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Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

Modernized Selected Acquisition Report (MSAR)

F-35 Lightning II Joint Strike Fighter (JSF) Program (F-35)

FY 2025 President's Budget

Effective: December 31, 2023

Defense Acquisition Visibility Environment

Table of Contents

(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-35 Lightning II Joint Strike Fighter (JSF) Program

PNO
198

Lead Component
Department of the Navy

Joint Program
Yes

Adaptive Acquisition Pathway
Major Capability Acquisition

Acquisition Category
ID

Acquisition Status
Active Acquisition

Short Name
F-35

Milestone Decision Authority
Defense Acquisition Executive

Program Executive Office
PEO F-35 Lightning II

Supporting Components
Department of the Air Force

International Partners
Australia, Canada, Denmark, Italy, Netherlands, Norway, United Kingdom

Acquisition Type
Major Defense Acquisition Program

Acquired Systems
F-35

Subprograms

Full Name	Short Name	Acquisition Status	Acquired Systems
F-35 Aircraft	F-35 Aircraft	Active Acquisition	F-35, F-35B, F-35A, F-35C
F-35 Engine	F-35 Engine	Active Acquisition	F-35 Engine

Mission
The F-35 Lightning II Program will develop and field an affordable, highly common family of next-generation strike aircraft for the U.S. Navy, Air Force, Marine Corps, and allies. The three variants are the F-35A; F-35B; and the F-35C. The F-35A will be a stealthy multi-role aircraft, primarily air-to-ground, for the Air Force to replace the F-16 and A-10 and complement the F-22. The F-35B variant will be a multi-role strike fighter aircraft to replace the AV-8B and F/A-18A/C/D for the Marine Corps. The F- 35C will provide the U.S. Navy a multi-role, stealthy strike fighter aircraft to complement the F/A-18E/F. The planned DoD F-35 Fleet will replace the joint services' legacy fleets. The transition from multiple type/model/series to a common platform will result in a smaller total force over time and operational and overall cost efficiencies.

(U) Responsible Office

Program Executive Officer
PEO F-35 Lightning II
Lt Gen Michael J. Schmidt
no email address provided
no phone number provided

Program Manager
F-35 Lightning II Joint Strike Fighter (JSF)
Program PMO
Reginald M. Hampton
no email address provided
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(U) Executive Summary

Program Highlights Since Last Report

The F-35 Joint Program Office (JPO), in sync with our Partners and FMS customers, made noteworthy progress during calendar year (CY) 2023. To date, F-35 users logged over 750,000 flight hours and 450,000 sorties across the globe. Within ten years, there will be over 600 F-35s operating in the European theater alone, and fewer than 60 of them will be U.S. owned. Meanwhile, multi-national exercises and operations consistently demonstrate the F-35's unmatched interoperability. Today, the F-35 JPO continues introducing and improving on capability, overall availability, and affordability to the F-35 fleet. Some of the progress made includes:

Capability

- Joint Simulation Environment (JSE) Runs for Score (RfS) Complete: In September, the JSF Operational Test Team (JOTT) completed all remaining Block 3F Initial Operational Test & Evaluation (IOT&E) RfS in the JSE. This represented a huge step toward Milestone C and Full Rate Production Decisions, planned for Mar 2024.
- Effects Based Simulator (EBS): The JPO worked with NAVAIR for the development and fielding of a deployable training solution for VFA-97 onboard USS CARL VINSON. The team achieved this effort in less than one year. The EBS continues to expand its role across the enterprise of Pilot Training in the U.S. and abroad. In 2023, EBS enhanced multinational F-35 training interoperability in the European theatre with use in Spartan Warrior and Spartan Lightning exercises.
- Dual Capable Aircraft (DCA) Capability Achieved: The U.S. Air Force and NATO both achieved F-35A operational nuclear certification in Oct 2023 and Nov 2023 respectively. The F-35A is the first 5th generation nuclear capable aircraft ever, and the first new platform (fighter or bomber) to achieve this status since the early 1990s. This F-35 Nuclear Certification effort culminates 10+ years of intense effort across the nuclear enterprise, which consists of 16 different government and industry stakeholders.
- Engine Power and Cooling Modernization: The Program remains focused on executing its Engine and Power Thermal Management Modernization (EPM). This supports future Mission System capabilities while restoring engine life. EPM will provide increased cooling and electrical power generation required to support capabilities beyond Block 4 for all variants, while reducing lifecycle costs through engine life restoration. In 2024, the JPO will continue staffing the EPM team with the expertise necessary to support this effort. The JPO is refining its EPM Acquisition Strategy, which addresses staffing, test infrastructure, and air vehicle integration risks.

Availability

- HMS Prince of Wales Sea Trials: F-35s executed 150+ landings aboard the HMS Prince of Wales', showcasing the Royal Navy working alongside the U.S. to expand operating limits as the team evaluated advanced take-off and landing techniques, enabling the aircraft to launch and recover with more weapons. An F-35B completed the first shipboard rolling vertical landings (SRVL) on the vessel in Oct and the first nighttime F-35 SRVL fewer than two weeks

later. Through these and other efforts, the U.S. Services and International Partners continue to demonstrate the tremendous value of the multinational F-35 Program.
- Overcoming Egress Challenges: During CY23, the F-35 JPO experienced challenges associated with availability of egress systems. Throughout the year, government and industry teams worked together to mitigate these challenges. Achievements include a four-year service life extension of the Cartridge Activated Device and Propellant Actuated Device, which prevented grounding 125 aircraft due to non-mission capable status.
- War on Cyber: The F-35 JPO kicked off a War on Cyber to enhance enterprise cybersecurity awareness and refine its cybersecurity strategy. Initiatives include addressing Software Obsolescence, Cyber Requirements, and Cyber Test. Infusion of cybersecurity testing is fundamental to delivering secure and survivable capabilities.
- War on Readiness: In Mar 23, the Program set out to increase fleetwide mission capability (MC) to 64% by Mar 24, an increase of 10%. To accomplish this, the JPO assembled a Readiness team dedicated to identifying and addressing the program's supply and maintenance challenges, top degraders and sustainment issues impacting Readiness. Monthly root cause correction action meetings led to the improvement of On-Time-Delivery metric for all initial spares to 92%.

Affordability
- 2023 Annual Cost Estimate (ACE): The F-35 continues to demonstrate its value proposition from cost and performance perspectives, as the platform delivers game-changing 5th Gen operational capability. In constant-year dollars, the ACE represents a $45B decrease from the 2022 ACE. This is attributable to successful affordability initiatives as well as altered beddown plans and flight hour reductions. The $55B increase in then-year figures largely results from inflation attributable to fuel and supplier costs associated with war and pandemic challenges.
- War on Cost: The F-35 Program initiated a War on Cost to renew an enterprise-wide focus on cost control. Since its inception in Feb 23, the effort completed 14 initiatives. The Program captured $20.1B in Sustainment cost reductions in previous years and an additional $13.6B (CY12$) within the 2023 Sustainment Annual Cost Estimate (ACE), bringing the total captured value to $33.7B (CY12$) / $83.9B (TY$) to date. Top initiatives for 2023 include: Engine Core Upgrade at $11.6B, DSL Tracking of Turbomachine RMIP at $0.6B. Canopy Conductive Wear Coating at $0.4B, and DoN FOD Mitigation at $0.4B (all in CY12$).
- The JPO now appears to be on track to meet the Service's Steady State Sustainment Affordability Constraints.

Sustainment
- Global Depot Stand Up: Organic depot stand-up remains critical to long-term air system affordability and availability. The F-35 Global Support Solution (GSS) Enterprise is establishing air vehicle, propulsion, and component repair facilities in the North American, European, and Asia-Pacific regions. In 2023 the JPO activated 46 of 68 Core workloads and accomplished 1.2 million touch labor hours at regional depots.
- Organic Warehousing and Transportation: The F-35 JPO continues to promote U.S. Service and International Partner involvement in all sustainment activities. In 2023, the program reached Full Operational Capability for USTC and set the stage for DLA Warehousing FOC in early 2024.
- U.S. Service-Led/Organic Transitions: The F-35 GSS operates in a hybrid sustainment

infrastructure leveraging legacy U.S. service providers, prime industry and our international partners and allies. In 2023, the JPO began integration with the U.S. services to codify NDAA 142 legislation requirements.
- Surge Sustainment Capability: The F-35 JPO continues to increase capacity and resiliency for sustaining surge operations and operations in a contested logistics environment. The success of GSS, along with its global sustainment infrastructure and practices for sustaining the fleet, is being proven through the current conflict in Israel.

Challenges
- Tech Refresh 3 (TR-3): TR-3 remains the F-35 Program's top development priority. The team achieved essential laboratory milestones during 180+ real-world flight test efforts at Edwards Air Force Base and Patuxent River Naval Air Station. The JPO and industry continue to address challenges to deliver a stable, capable, and maintainable TR-3 aircraft to the warfighters. As of 31 Dec 23, aircraft in Long Term Parking (LTP) are pending software maturity that will enable formal government acceptance.
- Block 4: Block 4 development is critical to meeting demands for the high-end fight. It enhances electronic warfare, communication systems, and other mission systems capabilities. In recent years, Block 4 experienced challenges associated with hardware design maturity and software integration. Development and production concurrency is Block 4's most critical challenge, and we are dealing with its consequences today. In CY23, the JPO commissioned an Independent Review Team to assess realistic priorities for Block 4. The JPO will leverage recommendations to improve acquisition strategies, accountability, contracting, and business processes.

Program Highlights:

(1) N/A - This is not the initial MSAR.

(2) N/A - This is not the final MSAR.

(3) N/A - This is not an Exception MSAR.

(4) Milestone Decisions: As of 31 December, the Defense Acquisition Board (DAB) is scheduled to be held in March 2024 to consider approval of Milestone C and Full Rate Production. The Milestone Decision Authority (MDA) may also consider development and planning steps required to allow future designation of two new major subprograms as required in NDAA 2024 sections 225 and 226.

(5) In CY 2023 the F-35 Joint Program Office completed hundreds of contract award and modification actions totaling over $36B. Following is a brief list of key contracts awarded during the year.

