-1416.7
Other	--	--	--	--
Support	--	-109.8	--	-109.8
Subtotal	+1227.2	-1316.2	-441.9	-530.9
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	-50.2	+2.1	--	-48.1
Engineering	--	--	--	--
Estimating	+108.6	-72.8	-1.6	+34.2
Other	--	--	--	--
Support	--	+3.8	--	+3.8
Subtotal	+58.4	-66.9	-1.6	-10.1
Total Changes	+1285.6	-1383.1	-443.5	-541.0
CE - Cost Variance	9304.7	22136.0	364.2	31804.9
CE - Cost & Funding	9304.7	22136.0	364.2	31804.9

Previous Estimate: December 2017

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+8.0
Adjustment for current and prior escalation. (Estimating)	-3.2	-3.7
FY 2018 Congressional reduction delayed fielding of critical Inc 3 Engineering Change Proposal 6/7 Anti-Submarine Warfare warfighting capability to the fleet. (Schedule)	-50.2	-58.2
Additional funding to achieve Inc 3 IOC. (Estimating)	+26.4	+31.8
Revised estimate for FY 2020 PB funding realignment. (Estimating)	-16.8	-21.0
Revised estimate for continued P-8A Inc 3 integrated development and testing activities. (Estimating)	+102.2	+133.6
<b>RDT&amp;E Subtotal</b>	<b>+58.4</b>	<b>+90.5</b>

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+84.3
Acceleration of procurement buy profile re-phasing three aircraft from FY 2020 to FY 2018. (Schedule)	0.0	-19.2
Additional schedule variance due to re-phasing of aircraft. (Schedule)	+2.1	+2.1
Adjustment for current and prior escalation. (Estimating)	-48.7	-56.7
Revised estimate to reflect the application of new outyear escalation indices. (Estimating)	-9.3	-11.5
Revised estimate for Production Line Shutdown costs. (Estimating)	-13.0	-16.2
FY 2019 Congressional reduction for contract cost savings. (Estimating)	-35.3	-42.1
Revised estimate due to cost estimating methodology updates for Airframe, Contractor Furnished Equipment (CFE), Government Furnished Equipment, Ancillary Equipment, and Engineering Change Orders. (Estimating)	+33.5	+41.0
Adjustment for current and prior escalation. (Support)	-8.7	-9.8
Decrease in Other Support for re-phasing of aircraft, CFE electronics and excess support cost. (Support)	-44.3	-53.8
Increase in Initial Spares due to re-phasing of aircraft. (Support)	+56.8	+67.1
<b>Procurement Subtotal</b>	<b>-66.9</b>	<b>-14.8</b>

MILCON	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+1.8
Adjustment for current and prior escalation. (Estimating)	-1.6	-1.8
<b>MILCON Subtotal</b>	<b>-1.6</b>	<b>0.0</b>

## Contracts

### Contract Identification

**Appropriation:** RDT&E  
**Contract Name:** Increment 3 Critical Design Review Capabilities Integration  
**Contractor:** The Boeing Company  
**Contractor Location:** 7755 East Marginal Way South  
 Seattle, WA 98108  
**Contract Number:** N00019-16-G-0001/1  
**Contract Type:** Cost Plus Fixed Fee (CPFF)  
**Award Date:** June 30, 2016  
**Definitization Date:** August 05, 2016

### Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
71.6	N/A	0	157.9	N/A	0	143.0	143.0

### 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 Increment 3 (Inc 3) Wideband (WB) Satellite Communications (SATCOM) Radome development efforts.

### Contract Variance

Item	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/31/2019)	-13.4	-2.4
Previous Cumulative Variances	-9.1	-1.7
Net Change	-4.3	-0.7

### Cost and Schedule Variance Explanations

The unfavorable net change in the cost variance is due to more effort than originally anticipated on High Frequency Internet Protocol (HF-IP) Execution Environment, Communications Manager Execution Environment, HF-IP redesign of the Pre-Flight Insertion Data, and Link 16 defects found in datalink area.

