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Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

Modernized Selected Acquisition Report (MSAR)

F-15 Eagle Passive Active Warning Survivability System (F-15 EPAWSS)

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**

F-15 Eagle Passive Active Warning
Survivability System

PNO

485

Lead Component

Department of the Air Force

Joint Program

No

Adaptive Acquisition Pathway

Major Capability Acquisition

Acquisition Category

IC

Acquisition Status

Active Acquisition

Short Name

F-15 EPAWSS

Milestone Decision Authority

Component Acquisition Executive

Program Executive Office

Fighters and Advanced Aircraft Directorate
(AFPEO/F&AA)

Acquisition Type

Major Defense Acquisition Program

Acquired Systems

F-15 EPAWSS

Mission

The F-15 EPAWSS upgrade will significantly improve the F-15's capability to autonomously and automatically detect, identify and locate radio frequency (RF) threats as well as provide the ability to deny, degrade, deceive, disrupt and defeat RF and electro-optical / infrared (EO / IR) threat systems in contested and unplanned operations within highly contested environments through 2040. The F-15 EPAWSS will provide indication, type and position of ground-based RF threats as well as the indication, type and bearing of airborne threats with the situational awareness needed to avoid, engage or negate the threat. The F-15 EPAWSS will prevent RF and IR threat systems from detecting or acquiring accurate targeting information prior to threat engagement to complicate and / or negate an enemy threat targeting solution--and effectively counter enemy missiles / weapons if adversary threat systems engage and employ weapons against friendly forces--through components such as chaff, flares, decoys / angle countermeasures and jamming. To improve schedule, affordability and program risk outcomes, and consistent with the JROC approved CDD and MDA approved acquisition strategy, the F-15 EPAWSS program is pursuing a two-increment acquisition approach. Increment 1 replaces the existing obsolete Radar Warning Receiver, Internal Countermeasures System and Countermeasures Dispenser System. Increment 2 adds a towed decoy / angle countermeasure capability to improve aircraft survivability.

(U) Responsible Office**Program Executive Officer**

Fighters and Advanced Aircraft Directorate
(AFPEO/F&AA)

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(U) Executive Summary

Program Highlights Since Last Report

The Program completed ~95% of the development effort; started and completed Initial Operational Test and Evaluation (IOT&E); continued to ramp up production; and initiated modification of seven aircraft including the first four Combat Air Force aircraft. The Program struggled with software stability and initial production ramp-up but those challenges were largely resolved. In Calendar Year 2024, the Program is poised to close the development contract; proceed to the FRP Decision; award the FRP Contract; and deliver up to 10 EPAWSS-modified F-15E aircraft to Nellis Air Force Base (AFB), Nevada, Mountain Home AFB, Idaho, and Royal Air Force Lakenheath, England.

The Program completed System Verification Review #2, signing off all technical requirements, closing the majority of the development effort, and expending \$27M in firm-fixed-price withhold/fee. The Program will close the development contract in May 2024 after BAE Systems completes and delivers production updates to the development hardware modules. The Program planned to start IOT&E in April 2023. However, the final planned iteration of mission system software exhibited unforeseen stability issues and delayed the start of IOT&E from April to July 2023. Throughout Calendar Year 2023, Boeing and BAE Systems delivered six iterations of mission system software to fine-tune performance and address the stability issues. The final software build is performing well, and the Air Force Operational Test and Evaluation Center (AFOTEC) completed IOT&E in January 2024. Combined developmental and operational testing demonstrated that the system meets/exceeds CDD requirements. AFOTEC is in the process of writing the IOT&E report, which is expected to convey that the system is Operationally Effective and Suitable. EPAWSS-equipped aircraft participated in the NORTHERN EDGE 2023 exercise in May 2023. EPAWSS demonstrated the ability to affect fifth-generation adversaries and delay aircraft detection against F-15E/EX. Furthermore, EPAWSS-equipped F-15s identified an unknown threat system on the range. BAE Systems tweaked the Mission Data File to correctly identify and jam the threat system on subsequent missions; this was a small but key step towards the goal of agile reprogramming, critical to combating modern/emerging threat systems.

Boeing and BAE Systems struggled with production ramp-up in Calendar Year 2023. BAE Systems failed to meet production commitments for the Electronic Warfare (EW) kits, an issue largely diminished by delays to F-15EX production in St. Louis, Missouri, and F-15E modifications in San Antonio, Texas. BAE Systems mitigated the early production challenges, delivering 11 shipsets in Fall 2023 in support of F-15EX #s 3-8 and F-15E modifications without delaying either Program. Boeing continued to fall behind in modifying the F-15E aircraft in San Antonio, Texas. The first aircraft was slated to deliver in August 2023 but was delayed to April 2024, eight months late. The schedule delay is due to first-time learning associated with the complex nature of the modification; challenging/unexpected incoming conditions (over-and-above work); inadequate planning/sequencing; and failure to capture lessons-learned from the test aircraft modifications at Eglin AFB, Florida. Boeing made tangible improvements on the second pair of aircraft, which will deliver five to six months late in May 2024. Boeing further improved on the third pair of aircraft, which will deliver approximately three months late in June 2024. The Program is confident that Boeing will continue to improve in Calendar Year 2024 but believes

they are unlikely to deliver an aircraft on time until early Calendar Year 2025. The Program is assessing the impact of this early "bow wave" on the remaining LRIP schedule.

On November 30, 2023, the Service Acquisition Executive approved the modification of six additional aircraft in the LRIP phase, bringing the total LRIP quantity to 49 and decreasing the total FRP quantity to 50. The authorization for six additional LRIP aircraft enables parallel modifications during F-15E Programmed Depot Maintenance at Robins AFB, Georgia, increasing aircraft availability for the fighter squadrons.

The December 2022 SAR reported the Nunn-McCurdy unit cost breach (39.3% cost growth in PAUC against the original baseline) that resulted from the continued F-15 force structure refinements in the FY 2024 PB, which reduced the F-15E EPAWSS procurement quantity from 217 to 99 and set the F-15EX procurement quantity at 104. The Air Force submitted the applicable Congressional notification memos July 20-21, 2023. In addition, the FY 2025 PB reduces the F-15EX procurement quantity from 104 to 98. The Program is evaluating the impacts to unit cost metrics. The Program intends to formally re-baseline at the FRP Decision in FY 2024.