Contract Name	Contract Description	$(M) Value

Lot 17 Option Exercise	Funding for 100 Lot 17 aircraft	7736
Block Four Contract	Development of all remaining Block 4 capabilities, delivery of Air System configurations, Initial Block 5 work	2500
Propulsion Lot 17 Option	Funding for 140 Lot 17 engines	2023
Lot 18 Long Lead	Provide long lead material for production	1310
Propulsion OY2 Annualized Sustainment	Provide repair of repairables/spares replenishment, fleet management, sustaining engineering, and supply chain management	907
IDIQ Delivery Year 25/26 NPL	Propulsion Initial Spares, 6 DOs awarded	853
AV FY23 Extension ? 31 Dec	Continue providing recurring sustainment support	663
FY23-24 SAHW	Production, Delivery, & Install of Training Devices	608
ODIN Hardware Maintenance	Production of ALIS, ODIN, Mission Planning hardware	345
FY23 SAHW	Site and Depot Activation & Hardware. Provides depot level capability and capacity expansion.	221
Reprogramming Verification and Validation Systems	Upgrade the verification and validation systems	196
ALIS-to-ODIN IDIQ	Provide development, installation, integration, training, delivery, and software mods	179
Lot 17 HMD Option	Procure Helmet Mount Display material	141

(6) The financial health of the program continues to receive both congressional scrutiny and support. In FY2023 the program received congressional support for the F135 engine enhancement developmental efforts and Lot 17 aircraft unit cost increases to preserve aircraft production rates. The program continues to receive congressional requests for information related to increases in unit recurring flyaway costs and non-recurring flyaway costs. Internally, the program is using predictive data analytics with continued focus on financial execution improvement. This allows the program to realign active year funds to address program priorities/requirements, in accordance with the Program's cost share ruleset, to minimize carryover. Where it makes sense, the program is exploring above threshold reprogramming action approvals to preserve the F-35's top line Total Obligation Authority (TOA) and execute funding to meet priority requirements. The program does not currently receive overseas contingency operations or other supplemental funding.

(7) The JPO will send a Program Deviation Report documenting the delay in completion of the F-35 Technical Refresh 3 (TR-3) program to the MDA (USD (A&S)) in the first week of 2024. The Joint Program Office (JPO) and industry partners are focused on completing the TR-3 program with urgency. The top priority is achieving stable, capable, maintainable, and exportable software. We have paused DD 250 acceptance of Lot 15 aircraft until industry can provide TR-3 software that meets requirements. The F-35 JPO continues to actively manage risks of the TR-3 program. Given the remaining risks in the program, we have determined that the first TR-3 aircraft delivery will not meet the threshold date of December 2023 required pursuant to F-35 Lightning II Joint Strike Fighter

Acquisition Program Baseline (APB), Change 4, 12 May 2022.

(8) The F-35 completed Developmental and Operational Test events.

(9) Milestone B certification was completed in March 2012. The DAB scheduled for March 2024 is to consider approval of Milestone C.

(10) The F-35 Program has held a Red Critical CSDR compliance rating since August 2012. The JPO CSDR Team applies the latest CSDR requirements to all new contracts and continues coordinating with Prime contractors and their Subcontractors to resolve the backlog.

(11) N/A

(12) The Program stood up a Modular Open Systems Approach (MOSA)/Open Systems Architecture team to (1) assess the viability of applying MOSA design principles to candidate capabilities; (2) capture and verify applicable MOSA requirements to transition a candidate capability to an open architecture design and development; (3) validate MOSA design principles and requirements for candidate capabilities incorporated into the Program of Record.

(13) There was a significant change in schedule events driven by delays in the testing and delivery of the TR-3 program which delayed the delivery of Lot 15 aircraft. TR-3 has experienced setbacks due to realized software development risk, aging development test aircraft, and insufficient lab capacity. Labs have not represented the operational environment well enough. Lockheed Martin and the F-35 JPO are implementing an Enterprise-wide approach to address these challenges. The highest TR-3 priority is software performance improvement, with specific focus on aircraft start-up time and software stability in flight. In compliance with the FY24 NDAA, future designation of Block 4/TR-3 programs as a major subprogram will provide increased visibility into the risks and progress made as development continues.

(14) The International Directorate is charged with managing all international aspects of the F-35 program with a key role of ensuring integration of the international customers' requirements within the overall F-35 program. The F-35 program is the first U.S. multi-service, multi-national, multi-variant aircraft program with the largest Cooperative aircraft development, production, and sustainment programs currently consisting of 3 U.S. Services, 7 Cooperative Partners, and 9 FMS Countries. The 7 Cooperative Partner countries that signed a Multi-Lateral agreement are part of the decision making and governance, and have military and civilian personnel embedded within the program. FMS customers have Bi-lateral relationships with the U.S. governed by individual FMS cases and codified in Letters of Offer and Acceptance.

(U) History of Significant Developments Since Program Inception

Date	Description
September 2023	IOT&E Testing Complete
May 2022	Acquisition Program Baseline change pursuant to October 2021 Acquisition Decision Memorandum
February 2020	Acquisition Program Baseline change pursuant to December 2019 Acquisition Decision Memorandum (no additional changes)
December 2019	Acquisition Decision Memorandum - Schedule breach relating to Milestone C/Full Rate Production Decision Review relating to Joint Simulation Environment delays
November 2018	Initial Operational Test & Evaluation (IOT&E) Starts
December 2011	Creation of subprograms - Split of program to 'aircraft' and 'engine' subprograms
June 2010	Nunn-McCurdy Recertification - Recertification of the program pursuant to 10 USC 2433a as required after a critical cost breach
April 2007	Production of F-35 Aircraft begins (LRIP 1 Contract Signed)
October 2001	Milestone B - System Development and Demonstration (SDD) Contract Awarded - Award of the SDD contracts to the air vehicle and propulsion providers for the JSF
November 1996	Concept Demonstration Contracts Awarded - Contracts for development of the final two contenders for the Joint Strike Fighter (JSF) program

F-35 Engine Subprogram

Program Highlights Since Last Report

Program Highlights for this area are being reported at the program level.

(U) History of Significant Developments Since Program Inception

No Data

F-35 Aircraft Subprogram

Program Highlights Since Last Report

Program Highlights for this area are being reported at the program level.

(U) History of Significant Developments Since Program Inception

No Data

(U) Schedule

F-35 Engine Subprogram

(U) Schedule Events

Events	APB Change 3 (Current) 5/12/2022 Objective / Threshold	Current Estimate 12/31/2023	Actual

Notes

Schedule milestones for the F-35 Engine subprogram are captured as part of the system-level schedule milestones reflected in the F-35 Aircraft subprogram.

Schedule Baseline Deviation Explanation

None

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

None

F-35 Aircraft Subprogram

(U) Schedule Events

Events		APB Change 4 (Current) 5/12/2022 Objective / Threshold		Current Estimate 12/31/2023	Actual
Concept Demonstration Contract Award	MS I	Nov 1996	Nov 1996	-	15 Nov 1996
Milestone B Re-approval	MS B	Nov 2011	May 2012	-	7 Mar 2012
EMD Contract Award	EMD CA	Oct 2001	Oct 2001	-	26 Oct 2001
Milestone B	MS B	Oct 2001	Apr 2002	-	26 Oct 2001
Preliminary Design Review	PDR	Mar 2003	Mar 2003	-	28 Mar 2003
Critical Design Review					
CDR (STOVL & Common)	CDR	Feb 2006	Feb 2006	-	24 Feb 2006
CDR (CTOL & Common)	CDR	Feb 2006	Feb 2006	-	24 Feb 2006

CDR (CV & Common)	CDR	Jun 2007	Jun 2007	-	7 Jun 2007
First Flight					
CTOL	First Flight	Dec 2006	Dec 2006	-	29 Dec 2006
STOVL	First Flight	Jun 2008	Jun 2008	-	27 Jun 2008
CV	First Flight	May 2010	May 2010	-	28 May 2010
DAE (IPR 1)	LRIP Decision	Mar 2006	Mar 2006	-	31 Mar 2006
DAE (IPR 2)	LRIP Decision	Apr 2007	Apr 2007	-	11 Apr 2007
Software Releases					
Block 2B Fleet Release	Other	Mar 2015	Sept 2015	-	26 Jun 2015
Block 3F Fleet Release	Other	Aug 2017	Feb 2018	-	25 Aug 2017
Initial Operating Capability					
USMC IOC	IOC	Jul 2015	Dec 2015	-	31 Jul 2015
USAF IOC	IOC	Aug 2016	Dec 2016	-	31 Aug 2016
USN IOC	IOC	Aug 2018	Feb 2019	-	24 Aug 2018
1st Production Aircraft Delivered	First Asset Delivery	May 2011	May 2011	-	27 May 2011
TR-3 CDR	CDR	Jun 2019	Jun 2019	-	28 Jun 2019
Dual Capable Aircraft - Technical Certification	FDD	Jan 2023	Jan 2023	-	28 Sept 2022
Milestone C	MS C	Sept 2023	Mar 2024	Mar 2024	-
Full Rate Production Decision	FRP Decision	Sept 2023	Mar 2024	Mar 2024	-
First TR-3 Aircraft Delivery	First Asset Delivery	Jun 2023	Dec 2023	Aug 2024*	-

* Baseline Deviation

Notes

None

Schedule Baseline Deviation Explanation

A Program Deviation Report documenting the delay in completion of the F-35 Technical Refresh 3 (TR-3) program is being finalized and will be sent to the MDA (USD (A&S)) in the first week of 2024. The Joint Program Office (JPO) and industry partners are focused on completing the TR-3 program with urgency. The top priority is achieving stable, capable, maintainable, and exportable software. We have paused DD 250 acceptance of Lot 15 aircraft until industry can provide TR-3 software that meets requirements. The F-35 JPO continues to actively manage risks of the TR-3 program. Given the remaining risks in the program, we have determined that the first TR-3 aircraft delivery will not meet the threshold date of December 2023 required pursuant to F-35 Lightning II Joint Strike Fighter Acquisition Program Baseline (APB), Change 4, 12 May 2022. Results of on-going work will be reported at the upcoming Overarching Integrated Product Team and Defense Acquisition Board events in Spring 2024 and then codifying the same in a revised APB.

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

Event	Date	Description
FRP	12/31/2023	TR-3 late hardware delivery and longer than expected 40P01 software development put first TR-3 aircraft (AF-392) delivery at risk of further schedule delay. Developmental flight test began in January 2023 and was planned to be completed in November 2023.
FRP	12/31/2023	Recent development capacity modeling identified instrumented flight test aircraft non-availability, hardware and software development and test and lab capacity as the top 3 constraints. Flight science aircraft contracts were recently awarded, but are late to need and could slip planned Block 4 weapon and sensor delivery dates. Acceleration activities include accelerating supplier deliveries, adding production fixtures and increasing manpower.