The unfavorable net change in the schedule variance is due to the re-phasing of Preliminary Design Review to Critical Design Review program activities.

**Notes**

This contract (Cost-Plus-Fixed-Fee Delivery Order against Boeing Basic Ordering Agreement) supports the development of P-8A Inc 3 Engineering Change Proposal (ECP) 4 that provides Ultra High Frequency SATCOM Demand Assigned Multiple Access integrated waveform and Targeting Capability upgrades and ECP 5 that provides Link-16 message [Net Enabled Weapon (J11), third party targeting (J12), and Electronic Warfare coordination (J14)], High Frequency radio Internet Protocol, Integrated Broadcast Service (IBS) filters and new IBS receiver, and Harpoon II+. The contract was modified to include Inc 3 Block 2 and WB SATCOM Radome.

**Contract Identification**

**Appropriation:** Procurement  
**Contract Name:** P-8A Production Contract for FRP Lot VII  
**Contractor:** The Boeing Company  
**Contractor Location:** 7755 East Marginal Way South  
 Seattle, WA 98108  
**Contract Number:** N00019-14-C-0067/2  
**Contract Type:** Fixed Price Incentive(Firm Target) (FPIF), Firm Fixed Price (FFP)  
**Award Date:** January 28, 2016  
**Definitization Date:** January 28, 2016

**Contract Price**

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
2210.1	2230.2	16	2329.9	2351.5	18	2329.9	2329.9

**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 VII and associated spares, support equipment, technical data/publications, tools, training devices, and long lead materials. One additional FY 2014 funded and one additional FY 2016 funded aircraft were procured via the FY 2016 Lot 7 contract as a result of the Department of the Navy's Congressional notification of the use of Buy to Budget authority under 10 United States Code 2308 received on February 22, 2016.

**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**

As of March 11, 2019 all 18 FRP Lot VII USN aircraft have delivered to the fleet.

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 VIII  
**Contractor:** The Boeing Company  
**Contractor Location:** 7755 East Marginal Way South  
 Seattle, WA 98108  
**Contract Number:** N00019-14-C-0067/3  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** April 05, 2016  
**Definitization Date:** March 30, 2017

**Contract Price**

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
235.3	N/A	0	1525.2	N/A	11	1525.2	1525.2

**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 VIII 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 (FFP) contract.

**Notes**

P-8A FRP Lot VII Firm Fixed Price aircraft production contract awarded for 11 USN aircraft on March 30, 2017. The first FRP Lot VII aircraft delivery to the USN fleet is expected by the end of March 2019.

**Contract Identification**

**Appropriation:** Procurement  
**Contract Name:** P-8A Production Contract for FRP Lot IX  
**Contractor:** The Boeing Company  
**Contractor Location:** 7755 East Marginal Way South  
 Seattle, WA 98108  
**Contract Number:** N00019-14-C-0067/4  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** April 05, 2016  
**Definitization Date:** May 24, 2018

**Contract Price**

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
858.2	N/A	7	1274.6	N/A	10	1274.6	1274.6

**Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to adding three FY 2018 Congressional Add aircraft to the P-8A aircraft production contract.

**Cost and Schedule Variance Explanations**

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

**Notes**

P-8A FRP Lot IX Firm Fixed Price aircraft production contract awarded for seven USN aircraft on December 21, 2017.

USN contract awarded May 24, 2018 adding three FY 2018 Congressional Add aircraft to the P-8A aircraft production contract.

The first FRP Lot IX aircraft delivery to the USN fleet is expected in March 2020.



**Contract Identification**

**Appropriation:** Procurement  
**Contract Name:** P-8A Production Contract for FRP Lot X  
**Contractor:** The Boeing Company  
**Contractor Location:** 7755 East Marginal Way South  
 Seattle, WA 98108  
**Contract Number:** N00019-14-C-0067/5  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** January 25, 2019  
**Definitization Date:** January 25, 2019

**Contract Price**

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1388.3	N/A	10	1388.3	N/A	10	1388.3	1388.3

**Cost and Schedule Variance Explanations**

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

**Notes**

This is the first time this contract is being reported.

P-8A FRP Lot X Firm Fixed Price aircraft production contract awarded for ten USN aircraft on January 25, 2019.

The first FRP Lot X aircraft delivery to the USN fleet is expected in November 2020.

## Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	5	5	5	100.00%
Production	80	80	117	68.38%
Total Program Quantity Delivered	85	85	122	69.67%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	34589.0	Years Appropriated	18
Expended to Date	26904.9	Percent Years Appropriated	78.26%
Percent Expended	77.78%	Appropriated to Date	32596.5
Total Funding Years	23	Percent Appropriated	94.24%

The above data is current as of March 11, 2019.

### Notes

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 80 total production aircraft supporting 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

<b>Date of Estimate:</b>	February 12, 2019
<b>Source of Estimate:</b>	POE
<b>Quantity to Sustain:</b>	117
<b>Unit of Measure:</b>	Aircraft
<b>Service Life per Unit:</b>	25.00 Years
<b>Fiscal Years in Service:</b>	FY 2012 - FY 2047

All five of the P-8A RDT&E funded System Development and Demonstration test aircraft will remain as test articles and sustained with RDT&E funding. The Quantity to Sustain number of 117 reflects the 117 procurement funded aircraft.

Flight hours per aircraft per year are: P-8A = 606. 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 (7 aircraft each).

The total operating aircraft years of 2,459 is computed by summing the number of operational aircraft in each year of the 'Fiscal Years in Service' period which includes delivery ramp-up, steady-state operation, and aircraft retirement ramp-down phases.

### Sustainment Strategy

The 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 142 parts with additional intermediate-level capability.

### Antecedent Information

The Antecedent System is the P-3C aircraft. 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 November 2016 (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.

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 56.2%, 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		P-3C (Antecedent)
	Average Annual Cost Per Aircraft		Average Annual Cost Per Aircraft
Unit-Level Manpower		3.865	3.733
Unit Operations		2.437	1.559
Maintenance		4.175	2.874
Sustaining Support		0.931	0.188
Continuing System Improvements		1.608	1.801
Indirect Support		2.173	2.094
Other		0.000	0.000
<b>Total</b>		<b>15.189</b>	<b>12.249</b>

Item	Total O&S Cost \$M			
	P-8A			P-3C (Antecedent)
	Current Production APB Objective/Threshold	Current Estimate		
<b>Base Year</b>	38060.1	41866.1	37348.1	30130.0
<b>Then Year</b>	54490.4	N/A	55031.7	N/A

#### Equation to Translate Annual Cost to Total Cost

The annual cost per aircraft is derived by taking the total O&S cost and dividing it by the total operating aircraft years. (\$37348.1 BY 2010 \$M Total O&S Cost / 2,459 P-8A aircraft years = \$15.19 BY 2010 \$M Cost per operating aircraft per year).

O&S Cost Variance		
Category	BY 2010 \$M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2017 SAR	38009.7	
Programmatic/Planning Factors	-294.7	Update to PB 2020 flying hour program estimates and phasing of intermediate-level repair capability stand-up activities.
Cost Estimating Methodology	-243.7	Update for continuing baseline budget submissions and end-of-life ramp down of engine inductions and limited life parts replacement.
Cost Data Update	279.3	Update to repairable and consumable parts pricing, airframe overhaul cost, engine overhaul cost, INMARSAT costs and including an additional year of P-8A cost data (FY 2018) into VAMOSOC averages.
Labor Rate	63.1	Update to FY 2019 Military Composite Pay rates.
Energy Rate	-87.1	Update to PB 2020 fuel cost per gallon and FY 2019 fuel inflation..
Technical Input	-378.5	Update for additional intermediate-level repair capability and Reliability & Maintainability estimates.

Other	0.0
Total Changes	-661.6
Current Estimate	37348.1

**Disposal Estimate Details**

Date of Estimate:	February 12, 2019
Source of Estimate:	POE
Disposal/Demilitarization Total Cost (BY 2010 \$M):	29.8

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