Key Risks:

The Program is actively mitigating and/or monitoring the following key risks: Diminishing Manufacturing Sources and Material Shortages (DMSMS); EW kit manufacturing; aircraft modification schedule; timing of the FRP Contract award; and incorporation of aircraft modifications into F-15 Programmed Depot Maintenance.

Key Issues:

Initial EW kit production ramp-up at BAE Systems; initial aircraft modification delays; software stability & performance; and financial under-execution of RDT&E 3600 funding (stemming from 2020 contract restructure from cost-type to firm-fixed-price).

Defense Cost and Resource Center Cost and Software Data Reporting Compliance Rating:
Green

There are no significant software-related issues with the program at this time. Although the system suffered from software instability throughout FY 2023, the contractor identified root causes, implemented fixes, and the updated software demonstrated stability in final IOT&E flight testing.

(U) History of Significant Developments Since Program Inception

Date	Description
August 2015	USD(AT&L) approved Milestone A.
July 2016	Completed Preliminary Design Review.
November 2016	USD(AT&L) approved the original APB (217 F-15E and 196 F-15C, total quantity 413).
November 2016	Awarded Development Contract.
December 2016	Completed Milestone B.
February 2017	Completed Critical Design Review.
June 2017	USAF force structure decision removed 194 F-15C models from APB (new total quantity

Date	Description
	219).
April 2019	Completed modification and first flight of 1st developmental test aircraft.
April 2019	Conducted 1st installed-system (interoperability) test at Benefield Anechoic Facility (BAF).
April 2019	Provided a Program Deviation Report for Significant Nunn-McCurdy Breach for Program Acquisition Unit Cost.
September 2019	Completed modification and first flight of 2nd developmental test aircraft.
November 2019	Completed modification and first flight of 3rd developmental test aircraft.
January 2020	Program deviation report for schedule breach (IOT&E Start; FRP; and F-15E and F-15C Required Assets Available).
January 2020	USAF Service Acquisition Executive (SAE) added 144 F-15EX to APB (new total program quantity 363).
February 2020	Completed modification and first flight of 4th developmental test aircraft.
March 2020	Completed modification and first flight of 5th developmental test aircraft.
June 2020	Completed modification and first flight of 6th developmental test aircraft.
August 2020	Restructured development contract from cost-type to firm-fixed-price.
December 2020	USAF SAE signed Milestone C-Decision Point 1 (Production Decision) ADM, program formally entered into Production Phase.
December 2020	Awarded LRIP Undefined Contract Action.
February 2021	USAF SAE approved the Production APB.
April 2021	Completed modification and first flight of 7th developmental test aircraft.
May 2021	Participated in NORTHERN EDGE 2021 Operationally-focused Large Force Exercise.
August 2021	Completed modification of 8th and final developmental test aircraft.
August 2021	Completed 3rd (final) installed-system test at the BAF.
September 2021	Definitized LRIP Contract.
January 2022	Completed 6th (final) test at Air Force Research Lab Integrated Demonstrations & Applications Laboratory.
February 2022	Delivered final mission system software containing new functional content.
April 2022	USAF force structure decision decreased the F-15EX procurement from 144 to 80 in FY 2023 PB (new total program quantity 299).
June 2022	Awarded LRIP Lot 2 contract option (17 EW kits).
June 2022	USAF SAE signed Milestone-C DP-2 (Deployment Decision) ADM.
June 2022	Awarded second DMSMS contract.
June 2022	Inducted 1st F-15E aircraft into Boeing San Antonio, Texas Contractor Modification Facility.
June 2022	Completed 4th (final) Pt. Mugu Ground Test.
June 2022	Completed 4th (final) Cyber Vulnerability Test.
July 2022	Inducted 2nd F-15E aircraft into Boeing San Antonio Contractor Modification Facility.
August 2022	USAF force structure decision decreased the F-15E procurement from 217 to 99 in the FY 2024 budget cycle (new total program quantity 167).
September 2022	Delivered updated Preliminary Technical Orders (PTOs).
September 2022	Awarded third DMSMS contract.
September 2022	Awarded \$1.4M Over and Above (O&A) contract modification.

Date	Description
September 2022	Participated in Black Flag exercise.
October 2022	Provided EPAWSS Academics to Nellis AFB Ops/Mnx.
October 2022	Awarded fourth DMSMS contract.
November 2022	Completed System Verification Review #2 Phase 1 event.
November 2022	Completed all Milestone-C Documentation.
December 2022	Completed EPAWSS Flight Bundle (EFB) 9P Performance Qualification Testing.
December 2022	Completed MRAP-C at Nellis AFB, Nevada.
December 2022	Delivered EFB 9P to Flight Test.
January 2023	Exercised MS Windows IT Upgrade Option CLIN on LRIP Contract.
January 2023	Awarded Fifth DMSMS contract.
March 2023	Completed EFB 9P Joint Service Electronic Combat Systems Tester (JSECST) Integration Testing.
April 2023	Awarded \$67M contract option for 20 Lot 3 Group A/B kits.
April 2023	Awarded \$86M LRIP Lot 2 Install Option (18 Installs).
April 2023	Awarded \$26M Initial Operational Test and Evaluation (IOT&E) Support Contract.
May 2023	Inducted 3rd and 4th F-15E aircraft into Boeing San Antonio Contractor Modification Facility.
June 2023	Conducted Functional Configuration Audit (FCA).
June 2023	Delivered final iteration of PTOs.
July 2023	Completed IOT&E ground test at Pt. Mugu.
July 2023	Conducted Physical Configuration Audit.
July 2023	Program started IOT&E.
August 2023	Conducted System Verification Review #2 Phase 2 event.
August 2023	Initiated IOT&E flight test activities.
September 2023	Completed Developmental Flight Test activities.
September 2023	Inducted Aircraft #5 and #6 into Boeing San Antonio, Texas modification facility.
September 2023	Declared Technology Readiness Level 8.
October 2023	Completed EPAWSS Functional Check with JSECST.
November 2023	SAE signed EPAWSS Production & Deployment update ADM.
November 2023	Delivered final planned mission system software (EFB 9.4) to flight test.
December 2023	Closed System Verification Review #2.
December 2023	Completed IOT&E Integrated Demonstrations and Applications Laboratory Ground Test
December 2023	Completed IOT&E Cooperative Vulnerability and Penetration Assessment Cyber Test.
January 2024	Program completed IOT&E.