(U) Performance

(U) F-35 Engine Subprogram

(U) Performance Attributes

See Note		[attribute type not provided]
Current Estimate 12/31/2023		NA
Demonstrated Performance -		TBD
APB Change 3 (Current)	Objective	NA
5/12/2022	Threshold	NA

(U) Requirement Source:

Sponsor(s): United States Air Force

1. Not Applicable*, Not Applicable*
   Validated By: Not Applicable, June 8, 2022

Notes

Performance characteristics for the F-35 Engine subprogram are captured as part of the system-level performance characteristics reflected in the F-35 Aircraft subprogram.

Performance Deviation Explanation

None

(U) F-35 Aircraft Subprogram

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

(U) Performance Attributes

Combat Radius NM - CTOL Variant		KPP
Current Estimate 12/31/2023		664
Demonstrated Performance 12/29/2023		664
APB Change 4 (Current)	Objective	690

5/12/2022	Threshold	590
Combat Radius NM - CV Variant		**KPP**
Current Estimate 12/31/2023		668
Demonstrated Performance 12/29/2023		668
APB Change 4 (Current)	Objective	730
5/12/2022	Threshold	600
Combat Radius NM - STOVL Variant		**KPP**
Current Estimate 12/31/2023		493
Demonstrated Performance 12/29/2023		493
APB Change 4 (Current)	Objective	550
5/12/2022	Threshold	450
CV Recovery Performance (Vpa)		**KPP**
Current Estimate 12/31/2023		Vpa. Maximum approach speed (Vpa) at required carrier landing weight (RCLW) of less than 147.9 knots.*
Demonstrated Performance 12/29/2023		**Vpa. Maximum approach speed (Vpa) at required carrier landing weight (RCLW) of less than 147.9 knots.**
APB Change 4 (Current)	Objective	Vpa at required carrier landing weight (RCLW) of less than 140 knots.
5/12/2022	Threshold	Vpa at required carrier landing weight (RCLW) of less than 145 knots.
Logistics Footprint - CTOL Variant		**KPP**
Current Estimate 12/31/2023		Less than or equal to 13.99 C-17 equivalents*
Demonstrated Performance 12/29/2023		**Less than or equal to 13.99 C-17 equivalents**
APB Change 4 (Current)	Objective	Less than or equal to 6 C-17 equivalents
5/12/2022	Threshold	Less than or equal to 8 C-17 equivalent loads
Logistics Footprint - CV Variant		**KPP**
Current Estimate 12/31/2023		Less than or equal to 53,100 cu ft., 290 ST*
Demonstrated Performance 12/29/2023		**Less than or equal to 53,100 cu ft., 222 ST**
APB Change 4 (Current)	Objective	Less than or equal to 34,000 cu ft., 183 ST
5/12/2022	Threshold	Less than or equal to 46,000 cu ft., 243 ST
Logistics Footprint - STOVL Variant		**KPP**
Current Estimate 12/31/2023		Less than or equal to 13.99 C-17 equivalents*
Demonstrated Performance		**Less than or equal to 13.99 C-17 equivalents**

12/29/2023		
APB Change 4 (Current)	Objective	Less than or equal to 4 C-17 equivalents
5/12/2022	Threshold	Less than or equal to 8 C-17 equivalent loads
Logistics Footprint - STOVL Variant L-Class		**KPP**
Current Estimate 12/31/2023		Less than or equal to 34,600 cu ft, 206 ST*
Demonstrated Performance 12/29/2023		**Less than or equal to 34,600 cu ft, 206 ST**
APB Change 4 (Current)	Objective	Less than or equal to 15,000 cu ft, 104 ST
5/12/2022	Threshold	Less than or equal to 21,000 cu ft, 136 ST
Mission Reliability - CTOL Variant		**KPP**
Current Estimate 12/31/2023		86.2%*
Demonstrated Performance 8/31/2023		**86.2%**
APB Change 4 (Current)	Objective	98%
5/12/2022	Threshold	93%
Mission Reliability - CV Variant		**KPP**
Current Estimate 12/31/2023		93.8%*
Demonstrated Performance 8/31/2023		**93.8%**
APB Change 4 (Current)	Objective	98%
5/12/2022	Threshold	95%
Mission Reliability - STOVL Variant		**KPP**
Current Estimate 12/31/2023		97.2%
Demonstrated Performance 8/31/2023		97.2%
APB Change 4 (Current)	Objective	98%
5/12/2022	Threshold	95%
Sortie Generation Rates - CTOL Variant		**KPP**
Current Estimate 12/31/2023		3.4/3.0/2.0 2.5 ASD
Demonstrated Performance 12/29/2023		3.4/3.0/2.0 2.5 ASD
APB Change 4 (Current)	Objective	4.0/3.0/2.0 2.5 ASD
5/12/2022	Threshold	3.0/2.0/1.0 2.5 ASD
Sortie Generation Rates - CV Variant		**KPP**

Current Estimate 12/31/2023		4.2/3.0/1.0 1.8 ASD
Demonstrated Performance 12/29/2023		4.2/3.0/1.0 1.8 ASD
APB Change 4 (Current)	**Objective**	4.0/3.0/1.0 1.8 ASD
5/12/2022	**Threshold**	3.0/2.0/1.0 1.8 ASD
Sortie Generation Rates - STOVL Variant (USMC)		**KPP**
Current Estimate 12/31/2023		5.8/4.0/2.0 1.1 ASD
Demonstrated Performance 12/29/2023		5.8/4.0/2.0 1.1 ASD
APB Change 4 (Current)	**Objective**	6.0/4.0/2.0 1.1 ASD
5/12/2022	**Threshold**	4.0/3.0/1.0 1.1 ASD
STOVL Mission Performance		**KPP**
Current Estimate 12/31/2023		2148
Demonstrated Performance 12/29/2023		2148
APB Change 4 (Current)	**Objective**	With four 1000# JDAMs and two internal AIM-120s, full expendables, execute a 600 foot (450 UK STOVL) STO from LHA, LHD, and aircraft carriers (sea level, tropical day, 10 kts operational WOD) and with a combat radius of 550 nm (STOVL profile). Also must perform STOVL vertical landing with two 1000# JDAMs and two internal AIM-120s, full expendables, and fuel to fly the STOVL Recovery profile.
5/12/2022	**Threshold**	With two 1000# JDAMs and two internal AIM-120s, full expendables, execute a 600 foot (450 UK STOVL) STO from LHA, LHD, and aircraft carriers (sea level, tropical day, 10 kts operational WOD) and with a combat radius of 450 nm (STOVL profile). Also must perform STOVL vertical landing with two 1000# JDAMs and two internal AIM-120s, full expendables, and fuel to fly the STOVL Recovery profile.

* Baseline Deviation

(U) Requirement Source:
Sponsor(s): United States Air Force

1. Decision Memorandum, *JSF Executive Steering Board Decision Memorandum #151*
   Validated By: OUSD (A&S), August 9, 2021
   Notes: Requirements in support of F-35 Modernization Capability Development Document for use in Post-Milestone C events.
2. Operational Requirements Document, *Joint Strike Fighter*
   Validated By: Joint Requirements Oversight Council, August 19, 2008
   Notes: Requirements up to and including the Milestone C decision

Notes

None

Performance Deviation Explanation

- For the purposes of SDD closeout, 30deg flap was used in the calculations for Vpa even though a decision was made in 2012-2013 timeframe to not have a 30deg TEF (trailing Edge flaps) setting in the aircraft due to Flying Qualities concerns despite the fact that in order to reach the 145kt SDD CV Vpa KPP, 30deg TEF would have been required from an aircraft performance perspective. Since SDD closeout, LM has used the ACTUAL configuration of the aircraft (15deg TEF) to do the Vpa calculations since 30deg TEF isn't a realistic aircraft configuration, which explains why we are not meeting the 145kt SDD KPP with no plan to correct
- Logistics Footprint KPP - C-17 Loads; Growth is driven by increased range and depth of items required to support mission profiles. LFP validation IPT discussions on going related to changing from C-17 loads to number of pallets, re-modeling Deployment Spares Package requirements, and clarifying mission profiles and durations."
- Mission Reliability KPP - Resolution in discussion with Services through MR working group; Relief Memo to MDA/JROC for MS-C in work

(U) Acquisition Budget Estimate

(U) F-35 Engine Subprogram

(U) Total Acquisition Estimates and Quantities

Category ($M) Base Year: 2012	APB Change 3 (Current) 5/12/2022 CY$ obs Objective / Threshold		Current Estimate PB 2025 CY$ obs / TY$ obs	
RDT&E	13,432.3	14,775.5	16,016.9*	16,111.6
Procurement	41,012.8	46,566.2	44,940.1	68,020.9
MILCON	0.0	0.0	0.0	0.0
O&M	0.0	0.0	0.0	0.0
R&MF	0.0	0.0	0.0	0.0
Total Acquisition	54,445.1	-	60,957.0	84,132.5
Program Acquisition Unit Cost	22.043	24.746	24.679	34.062
Average Procurement Unit Cost	16.699	19.061	18.298	27.696
Program End-Item Quantity				
Development	14		14	
Procurement	2456		2456	
O&M-Acquired	-		-	

* Baseline Deviation

Budget Notes

Quantity Notes

None

Cost Baseline Deviation Explanation

Parameter	Explanation
Acquisition Cost (RDT&E)	The new Engine Core Upgrade (ECU) program was added to the development estimate, beginning in FY24. A future change of the APB will be a revised original for the purposes of compliance with Section 225 and 226 of Public Law 118-31 at sub-program initiation (program restructure) for Block 4 and Engine and Power Thermal Management Upgrade (EPM). This baseline, once approved, will be reported in the SAR.

(U) Risk and Sensitivity Analysis

Current Procurement Estimate Risks (12/31/2023)
None
Current Baseline Risks (5/12/2022)
None
Original Baseline Risks (3/26/2012)
No major programmatic risks attributable to the F-35 Engine subprogram have been identified at this time.

(U) F-35 Aircraft Subprogram

(U) Total Acquisition Estimates and Quantities

Category ($M) Base Year: 2012	APB Change 4 (Current) 5/12/2022 CY$ obs Objective / Threshold		Current Estimate PB 2025 CY$ obs / TY$ obs	
RDT&E	63,162.0	69,478.2	66,902.2	71,300.3
Procurement	230,886.4	253,975.0	221,345.2	325,797.7
MILCON	4,168.0	4,584.8	3,523.0	4,022.7
O&M	0.0	0.0	0.0	0.0
R&MF	0.0	0.0	0.0	0.0
Total Acquisition	298,216.4	-	291,770.4	401,120.7
Program Acquisition Unit Cost	120.735	132.810	118.126	162.397
Average Procurement Unit Cost	94.009	103.410	90.124	132.654
Program End-Item Quantity				
Development	14		14	
Procurement	2456		2456	
O&M-Acquired	-		-	

Budget Notes

- This SAR reflects President's Budget (PB) 2025 and budget authority required to execute the requirements of JSF Executive Steering Board Decision Memorandum #151.

Quantity Notes

None

Cost Baseline Deviation Explanation

None

(U) Risk and Sensitivity Analysis

Current Procurement Estimate Risks (12/31/2023)
None
Current Baseline Risks (5/12/2022)
None
Revised Original Baseline Risks (3/26/2012)
None

(U) Unit Costs

(U) F-35 Engine Subprogram

(U) Current Estimate Compared with Current Baseline

Category (CY$M) Base Year: 2012	Current Baseline 05/12/2022	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	54,445.1	60,957.0	
Program Quantity	2,470	2,470	
PAUC	22.043	24.679	11.96%
Average Procurement Unit Cost			
Procurement Cost	41,012.8	44,940.1	
Procurement Quantity	2,456	2,456	
APUC	16.699	18.298	9.58%

(U) Current Estimate Compared with Original Baseline

Category (CY$M) Base Year: 2012	Original Baseline 03/26/2012	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	54,028.1	60,957.0	
Program Quantity	2,457	2,470	
PAUC	21.989	24.679	12.23%
Average Procurement Unit Cost			
Procurement Cost	42,332.9	44,940.1	
Procurement Quantity	2,443	2,456	
APUC	17.328	18.298	5.60%

(U) Cost Growth Details

Actions taken or Proposed to Control Future Cost Growth

Cost growth shown in current SAR due to inclusion of new Engine Core Upgrade Program. A future change of the APB will be a revised original for the purposes of compliance with Section 225 and 226 of Public Law 118-31 at sub-program initiation (program restructure) for Block 4 and Engine and Power Thermal Management Upgrade (EPM). This baseline, once approved, will be reported in the SAR.

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 DoD average F-35 Unit Recurring Flyaway cost consists of the Hardware (Airframe, Vehicle Systems, Mission Systems, Engine, Engineering Change Order) costs over the life of the program. The URF assumes the benefit of 371 FMS aircraft and 547 International Partner Aircraft
CY12$M URF (SAR 23)
F-35A - $10.48
F-35B - $25.17
F-35C - $10.45

(U) F-35 Aircraft Subprogram

(U) Current Estimate Compared with Current Baseline

Category (CY$M) Base Year: 2012	Current Baseline 05/12/2022	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	298,216.4	291,770.4	
Program Quantity	2,470	2,470	
PAUC	120.735	118.126	-2.16%
Average Procurement Unit Cost			
Procurement Cost	230,886.4	221,345.2	
Procurement Quantity	2,456	2,456	
APUC	94.009	90.124	-4.13%

(U) Current Estimate Compared with Original Baseline

Category (CY$M) Base Year: 2012	Original Baseline 03/26/2012	Current Estimate PB 2025	% Change
Program Acquisition Unit Cost			
Acquisition Cost	276,483.0	291,770.4	
Program Quantity	2,457	2,470	
PAUC	112.529	118.126	4.97%
Average Procurement Unit Cost			
Procurement Cost	224,332.9	221,345.2	
Procurement Quantity	2,443	2,456	
APUC	91.827	90.124	-1.85%

(U) Cost Growth Details

Actions taken or Proposed to Control Future Cost Growth

The F-35 JPO remains focused on enterprise affordability and instilling a culture of cost consciousness. Since January 2023, the F-35 enterprise has employed a "War on Cost" to tackle F-35 cost growth challenges in new and innovative ways. The F-35 Affordability Directorate leads this initiative and is the primary conduit for ensuring cost control by addressing three focus areas; cost as a design and program requirement, cost estimating, and cost reduction. Additionally, we have multiple Reliability Maintainability Improvement Projects, Component Improvement Projects and Cost Reduction Initiatives under development across the life cycle aimed at driving down the cost of the air system.

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 DoD average F-35 Unit Recurring Flyaway cost consists of the Hardware (Airframe, Vehicle Systems, Mission Systems, Engine, Engineering Change Order) costs over the life of the program. The URF assumes the benefit of 371 FMS aircraft and 547 International Partner Aircraft
CY12$M URF (SAR 23)
F-35A - $62.22
F-35B - $74.61
F-35C - $77.20

(U) Life-Cycle Costs

(U) F-35 Aircraft Subprogram

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

Category ($M) Base Year: 2012	APB Change 4 (Current) 5/12/2022 CY$ obs Objective / Threshold		Current Estimate CY$ obs / TY$ obs	
Total O&S	630,534.5	693,588.0	651,341.7	1,576,720.4
Total Disposal	-	-	262.0	810.0

(U) Current Cost Estimate Sources

Operating and Support Cost
Type: Program Office Estimate
Approved by: F-35 Joint Program Office (JPO), August 08, 2023

Disposal/Demilitarization Cost
Type: Component Cost Position
Approved by: AFCAA & NAVAIR Joint Services Cost Position (JSCP), June 15, 2020

Operating and Support Baseline Deviation Explanation

None

Cost Notes

None

(U) Operating and Support Variance with Prior Estimate

(CY$M) Base Year: 2012	Estimate	
Prior Estimate (11/2/2022)	705,773.8	
Current Estimate	651,341.7	
Category	**Variance**	**Explanation**
Unit-Level Manpower	-15,173.8	OSD Inflation, Composite Rates, and Beddowns decreases
Unit Operations	3,523.9	Fuel Pricing, Fuel Consumption, and Training Munitions increases, with offsetting OSD Inflation, Engine Core Upgrade (ECU), and Beddowns decreases

(CY$M) Base Year: 2012	Estimate	
Maintenance	-32,105.6	ECU, Air Vehicle Depot Maintenance definition, Beddowns, OSD Inflation, and Propulsion updates decreases
Sustaining Support	-2,547.3	OSD Inflation decreases, with offsetting Actuals, ECU, and Tech Refresh cycle increases
Continuing System Improvements	-5,064.8	Air Vehicle Depot Maintenance definition, Modifications updates, and OSD Inflation decreases, with offsetting ODIN Platform Environment Infrastructure increases
Other	-3,064.5	Beddowns, OSD Inflation, and Composite Rates decreases
Not Categorized	0.0	

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

(CY$M) Base Year: 2012							
System	Unit-Level Manpower	Unit Operations	Maintenance	Sustaining Support	Continuing System Improvements	Other	Total
F-35A	135,429.3	59,653.9	135,898.3	73,285.7	34,525.5	54,037.0	**492,829.7**
F-35B	12,777.8	9,263.3	30,150.3	14,954.6	5,652.9	15,746.2	**88,545.1**
F-35C	12,248.6	8,026.3	20,257.0	11,513.0	4,828.3	13,093.7	**69,966.9**
Program	**160,455.7**	**76,943.5**	**186,305.6**	**99,753.3**	**45,006.7**	**82,876.9**	**651,341.7**

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

No Data

(U) Operating and Support Cost Estimate Assumptions

System	Quantity to Sustain	Unit Expected Service Life (Years)	Unit of Measure	Fiscal Years Operational
F-35A	1,763	43.0	TAI	2011 - 2088
F-35B	353	34.0	TAI	2012 - 2062
F-35C	340	27.0	TAI	2013 - 2061

Additional O&S Estimate Assumptions

- F-35A includes USAF F-35A
- F-35B includes USMC F-35B
- F-35C includes USMC F-35C and USN F-35C
- Quantity Unit of Measure reflects Total Aircraft Inventory (TAI)

Antecedent Estimate Assumptions

- The F-35A/B/C family of aircraft variants replace the following current aircraft: F-16C/D, A-10C, F/A-18C/D, and AV-8B. Comparing the costs of the 5th generation F-35 to legacy aircraft proves challenging. Given the significant increase in military capabilities provided, DoD reasonably expects F-35A to cost more to operate and sustain than 4th generation legacy aircraft.
- An update to the F-35A and F-16C/D comparison remains in work.

O&S Annual Cost Calculation Memo

- Cost Per Tail Per Year (CPTPY) or Cost Per Flight Hour (CPFH): Sum of Total O&S less Indirect Support costs, 1.0 Unit-Level Manpower to 5.0 Continuing System Improvements, for a particular Fiscal Year (FY) or period such as Steady State (SS), divided by the sum of the Total Aircraft Inventory (TAI) less Attrition (LA) or Flight Hours (FH) for the same period.
- Note that the cost basis for CPTPY and CPFH exclude 5.1 Hardware Modifications for all prior years through FY 2022, as those costs already appear within Acquisition costs and the resulting PAUC and APUC metrics.
- Official measures for CPTPY and CPFH appear in Constant Year 2012 $ (CY12$).

(U) F-35 Engine Subprogram

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

Category ($M) Base Year: 2012	APB Change 3 (Current) 5/12/2022 CY$ obs Objective / Threshold		Current Estimate CY$ obs / TY$ obs	
Total O&S	0.0	0.0	-	-
Total Disposal	-	-	-	-

(U) Current Cost Estimate Sources

Operating and Support Cost
Type: No estimate. Not Required

Operating and Support Baseline Deviation Explanation

None

Cost Notes

Total O&S Cost appears within the F-35 Aircraft section.

(U) Operating and Support Variance with Prior Estimate

No Data

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

No Data

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

No Data

(U) Operating and Support Cost Estimate Assumptions

No Data

Additional O&S Estimate Assumptions

None

Antecedent Estimate Assumptions

None

O&S Annual Cost Calculation Memo

None

(U) Technologies and Systems Engineering

(U) F-35 Aircraft Subprogram

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

Event	Date	Description
Current	12/31/2023	TR-3 development and verification remain the highest priority efforts on the program, with risk not yet reduced to zero. The program is nearing the milestone of the first fleet delivery of TR-3 aircraft, expected in May/June 2024, but has not yet achieved the in-air stability with TR-3 needed to meet service mission reliabilty needs. The program has made decisions to defer some capabilities to later releases in order to reduce the risk of achieving this first milestone, but still has at least one more software version to release before it can address all known stability issues.
Current	12/31/2023	Investigation of the TR-3 delays has recently highlighted insufficient attention being paid to maturation of production and manufacturing processes for advanced avionics hardware. Production variances and slow hardware delivery on TR-3 is being recognized as a primary contributing cause for the ongoing challenges with TR-3 software integration and instability. Technical expertise to diagnose and resolve harware production challenges is lacking at JPO and at the contractors. Recovery efforts and mitigation of similar risk for future efforts will need to be worked throughout 2024.
Current	12/31/2023	Flight Sciences (FS) flight test risk remains high, but active mitigation is now in place. Life extension modifications are being worked for test aircraft that have unique instrumentation packages. Three new production aircraft are being modified to a "FS-Lite" configuration, which will allow them to be used as stopgap support for Flight Sciences flight test until new aircraft can be delivered with the full suite of calibrated FS instrumentation.
Current	12/31/2023	Lot 17 software risk is high, due to the decision to defer maturation of some capabilities out of Lot 15/16 software. Lot 17 is now intended to be the first fleet TR-3 configuration which fully delivers the warfighting capabilities of the latest TR-2 configurations. As such, there are a significant number of TR-2 capabilities and weapons that still need to be integrated and verified on this TR-3 Lot 17 configuration before production deliveries will be accepted.
Current	12/31/2023	Lot 17 production risk remains high, as a result of development and integration delays with supplier hardware and software being introduced in Lot 17. This risk is affected by TR-3 development delays, but is separate and in-addition-to any TR-3 risk, specifically related to new Lot 17 capabilities.
Current	12/31/2023	Supply chain issues have become a competing concern of interrupting fleet operations, and the program technical teams are getting more involved in assessing the risk of operating with workaround solution to production and quality issues in the supply chain.

(U) F-35 Engine Subprogram

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

Event	Date	Description
Current	12/31/2023	Electrical power and cooling demands of some of the advanced Block 4+ hardware continue to drive risk for configurations planned for post-2030 delivery. The Engine Core Upgrade (ECU) efforts are being organized as part of a new sub-program that will bring more bleed air capability (for avionics cooling) and more power takeoff capability (for electrical power generation) in addition to thrust and fuel burn improvements to the F135 engine. ECU is anticipated to conduct a Preliminary Design Review (PDR) in May 2024, and is maturing well but has risk due to delayed funding of the air vehicle integration and power/thermal systems design changes that are required to integrate with these F135 changes. If the Air Vehicle efforts are not funded by mid-2024, there is risk that ECU efforts will need to be put on hold.

(U) Performing Activities and Contracts

(U) External Government Activities

None

(U) Contracts and Efforts

Contract Title	Contract Number / Effort	Contractor	Phase
ACURL Phase 2	N00019-22-C-0062	Lockheed Martin Aeronautics Co.	Development
Block Four Contract	N00019-23-C-0009	Lockheed Martin Aeronautics Co.	Development
Development Foundation Contract 003	N00019-22-C-0041	Lockheed Martin Aeronautics Co.	Development
Development Test Aircraft Viability	N00019-14-G-0020 / 97	Lockheed Martin Aeronautics Co.	Development
F135 Engine Core Upgrade	N00019-21-G-0005 / N00019-23-F-0019	Pratt & Whitney, A Raytheon Technologies Company	Development
Follow-On Modernization Phase 2.3	N00019-19-C-0010	Lockheed Martin Aeronautics Co.	Development
FOM Tech Refresh 3 Phase 3	N00019-14-G-0020 / N00019-F-2474	Lockheed Martin Aeronautics Co.	Development
Block Buy 1 Lot 12 - 14	N00019-17-C-0001	Lockheed Martin Aeronautics Co.	Production
Block Buy 2 Lot 15-17	N00019-20-C-0009	Lockheed Martin Aeronautics Co.	Production
F135 Lots 12-14	N00019-18-C-1021	Pratt & Whitney, A Raytheon Technologies Company	Production
F135 Lots 15-17	N00019-20-C-0011	Pratt & Whitney, A Raytheon Technologies Company	Production
Special Tooling & Test Equipment (STATE)	N00019-19-C-0074	Lockheed Martin Aeronautics Co.	Production
CY20 Mods and Upgrades	N00019-19-G-0008 / N00019-20-F-0571	Lockheed Martin Aeronautics Co.	Sustainment
F135 Lot 14 Non Annualized	N00019-21-C-0068	Pratt & Whitney, A Raytheon Technologies Company	Sustainment
F135 PBL2	N00019-21-C-0011	Pratt & Whitney, A Raytheon Technologies Company	Sustainment
FY20 Annualized Sustainment	N00019-20-C-0006	Lockheed Martin Aeronautics Co.	Sustainment
FY20-21 Site Activation & Hardware	N00019-20-C-0032	Lockheed Martin Aeronautics Co.	Sustainment
FY21-23 Annualized Sustainment	N00019-21-C-0020	Lockheed Martin Aeronautics Co.	Sustainment

FY22-24 Site Activation & Hardware	N00019-23-D-0010	Lockheed Martin Aeronautics Co.	Sustainment
Maintenance Systems Operational Data Integrated Network (ODIN) Hardware	N00019-22-D-0004	Lockheed Martin Aeronautics Co.	Sustainment

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

Contract Number:	N00019-22-C-0062	**Order Number:**	-
Contract Title:	ACURL Phase 2	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Development
Type:	Multiple Types	**Award Date:**	July 27, 2022
Latest Modification Date:	March 9, 2023	**Definitization Date:**	March 9, 2023
Latest Modification No.:	P00001	**Work Start Date:**	-
Technical Data Rights:	-		

Notes: This is the first time this contract is being reported. The difference between the initial contract price and the current contract price is driven by the contract being awarded an Undefinitized Contract Action (UCA) and subsequent definitization of effort. The PM EAC reflects the Total Allocated Budget as no PM EAC has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
0.0	-	320.3	-	283.9	291.7	-	-	-

Work Completed (%):	10.88%
Cost Variance (TY$M):	+1.8
Schedule Variance (TY$M):	+4.3

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is due primarily to less senior level Phase 2 Project Lead support than planned, and less effort than planned to complete Phase 2 draft Facilities Requirements Document and initial Phase 2 hardware design support.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The favorable cumulative schedule variance is due primarily to receipt of NG-B Phase 2 Radar Stim non-Prime Mission Equipment (PME) long-lead hardware and PME long-lead hardware ahead of the baseline plan, and performance earned with no associated work scheduled (BCWS) for BAE System Engineering support (invoice received earlier than planned).

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

Contract Number:	N00019-23-C-0009	**Order Number:**	-

Contract Title:	Block Four Contract	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Development
Type:	Cost Plus Fixed Fee	**Award Date:**	May 2, 2023
Latest Modification Date:	November 16, 2023	**Definitization Date:**	-
Latest Modification No.:	P00003	**Work Start Date:**	May 2, 2023
Technical Data Rights:	-		

Notes: This is the first time this contract is being reported. All effort is currently being executed under an undefinitized contract action. The PM EAC is equal to the Total Allocated Budget as no PM EAC has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
0.0	-	0.0	-	1,573.8	1,573.8	-	-	-

Work Completed (%):	2.97%
Cost Variance (TY$M):	+8.0
Schedule Variance (TY$M):	-2.2

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by a schedule slip that reflects the SW baseline moving from the Tech Refresh 2 (TR2) build series to the 40S01 Tech Refresh 3 (TR3) build series, as well as Agile reprioritization of work associated with Common Reprogramming Tools (CRT) Project Management and Architecture, Chief Engineer, and Technical Leads.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by overall efforts ramping up slower than anticipated, as well as a schedule slip that reflects the software baseline moving from the TR2 build series to the 40S01 TR3 build series.

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

Contract Number:	N00019-22-C-0041	**Order Number:**	-
Contract Title:	Development Foundation Contract 003	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Development
Type:	Cost Plus Incentive Fee (Cost Based)	**Award Date:**	May 17, 2022

Latest Modification Date:	December 28, 2023	**Definitization Date:**	May 17, 2022
Latest Modification No.:	P000023	**Work Start Date:**	May 17, 2022
Technical Data Rights:	-		
Notes:	This is the first time this contract is being reported. The difference between the Initial Contract Price and the Current Contract Price is driven by incentive fees and contract modifications adding work scope to provide 10GB wide area network access for support of F-35 developmental flight testing at Edwards Air Force Base and Fort Worth and additional work scope for Flight Test Integration (FTI) effort. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
622.3	-	766.9	-	669.6	658.4	-	-	-

Work Completed (%):	75.25%
Cost Variance (TY$M):	+6.4
Schedule Variance (TY$M):	-29.1

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by utilization of lower labor grade staffing across the Lab Operations team as well as less Aeronautics Field Sustainment (AFS) support cost at Edwards Air Force Base than anticipated.The favorable cumulative cost variance is primarily driven by utilization of lower labor grade staffing across the Lab Operations team as well as less Aeronautics Field Sustainment (AFS) support cost at Edwards Air Force Base than anticipated.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by delays in lab maintenance support due to late supplier negotiations which affected when the supplier contract was awarded and subsequently detail planned.

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

Contract Number:	N00019-14-G-0020	**Order Number:**	DO 0097
Contract Title:	Development Test Aircraft Viability	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	97	**Supported Phase:**	Development
Type:	Cost Plus Fixed Fee	**Award Date:**	May 30, 2018
Latest Modification Date:	December 12, 2023	**Definitization Date:**	July 30, 2018
Latest Modification No.:	P00028	**Work Start Date:**	May 30, 2018
Technical Data Rights:	-		
Notes:	This is the first time this contract is being reported. The difference between the Initial Contact Price and the Current Contract Price is driven by incentive fees and contract modifications adding work scope to procure long lead parts under Development Test Viability Material. This contract contains the CSDR and the most recent CPR/IPMR/		

IPMDAR was in December 2023.

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
39.7	-	108.4	-	294.3	294.6	-	-	-

Work Completed (%): 27.48%
Cost Variance (TY$M): +3.9
Schedule Variance (TY$M): -37.7

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by completion of Northrop Grumman scope associated with Development Test Aircraft Viability non-recurring engineering and incurring less actuals than anticipated for Program Management Labor, Deployed Program Management support, and Autonomic Logistics Information System (ALIS) Program Management support.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by delayed Mod Kit procurement due to the finalization of requirements in ongoing negotiations.

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

Contract Number:	N00019-21-G-0005	**Order Number:**	N00019-23-F-0019
Contract Title:	F135 Engine Core Upgrade	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	52661 - Pratt & Whitney, A Raytheon Technologies Company	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	East Hartford, CT		
Effort Number:	N00019-23-F-0019	**Supported Phase:**	Development
Type:	Multiple Types	**Award Date:**	November 29, 2022
Latest Modification Date:	December 14, 2023	**Definitization Date:**	June 30, 2023
Latest Modification No.:	P00008	**Work Start Date:**	November 29, 2022
Technical Data Rights:	-		
Notes:	This is the first time this contract is being reported. The PM EAC reflects the Total Allocated Budget as no PM EAC update has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
180.6	-	183.0	-	169.1	166.8	-	-	-

Work Completed (%): 84.81%
Cost Variance (TY$M): -8.8
Schedule Variance (TY$M): -10.0

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable cumulative cost variance is primarily driven by Low Pressure Turbine (LPT) and Engine Systems Software. Additional iterations to meet design requirements and bringing in higher skilled resources to address rework has driven the unfavorable cost variance. For Engine Sys S/W, more complex work compared to baseline has required more iterations and manpower to complete the work packages which has also impacted the cost variance.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by delays, rework, and additional iterations needed to meet design requirements. Largest contributors are from the High Pressure Compressor, High Pressure Turbine, and Low Pressure Turbine WBS.

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

Contract Number:	N00019-19-C-0010	**Order Number:**	-
Contract Title:	Follow-On Modernization Phase 2.3	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Development
Type:	Multiple Types	**Award Date:**	September 30, 2018
Latest Modification Date:	December 21, 2023	**Definitization Date:**	June 7, 2019
Latest Modification No.:	P00095	**Work Start Date:**	September 30, 2018
Technical Data Rights:	-		
Notes:	The difference between the Initial Contract Price and the Current Contract Price is driven by contract modifications adding work scope for reprogramming labs, incentive fee for dual capability aircraft software development delivery, fuselage bulkhead development, super multi-function aircraft data link work scope, additional dual capable aircraft development, and training work scope. Variance explanations are reported year over year and may not match cumulative values over the life of the contract. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
1,891.6	-	3,172.3	-	4,831.1	4,747.3	-	-	-

Work Completed (%):	55.86%
Cost Variance (TY$M):	-188.9
Schedule Variance (TY$M):	-214.7

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable net cost variance is primarily driven by requiring more labor than planned due to software and firmware complexities, material cost exceeding plan, and growth in BAE's Electronic Warfare effort.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable net schedule variance is primarily driven by ongoing Electronic Warfare issues that resulted in late supplier deliveries for System 3 and subsequent System 4 delays. Additionally, ongoing subcontractor baselining and

Interoperability System Shared B Kit Hardware budget increase resulted in unearned performance due to the use of the PERT earned value methodology.

(U) Contract and Effort Identification, Price, Quantity and Performance			
Contract Number:	N00019-14-G-0020	**Order Number:**	N00019-19-F-2474
Contract Title:	FOM Tech Refresh 3 Phase 3	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	N00019-F-2474	**Supported Phase:**	Development
Type:	Cost Plus Incentive Fee (Cost Based)	**Award Date:**	December 24, 2018
Latest Modification Date:	September 27, 2023	**Definitization Date:**	December 24, 2018
Latest Modification No.:	P00044	**Work Start Date:**	December 24, 2018
Technical Data Rights:	-		
Notes:	The difference between the Initial Contract Price and the Current Contract Price is driven by contract modifications adding work scope for data acquisition recording and telemetry development and tooling. The PM's EAC will be updated in 2024 as the technical team completes the Technical Baseline Review (TBR). Variance explanations are reported year over year and may not match cumulative values over the life of the contract. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
712.5	-	794.5	-	1,783.3	1,677.1	-	-	-

Work Completed (%):	92.06%
Cost Variance (TY$M):	-914.7
Schedule Variance (TY$M):	-27.3

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable net cost variance is primarily driven by technical complexity, design changes, and maturation driving additional engineering effort for the Integrated Core Processor (ICP), Panoramic Cockpit Display (PCD), and Aircraft Memory System (AMS) efforts.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The favorable net schedule variance is primarily driven by schedule burndown of cumulative supplier delays on their Integrated Core Processor (ICP), Panoramic Cockpit Display (PCD), and Aircraft Memory System (AMS) development engineering efforts for design, integration, and test activities that were the result of technical complexity.

(U) Contract and Effort Identification, Price, Quantity and Performance			
Contract Number:	N00019-17-C-0001	**Order Number:**	-
Contract Title:	Block Buy 1 Lot 12 - 14	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland

20670

City, State/Province: Fort Worth, TX

Effort Number:	-	**Supported Phase:**	Production
Type:	Multiple Types	**Award Date:**	April 28, 2017
Latest Modification Date:	November 22, 2023	**Definitization Date:**	October 28, 2019
Latest Modification No.:	P00103	**Work Start Date:**	April 28, 2017
Technical Data Rights:	-		

Notes: The difference between the Initial Contract Price and the Current Contract Price is driven by definitization of the Lot 12-14 Production effort. Initial Price consisted primarily of Long Lead material. Variance explanations are reported year over year and may not match cumulative values over the life of the contract. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
2,731.3	-	34,247.9	-	30,815.5	30,785.2	466	466	461

Work Completed (%):	98.09%
Cost Variance (TY$M):	-868.1
Schedule Variance (TY$M):	-195.9

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable net cost variance is primarily driven by unfavorable rate impacts and definitization of a hardware contract line item number resulting in a budget reduction and unearned performance.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The favorable net schedule variance is primarily driven by schedule recovery as jets continue to deliver late to baseline.

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

Contract Number:	N00019-20-C-0009	**Order Number:**	-
Contract Title:	Block Buy 2 Lot 15-17	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	-
City, State/Province:	Fort Worth, TX		

Effort Number:	-	**Supported Phase:**	Production
Type:	Multiple Types	**Award Date:**	December 20, 2018
Latest Modification Date:	December 18, 2023	**Definitization Date:**	September 24, 2021
Latest Modification No.:	P00036	**Work Start Date:**	December 20, 2018
Technical Data Rights:	-		

Notes: The Initial Contract Price consisted primarily of Long Lead material and two definitized aircraft CLINs representing 10 USAF and 6 USMC aircraft. As of month-end December 2023, the majority of the Block Buy 2 contract is definitized. The PM EAC reflects the

Total Allocated Budget as no PM EAC has been completed to date. Variance explanations are reported year over year and may not match cumulative values over the life of the contract. This contract contains the CSDR and the most recent CPR/IPMR/ IPMDAR was in December 2023.

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
1,099.6	-	30,041.0	-	27,047.4	26,991.7	398	145	30

Work Completed (%): 38.37%

Cost Variance (TY$M): -335.8

Schedule Variance (TY$M): -1,649.7

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable net cost variance is primarily driven by allocations/rates, negotiation loss with subcontractor Honeywell, and assembly inefficiencies related to Scrap, Rework, and Repair (SRR).

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable net schedule variance is primarily driven by late finishes in Final Assembly due to material shortages with Leading Edge Flaps, Palmdale's late issuance of parts related to Electronic Warfare Systems, Radar components issuing late, and late issuance of wings from Leonardo Wing. Aircraft deliveries are impacted and are under review. The Contractor is reporting that there are no anticipated impacts to on-time completion of the contract.

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

Contract Number:	N00019-18-C-1021	**Order Number:**	-
Contract Title:	F135 Lots 12-14	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	52661 - Pratt & Whitney, A Raytheon Technologies Company	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	East Hartford, CT		
Effort Number:	-	**Supported Phase:**	Production
Type:	Multiple Types	**Award Date:**	March 28, 2018
Latest Modification Date:	July 12, 2023	**Definitization Date:**	September 30, 2019
Latest Modification No.:	P00047	**Work Start Date:**	March 28, 2018
Technical Data Rights:	-		

Notes: The difference between the Initial Contract Price and the Current Contract Price is driven by definitization of the Production work scope. Initial Contract Price consisted of long lead production hardware. Variance explanations are reported year over year and may not match cumulative values over the life of the contract. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
239.7	239.7	7,758.4	7,759.6	7,080.8	7,056.6	213	486	486

Work Completed (%): 99.27%

Cost Variance (TY$M): -323.3

Schedule Variance (TY$M): -37.5

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable net change in cost performance is driven by 2020 and 2021 rate annualization. Defense Contracts Management Agency (DCMA) provided the final negotiated rates to be incorporated into FAR15 programs. This cost variance reflects the reconciliation of the true labor and overhead rates with the DCMA forward pricing rates, and adjustments to fee, impacting scope at subcontractor Rolls-Royce.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The favorable net change in schedule performance is primarily driven by schedule recovery of late Rolls-Royce United States Marine Corps Afloat Spares Package/Deployed Spares Package (USMC ASP/DSP), Production Tooling, and LiftFan tooling. Some tooling no longer needed was removed from the contract. Variance was also caused by claiming final performance on Engineering Assistance to Production (EAP) projects as well as the removal of remaining EAP work (negative Budgeted Cost of Work Scheduled [BCWS]) that did not get completed within the Period of Performance (PoP).

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

Contract Number:	N00019-20-C-0011	**Order Number:**	-
Contract Title:	F135 Lots 15-17	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	52661 - Pratt & Whitney, A Raytheon Technologies Company	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	East Hartford, CT		
Effort Number:	-	**Supported Phase:**	Production
Type:	Multiple Types	**Award Date:**	March 23, 2020
Latest Modification Date:	November 21, 2023	**Definitization Date:**	January 25, 2023
Latest Modification No.:	P00023	**Work Start Date:**	March 23, 2020
Technical Data Rights:	-		

Notes: The contract started as an Advance Acquisition Contract (AAC) and an Undefinitized Contract Action (UCA) was awarded on 14 June 2022 for Lots 15 and 16. The contract definitized on 26 January 2023. The Lot 17 Option was exercised 6 June 2023. The Program Management Estimate at Completion (PM EAC) is equal to the Total Allocated Budget (TAB) as no PM EAC has been completed to date. Variance explanations are reported year over year and may not match cumulative values over the life of the contract. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
4,657.3	4,798.5	7,098.0	7,142.7	6,799.2	6,343.4	267	430	141

Work Completed (%): 58.04%

Cost Variance (TY$M): -337.2

Schedule Variance (TY$M): +302.1

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable net change in cost performance is driven by Purchase Order (PO) reevaluations, Nonrecurring Engineering (NRE) charges, material special charges, scrap, unfavorable General and Administrative/Facilities Capital Cost of Money (G&A/FCOM) rate changes, Long Term Agreements, inflation, vendor assist charges, and increased labor costs. Biggest impacts are in Fan, High Pressure Turbine and Low Pressure Turbine.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable net change in schedule performance is primarily driven by burning down positive schedule variance for hardware delivered early. Engine Controls, Fan, High Pressure Compressor and Nozzle account for most of the change.

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

Contract Number:	N00019-19-C-0074	**Order Number:**	-
Contract Title:	Special Tooling & Test Equipment (STATE)	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Production
Type:	Cost Plus Fixed Fee	**Award Date:**	December 12, 2018
Latest Modification Date:	October 23, 2023	**Definitization Date:**	September 6, 2019
Latest Modification No.:	P00026	**Work Start Date:**	December 12, 2018
Technical Data Rights:	-		
Notes:	This is the first time this contract is being reported. Target Price increased due to several MODs increasing the number of tools delivered under this contract. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
419.6	-	630.9	-	566.6	577.5	-	-	-

Work Completed (%):	68.24%
Cost Variance (TY$M):	-3.5
Schedule Variance (TY$M):	-63.8

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable cumulative cost variance is primarily driven by tooling pricing being higher on Leonardo Purchase Order than expected and an error in scope placement.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by late delivery of tooling, subcontractor material shortages, software delays, and rework.

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

Contract Number:	N00019-19-G-0008	**Order Number:**	N00019-20-F-0571

Contract Title:	CY20 Mods and Upgrades	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	N00019-20-F-0571	**Supported Phase:**	Sustainment
Type:	Multiple Types	**Award Date:**	April 27, 2020
Latest Modification Date:	September 6, 2023	**Definitization Date:**	April 30, 2020
Latest Modification No.:	P00025	**Work Start Date:**	April 27, 2020
Technical Data Rights:	-		

Notes: This is the first time this contract is being reported. The difference between the Initial Contract Price and the Current Contract Price is driven by incentive fees, fee adjustment for special tooling and contract modifications adding work scope for Depot Flow Plan (DFP). The PM EAC reflects the Total Allocated Budget as no PM EAC has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/ IPMDAR was in December 2023.

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
94.5	-	998.1	-	846.6	913.2	-	-	-

Work Completed (%):	52.43%
Cost Variance (TY$M):	+26.5
Schedule Variance (TY$M):	-19.6

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by delay in receiving OCONUS taxes and relocation cost at Nagoya and Cameri as well as delays in filling several key vacant positions.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by the Contractor's inability to claim performance due to lagging supplier invoices.

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

Contract Number:	N00019-21-C-0068	**Order Number:**	-
Contract Title:	F135 Lot 14 Non Annualized	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	52661 - Pratt & Whitney, A Raytheon Technologies Company	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	East Hartford, CT		
Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Multiple Types	**Award Date:**	September 24, 2021
Latest Modification Date:	September 8, 2023	**Definitization Date:**	September 24, 2021
Latest Modification No.:	P00009	**Work Start Date:**	September 24, 2021

Technical Data Rights: -

Notes: This is the first time this contract is being reported. The PM EAC is equal to the Total Allocated Budget as no PM EAC has been completed to date. The difference between the Initial Contract Price is driven by contract modifications adding work scope for Common Shared Non-Recurring Sustainment, Depot Activation, and Netherlands Depot Activation Unique Non-Recurring Sustainment. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

Initial Price (TY$M) Target	Initial Price (TY$M) Ceiling	Current Price (TY$M) Target	Current Price (TY$M) Ceiling	Estimate at Completion (TY$M) Contractor	Estimate at Completion (TY$M) PM	Initial Quantity	Current Quantity	Delivered Quantity
258.6	264.9	425.6	435.8	370.3	387.8	-	-	-

Work Completed (%): 66.67%

Cost Variance (TY$M): +0.6

Schedule Variance (TY$M): -41.0

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The cumulative cost variance is driven by favorable performance in complex support equipment, planning and management; and management services.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by needing to rebid for special test equipment and delays to the delivery of support equipment due to increased vendor lead times.

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

Contract Number:	N00019-21-C-0011	**Order Number:**	-
Contract Title:	F135 PBL2	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	52661 - Pratt & Whitney, A Raytheon Technologies Company	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	East Hartford, CT		
Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Multiple Types	**Award Date:**	December 1, 2020
Latest Modification Date:	December 26, 2023	**Definitization Date:**	May 27, 2021
Latest Modification No.:	P00048	**Work Start Date:**	December 1, 2020

Technical Data Rights: -

Notes: This is the first time this contract is being reported. The PM EAC is equal to the Total Allocated Budget as the PM WAC has been completed to date. The difference between the Initial Contract Price and the Current Contract Price is driven by contract modifications adding work scope for Option Years 1, 2, and 3, in addition to work scope for Italy Cavour Deployment. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

Initial Price (TY$M) Target	Initial Price (TY$M) Ceiling	Current Price (TY$M) Target	Current Price (TY$M) Ceiling	Estimate at Completion (TY$M) Contractor	Estimate at Completion (TY$M) PM	Initial Quantity	Current Quantity	Delivered Quantity
638.6	657.2	2,351.6	3,144.9	2,584.5	2,756.6	-	-	-

Work Completed (%): 60.18%
Cost Variance (TY$M): -39.5
Schedule Variance (TY$M): +79.5

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable cumulative cost variance is primarily driven by needing more support than planned for the repair of modules for various engines , and needing more labor than planned for the Depot Maintenance Network.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The favorable cumulative schedule variance is driven by the early delivery of material.

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

Contract Number:	N00019-20-C-0006	**Order Number:**	-
Contract Title:	FY20 Annualized Sustainment	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Multiple Types	**Award Date:**	December 30, 2019
Latest Modification Date:	July 17, 2023	**Definitization Date:**	December 31, 2019
Latest Modification No.:	P00039	**Work Start Date:**	December 30, 2019
Technical Data Rights:	-		
Notes:	This is the first time this contract is being reported. The difference between the initial contract price and the current contract price is driven by full funding of Air Vehicle Sustainment that occurred in May 2020, as initial contract award only included funding for the first six months of the contract through June 30, 2020. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
1,018.0	-	1,900.2	-	1,570.8	1,579.4	-	-	-

Work Completed (%): 98.64%
Cost Variance (TY$M): +95.1
Schedule Variance (TY$M): -22.7

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by delayed supplier definitization/invoicing, delivery delays, and delayed interim contractor support (ICS) staffing.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by delayed supplier definitization/invoicing, missed deliveries, and delays in placing purchase orders.

(U) Contract and Effort Identification, Price, Quantity and Performance			
Contract Number:	N00019-20-C-0032	**Order Number:**	-
Contract Title:	FY20-21 Site Activation & Hardware	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Multiple Types	**Award Date:**	July 27, 2020
Latest Modification Date:	December 29, 2023	**Definitization Date:**	September 11, 2023
Latest Modification No.:	P00037	**Work Start Date:**	July 27, 2020
Technical Data Rights:	-		
Notes:	This is the first time this contract is being reported. The difference between the initial contract price and the current contract price is driven by the contract being awarded as an undefinitized contract action (UCA). This contract is to procure support equipment, autonomic logistics information system hardware, training systems, site activations and integrated contractor support for the F-35 Lightning II. The PM EAC is equal to the Total Allocated Budget as no PM EAC has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.		

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
0.0	-	1,616.0	-	1,465.1	1,463.8	-	-	-

Work Completed (%):	64.45%
Cost Variance (TY$M):	+24.9
Schedule Variance (TY$M):	-12.8

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by hiring delays and less labor than anticipated.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by delayed deliveries of Ground Data Security Assembly Receptacles (GDRs), late awards of contracts to suppliers and manning issues for Reliability and Maintainability Improvement Program (RMIP), work still residing in planning packages, and lagging invoicing from suppliers.

(U) Contract and Effort Identification, Price, Quantity and Performance			
Contract Number:	N00019-21-C-0020	**Order Number:**	-
Contract Title:	FY21-23 Annualized Sustainment	**Strategy:**	FAR 15: Negotiated Contracts
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		

Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Multiple Types	**Award Date:**	December 30, 2020
Latest Modification Date:	December 21, 2023	**Definitization Date:**	September 13, 2021
Latest Modification No.:	P00093	**Work Start Date:**	December 30, 2020
Technical Data Rights:	-		

Notes: This is the first time this contract is being reported. The difference between the initial contract price and the current contract price is driven by the contract being awarded as an undefinitized contract (UCA), and subsequent awards of FY22, FY23, and FY24 efforts. The PM EAC reflects the Total Allocated Budget as no PM EAC has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
0.0	-	7,407.6	-	6,448.4	6,833.5	-	-	-

Work Completed (%):	81.92%
Cost Variance (TY$M):	+397.5
Schedule Variance (TY$M):	-68.4

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The favorable cumulative cost variance is primarily driven by Lockheed Martin Rotary and Mission Systems (LM RMS) Management Reserve (MR) representation, staffing vacancies for training and Field Service Engineers (FSEs), lower labor rates than estimated, lagging invoices, lower living expenses than planned, expat taxes that are not expected to reconcile for years, and reduced travel due to COVID-19 restrictions.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by delayed supplier invoicing.

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

Contract Number:	N00019-23-D-0010	**Order Number:**	N0001924F0181
Contract Title:	FY22-24 Site Activation & Hardware	**Strategy:**	FAR 16.5: Indefinite Delivery Definite Quantity
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	Naval Air Systems Command, Patuxent River, Maryland 20670
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Order Dependent (Indefinite Delivery Vehicles / Indefinite Delivery Contracts)	**Award Date:**	November 4, 2022
Latest Modification Date:	December 29, 2023	**Definitization Date:**	September 21, 2023
Latest Modification No.:	-	**Work Start Date:**	November 4, 2022
Technical Data Rights:	-		

Notes: This is the first time this contract is being reported. the difference between the initial contract price and the current contract price is driven by the contract being awarded as

an undefinitized contract action (UCA). This contract is for site activation/hardware requirements in support of first aircraft arrival, initial operation capability, and full operational capability milestone events, to include site activation events, support equipment, pilot flight equipment, and post ejection survival training material, as well as contract management, planning and readiness reviews and associated non-recurring introduction to service activities in support of F-35A, F-35B, and F-35C aircraft initial sustainment activities for the Air Force, Marine Corps, Navy, non-Department of Defense participants and Foreign Military Sales customers. The PM EAC is equal to the Total Allocated Budget as no PM EAC has been completed to date. This contract contains the CSDR and the most recent CPR/IPMR/IPMDAR was in December 2023.

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
0.0	-	1,669.5	-	1,564.5	1,562.1	-	-	-

Work Completed (%):	10.13%
Cost Variance (TY$M):	-1.3
Schedule Variance (TY$M):	+3.9

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable cumulative cost variance is primarily driven by rate change adjustments, and material procurement efforts by RMS, due to delta between undefinitized contract action (UCA) pricing called out in the prime contract and the definitized supplier pricing with suppliers.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The favorable cumulative schedule variance is driven by support equipment delivering earlier than baselined.

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

Contract Number:	N00019-22-D-0004	**Order Number:**	DO 2423, DO 0345
Contract Title:	Maintenance Systems Operational Data Integrated Network (ODIN) Hardware	**Strategy:**	FAR 16.5: Indefinite Delivery Definite Quantity
CAGE:	81755 - Lockheed Martin Aeronautics Co.	**Contracting Office:**	-
City, State/Province:	Fort Worth, TX		
Effort Number:	-	**Supported Phase:**	Sustainment
Type:	Order Dependent (Indefinite Delivery Vehicles / Indefinite Delivery Contracts)	**Award Date:**	September 29, 2022
Latest Modification Date:	September 21, 2023	**Definitization Date:**	September 29, 2023
Latest Modification No.:	P00002	**Work Start Date:**	November 29, 2022
Technical Data Rights:	-		

Notes: This is the first time this contract is being reported. The difference between the initial contract price and the current contract price is driven by the award of DO-0345. DO-2423 remains an undefinitized contracting action (UCA). This contract provides hardware and initial admins necessary to support the MOHW F-35 logistics information system software and hardware infrastructure requirements for maintenance systems and mission planning. The PM EAC reflects the Total Allocated Budget as no PM EAC

has been completed to date.

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
0.0	-	153.2	-	293.9	293.9	-	-	-

Work Completed (%): 8.91%

Cost Variance (TY$M): -7.1

Schedule Variance (TY$M): -27.5

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable cumulative cost variance is primarily driven by use of more level of effort (LOE) hours spent than anticipated during definitization and issues incorporating Lockheed Martin Global Readiness Solutions (GRS) cost data due to not understanding the structure.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable cumulative schedule variance is driven by Oracle software licenses purchased for earlier than scheduled for Operational Data Integrated Network (ODIN) Base Kits (OBKs). The baseline plan does not match the supplier invoicing plan; and a baseline change request has been submitted to align these items. Also driven by a delayed award to supplier ITI.

(U) F-35 Aircraft Subprogram

No Data

(U) F-35 Engine Subprogram

No Data

(U) Production

(U) F-35 Aircraft Subprogram

(U) Low-Rate Initial Production

	Original LRIP Determination	Current LRIP Determination
Total LRIP Quantity	465	1,185
Date	10/26/2001	5/5/2023
Reference	Milestone B ADM	Lot 18-19 ADM
LRIP Period	FY 2001 - 2015	FY 2001 - 2027
Total Procurement Quantity	2,456	2,456
LRIP Percentage of Total	18.9%	48.2%

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

OUSD(A&S) approved an increased LRIP quantity to support the ramp to FRP.

LRIP Notes

None

(U) F-35 Engine Subprogram

No Data

(U) Deliveries and Expenditures

(U) F-35 Engine Subprogram

(U) Acquisition Funding

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	81	31	38.3%
Appropriations (TY, $M)	84,132.5	37,498.1	44.6%
Expenditures (TY, $M)	84,132.5	31,198.3	37.1%

(U) End Items Delivered

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Development	14			
F-35 Engine		14	12	
Procurement	2,456			
F-35 Engine		1,237	1,202	
Total	**2,470**	**1,251**	**1,214**	**49.1%**

Notes

None

(U) F-35 Aircraft Subprogram

(U) Acquisition Funding

	Total Estimate	Actual to Date	Actual, Percent Complete
Years Appropriated	81	31	38.3%
Appropriations (TY, $M)	401,120.7	177,099.2	44.2%
Expenditures (TY, $M)	401,120.7	128,962.0	32.2%

(U) End Items Delivered

	Total Required	Planned to Date	Actual to Date	Actual, Percent Complete
Development	14			
F-35B		5	5	
F-35A		5	5	
F-35C		4	4	
Procurement	2,456			
F-35B		200	197	
F-35A		750	710	
F-35C		94	85	
Total	**2,470**	**1,058**	**1,006**	**40.7%**

Notes

None

(U) International Program Aspects

General Memo

F-35 Cooperative Partners participate in the cooperative development, production, and sustainment of the F-35 Air System, under the New Joint Strike Fighter Production, Sustainment and Follow-on Development Memorandum of Understanding (NEW JSF PSFD MOU), which entered into effect on 23 September 2021. The New JSF PSFD MOU removed Turkey from the cooperative partnership established in the original JSF PSFD MOU, which entered into effect in 2006.

Exportability and Business Issues

Foreign Military Sales (FMS): The F-35 Lightning II continues to perform new business activity in conjunction with the Defense Security Cooperation Agency. New JSF PSFD MOU Partner funding amounts reflect each Participant's maximum contribution to the total shared costs as reflected in the New JSF PSFD MOU, Section 5 Financial Provisions, Table 5.1. Quantities reflect the total estimated air vehicle procurement quantities per Annex A, of the New JSF PSFD MOU.
FMS Customer funding and quantities are per their respective LOA.

Is design for international exportability planned?	Yes	**Industry/Partner Exportability Cost-Sharing?**	Yes

Program Protection: Technology Security and Foreign Disclosure Issues

NA

(U) Agreements

Activity Date	Type	Agreement Number	International Partner(s)	Quantity	Funding (TY$M)
12/14/2022	FMS LOA	GY-D-SAB	Germany (GY)	35	6,476.0
9/19/2022	FMS LOA	SZ-D-SAA	Switzerland (SZ)	36	5,569.0
2/11/2022	FMS LOA	FI-D-SAB; FI-D-QAI	Finland (FI)	64	10,790.0
9/23/2021	ICP MOU	New JSF PSFD MOU	Australia (AT)	100	2,482.1
9/23/2021	ICP MOU	New JSF PSFD MOU	Canada (CN)	88	2,183.9
9/23/2021	ICP MOU	New JSF PSFD MOU	Denmark (DE)	27	670.2
9/23/2021	ICP MOU	New JSF PSFD MOU	Italy (IT)	90	2,233.7
9/23/2021	ICP MOU	New JSF PSFD MOU	Netherlands (NE)	52	1,141.8
9/23/2021	ICP MOU	New JSF PSFD MOU	Norway (NO)	52	1,290.5
9/23/2021	ICP MOU	New JSF PSFD MOU	United Kingdom (UK)	138	3,425.3
3/2/2020	FMS LOA	SN-D-SAE	Singapore (SN)	12	2,750.0
1/31/2020	FMS LOA	PL-D-SAI	Poland (PL)	32	4,590.0
10/27/2018	FMS LOA	BE-D-SAD	Belgium (BE)	34	5,100.0
9/30/2014	FMS LOA	KS-D-SAC	Korea (Seoul) (KS)	40	10,340.0

6/29/2012	FMS LOA	JA-D-SBC/JA-D-SGN	Japan (JA)	67	11,270.0
9/30/2010	FMS LOA	IS-D-SAC	Israel (IS)	50	8,966.0

(U) Agreement Information

Partner(s): Germany (GY) **Activity Date:** 12/14/2022

Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** GY-D-SAB

Notes: 12/14/2022 FMSLOA GY-D-SAB Germany Qty: 35 Funding ($M) 6476

Germany (GY)

Fiscal Year	Funding (TY$M)	Quantity
2022	6,476.0	35
Total	**6,476.0**	**35**

(U) Agreement Information

Partner(s): Switzerland (SZ) **Activity Date:** 9/19/2022

Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** SZ-D-SAA

Notes: 9/19/2022 FMSLOA SZ-D-SAA Switzerland Qty: 36 Funding ($M) 5569

Switzerland (SZ)

Fiscal Year	Funding (TY$M)	Quantity
2022	5,569.0	36
Total	**5,569.0**	**36**

(U) Agreement Information

Partner(s): Finland (FI) **Activity Date:** 2/11/2022

Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** FI-D-SAB; FI-D-QAI

Notes: 2/11/2022 FMSLOA FI-D-SAB; FI-D-QAI Finland Qty: 64 Funding ($M) 10790

Finland (FI)

Fiscal Year	Funding (TY$M)	Quantity
2022	10,790.0	64
Total	**10,790.0**	**64**

(U) Agreement Information

Partner(s): Australia (AT) **Activity Date:** 9/23/2021

Type: International Cooperative Program: Memorandum of Understanding **Agreement Number:** New JSF PSFD MOU

Notes: None

Australia (AT)

Fiscal Year	Funding (TY$M)	Quantity
2024	2,482.1	100
Total	**2,482.1**	**100**

(U) Agreement Information

Partner(s):	Canada (CN)	**Activity Date:**	9/23/2021
Type:	International Cooperative Program: Memorandum of Understanding	**Agreement Number:**	New JSF PSFD MOU
Notes:	None		

Canada (CN)

Fiscal Year	Funding (TY$M)	Quantity
2024	2,183.9	88
Total	**2,183.9**	**88**

(U) Agreement Information

Partner(s):	Denmark (DE)	**Activity Date:**	9/23/2021
Type:	International Cooperative Program: Memorandum of Understanding	**Agreement Number:**	New JSF PSFD MOU
Notes:	None		

Denmark (DE)

Fiscal Year	Funding (TY$M)	Quantity
2024	670.2	27
Total	**670.2**	**27**

(U) Agreement Information

Partner(s):	Italy (IT)	**Activity Date:**	9/23/2021
Type:	International Cooperative Program: Memorandum of Understanding	**Agreement Number:**	New JSF PSFD MOU
Notes:	None		

Italy (IT)

Fiscal Year	Funding (TY$M)	Quantity
2024	2,233.7	90
Total	**2,233.7**	**90**

(U) Agreement Information

Partner(s):	Netherlands (NE)	**Activity Date:**	9/23/2021
Type:	International Cooperative Program: Memorandum of Understanding	**Agreement Number:**	New JSF PSFD MOU
Notes:	None		

Netherlands (NE)

Fiscal Year	Funding (TY$M)	Quantity
2024	1,141.8	52
Total	**1,141.8**	**52**

(U) Agreement Information

Partner(s):	Norway (NO)	**Activity Date:**	9/23/2021
Type:	International Cooperative Program: Memorandum of Understanding	**Agreement Number:**	New JSF PSFD MOU

Notes: None

Norway (NO)

Fiscal Year	Funding (TY$M)	Quantity
2024	1,290.5	52
Total	**1,290.5**	**52**

(U) Agreement Information

Partner(s): United Kingdom (UK) **Activity Date:** 9/23/2021

Type: International Cooperative Program: Memorandum of Understanding **Agreement Number:** New JSF PSFD MOU

Notes: None

United Kingdom (UK)

Fiscal Year	Funding (TY$M)	Quantity
2024	3,425.3	138
Total	**3,425.3**	**138**

(U) Agreement Information

Partner(s): Singapore (SN) **Activity Date:** 3/2/2020

Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** SN-D-SAE

Notes: 3/2/2020 FMSLOA SN-D-SAE Singapore Qty: 12 Funding ($M) 2750

Singapore (SN)

Fiscal Year	Funding (TY$M)	Quantity
2020	2,750.0	12
Total	**2,750.0**	**12**

(U) Agreement Information

Partner(s): