Modernized Selected Acquisition Report (MSAR)

E-2D Advanced Hawkeye Aircraft (E-2D AHE)

FY 2025 President's Budget

Effective: December 31, 2023

Defense Acquisition Visibility Environment

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(U) Common DoD Abbreviations

$B	Billions of Dollars
$K	Thousands of Dollars
$M	Millions of Dollars
ACAT	Acquisition Category
Acq O&M	Acquisition-Related Operations and Maintenance
ADM	Acquisition Decision Memorandum
APA	Additional Performance Attribute
APB	Acquisition Program Baseline
APPN	Appropriation
APUC	Average Procurement Unit Cost
BA	Budget Authority or Budget Activity
Blk	Block
BY	Base Year
CAE	Component Acquisition Executive
CAPE	Cost Assessment and Program Evaluation
CARD	Cost Analysis Requirements Description
CCE	Component Cost Estimate
CCP	Component Cost Position
CDD	Capability Development Document
CLIN	Contract Line Item Number
CPD	Capability Production Document
CY	Calendar Year or Constant Year
DAB	Defense Acquisition Board
DAE	Defense Acquisition Executive
DAES	Defense Acquisition Executive Summary
DAVE	Defense Acquisition Visibility Environment
DoD	Department of Defense
DSN	Defense Switched Network
EMD	Engineering and Manufacturing Development
EVM	Earned Value Management
FD	Full Deployment
FDD	Full-Deployment Decision
FMS	Foreign Military Sales
FOC	Full Operational Capability
FRP	Full-Rate Production
FY	Fiscal Year
FYDP	Future Years Defense Program
ICD	Initial Capabilities Document
ICE	Independent Cost Estimate
Inc	Increment
IOC	Initial Operational Capability
IT	Information Technology
JROC	Joint Requirements Oversight Council
KPP	Key Performance Parameter
KSA	Key System Attribute

LRIP	Low-Rate Initial Production
MDA	Milestone Decision Authority
MDAP	Major Defense Acquisition Program
MILCON	Military Construction
N/A	Not Applicable
O	Objective
O&M	Operations and Maintenance
O&S	Operating and Support
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense
PAUC	Program Acquisition Unit Cost
PB	President's Budget
PE	Program Element
PEO	Program Executive Officer
PM	Program Manager
POE	Program Office Estimate
R&MF	Revolving and Management Funds
RDT&E	Research, Development, Test, and Evaluation
SAR	Selected Acquisition Report
SCP	Service Cost Position
T	Threshold
TBD	To Be Determined
TY	Then Year
U.S.	United States
U.S.C	United States Code
UCR	Unit Cost Reporting
USD(A&S)	Under Secretary of Defense (Acquisition and Sustainment)

(U) Program Description

Full Name
E-2D Advanced Hawkeye Aircraft

Short Name
E-2D AHE

PNO
364

Milestone Decision Authority
Component Acquisition Executive

Lead Component
Department of the Navy

Program Executive Office
PEO Tactical Air

Joint Program
No

International Partners
France, Japan

Adaptive Acquisition Pathway
Major Capability Acquisition

Acquisition Type
Major Defense Acquisition Program

Acquisition Category
IC

Acquired Systems
E-2D AHE

Acquisition Status
Active Acquisition

Mission
The E-2D Advanced Hawkeye Aircraft (E-2D AHE) is a carrier based, all weather, multi-mission aircraft. The E-2D AHE mission is to provide premier airborne Battle Management Command and Control and Surveillance as part of the Naval and Joint Integrated Air and Missile Defense architecture including the Naval Integrated Fire Control-Counter Air capability. The centerpiece of the E-2D AHE is the APY-9 radar system. This radar system is designed specifically to provide significantly enhanced surveillance detection and tracking capability against advanced threat aircraft and cruise missile systems in the overland, littoral, and open ocean environments. Maritime surveillance is also maintained in the open ocean scenarios. The E-2D AHE provides early warning of hostile threats and provides the force with the right data to prosecute any engagement. Key capabilities along with the radar include the Identification Friend or Foe system and Electronic Support Measures for surveillance and combat identification, advanced mission processing capability to integrate all on-board sensor data and off-board information into a coherent tactical picture, and communications, data link, and sensor netting systems to share information across the battlespace. These capabilities allow the E-2D AHE to provide a significant contribution to execution of other mission areas such as Strike, Combat Search and Rescue, and Homeland Defense. As a part of the E-2D AHE radar modernization effort, the Navy also invested in integrating a full glass cockpit and full Communication Navigation Surveillance/ Air Traffic Management capability. The glass cockpit will also provide the capability for the pilot or co-pilot to perform tactical mission functions. Additionally, aerial refueling capability is being installed to increase the duration of the maximum time on station.

(U) Responsible Office

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(U) Executive Summary

Program Highlights Since Last Report

Multi-Year Procurement (MYP) II has completed Full Rate Production (FRP) Lot 7 and four aircraft from FRP Lot 8 have been delivered.
Delta System/Software Configuration 4 (DSSC 4) completed Operational Test Readiness Review (OTRR) in January 2023 and received approval to proceed to test; Operational Test (OT) began in May 2023 and completed in November 2023. Final OT report for DSSC 4 scheduled to be released on 24 April 2024. Key capabilities included in DSSC 4 include Counter Electronic Attack (CEA), Integrated Beyond Line of Sight (BLOS), baseline Tactical Targeting Network Technology (TTNT) and Sensor Netting updates to the From The Sea (FTS) mission known as FTS Improvements (FTS-I).
The Research, Development, Test and Engineering (RDT&E) Budget Estimate shows an APB breach to total dollars. This is due to PB 2025 exceeding the current APB by $949.8M (BY 2009$) due to extending the RDT&E budget from FY 2025 to FY 2031 to address obsolescence and modernization efforts including DSSC-6 and future DSSC build capabilities. The MDA has been notified and an APB is in work to address this deviation.
The Operating and Support (O&S) baseline deviation is due to re-baselining program via Gate 7 Sustainment Review process and building out the requirements-based estimate. This has resulted in a longer service life by 7 years greater than previously estimated which is driving more lifecycle costs into the estimate. Following the Gate 7 out-brief, the program will be signing out a new APB that aligns with the current execution of the program and the Independent Cost Estimate. The MDA has been notified and an APB is in work to address this deviation.
Defense Cost and Resource Center Cost and Software Data Reporting Compliance Rating: Red.

(U) History of Significant Developments Since Program Inception

Date	Description
November 2023	DSSC-4 OT Completed
January 2023	Delta System/Software Configuration 4 (DSSC-4) Operational Test Readiness Review (OTRR) completed and approved to proceed to test.
December 2021	Final MYP-I aircraft delivered.
December 2021	Three (3) French E-2D AHE Aircraft awarded on MYP-II contract.
July 2020	First DSSC-3 AR capable aircraft was delivered to a deployable fleet squadron (VAW-126).
February 2020	The Program revised the APB. Change 4 was approved February 2020.
October 2019	DSSC-3 and AR FOT&E (OT-D3) completed.
September 2019	The modification to the E-2D AHE MYP-II contract added the procurement of nine Japan aircraft.
July 2019	US Navy held a R3B and affirmed the requirement for an inventory of 86 E-2Ds in order to support nine Carrier Air Wings.
April 2019	The E-2D AHE MYP-II contract was awarded.
March 2019	DSSC-3 and AR FOT&E commenced. The first Japan E-2D AHE was delivered to the Japan Air Self Defense Force.
February 2019	The United States Government took possession of the first Japan E-2D AHE aircraft.

Date	Description
August 2018	FY 2019 National Defense Authorization Act (NDAA) included language for authorizing the second E-2D AHE five year MYP of 24 aircraft.
March 2017	VAW-125 deployed with DSSC-2.
December 2016	The first E-2D AHE flight in the Aerial Refueling configuration was made.
October 2016	DSSC-2 completed FOT&E (OT-D2).
July 2016	The Government of Japan procured a second E-2D AHE as a contract modification to the E-2D AHE MYP contract utilizing a variation in quantity clause.
November 2015	The Japan E-2D AHE aircraft was placed on contract as a modification to the E-2D AHE MYP contract utilizing a variation in quantity clause. The first E-2D AHE Fleet Squadron Deployment completed.
October 2015	The MSD was achieved.
August 2015	The Japan Ministry of Defense signed a Letter of Offer and Acceptance (LOA) for one E-2D AHE.
May 2015	DSSC-1 OT-D1 was completed.
March 2015	The first Fleet Squadron Deployment commenced with DSSC-1 incorporated.
October 2014	IOC was achieved on the APB schedule objective.
July 2014	DSSC-1, which is the Initial Operating Capability (IOC) hardware/software configuration, was released to the Fleet following a recommendation by the Commander, Operational Test Forces during FOT&E (OT-D1) execution.
June 2014	A MYP contract for 25 aircraft in FRP Lots 2-6 during FY2014-2018 was awarded saving the Navy approximately $369M.
May 2014	A USD(AT&L) ADM granted authority to proceed with a MYP during FY 2014 through FY 2018. It also designated E-2D AHE as an ACAT IC MDAP and delegated Milestone Decision Authority (MDA) to the Secretary of the Navy.
October 2013	Test events for the verification of Correction of Deficiencies period for IOT&E were completed.
September 2013	The Aerial Refueling Engineering, Manufacturing and Design (EMD) contract was awarded.
July 2013	A contract was awarded for the first FRP lot of five aircraft.
April 2013	USD (AT&L) approved the FRP APB.
March 2013	A USD(AT&L) ADM granted authority to commence Full Rate Production (FRP) procurement of 55 aircraft during FY 2013-FY2021.
October 2012	IOT&E was completed with the Commander, Operational Test and Evaluation Forces assessing the E-2D AHE as operationally effective; operationally suitable for shore based operations (based on limited shipboard testing).
February 2012	The PEO for Tactical Aircraft Programs (PEOT) certified the E-2D AHE to enter Initial Operational Test and Evaluation (IOT&E).
February 2012	A contract was awarded for LRIP Lot 4.
July 2011	A contract was awarded for LRIP Lot 3.
March 2011	A DAB approved procurement of LRIP Lots 3 and 4 as well as Advanced Procurement for FRP Lot 1.
July 2010	A contract for one LRIP Lot 2 Congressionally added aircraft was awarded.
January 2010	A contract was awarded for LRIP Lot 2.
July 2009	The program received a new APB that rebaselined the program to a Production Baseline, replaced the original APB approved in June 2003, and reset the APUC and PAUC values.
June 2009	The Navy declared a Critical Nunn-McCurdy breach based on the updated CAIG ICE.

Date	Description
	USD(AT&L) issued an ADM acknowledging the breach and stated all required actions to resolve it were completed. The ADM rescinded the Milestone B and documented completion of a root cause analysis. Upon reviewing the program and business case analysis, USD(AT&L) made the certifications required by 10 U.S.C. 2366b(d) to allow the program to re-enter the acquisition process at Milestone C. The Navy was directed to use the accelerated production ramp briefed at the Defense Acquisition Board (DAB). Finally, the ADM approved the E-2D AHE program to enter into the Production and Deployment Phase, specifically to procure Low Rate Initial Procurement (LRIP) Lots 1 and 2. A contract was awarded for LRIP Lot 1 and Advanced Procurement for LRIP Lot 2. A quarterly exception SAR was submitted reporting the Nunn-McCurdy unit cost breach.
May 2009	As part of the Nunn-McCurdy review, the CAIG updated their ICE and reported the program was in a Critical Nunn-McCurdy breach. The Overarching Integrated Product Team Lead directed the Navy to consider an accelerated production ramp to reduce cost to mitigate the critical breach. A Critical Nunn-McCurdy review out-brief/Milestone C DAB was held and a revised APB Deviation Report was submitted announcing a Significant breach to APUC and PAUC based on the CAIG estimate using a revised production ramp, which accelerated aircraft procurement by moving six aircraft to within the FYDP and ending production one year earlier.
April 2009	USD(AT&L) issued an Acquisition Decision Memorandum (ADM) directing the program perform a review similar to the one for a Critical Nunn-McCurdy breach even though a Critical breach had not occurred.
March 2009	The Cost Analysis Improvement Group (CAIG) conducted an ICE and reported a Significant cost breach to APUC and PAUC.
December 2007	First Mission System (radar) Flight Test.
September 2007	The CDD was approved by the JROC. Seven Key Performance Parameters (KPPs) were added post Milestone B.
August 2007	First Test Flight occurred on the original Milestone B schedule objective.
July 2007	A Pilot Production contract for three aircraft was awarded.
October 2005	The Critical Design Review was completed one month prior to the original Milestone B schedule objective.
June 2003	The E-2D AHE program received Milestone B approval to enter the System Development and Demonstration acquisition phase.

(U) Schedule

(U) Schedule Events

Events		Production APB (Milestone) 7/31/2009 Objective	APB Change 4 (Current) 2/10/2020 Objective / Threshold		Current Estimate 12/31/2023	Actual
Milestone B	MS B	May 2003	Jun 2003	Jun 2003	-	1 Jun 2003
Critical Design Review	CDR	Nov 2005	Oct 2005	Oct 2005	-	1 Oct 2005
First Flight	First Flight	Aug 2007	Aug 2007	Aug 2007	-	1 Aug 2007
Milestone C	MS C	Mar 2009	May 2009	May 2009	-	1 May 2009
Full Rate Production	FRP Decision	Dec 2012	Mar 2013	Mar 2013	-	1 Mar 2013
IOC	IOC	Oct 2014	Oct 2014	Oct 2014	-	1 Oct 2014

Notes

None

Schedule Baseline Deviation Explanation

None

(U) Current Significant Schedule Risks and Risks Identified at Milestones/Decisions

None

(U) Performance

(U) Performance Attributes

Unrefueled Time On Station (1)		KPP
Current Estimate 12/31/2023		-
Demonstrated Performance -		-
APB Change 4 (Current) 2/10/2020	Objective	=>2.0 hours at a station distance of 200nm
	Threshold	(T=O) =>2.0 hours at a station distance of 200nm
Production APB (Milestone) 7/31/2009	Objective	=>2.0 hours at a station distance of 200nm
Manpower (Full Operational Capability - FY 2020)		**KPP**
Current Estimate 12/31/2023		-
Demonstrated Performance -		-
APB Change 4 (Current) 2/10/2020	Objective	Aircrew Os =< 323 Maintenance Os/Es =< 34 / 1303 Support Os/Es =< 12 / 683 Training Os/Es =< 76 / 60
	Threshold	(T=O) Aircrew Os =< 323 Maintenance Os/Es =< 34 / 1303 Support Os/Es =< 12 / 683 Training Os/Es =< 76 / 60
Production APB (Milestone) 7/31/2009	Objective	Aircrew Os =< 323 Maintenance Os/Es =< 34 / 1303 Support Os/Es =< 12 / 683 Training Os/Es =< 76 / 60
Flat Turn Service Ceiling (2)		**KPP**
Current Estimate 12/31/2023		-
Demonstrated Performance -		-
APB Change 4 (Current) 2/10/2020	Objective	=>25,000 feet above MSL at mission profile
	Threshold	(T=O) =>25,000 feet above MSL at mission profile
Production APB (Milestone) 7/31/2009	Objective	=>25,000 feet above MSL at mission profile
Network-Centric Military Operations (Network Readiness) (1)		**KPP**
Current Estimate 12/31/2023		-
Demonstrated Performance -		-
APB Change 4	Objective	The system must fully support execution of all

(Current) 2/10/2020		operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include: (1) The DISR mandated GIG IT standards and profiles identified in the TV-1, (2) DISR mandated GIG KIPs identified in the KIP declaration table, (3) NCOW RM Enterprise Services (4) IA requirements include availability, integrity, authenticat-ion, confidential-ity, non-repudiation, and issuance of an ATO by the DAA (5) Operationally effective information exchanges; and MC- performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views
	Threshold	The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include: (1) The DISR mandated GIG IT standards and profiles identified in the TV-1 (2) DISR mandated GIG KIPs identified in the KIP declaration table (3) NCOW RM Enterprise Services (4) IA requirements including availability integrity, authenticat-ion, confidential-ity, non-repudiation, and issuance of an IATO by the DAA (5) Operationally effective information exchanges and MC-performance and IA attributes, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views
Production APB (Milestone) 7/31/2009	**Objective**	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include: (1) The DISR mandated GIG IT standards and profiles identified in the TV-1, (2) DISR mandated GIG KIPs identified in the KIP declaration table, (3) NCOW RM Enterprise Services (4) IA requirements include availability, integrity, authenticat-ion, confidential-ity, non-repudiation, and issuance of an ATO by the DAA (5) Operationally effective information exchanges; and MC- performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views
Radar Ao		**KPP**
Current Estimate 12/31/2023		-
Demonstrated Performance -		-
APB Change 4 (Current)	**Objective**	=>0.98
2/10/2020	**Threshold**	=>0.85
Production APB (Milestone)	**Objective**	=>0.98

7/31/2009		
Level Flight Airspeed (2)		**KPP**
Current Estimate **12/31/2023**		-
Demonstrated Performance -		-
APB Change 4 **(Current)**	**Objective**	=>300 knots true airspeed below 18,000 feet MSL
2/10/2020	**Threshold**	(T=O) =>300 knots true airspeed below 18,000 feet MSL
Production APB **(Milestone)** **7/31/2009**	**Objective**	=>300 knots true airspeed below 18,000 feet MSL
Survivability - Safe Egress In Crash (2)		**KPP**
Current Estimate **12/31/2023**		-
Demonstrated Performance -		-
APB Change 4 **(Current)**	**Objective**	The E-2D AHE shall retain all equipment mounted inside the fuselage in its installed position in inhabited spaces for crash landing inertia load factors applied at the equipment center of gravity of 20g forward, parallel and downward in the cockpit along a single axis. The E-2D AHE escape hatches and doors shall allow egress subsequent to a 40g crash inertial load.
2/10/2020	**Threshold**	(T=O) The E-2D AHE shall retain all equipment mounted inside the fuselage in its installed position in inhabited spaces for crash landing inertia load factors applied at the equipment center of gravity of 20g forward, parallel and downward in the cockpit along a single axis. The E-2D AHE escape hatches and doors shall allow egress subsequent to a 40g crash inertial load.
Production APB **(Milestone)** **7/31/2009**	**Objective**	The E-2D AHE shall retain all equipment mounted inside the fuselage in its installed position in inhabited spaces for crash landing inertia load factors applied at the equipment center of gravity of 20g forward, parallel and downward in the cockpit along a single axis. The E-2D AHE escape hatches and doors shall allow egress subsequent to a 40g crash inertial load.

(U) Requirement Source:

Sponsor(s): None

1. Document Type Not Provided
   Notes: CDD dated March 3, 2009

Notes

None

Performance Deviation Explanation

None

(U) Acquisition Budget Estimate

(U) Total Acquisition Estimates and Quantities

Category ($M) Base Year: 2009	Production APB (Milestone) 7/31/2009 CY$ obs Objective	APB Change 4 (Current) 2/10/2020 CY$ obs Objective	APB Change 4 (Current) 2/10/2020 CY$ obs Threshold	Current Estimate PB 2025 CY$ obs	Current Estimate PB 2025 TY$ obs
RDT&E	4,140.0	6,707.0	7,377.7	8,327.5*	9,805.1
Procurement	13,281.9	14,832.9	16,316.2	14,257.5	17,244.9
MILCON	46.7	88.7	97.6	88.7	103.9
O&M	0.0	0.0	0.0	-	-
R&MF	-	-	-	-	-
Total Acquisition	17,468.6	21,628.6	-	22,673.7	27,153.9
Program Acquisition Unit Cost	232.915	251.495	276.645	263.648	315.743
Average Procurement Unit Cost	189.741	183.122	201.434	176.019	212.900
Program End-Item Quantity					
Development	5	5		5	
Procurement	70	81		81	
O&M-Acquired	-	-		-	

* Baseline Deviation

Budget Notes

RDT&E Funds E-2D HECTR and TCID and accelerates mod line start from FY31 to FY28 (+$78.8M)
RDT&E Funds FNC Transition for E-2D improved landing mode (Magic Prop) (+$88.1M)
RDT&E Congressional reduction (Omnibus-ATR) (-$32.4M)
RDT&E Prior Year execution reduction (-$76.9M)
RDT&E Congressional add for Enhanced L-band and UHG for E-2D (+$20M)
RDT&E Congressional reduction for overestimation of Theater Combat Identification (TCID) (-$12.3M)
RDT&E adjustments for inflation, rate changes (-$21.8M)
RDT&E various reductions for SBIR, BSO realignments, Cancelled Accounts and Total Force Management (-$15.8M)
Procurement increased FY 2024 aircraft quantity by two (+$413.0M)
Procurement reduced To Complete aircraft quantity by two (-$386.1M)
Procurement revised Production Line Shutdown Estimate due to early to need (-$24.7M)
Procurement revised Initial Spares Estimate (-$11.1M)
Procurement revised Depot Standup Estimate (-$0.3M)
Procurement revised Government Staff estimate (-$2.6M)

Quantity Notes

The requirement has been validated at 86 aircraft to support nine fleet squadrons. Through the FY

2025 PB FYDP, the program is funded for 77 aircraft.

Cost Baseline Deviation Explanation

Parameter	Explanation
Acquisition Cost (RDT&E)	The RDT&E Budget Estimate shows an APB breach to total dollars. This is due to PB 2025 exceeding the current APB by $949.8M (BY 2009$) due to extending the RDT&E budget from FY 2025 to FY 2031 to address obsolescence and modernization efforts including DSSC-6 and future DSSC build capabilities. The MDA has been notified and an APB is in work to address this deviation.

(U) Risk and Sensitivity Analysis

Current Procurement Estimate Risks (12/31/2023)
None
Current Baseline Risks (2/10/2020)
The Current Baseline Estimate aligns with PB 2021.
Revised Original Baseline Risks (7/31/2009)
(1) After review of the programmatic and technical baseline at Milestone C, the MDA directed E-2D AHE to use the CAIG ICE as the funding requirement. The Navy SCP was seven percent lower than the CAIG ICE. (2) Both the CAIG ICE and the Navy SCP showed a shortfall in FY 2010-FY 2015 resources for procurement in the FYDP.

(U) Unit Costs

(U) Current Estimate Compared with Current Baseline

Category (CY$M) Base Year: 2009	Current Baseline 02/10/2020	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	21,628.6	22,673.7	
Program Quantity	86	86	
PAUC	251.495	263.648	4.83%
Average Procurement Unit Cost			
Procurement Cost	14,832.9	14,257.5	
Procurement Quantity	81	81	
APUC	183.122	176.019	-3.88%

(U) Current Estimate Compared with Original Baseline

Category (CY$M) Base Year: 2009	Original Baseline 07/31/2009	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	17,468.6	22,673.7	
Program Quantity	75	86	
PAUC	232.915	263.648	13.19%
Average Procurement Unit Cost			
Procurement Cost	13,281.9	14,257.5	
Procurement Quantity	70	81	
APUC	189.741	176.019	-7.23%

Notes

None

(U) Life-Cycle Costs

(U) Operating and Support and Disposal Cost Estimates Compared with Baseline

Category ($M) Base Year: 2009	Production APB (Milestone) 7/31/2009 CY$ obs Objective	APB Change 4 (Current) 2/10/2020 CY$ obs Objective / Threshold		Current Estimate CY$ obs / TY$ obs	
Total O&S	19,394.0	19,700.2	21,670.2	21,769.8*	40,100.9
Total Disposal	-	-	-	19.8	43.5

* Baseline Deviation

(U) Current Cost Estimate Sources

Operating and Support Cost
Type: Program Office Estimate
Approved by: N/A, March 18, 2024

Disposal/Demilitarization Cost
Type: Program Office Estimate
Approved by: N/A, March 18, 2024

Operating and Support Baseline Deviation Explanation

Baseline deviation due to re-baselining program via Gate 7 Sustainment Review process and building out the requirements-based estimate. This has resulted in a longer service life by 7 years greater than previously estimated which is driving more lifecycle costs into the estimate. Following the Gate 7 out-brief, the program will be signing out a new APB that aligns with the current execution of the program and the Independent Cost Estimate. The MDA has been notified and an APB is in work to address this deviation.

Cost Notes

The E-2D AHE initial sustainment concept for E-2D AHE unique parts was Interim Contractor Support through MSD with common systems supported organically. For the period of MSD (1st Quarter FY 2016) through Navy Support Date (3rd Quarter FY 2025), Naval Supply Systems Command Weapons System Support will support E-2D AHE unique systems through conventional and/or performance-based repair contracts with Original Equipment Manufacturers. With few exceptions, E-2D AHE unique systems have been designated as Core Capabilities and the program is pursuing the establishment of organic repair capabilities to comply with the U.S. Code Title 10 requirements. As these organic repair capabilities are established, business case analyses will be conducted to determine the best value sustainment strategies, whether it is fully organic or public-private partnership.

(U) Operating and Support Variance with Prior Estimate

(CY$M) Base Year: 2009	Estimate	
Prior Estimate (3/1/2023)	17,756.9	
Current Estimate	21,769.8	
Category	**Variance**	**Explanation**
Unit-Level Manpower	1,353.7	Variance due to increased manpower costs. FY24 rates used in this estimate were greater than FY23 rates used in the SAR-22 submission.
Unit Operations	342.5	Increase in fuel pricing drove the Energy (Fuel, Petroleum, Oil, Electricity) O&S element higher than prior estimate.
Maintenance	2,938.1	Increase in AVDLR and AFM costs due primarily to inflationary pressures. 7 years of additional aircraft service life also contributed to the increase in lifecycle maintenance costs for the platform.
Sustaining Support	306.2	An increase in the Program Related Logistics (PRL) costs as a result of transitioning away from acquisition dollars funding program personnel pushed the Sustaining Support estimate higher than previously estimated.
Continuing System Improvements	755.6	An increase in the modification kit requirements to support the Delta Software System Configuration (DSSC) modification efforts drove the costs higher than previously estimated.
Other	-1,683.2	6.0 Indirect Support costs have been removed from the estimate in order to comply with the latest OSD CAPE standards via the 2020 guidebook.
Not Categorized	0.0	

(U) Operating and Support Cost Element Structure Estimates by Acquired System

(CY$M) Base Year: 2009							
System	**Unit-Level Manpower**	**Unit Operations**	**Maintenance**	**Sustaining Support**	**Continuing System Improvements**	**Other**	**Total**
E-2D AHE	6,033.5	926.3	9,234.7	1,430.8	4,144.5	-	**21,769.8**
Program	**6,033.5**	**926.3**	**9,234.7**	**1,430.8**	**4,144.5**	**-**	**21,769.8**

(U) Annual Operating and Support Costs per Unit Compared with Antecedent System

(CY$M) Base Year: 2009							
System	**Unit-Level Manpower**	**Unit Operations**	**Maintenance**	**Sustaining Support**	**Continuing System Improvements**	**Other**	**Total**
E-2D AHE	3.4	0.5	5.1	0.8	2.3	-	**12.1**

E-2C Aircraft (Antecedent)	2.7	0.4	3.5	0.2	1.0	-	**7.8**

(U) Operating and Support Cost Estimate Assumptions

System	Quantity to Sustain	Unit Expected Service Life (Years)	Unit of Measure	Fiscal Years Operational
E-2D AHE	81	25.0	Number of Aircraft	2010 - 2057
E-2C Aircraft (Antecedent)	183	20.0	Number of Aircraft	1973 - 2027

Additional O&S Estimate Assumptions

Inflation Indices Utilized: FY 2023 OSD rates
6.0 Indirect Costs previously allocated to "Other" are removed in order to align with the OSD CAPE 2020 O&S Guidebook
Flight Hours per Aircraft per Month: 32.4
Number of Aircraft per Carrier Airborne Early Warning Squadron (AEW): 5
Total Number of Primary Aircraft Authorization (PAA): 62

- Nine 5 aircraft Carrier AEW squadrons
- One 12 aircraft Fleet Replacement Squadron (FRS)
- 2 aircraft at Air Test and Evaluation Squadron One (VX-1)*
- 3 aircraft at Naval Aviation Warfighting Development Center (NAWDC)
  Aircraft Flight Hours Life Limit: 9,600
  Total Operating Flight Hours: 604,862
  Total Operating Aircraft Years: 1,801
  Assumes 6% of maximum total aircraft inventory will be attrited over the lifecycle. The Quantity to Sustain only includes fleetowned
  assets, thereby excluding two developmental aircraft, which are Naval Air Systems Command (NAVAIR)-owned assets.
  The Total Operating Aircraft Years is calculated by summing the actual or estimated annual Primary Aircraft Inventory from FY
  2010 through FY 2057.
  *PAA beyond Primary Mission Aircraft Authorization (PMAA) and FRS aircraft are typically not included in NAVAIR SCE&A O&S cost estimates; however, PAA for VX-1 and Naval Aviation Warfighting Development Center (NAWDC) have been included in the E-2D AHE O&S cost estimate.

Antecedent Estimate Assumptions

The antecedent program is the E-2C. The boxes shown above for antecedent program do not show availability to enter data for any platform other than E-2D AHE. Given the lack of input fields, the actual E-2C antecedent costs will be shown at the bottom of this box. Annual costs for the antecedent program are based upon a three-year average of Naval Visibility and Management of Operating and Support Costs (VAMOSC) data from FY 2010 - FY 2012, the last three years prior to the start of the E-2C transition to E-2D AHE. Costs for the three years are summed and then divided by the sum of aircraft count for the three years. The average number of aircraft in the three-year

VAMOSC dataset is 58.33. For comparison purposes, the Total O&S Cost is the product of the Antecedent's Average Annual cost per Unit and the Operating Aircraft Years of the E-2D AHE.
1.0: $2.7M
2.0: $0.4M
3.0: $3.5M
4.0: $0.2M
5.0: $1.0M
Total: $7.8M

O&S Annual Cost Calculation Memo

Total O&S Cost per element divided by the Total Aircraft Years for Total Operational Aircraft (PAA) Years. $21,769.8M / 1,801 OpAC Years = $12.1M/AC/Year

(U) Technologies and Systems Engineering

(U) Current Significant Technical Risks and Risks Identified at Milestones/Decisions

Event	Date	Description
Other	9/30/2024	Risk: Rotodome Damage from F/A-18 Tanking: If the rotodome adhesive limitations are exceeded, then an operational F/A-18 tanking envelope will reduce rotodome life. Driver: E-2D rotodome materials requirements were for temperatures up to 180F. Mitigation: 1. (Complete) Raise IFC thermal limits to 270F IOT allow exploration of the tanking environment behind the F/A-18 with increased probability of irreparable damage to the rotodome. 2. (Complete) Increase post-flight inspection criteria to minimize likelihood of catastrophic failure. 3. (Complete) Gather and analyze test data to establish an operational tanking envelope. 4. (Complete) Conduct coupon testing to address cyclic thermal fatigue of the rotodome and its effects on material life. Analyze data and adjust periodic maintenance plan. (Publish Mx update Q3 FY 2022) 5. Increase the ARS pod hose length with a 5' extension and execute F-18 flight test. Funds identified in Q4 FY 2022. (Flight test planned for Q4 FY 2024).

(U) Performing Activities and Contracts

(U) External Government Activities

None

(U) Contracts and Efforts

Contract Title	Contract Number / Effort	Contractor	Phase
E-2D AHE Multi-Year Procurement (FRP Lots 2-6)	N00019-13-C-9999	Northrop Grumman Systems Corporation	Production
E-2D AHE Multi-Year Procurement (FRP Lots 7-11)	N00019-18-C-1037	Northrop Grumman Systems Corporation	Production
Northrop Grumman Corporate BOA	N00019-20-G-0005	Northrop Grumman Systems Corporation	Production

(U) Contract and Effort Identification, Price, Quantity and Performance

Contract Number:	N00019-13-C-9999	**Order Number:**	-
Contract Title:	E-2D AHE Multi-Year Procurement (FRP Lots 2-6)	**Strategy:**	-
CAGE:	70974 - Northrop Grumman Systems Corporation	**Contracting Office:**	N00019
City, State/Province:	Melbourne, FL		
Effort Number:	-	**Supported Phase:**	Production
Type:	Fixed-Price Incentive (Cost Based)	**Award Date:**	May 17, 2013
Latest Modification Date:	November 13, 2023	**Definitization Date:**	June 30, 2014
Latest Modification No.:	P00095	**Work Start Date:**	-
Technical Data Rights:	-		
Notes:	None		

Initial Price (TY$M) Target / Ceiling		Current Price (TY$M) Target / Ceiling		Estimate at Completion (TY$M) Contractor / PM		Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	-	-	-	-	-	-

(U) Contract and Effort Identification, Price, Quantity and Performance

Contract Number:	N00019-18-C-1037	**Order Number:**	-
Contract Title:	E-2D AHE Multi-Year Procurement (FRP Lots 7-11)	**Strategy:**	-
CAGE:	70974 - Northrop Grumman Systems Corporation	**Contracting Office:**	N00019
City, State/Province:	Melbourne, FL		

Effort Number:	-	**Supported Phase:**	Production
Type:	Fixed-Price Incentive (Firm Target)	**Award Date:**	February 22, 2018
Latest Modification Date:	March 27, 2024	**Definitization Date:**	April 10, 2019
Latest Modification No.:	P00081	**Work Start Date:**	April 10, 2019
Technical Data Rights:	Limited Rights		
Notes:	None		

Initial Price (TY$M) Target / Ceiling		Current Price (TY$M) Target / Ceiling		Estimate at Completion (TY$M) Contractor / PM		Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	-	-	-	-	-	-

(U) Contract and Effort Identification, Price, Quantity and Performance

Contract Number:	N00019-20-G-0005	**Order Number:**	-
Contract Title:	Northrop Grumman Corporate BOA	**Strategy:**	FAR 16.703: Basic Ordering Agreement
CAGE:	70974 - Northrop Grumman Systems Corporation	**Contracting Office:**	N00019
City, State/Province:	Melbourne, FL		

Effort Number:	-	**Supported Phase:**	Production
Type:	Other	**Award Date:**	May 16, 2020
Latest Modification Date:	October 18, 2023	**Definitization Date:**	-
Latest Modification No.:	P00011	**Work Start Date:**	-
Technical Data Rights:	-		
Notes:	None		

Initial Price (TY$M) Target / Ceiling		Current Price (TY$M) Target / Ceiling		Estimate at Completion (TY$M) Contractor / PM		Initial Quantity	Current Quantity	Delivered Quantity
-	-	-	-	-	-	-	-	-

(U) Production

(U) Low-Rate Initial Production

	Original LRIP Determination	Current LRIP Determination
Total LRIP Quantity	22	15
Date	6/13/2003	4/3/2011
Reference	Milestone B ADM	LRIP Lots 3 and 4 ADM
LRIP Period	FY 2009 - 2012	FY 2009 - 2012
Total Procurement Quantity	22	15
LRIP Percentage of Total	100.0%	100.0%

Rationale if LRIP Quantity Exceeds 10% of Total Procurement Quantity (Current Determination)

The Current Total LRIP Quantity is more than 10% of the total production quantity due to 15 aircraft being the minimum to maintain the industrial base and ensure successful transition to FRP. The 15 planned LRIP aircraft (including one FY 2011 supplemental) represent 20% of the total quantity. The reduction in LRIP quantities is due to the production quantity ramp changes.

LRIP Notes

None

(U) Deliveries and Expenditures

(U) Acquisition Funding

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	32	23	71.9%
Appropriations (TY, $M)	27,153.9	27,153.9	100.0%
Expenditures (TY, $M)	27,153.9	19,651.6	72.4%

(U) End Items Delivered

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Development	5			
E-2D AHE		5	5	
Procurement	81			
E-2D AHE		55	55	
Total	**86**	**60**	**60**	**69.8%**

Notes

PB 2025 budget numbers. Expenditures as of March 11, 2024.

(U) International Program Aspects

General Memo

The E-2D has currently been exported to Japan and is being operated by the Japan Air Self Defense Force (JASDF). JASDF has accepted delivery of five E-2Ds to date, with 13 more to be delivered by 2028. The French Ministry of Defense has also procured three E-2Ds to replace their current E-2C fleet, with deliveries planned in 2027. Egypt, Taiwan and Poland have all expressed some degree of interest in the E-2D and limited discussions are on-going with those countries regarding procurement of the E-2D.

Exportability and Business Issues

N/A

Is design for international exportability planned?	Yes	**Industry/Partner Exportability Cost-Sharing?**	No

Program Protection: Technology Security and Foreign Disclosure Issues

CPI analysis has been completed and horizontal protection analysis conducted to evaluate exportability. PP/AT has been implemented on aspects of the platform containing CPI, such that different part numbers exist for those components which limits supply chain commonality with the USN.

(U) Agreements

Activity Date	Type	Agreement Number	International Partner(s)	Quantity	Funding (TY$M)
9/26/2019	FMS LOA	JA-P-SCW	Japan (JA)	-	-
9/5/2018	FMS LOA	JA-P-SCQ	Japan (JA)	-	-
6/5/2018	FMS LOA	JA-P-SCM	Japan (JA)	-	-
7/28/2016	FMS LOA	JA-P-SCL	Japan (JA)	-	-
8/31/2015	FMS LOA	JA-P-SCJ	Japan (JA)	-	-

(U) Agreement Information

Partner(s):	Japan (JA)	**Activity Date:**	9/26/2019
Type:	Foreign Military Sales: Letter of Offer and Acceptance	**Agreement Number:**	JA-P-SCW
Notes:	None		

Japan (JA) Fiscal Year	Funding (TY$M)	Quantity
Total	-	-

(U) Agreement Information

Partner(s): Japan (JA) **Activity Date:** 9/5/2018
Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** JA-P-SCQ
Notes: None

Japan (JA) Fiscal Year	Funding (TY$M)	Quantity
Total	-	-

(U) Agreement Information

Partner(s): Japan (JA) **Activity Date:** 6/5/2018
Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** JA-P-SCM
Notes: None

Japan (JA) Fiscal Year	Funding (TY$M)	Quantity
Total	-	-

(U) Agreement Information

Partner(s): Japan (JA) **Activity Date:** 7/28/2016
Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** JA-P-SCL
Notes: None

Japan (JA) Fiscal Year	Funding (TY$M)	Quantity
Total	-	-

(U) Agreement Information

Partner(s): Japan (JA) **Activity Date:** 8/31/2015
Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** JA-P-SCJ
Notes: None

Japan (JA) Fiscal Year	Funding (TY$M)	Quantity
Total	-	-

Modernized
Selected Acquisition Report
Supplement

E-2D Advanced Hawkeye Aircraft
(E-2D AHE)

FY 2025 President's Budget
As of: December 31, 2023

MSAR Supplement Sections

Program Description

Program Use of the Adaptive Acquisition Framework

Technologies and Systems Engineering

Funding Sources (Acquisition)

Funding Sources (Operating and Support)

Acquisition Estimate and Quantity Summary

Annual Acquisition Estimates by Appropriation Account

Acquired System Annual End-Item Quantities by Appropriation Account

Nuclear Costs

Operational Fielding Plan

O&S Independent Cost Estimate

Annual Operating and Support Estimates by Cost Element

Program Description

Full Name
E-2D Advanced Hawkeye Aircraft

Short Name
E-2D AHE

PNO
364

Lead Component
Navy

AAF Pathway
MCA

Acquisition Type
MDAP

Acquired Systems
E-2D AHE

Related Programs

Full Name	PNO	Pathway	Type	ACAT/ BCAT	Acquisition Status	Costs in SAR? Acq	O&S

Program Use of the Adaptive Acquisition Framework

This acquisition is accomplished by a single program in the Major Capability Acquisition Pathway.

Technologies and Systems Engineering

E-2D Advanced Hawkeye Aircraft

Major Software Efforts

Title	Status	Fielding Date	Description
DSSC4	Deployment	Aug 2023	DSSC4 Retrofit Upgrades DSSC3.1 and DSSC3.X to a permanent solution for SIPR Chat and Data Link Networking capability.
DSSC5.1	Development	Oct 2024	DSSC 5.1 delivers software capabilities to increase to the lethality, survivability and the effectiveness of the E-2D. It will provide longer range detections, more simultaneous detections and tracking, and high resolution tracking of adversary threats. This will provide the E-2D warfighter advancements in all mission critical areas while closing critical kill chains and capacity gaps. Additionally, these changes bring a greater cyber reiliency and surviablity and multi-level security to the platform.
DSSC5.2	Development	Oct 2025	DSSC 5.2 expands on the software from DSSC 5.1. Additionally, the release will also bring Global Lightning to the platform to provide better SATCOM abilities.
DSSC6	Development	Jul 2030	Cockpit and theater combat identification technology refresh to improve computer processing, hardware and displays representations. Refresh also includes open architecture, CNS/ATM certification, cyber resilience improvement, multi level security, and integraton of National Technical Means data.

Major Engineering Changes

Title	Original Need Date	Fielding Date	Description, Rationale and Program Impacts
DSSC5.1		Oct 2024	Firmware on some of the single board computers will be updated.
DSSC 5.2		Oct 2025	Firmware on some of the single board computers will be updated.
DSSC6		Jul 2030	Cockpit and theater combat identification technology refresh to improve computer processing, hardware and displays representations. Refresh also includes open architecture, CNS/ATM certification, cyber resilience improvement, multi level security, and integraton of National Technical Means data.
Structural Modifications from Full Scale Fatigue Results		Oct 2024	Cumulative cost projection from structural modifications needed to meet establish service life of the aircraft. Incremental fielding of structural modifications will commence Oct 2024.

Funding Sources (Acquisition)

Acquisition Funding Notes

LINE 24 OTHER - PE 0815976N, Sub-Activity: 6288404 for Norfolk (LP-49) Training Annex. Shared: Yes, Sunk: No Current Cost is: 30.400 reflected on the annual acquisition estimate section.

E-2D Advanced Hawkeye Aircraft

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	1319N	05	0604234N - Advanced Hawkeye	0604234N	3051 - E-2D Adv Hawkeye		
Procurement	1506N	01	0195 - E-2D Adv Hawkeye	0204152N	-		
Procurement	1506N	06	0605 - Spares and Repair Parts	0204152N	-		
MILCON	1205N	01	60495420 - Air Wing Training Facility	0815976N	-		
MILCON	1205N	01	69232565 - E-2C/D Hangar Additions and Renovations	0703676N	-		
MILCON	1205N	01	62613603 - E-2D Operational Trainer Complex	0805976N	-		
MILCON	1205N	XX	OTHER - Other or New 1205N Line Item	XXX	XXX - --		

Funding Sources (Operating and Support)

Note: Budget lines fund activites executed by the Program Office or Sustainment Office.

Operating and Support Funding Notes

O&S estimates inlcude PRE and PRL funding within the 1A4N BLI. PRE and PRL are budgeted through the PB 2025 FYDP.

E-2D Advanced Hawkeye Aircraft

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
O&M	1804N	01	1A4N - Air Systems Support	0204152N	-		
Procurement	1506N	05	0544 - E-2 Series	0204152N	-		

Acquisition Estimate and Quantity Summary

E-2D Advanced Hawkeye Aircraft

Acquisiton Estimates

Category PB 2025	TY ($M)	Current Base Year CY2009 ($M)	Original Base Year CY2009 ($M)	Report Fiscal Year CY2024 ($M)
RDT&E	9,805.1	8,327.5	8,327.5	11,658.3
Procurement	17,244.9	14,257.5	14,257.5	19,960.1
MILCON	103.9	88.7	88.7	124.1
O&M	-	-	-	-
Total Acquisition	27,153.9	22,673.7	22,673.7	31,742.5
PAUC	315.742	263.647	263.647	369.099
APUC	212.900	176.018	176.018	246.420

Acquisiton End-Item Quantities

System PB 2025	Development	Procurement
E-2D AHE	5	81
Total	**5**	**81**

Unit Description

The 5 development assets are RDT&E Test Assets. The 81 are production units. Actual inventory is 80 due to one mishap aircraft.

Current and Future Years Defense Program Summary, TY($M)

Appropriation	Prior	2024	2025	2026	2027	2028	2029	To Complete	Total
RDT&E	6,633.4	407.6	301.4	460.7	432.2	433.7	460.7	675.3	9,805.1
Procurement	15,275.3	575.1	197.7	22.2	-	-	-	1,174.5	17,244.9
MILCON	103.9	-	-	-	-	-	-	-	103.9
O&M	-	-	-	-	-	-	-	-	-
PB 2025 Total	**22,012.7**	**982.7**	**499.1**	**483.0**	**432.2**	**433.7**	**460.7**	**1,849.8**	**27,153.9**

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

E-2D Advanced Hawkeye Aircraft

Source for TY$-CY$ Conversion: ASN FMB-6 Inflation Rates and Outlay Factors for DA, DoN and DW accounts: 17 Jan 2024

1319N - Research, Development, Test & Eval, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2009 ($M)
Total		**9,805.1**	**9,805.1**	**-**	**8,327.5**
2002		73.225	73.2	0.864695	84.7
2003		105.810	105.8	0.877371	120.6
2004		325.507	325.5	0.901862	360.9
2005		541.670	541.7	0.925599	585.2
2006		595.618	595.6	0.954440	624.0
2007		480.843	480.8	0.977818	491.8
2008		784.773	784.8	0.995654	788.2
2009		467.941	467.9	1.008439	464.0
2010		345.770	345.8	1.023565	337.8
2011		167.752	167.8	1.048005	160.1
2012		108.488	108.5	1.065386	101.8
2013		115.659	115.7	1.076573	107.4
2014		102.953	103.0	1.091785	94.3
2015		171.189	171.2	1.105522	154.8
2016		211.146	211.1	1.126040	187.5
2017		354.390	354.4	1.147109	308.9
2018		283.497	283.5	1.175207	241.2
2019		205.592	205.6	1.197841	171.6
2020		221.060	221.1	1.241891	178.0
2021		192.190	192.2	1.297706	148.1
2022		337.642	337.6	1.365502	247.3
2023		440.717	440.7	1.406153	313.4
2024		407.631	407.6	1.438253	283.4
2025		301.384	301.4	1.468762	205.2
2026		460.706	460.7	1.499606	307.2
2027		432.246	432.2	1.531098	282.3
2028		433.723	433.7	1.563251	277.4
2029		460.675	460.7	1.596079	288.6
2030		446.071	446.1	1.629597	273.7
2031		229.187	229.2	1.663818	137.7

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

E-2D Advanced Hawkeye Aircraft

Source for TY$-CY$ Conversion: ASN FMB-6 Inflation Rates and Outlay Factors for DA, DoN and DW accounts: 17 Jan 2024

1506N - Aircraft Procurement, Navy									
fiscal year	End Item Recurring Flyaway	Non-End Item Recurring Flyaway	Non-Recurring Flyaway	Initial Spares	Depot Activation	Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2009 ($M)
Total	**12,973.4**	**-**	**1,156.8**	**312.3**	**-**	**2,802.3**	**17,244.9**	**-**	**14,257.5**
2002							-	0.875471	-
2003							-	0.892950	-
2004							-	0.916524	-
2005							-	0.942337	-
2006							-	0.968470	-
2007							-	0.991050	-
2008	72.219		-	-		-	72.2	1.005915	71.8
2009	404.530		-	58.175		9.350	472.1	1.019928	462.8
2010	584.551		33.728	37.775		123.718	779.8	1.041255	748.9
2011	848.578		73.902	42.977		159.928	1,125.4	1.061920	1,059.8
2012	852.782		37.431	30.012		101.111	1,021.3	1.077189	948.1
2013	772.673		42.486	35.791		83.304	934.3	1.088718	858.1
2014	979.409		47.602	7.449		180.643	1,215.1	1.102942	1,101.7
2015	881.875		109.537	11.635		145.741	1,148.8	1.120232	1,025.5
2016	805.323		37.744	11.295		197.989	1,052.4	1.145058	919.0
2017	780.517		33.047	20.371		209.368	1,043.3	1.169501	892.1
2018	605.120		64.946	10.350		162.975	843.4	1.193153	706.9
2019	1,051.878		61.931	12.296		190.270	1,316.4	1.226069	1,073.7
2020	966.541		116.935	7.974		158.965	1,250.4	1.274432	981.2
2021	686.725		55.671	11.106		166.907	920.4	1.332888	690.5
2022	638.524		56.373	2.665		173.660	871.2	1.385363	628.9
2023	907.025		92.864	2.809		206.272	1,209.0	1.423615	849.2
2024	363.005		49.995	3.984		158.100	575.1	1.455467	395.1
2025	-		119.864	-		77.805	197.7	1.486289	133.0
2026	-		12.492	-		9.752	22.2	1.517501	14.7
2027	-		-	-		-	-	1.549369	-
2028	-		-	-		-	-	1.581905	-
2029	-		-	-		-	-	1.615125	-
2030	131.236		-	-		-	131.2	1.649043	79.6
2031	640.936		56.904	5.652		118.996	822.5	1.683673	488.5
2032	-		53.305	-		167.490	220.8	1.719030	128.4

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

E-2D Advanced Hawkeye Aircraft

Source for TY$-CY$ Conversion: ASN FMB-6 Inflation Rates and Outlay Factors for DA, DoN and DW accounts: 17 Jan 2024

1205N - Military Construction, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2009 ($M)
Total		**103.9**	**103.9**	**-**	**88.7**
2002			-	0.876647	-
2003			-	0.896158	-
2004			-	0.919624	-
2005			-	0.945724	-
2006			-	0.971375	-
2007			-	0.991130	-
2008		11.510	11.5	1.008021	11.4
2009			-	1.021833	-
2010		16.779	16.8	1.047406	16.0
2011			-	1.070933	-
2012		15.377	15.4	1.086757	14.1
2013			-	1.102238	-
2014			-	1.118770	-
2015		1.700	1.7	1.150303	1.5
2016		28.169	28.2	1.177112	23.9
2017			-	1.207432	-
2018			-	1.252241	-
2019			-	1.300414	-
2020			-	1.355326	-
2021		30.400	30.4	1.402423	21.7

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

E-2D Advanced Hawkeye Aircraft

1319N - Research, Development, Test & Eval, Navy				
fiscal year	**E-2D AHE**			**Total**
Total	**5**			**5**
Undistributed				-
2007	5			5

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

E-2D Advanced Hawkeye Aircraft

1506N - Aircraft Procurement, Navy				
fiscal year	E-2D AHE			Total
Total	**81**			**81**
Undistributed				-
2007				-
2009	2			2
2010	3			3
2011	5			5
2012	5			5
2013	5			5
2014	5			5
2015	5			5
2016	5			5
2017	6			6
2018	5			5
2019	6			6
2020	6			6
2021	5			5
2022	5			5
2023	7			7
2024	2			2
2025	-			-
2026	-			-
2027	-			-
2028	-			-
2029	-			-
2030	-			-
2031	4			4

Nuclear Costs

E-2D Advanced Hawkeye Aircraft

Program's Use of Department of Energy Resources
None

Operational Fielding Plan

E-2D Advanced Hawkeye Aircraft

System: E-2D AHE

Fielding and Inventory Notes

The E-2D AHE is the replacement for the E-2C. VAW-123 will transition to E-2D Dec 2024 and VAW-116 will transition to E-2D Jul 2026, thus completingh E-2C transitions and fielding of E-2D AHE.

E-2D AHE Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					58
2024	-	6	-	-	64
2025	-	5	-	-	69
2026	-	6	-	-	75
2027	-	2	-	-	77
2028	-	2	-	-	79
2029	-	2	-	-	81

O&S Independent Cost Estimate

E-2D Advanced Hawkeye Aircraft

Independent and Current Cost Estimate Comparison

Category CY2009 ($M)	Independent Cost Estimate 1/30/2013	Current Estimate 3/18/2024	Variance with ICE (%)
Unit-Level Manpower	3,603.7	6,033.5	67%
Unit Operations	619.4	926.3	50%
Maintenance	8,586.7	9,234.7	8%
Sustaining Support	605.9	1,430.8	136%
Continued System Improvements	2,501.8	4,144.5	66%
Other			-
Total O&S	**15,917.5**	**21,769.8**	**37%**

Independent Cost Estimate Source

Event: FRP
Type: Component Cost Position
Approved by: OSD Cost Assessment & Program Evaluation, January 30, 2013
Note: N/A

Current Cost Estimate Source

Type: Program Office Estimate
Approved by: N/A, March 18, 2024
Note: Estimate in support of FY24 Gate 7 Sustainment Review

Cost Estimate Variance Explanation

The O&S cost growth in the estimate is due to procurement of additional aircraft, utilization and service life changes, and the implementation of capabilities that were not part of the prior estimates. These deliberate programmatic changes were due to increased warfighting requirements driven by the critical capability and high readiness outcomes of the E-2D programs.

Annual Operating and Support Estimates by Cost Element

E-2D Advanced Hawkeye Aircraft

System: E-2D AHE

Source for TY-CY Conversion: OSD CAPE Inflation/Escalation Handbook 2021

Operating and Support Cost Elements							
fiscal year	1.0 Unit-Level Manpower	2.0 Unit Operations	3.0 Maintenance	4.0 Sustaining Support	5.0 Continuing System Improvements	Other	Total CY2009 ($M)
Total	**6,033.5**	**926.3**	**9,234.7**	**1,430.8**	**4,144.5**	**-**	**21,769.8**
2010	-	-	-	-	0.016		0.0
2011	-	-	0.005	-	-		0.0
2012	-	0.679	0.856	-	0.166		1.7
2013	13.006	1.468	2.434	1.057	2.426		20.4
2014	27.392	4.356	7.602	4.807	4.404		48.6
2015	41.057	7.877	15.131	6.715	6.019		76.8
2016	53.168	5.132	43.095	6.050	7.219		114.7
2017	59.092	9.377	55.483	5.440	9.062		138.5
2018	61.762	9.975	77.122	11.070	17.285		177.2
2019	72.480	11.895	80.528	10.481	38.647		214.0
2020	95.627	12.798	70.869	18.069	79.367		276.7
2021	102.216	12.398	109.332	24.169	82.720		330.8
2022	116.094	18.997	146.256	14.351	109.449		405.1
2023	144.595	24.441	209.156	37.689	184.357		600.2
2024	150.837	25.290	209.340	38.618	180.273		604.4
2025	172.410	29.108	231.834	44.383	154.610		632.3
2026	190.465	29.420	243.108	47.906	159.413		670.3
2027	191.395	31.803	257.440	47.931	123.139		651.7
2028	192.330	30.561	280.268	47.949	166.109		717.2
2029	193.269	28.071	265.712	47.963	166.500		701.5
2030	194.213	30.137	255.050	47.987	176.390		703.8
2031	195.162	30.218	282.643	48.007	137.775		693.8
2032	196.115	30.300	295.126	48.028	134.504		704.1
2033	197.073	30.382	301.507	48.048	134.382		711.4
2034	198.035	30.464	293.377	48.068	130.569		700.5
2035	199.002	30.547	324.182	48.089	115.167		717.0
2036	199.974	30.630	273.465	48.109	113.841		666.0
2037	200.951	30.714	321.859	48.130	132.338		734.0
2038	201.933	30.798	340.222	48.151	130.589		751.7
2039	202.919	30.882	304.019	48.171	128.870		714.9
2040	203.910	30.960	343.778	48.192	126.033		752.9
2041	204.906	31.025	327.139	48.213	121.041		732.3
2042	205.907	31.110	333.018	48.235	119.501		737.8

System: E-2D AHE

Source for TY-CY Conversion: OSD CAPE Inflation/Escalation Handbook 2021

Operating and Support Cost Elements							
fiscal year	1.0 Unit-Level Manpower	2.0 Unit Operations	3.0 Maintenance	4.0 Sustaining Support	5.0 Continuing System Improvements	Other	Total CY2009 ($M)
2043	206.913	31.189	348.334	48.122	116.907		751.5
2044	186.364	28.081	340.532	43.801	114.380		713.2
2045	165.610	24.956	280.056	39.479	111.889		622.0
2046	144.648	21.781	259.725	35.291	104.252		565.7
2047	145.354	21.751	271.063	35.177	88.739		562.1
2048	124.080	18.531	219.957	30.854	67.739		461.2
2049	102.594	15.274	210.810	26.665	57.693		413.0
2050	96.714	14.709	205.509	25.298	48.818		391.0
2051	94.057	14.360	180.810	23.103	43.976		356.3
2052	72.853	11.117	173.999	18.778	40.758		317.5
2053	51.440	7.849	132.514	14.586	36.971		243.4
2054	51.691	7.878	140.015	14.606	34.727		248.9
2055	51.944	7.881	76.659	14.491	28.479		179.5
2056	30.877	4.571	46.591	10.298	28.479		120.8
2057	31.027	4.585	47.190	10.183	28.479		121.5