(U) Schedule

(U) Schedule Events

Events		Production APB (Milestone) 2/23/2021 Objective	Production APB (Current) 2/23/2021 Objective / Threshold		Current Estimate 12/31/2023	Actual
Milestone A	MS A	Aug 2015	Aug 2015	Aug 2015	-	1 Aug 2015
Preliminary Design Review	PDR	Jul 2016	Jul 2016	Jul 2016	-	1 Jul 2016
Milestone B	MS B	Nov 2016	Nov 2016	Nov 2016	-	1 Nov 2016
Critical Design Review	CDR	Feb 2017	Feb 2017	Feb 2017	-	1 Feb 2017
Milestone C Decision Point #1	MS C	Dec 2020	Dec 2020	Dec 2020	-	1 Dec 2020
Milestone C Decision Point #2	MS C	May 2022	May 2022	Nov 2022	-	23 Jun 2022
IOT&E Start	IOT&E	Apr 2023	Apr 2023	Oct 2023	-	17 Jul 2023
Full Rate Production Decision	FRP Decision	Apr 2024	Apr 2024	Oct 2024	Sept 2024	-
F-15E RAA	IOC	Apr 2025	Apr 2025	Oct 2025	Aug 2025	-

Notes

None

Schedule Baseline Deviation Explanation

None

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

Event	Date	Description
Current	12/31/2023	Risk: IF Boeing, BAE Systems, and the USG cannot award the FRP Contract on-time in FY 2024, THEN the program may suffer a break in production, delaying FOC. Mitigation: Progress: The program is nearly complete with the technical evaluation and formulation of a government objective position prior to starting negotiations in 3rd Quarter FY 2024. Ongoing: Boeing delays in the initial aircraft modifications create a bow-wave that propagates through the LRIP phase, providing margin for the FRP contract award date. Closure Date: FRP contract award, 4th Quarter FY 2024
Current	12/31/2023	Risk: IF the program is unsuccessful in ongoing mitigations, or the number/

		<p>frequency of obsolescence issues becomes unmanageable, THEN there may be insufficient hardware for production, delaying FOC.</p> <p>Mitigation:</p> <p>Progress: Executed bridge buys, initiated redesigns, and procured life-of-type quantities for several DMS components. Established agile process to rapidly address future unknown DMS issues.</p> <p>On-Going: Redesigns and Life-of-Type buys</p> <p>Closure Date: N/A (ongoing throughout production)</p>
Current	12/31/2023	<p>Risk: IF the EW kit supplier is unable to meet the production schedule, THEN the aircraft mod schedule and IOC may be delayed.</p> <p>Mitigation:</p> <p>Progress: BAE Systems delivered 11 shipsets in Fall 2023 in support of F-15EX production and F-15E modifications and initial modification delays provide margin</p> <p>On-Going: BAE Systems is settling into production stability and working to recover to contractual schedule commitments during 2024.</p> <p>Closure Date: Delivery of final kit in Lot 2 order (January 25).</p>
Current	12/31/2023	<p>Risk: IF F-15 Programmed Depot Maintenance is unable to incorporate the EPAWSS mod starting mid-way through LRIP, THEN the program will experience significant cost growth (~\$45M), negatively impact F-15 aircraft availability, and delay FOC.</p> <p>Mitigation:</p> <p>Progress: The program has been working to initiate the first Programmed Depot Maintenance (PDM) modification in April 2024 which is at-risk due to kit and tooling availability.</p> <p>On-Going: Working to initiate the first PDM mod in April - July 2024</p> <p>Closure Date: Successful incorporation of EPAWSS mods into F-15 PDM (mid Calendar Year 2024)</p>

(U) Performance

Additional information for this section is provided in the classified annex to this submission.

(U) Performance Attributes

Sustainment (Ao and Am)		KPP
Current Estimate 12/31/2023		Ao currently at 97% and Am currently at 95%.
Demonstrated Performance 1/24/2024		Ao demonstrated at 97% and Am demonstrated at 95%.
Production APB (Current) 2/23/2021	Objective	Ao = 99% Am = 90%
	Threshold	Ao = 97% Am = 88%
Production APB (Milestone) 2/23/2021	Objective	Ao = 99% Am = 90%

(U) Requirement Source:

Sponsor(s): None

1. Document Type Not Provided

Notes: CDD dated September 18, 2014

Notes

None

Performance Deviation Explanation

None

(U) Acquisition Budget Estimate**(U) Total Acquisition Estimates and Quantities**

Category (\$M) Base Year: 2016	Production APB (Milestone) 2/23/2021 CY\$ obs Objective	Production APB (Current) 2/23/2021 CY\$ obs Objective / Threshold		Current Estimate PB 2025 CY\$ obs / TY\$ obs	
		RDT&E	1,236.0	1,236.0	1,359.6
Procurement	3,314.1	3,314.1	3,645.5	1,841.6	2,433.7
MILCON	0.0	0.0	0.0	-	-
O&M	0.0	0.0	0.0	-	-
R&MF	-	-	-	-	-
Total Acquisition	4,550.1	4,550.1	-	2,878.8	3,559.6
Program Acquisition Unit Cost	12.535	12.535	13.382	14.394*	17.798
Average Procurement Unit Cost	9.180	9.180	10.120	9.444	12.480
Program End-Item Quantity					
Development	2	2		5	
Procurement	361	361		195	
O&M-Acquired	-	-		0	

* Baseline Deviation

Budget Notes

The FY 2024 PB reduction in F-15E EPAWSS procurement quantity (217 to 99), coupled with an F-15EX quantity of 104, triggered a Significant Nunn-McCurdy Breach for PAUC. NOTE: the program is currently evaluating Boeing's proposal for the Full Rate Production phase and the FY 2025 PB further reduces the F-15EX procurement quantity from 104 to 98. The program is evaluating the impact on unit cost metrics and will formally re-baseline at the FRP Decision in 4th Quarter FY 2024.

Quantity Notes

Production APB Production Quantity (361) includes 217 F-15E and 144 F-15EX.

The total F-15 EPAWSS RDT&E quantity includes two F-15EXs, two F-15Cs, and one F-15E for a total of five RDT&E units.

The total Procurement quantities breakdown are as follows:

F-15E EPAWSS Procurement Quantity Total: 99

FY 2021 = 6FY 2022 = 17FY 2023 = 26FY 2024 = 19FY 2025 = 21FY 2026 = 10

F-15EX Procurement Quantity: 96

FY 2020 = 6FY 2021 = 12FY 2022 = 12FY 2023 = 24FY 2024 = 24FY 2025 = 18

Cost Baseline Deviation Explanation

None

(U) Risk and Sensitivity Analysis

Current Procurement Estimate Risks (12/31/2023)	
1	<p>Risk: IF F-15 Programmed Depot Maintenance is unable to incorporate the EPAWSS mod starting mid-way through LRIP, THEN the program will experience significant cost growth (~\$45M), negatively impact F-15 aircraft availability, and delay FOC.</p> <p>Mitigation: Progress: The program has been working to initiate the first Programmed Depot Maintenance (PDM) modification in April 2024 which is at-risk due to kit and tooling availability. On-Going: Working to initiate the first PDM mod in April - July 2024 Closure Date: Successful incorporation of EPAWSS mods into F-15 PDM (mid Calendar Year 2024)</p>
2	<p>Risk: IF the program is unsuccessful in ongoing mitigations, or the number/frequency of obsolescence issues becomes unmanageable, THEN there may be insufficient hardware for production, delaying FOC.</p> <p>Mitigation: Progress: Executed bridge buys, initiated redesigns, and procured life-of-type quantities for several DMS components. Established agile process to rapidly address future unknown DMS issues. On-Going: Redesigns and Life-of-Type buys Closure Date: N/A (ongoing throughout production)</p>
3	<p>Risk: IF Boeing, BAE Systems, and the USG cannot award the FRP Contract on-time in FY 2024, THEN the program may suffer a break in production, delaying FOC.</p> <p>Mitigation: Progress: The program is nearly complete with the technical evaluation and formulation of a government objective position prior to starting negotiations in 3rd Quarter FY 2024. Ongoing: Boeing delays in the initial aircraft modifications create a bow-wave that propagates through the LRIP phase, providing margin for the FRP contract award date. Closure Date: FRP contract award, 4th Quarter FY 2024</p>
Current Baseline Risks (2/23/2021)	
None	
Original Baseline Risks (11/2/2016)	
<p>The EPAWSS Original Baseline was set by the MDA in a November 2, 2016 ADM approving Milestone B. The CAPE review of the cost estimates prepared for the F-15 EPAWSS Milestone B review dated September 26, 2016 noted the Air Force conducted an analysis of the program staffing levels over time compared to similar electronic warfare systems. CAPE concluded the staffing levels are reasonable and achievable. To assess the reasonableness of the SCP and the ICE, CAPE reviewed the technical and cost data collected from Boeing and BAE Systems in support of the Milestone B decision. F-15 Saudi Arabia DEWS, from which EPAWSS heavily leverages, shares 87% of the software, 76% of the firmware, and 81% of the hardware with EPAWSS. CAPE noted the DEWS leverage reduces the overall risk for development and procurement and provides a reasonable analogy for cost estimating.</p>	

(U) Unit Costs

(U) Current Estimate Compared with Current Baseline

Category (CY\$M) Base Year: 2016	Current Baseline 02/23/2021	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	4,550.1	2,878.8	
Program Quantity	363	200	
PAUC	12.535	14.394	14.83%
Average Procurement Unit Cost			
Procurement Cost	3,314.1	1,841.6	
Procurement Quantity	361	195	
APUC	9.180	9.444	2.88%

(U) Current Estimate Compared with Original Baseline

Category (CY\$M) Base Year: 2016	Original Baseline 11/02/2016	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	4,251.5	2,878.8	
Program Quantity	413	200	
PAUC	10.294	14.394	39.83%
Average Procurement Unit Cost			
Procurement Cost	3,375.0	1,841.6	
Procurement Quantity	413	195	
APUC	8.172	9.444	15.57%

Significant Cost Growth

(U) Significant Cost Growth Details

Original Baseline PAUC Breach Explanation

Deviation explanation not provided.

Impacts of Schedule Changes on Unit Cost

None

Impacts of Performance Changes on Unit Cost

None

Actions taken or Proposed to Control Future Cost Growth

Converted EMD from Cost-type to mostly Firm Fixed Price in August 2020.

Status of Each Major Contract and Significant Factors Contributing to Cost and Schedule Variance; Projected Effects on Future Program Costs

See Contracts section.

Notes

The FY 2024 PB reduction in F-15E EPAWSS procurement quantity (217 to 99), coupled with an F-15EX quantity of 104, triggered a Significant Nunn-McCurdy Breach for PAUC. NOTE: the program is currently evaluating Boeing's proposal for the Full Rate Production phase and the FY 2025 PB further reduces the F-15EX procurement quantity from 104 to 98. The program is evaluating the impact on unit cost metrics and will formally re-baseline at the FRP Decision in 4th Quarter FY2024.

(U) Life-Cycle Costs

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

Category (\$M) Base Year: 2016	Production APB (Milestone) 2/23/2021 CY\$ obs Objective	Production APB (Current) 2/23/2021 CY\$ obs Objective / Threshold		Current Estimate CY\$ obs / TY\$ obs	
Total O&S	1,312.8	1,312.8	1,444.1	814.3	1,505.8
Total Disposal	-	-	-	-	-

(U) Current Cost Estimate Sources

Operating and Support Cost

Type: Program Office Estimate

Approved by: Mr. Jeremy Mitchell, September 27, 2023

Note: "Quantity to Sustain" includes 99 F-15E and 98 F-15EX. (Note: the Air Force will not sustain (2) F-15C test aircraft nor the single F-15E test aircraft with P&W F100-220 engines.) "Fiscal Years in Service" is inclusive of service life for F-15E (FY 2049) and F-15 EX (FY 2068).

Disposal/Demilitarization Cost

Type: Program Office Estimate

Approved by: Mr. Jeremy Mitchell, September 27, 2023

Operating and Support Baseline Deviation Explanation

None

Cost Notes

Sustainment Strategy

EPAWSS will employ a two-level maintenance concept: organic at both the Organizational Level (O-Level) and the Depot Level (D-Level). EPAWSS contractors will provide Interim Contractor Support (ICS) until the Government transitions to an organic capability, originally planned for IOC plus four years but delayed due to inadequate funding. During ICS, the contractor will perform all required D-level repairs on the system; provide Field Service Representatives to support O-Level repairs; provide interim supply support; and conduct product support integrator activities. Additionally, during LRIP, the contractor will provide initial O-level training on how to operate, maintain, and support EPAWSS-equipped aircraft.

O&S and Disposal Cost Sources: For Programs with an O&S Cost estimate or Disposal Cost estimate the O&S Cost Source and Disposal Cost Source listed in the MSAR are inaccurate due to a system limitation. See MSAR Supplement for corrected source(s).

(U) Operating and Support Variance with Prior Estimate

(CY\$M) Base Year: 2016		Estimate	
Prior Estimate (12/31/2022)		821.0	
Current Estimate		814.3	
Category			
		Variance	Explanation
Unit-Level Manpower		0.0	
Unit Operations		0.0	
Maintenance		0.0	
Sustaining Support		0.0	
Continuing System Improvements		0.0	
Other		-6.7	Reduction in EX quantities from 104 to 98.
Not Categorized			
		0.0	

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

(CY\$M) Base Year: 2016							
System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
F-15 EPAWSS	0.0	0.0	317.0	26.2	49.2	421.8	814.3
Program	0.0	0.0	317.0	26.2	49.2	421.8	814.3

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

(CY\$M) Base Year: 2016							
System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
F-15 EPAWSS	0.0	0.0	0.1	0.0	0.0	0.0	0.1

(U) Operating and Support Cost Estimate Assumptions

System	Quantity to Sustain	Unit Expected Service Life (Years)	Unit of Measure	Fiscal Years Operational
F-15 EPAWSS	197	45.0	Aircraft	2025 - 2045

Additional O&S Estimate Assumptions

FY 2023 POE w/EX 98: Initial O&S Year is FY 2026 and the Final O&S Year is FY 2068 (F-15EX). Total Aircraft Inventory: 197

Antecedent Estimate Assumptions

Not Applicable

O&S Annual Cost Calculation Memo

Flying Hours based on FY 2021 F-15 Sustainment Review. For Annualized O&S cost: Used 34 years as a hybrid number for life-cycle since EPAWSS on F-15E has a 24 year while F-15EX has a 44 year life-cycle expectancy.

(U) Performing Activities and Contracts

(U) External Government Activities

None

(U) Contracts and Efforts

Contract Title	Contract Number / Effort	Contractor	Phase
F-15 EPAWSS EMD	FA863417C2650	THE BOEING COMPANY	Development
F-15 EPAWSS LRIP	FA863421C2702 / 480	THE BOEING COMPANY	Production

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

Contract Number: FA863417C2650 **Order Number:** -
Contract Title: F-15 EPAWSS EMD **Strategy:** FAR 15: Negotiated Contracts
CAGE: 76301 - THE BOEING COMPANY **Contracting Office:** AFLCMC/WAQ - F-15 Division
City, State/Province: SAINT LOUIS, MO

Effort Number: - **Supported Phase:** Development
Type: Multiple Types **Award Date:** November 3, 2016
Latest Modification Date: - **Definitization Date:** December 16, 2016
Latest Modification No.: P00085 **Work Start Date:** November 3, 2016

Technical Data Rights: -

Notes: This is a mixed type Contract: FFP, CR, CPFF, and CPIF

 -Target Cost includes cost for: CR, CPFF, and CPIF CLINs Only.
 Fixed Fee includes FF for: CPFF CLINs Only.
 Incentive Fee includes fee for: CPIF and FPIF CLINs Only.
 There is no Award Fee as part of this contract.
 -Target Fee includes fee for: all CPIF, FPIF, and CPFF
 Target Price includes Price for all CLIN types (Cost and Firm)
 Ceiling Price includes the max value of all CLINs and incentive ceilings. (Cost and FFP)
 Budget Base is the obligated amount currently on contract.

The F-15 EPAWSS EMD contract encompasses all activities (planning, design, development, integration, testing and risk reduction) through the completion of Developmental Testing and IOT&E. EPAWSS will replace the legacy system with a more capable integrated EW system to improve reliability and increase the capability to detect, identify, locate, deny, degrade, deceive, disrupt, and defeat modern threat systems in highly contested environments. The program extended the period of performance from December 31, 2023 to May 31, 2024 to enable completion of IOT&E and hardware refurbishment.

Target Price Change Explanation

The target price change is due to additional scope and overruns. The additional scope includes an increase in kits, support, hardware and material for F15E, as well as

additional obligations for incentive fees earned. The overruns were primarily on the Group A kits. As a result of the overruns, the contract was restructured in 2020 to change multiple cost and incentive CLINs to FFP which increased the target price by ~\$182M.

Target Cost includes cost for: CR, CPFF, and CPIF CLINs Only.
 Fixed Fee includes FF for: CPFF CLINs Only.
 Incentive Fee includes fee for: CPIF and FPIF CLINs Only.
 There is no Award Fee as part of this contract.
 Target Fee includes fee for: all CPIF, FPIF, and CPFF
 Target Price includes Price for all CLIN types (Cost and Firm)
 Ceiling Price includes the max value of all CLINs and incentive ceilings. (Cost and FFP)
 Budget Base is the obligated amount currently on contract.

General Variance Explanation

This contract is a combination and includes FFP a Cost and Incentive type contracts; however the EVM portion of the contract discontinues in FY 2020. Therefore, Cost and Schedule Variance does not apply to the primary FFP type contract.

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
478.8	500.0	745.0	794.8	-	794.8	-	8	8

Work Completed (%): 84.58%
 Cost Variance (TY\$M): -90.1
 Schedule Variance (TY\$M): -18.2

Factors Contributing to Cost Variance and Projected Effects on Program Costs

This contract is a combination and includes FFP a Cost and Incentive type contracts; however the EVM portion of the contract discontinues in FY 2020. Therefore, Cost and Schedule Variance does not apply to the primary FFP type contract.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

This contract is a combination and includes FFP a Cost and Incentive type contracts; however the EVM portion of the contract discontinues in FY 2020. Therefore, Cost and Schedule Variance does not apply to the primary FFP type contract.

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

Contract Number:	FA863421C2702	Order Number:	-
Contract Title:	F-15 EPAWSS LRIP	Strategy:	FAR 15: Negotiated Contracts
CAGE:	76301 - THE BOEING COMPANY	Contracting Office:	AFLCMC/WAQ - F-15 Division
City, State/Province:	SAINT LOUIS, MO		
Effort Number:	480	Supported Phase:	Production
Type:	Cost Plus Fixed Fee	Award Date:	December 16, 2020
Latest Modification Date:	-	Definitization Date:	September 28, 2021
Latest Modification No.:	P00040	Work Start Date:	December 16, 2020
Technical Data Rights:	-		

Notes:

This is a mixed type contract: Contract type is ~36% CPFF, ~35% FFP, ~26% FPIF, and ~3% CR. This contract defines the LRIP Phase of the F-15E EPAWSS Increment 1 program. The LRIP phase includes tasks necessary for modification, kit production, installation, CERT/VER, operations, and sustainment of the EPAWSS system. Major program milestones during this period include Initial Operational Capability and the Full Rate Production Decision Point. The initial minimum scope Unfinalized Contract Action activated limited CLINs for DMSMS to prevent a delay in production. Modification P0001 funded CLINS for Lot 1 production kits (6 Group A and 6 Group B kits), mod line standup, interim contractor support, tech orders, gap analysis, and support equipment.

Target Price Change Explanation

Target price change is due to additional work scope, Diminishing Manufacturing Sources and Material Shortages (DMSMS) buys, and overruns. The additional work scope includes addition of threat studies, Lot 1 and 2 Over and Above, additional support equipment, six additional Group B kits and Group B spares. Multiple DMSMS buys have been accomplished since the beginning of the contract effort. Finally, the contractor has had multiple overruns on CLIN 1009 for Certification / Verification (CERT/VER) work. Contractor Estimated Price at Completion is though contract mod 43.

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
952.6	-	1,015.6	1,015.6	-	1,015.6	43	49	-

Work Completed (%): 48.40%

Cost Variance (TY\$M): -18.4

Schedule Variance (TY\$M): -24.4

Factors Contributing to Cost Variance and Projected Effects on Program Costs

At the end of February 2024, the unfavorable Cumulative Cost Variance (CPI) was 0.90(-\$28,166K), driven by the top three variances of CLIN 1009 SAT Cert/Ver Bulk (-\$6,955K), CLIN 1004 SAT Bulk Lot 1 Installs (-\$4,115K), and SAT A/C 2 CLIN 1009 Cert/Ver Discrete (-\$3,040K).

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

At the end of February 2024, the unfavorable Cumulative Schedule Variance (SPI) was 0.90 (-\$27,149K). The top three variances were CLIN 4002 Full Mod Line Standup Material (-\$7,365K), CLIN 5027 Subcontractor BAE ICS Repair Line Standup (-\$3,686K), and CLIN 0037 Subcontractor BAE DMS Redesigns (-\$2,264K).

(U) Production

(U) Low-Rate Initial Production

	Original LRIP Determination	Current LRIP Determination
Total LRIP Quantity	43	49
Date	12/1/2020	7/10/2023
Reference	EPAWSS MS-C ADM 1 Dec 2020	Service Acquisition Executive email (dated July 10, 2023) and subsequent ADM (dated November 30, 2023)
LRIP Period	FY 2020 - 2026	FY 2020 - 2026
Total Procurement Quantity	195	195
LRIP Percentage of Total	22.1%	25.1%

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

Increase from 43 to 49 enables additional (parallel) aircraft modifications during F-15E Programmed Depot Maintenance at Robins Air Force Base, Georgia.

LRIP Notes

None

(U) Deliveries and Expenditures**(U) Acquisition Funding**

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	-	-	-
Appropriations (TY, \$M)	3,559.6	3,559.6	100.0%
Expenditures (TY, \$M)	3,559.6	1,389.8	39.0%

(U) End Items Delivered

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Development	5			
F-15 EPAWSS		5	5	
Procurement	195			
F-15 EPAWSS		13	4	
Total	200	18	9	4.5%

Notes

The 'Delivered to Date' table is derived from the Cost section of this MSAR and is, therefore, inclusive of both F-15E and F-15EX. F-15EX reports two Planned and two Actual for Development; and six Planned and four Actual for Procurement. F-15 EPAWSS reports three Planned and three Actual for Development; and seven Planned and zero Actual for Procurement. However, the 'Expended and Appropriated' table only reflects F-15E EPAWSS execution. The Contractor is significantly behind schedule in the initial aircraft modifications. The Contractor is making tangible improvements in quality and schedule with each aircraft, but is unlikely to meet baseline schedule commitments for the aircraft modification timelines until mid-FY 2025.

(U) International Program Aspects

General Memo

While there is significant international interest in F-15 EPAWSS, the exportable version of EPAWSS (and all development required) is funded via applicable FMS cases. The baseline EPAWSS configuration is based on F-15 Saudi Digital Electronic Warfare System.

Exportability and Business Issues

Not Applicable

Is design for international exportability planned?	No	Industry/Partner Exportability Cost-Sharing?	No
If not, has the MDA approved an exportability waiver for a U.S.-only design?	Not Applicable		

Program Protection: Technology Security and Foreign Disclosure Issues

Not Applicable

(U) Agreements

No International Agreements have been defined for F-15 EPAWSS



UNCLASSIFIED

**Modernized
Selected Acquisition Report
Supplement**

**F-15 Eagle Passive Active Warning Survivability System
(F-15 EPAWSS)**

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

UNCLASSIFIED

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

F-15 Eagle Passive Active Warning Survivability System

Short Name

F-15 EPAWSS

PNO

485

Lead Component

Air Force

AAF Pathway

MCA

Acquisition Type

MDAP

Acquired Systems

F-15 EPAWSS

Related Programs

Full Name	PNO	Pathway	Type	ACAT/ BCAT	Acquisition Status	Costs in SAR?	
						Acq	O&S
F-15 EX MDAP	725	MCA	MDAP	IB	Active	No	No

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

F-15 Eagle Passive Active Warning Survivability System

Major Software Efforts

Title	Status	Fielding Date	Description
Production Mission System Software	Deployment	Jun 2024	Initial, baseline software capability (EPAWSS Flight Bundle 9.4, or EFB 9.4) which is fielding with F-15 Operational Flight Program Suite 9.2

Major Engineering Changes

Title	Original Need Date	Fielding Date	Description, Rationale and Program Impacts

Funding Sources (Acquisition)**Acquisition Funding Notes****F-15 Eagle Passive Active Warning Survivability System**

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	3600F	07	0207134F - F-15E Squadrons	0207134F	676020 - F-15 Programs		x
Note: Prior Years funding (FY 2013 and FY 2014)							
RDT&E	3600F	05	0207171F - F-15 EPAWSS	0207171F	657108 - EPAWSS Development		
Note: Currently-programmed EPAWSS RDT&E funding							
RDT&E	3600F	07	0207171F - F-15 EPAWSS	0207171F	676038 - F-15 EPAWSS Development		x
Note: Prior Year funding (FY 2015)							
Procurement	3010F	05	F15EWS - F-15 EPAW	0207171F	-		
Note: BP11 (Procurement)							
Procurement	3010F	06	000999 - Initial Spares/Repair Parts	0207171F	-		
Note: BP16 (Initial Spares)							
Procurement	3010F	06	F15EWS - F-15 EPAW	0207171F	-	x	
Note: Working Capital Funds (used for procurement of initial spares)							
Procurement	3010F	07	000075 - Other Production Charges	0207171F	-		
Note: BP19 (Organic Repair Standup)							

Funding Sources (Operating and Support)

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

Operating and Support Funding Notes

O&S funding has not yet started and as such, there are no O&S lines of accounting.

F-15 Eagle Passive Active Warning Survivability System

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
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Acquisition Estimate and Quantity Summary

F-15 Eagle Passive Active Warning Survivability System

Acquisition Estimates

Category	PB 2025	TY (\$M)	Current Base Year	Original Base Year	Report Fiscal Year
			CY2016 (\$M)	CY2016 (\$M)	CY2024 (\$M)
RDT&E		1,125.6	1,037.0	1,037.0	1,316.0
Procurement		2,963.7	2,264.1	2,264.1	2,873.2
MILCON		-	-	-	-
O&M		-	-	-	-
Total Acquisition		4,089.3	3,301.1	3,301.1	4,189.2
PAUC		20.446	16.505	16.505	20.946
APUC		15.198	11.611	11.611	14.734

Acquisition End-Item Quantities

System	PB 2025	Development	Procurement
F-15 EPAWSS		5	195
Total		5	195

Unit Description

The procurement quantities include 98 EPAWSS for F-15EX. The F-15 EPAWSS upgrade will significantly improve the F-15's capability to autonomously and automatically detect, identify and locate radio frequency (RF) threats as well as provide the ability to deny, degrade, deceive, disrupt and defeat RF and electro-optical / infrared (IR) threat systems in contested and unplanned operations within highly contested environments through 2040. The F-15 EPAWSS will provide indication, type and position of ground-based RF threats as well as the indication, type and bearing of airborne threats with the situational awareness needed to avoid, engage or negate the threat. The F-15 EPAWSS will prevent RF and IR threat systems from detecting or acquiring accurate targeting information prior to threat engagement to complicate and / or negate an enemy threat targeting solution--and effectively counter enemy missiles / weapons if adversary threat systems engage and employ weapons against friendly forces--through components such as chaff, flares, decoys / angle countermeasures and jamming. To improve schedule, affordability and program risk outcomes, and consistent with the Joint Requirements Oversight Council approved Capability Development Document and Service Acquisition Executive approved acquisition strategy, the F-15 EPAWSS program is pursuing a two-increment acquisition approach. Increment 1 replaces the existing obsolete Radar Warning Receiver, Internal Countermeasures System and Countermeasures Dispenser System. Increment 2 adds a towed decoy / angle countermeasure capability to improve aircraft survivability (unfunded requirement).

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

Appropriation	Prior	2024	2025	2026	2027	2028	2029	To Complete	Total
RDT&E	1,111.6	14.0	-	-	-	-	-	-	1,125.6
Procurement	1,536.4	338.4	374.8	263.3	147.3	150.3	153.3	-	2,963.7
MILCON	-	-	-	-	-	-	-	-	-
O&M	-	-	-	-	-	-	-	-	-
PB 2025 Total	2,648.0	352.4	374.8	263.3	147.3	150.3	153.3	-	4,089.3

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-15 Eagle Passive Active Warning Survivability System

Source for TY\$-CY\$ Conversion: SAF/FMCE Raw and Weighted Inflation Indices for DAF Accounts: 23 Feb 2024

3600F - Research, Development, Test & Eval, AF					
fiscal year		Other/ Unallocated	Total TY(\$M)	Weighted Rate	Total CY2016 (\$M)
Total		1,125.6	1,125.6	-	1,037.0
2013		4.666	4.7	0.973942	4.8
2014		9.600	9.6	0.987520	9.7
2015		36.087	36.1	0.997440	36.2
2016		114.582	114.6	1.012693	113.1
2017		240.385	240.4	1.033884	232.5
2018		201.863	201.9	1.055619	191.2
2019		133.212	133.2	1.075243	123.9
2020		51.939	51.9	1.102898	47.1
2021		156.618	156.6	1.154715	135.6
2022		101.644	101.6	1.216661	83.5
2023		61.032	61.0	1.259904	48.4
2024		13.982	14.0	1.291994	10.8

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-15 Eagle Passive Active Warning Survivability System

Source for TY\$-CY\$ Conversion: SAF/FMCE Raw and Weighted Inflation Indices for DAF Accounts: 23 Feb 2024

3010F - Aircraft Procurement, Air Force									
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 CY2016 (\$M)
Total	1,802.0	-	373.9	90.6	167.3	530.0	2,963.7	-	2,264.1
2013							-	0.994366	-
2014							-	1.008848	-
2015							-	1.022889	-
2016							-	1.042966	-
2017							-	1.064794	-
2018							-	1.095835	-
2019	115.817		31.380				147.2	1.133854	129.8
2020	129.812		26.737				156.5	1.181798	132.5
2021	61.150		-		15.058	304.931	381.1	1.232370	309.3
2022	169.578		34.923	28.005	15.494	183.095	431.1	1.273021	338.6
2023	309.557		55.393	13.496	-	41.946	420.4	1.304428	322.3
2024	288.671		49.734	-	-	-	338.4	1.330717	254.3
2025	292.825		57.979	21.945	2.040	-	374.8	1.358801	275.8
2026	163.440		44.283	11.794	43.744	-	263.3	1.387336	189.8
2027	93.335		25.289	-	28.633	-	147.3	1.416470	104.0
2028	80.659		21.854	-	47.784	-	150.3	1.446216	103.9
2029	97.151		26.323	15.311	14.497	-	153.3	1.476586	103.8

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-15 Eagle Passive Active Warning Survivability System

3600F - Research, Development, Test & Eval, AF				
fiscal year	F-15 EPAWSS			Total
Total	5			5
Undistributed	5			5

Acquired System Annual End-Item Quantities by Appropriation Account
(Aligned to Budget Position: PB 2025)

F-15 Eagle Passive Active Warning Survivability System

3010F - Aircraft Procurement, Air Force				
fiscal year	F-15 EPAWSS			Total
Total	195			195
Undistributed				-
2019	6			6
2020	6			6
2021	12			12
2022	29			29
2023	50			50
2024	43			43
2025	39			39
2026	10			10

Nuclear Costs

F-15 Eagle Passive Active Warning Survivability System

Program's Use of Department of Energy Resources

None

Operational Fielding Plan

F-15 Eagle Passive Active Warning Survivability System

Some data for this section cannot be provided in an unclassified report

System: F-15 EPAWSS

Fielding and Inventory Notes

Some of the F-15 EPAWSS program contains Controlled Unclassified Information (CUI) and have been removed per the Implementation Plan for the DoD's Modernized Selected Acquisition Report Process, dated June 2023, which required the SAR be submitted without any designation relation to dissemination control.

F-15 EPAWSS Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					
2024					-
2025					-
2026					-
2027					-
2028					-
2029					-

O&S Independent Cost Estimate

F-15 Eagle Passive Active Warning Survivability System

Independent and Current Cost Estimate Comparison

Category	CY2016 (\$M)	Independent Cost Estimate 11/10/2020	Current Estimate 9/28/2023	Variance with ICE (%)
Unit-Level Manpower				-
Unit Operations				-
Maintenance		1,043.3	317.0	-70%
Sustaining Support		47.3	26.3	-45%
Continued System Improvements		67.2	49.2	-27%
Other				-
Total O&S		1,157.8	392.5	-66%

Independent Cost Estimate Source

Event: Milestone C
Type: Independent Cost Estimate
Approved by: OSD Cost Assessment & Program Evaluation, November 10, 2020

Current Cost Estimate Source

Type: Program Office Estimate
Approved by: AFLCMC Cost Chief, September 28, 2023

Cost Estimate Variance Explanation

The FY 2020 Milestone C ICE used a total procurement quantity of 361 whereas the FY 2023 POE procurement quantity is 195 due to the reduction of F-15EX quantities and divestment of -220 model engine F-15Es.

Annual Operating and Support Estimates by Cost Element**F-15 Eagle Passive Active Warning Survivability System****System: F-15 EPAWSS**

Source for TY-CY Conversion:

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 CY2016 (\$M)
Total	-	-	317.0	26.2	49.2	-	392.5
2026			2.282	0.328	0.601		3.2
2027			6.491	0.656	1.201		8.3
2028			12.057	0.984	1.802		14.8
2029			16.188	1.312	2.402		19.9
2030			16.204	1.312	2.402		19.9
2031			16.220	1.312	2.402		19.9
2032			16.236	1.312	2.402		20.0
2033			16.251	1.312	2.402		20.0
2034			16.267	1.312	2.402		20.0
2035			16.283	1.312	2.402		20.0
2036			16.299	1.312	2.402		20.0
2037			16.315	1.312	2.402		20.0
2038			16.331	1.312	2.402		20.0
2039			16.347	1.312	2.402		20.1
2040			16.363	1.312	2.402		20.1
2041			16.379	1.312	2.402		20.1
2042			16.395	1.312	2.402		20.1
2043			16.411	1.312	2.402		20.1
2044			16.036	1.312	2.402		19.8
2045			14.290	0.656	2.402		17.3
2046			10.777	0.656	1.201		12.6
2047			6.963	0.656	1.201		8.8
2048			3.043	0.656	1.201		4.9
2049			0.590	0.656	1.201		2.4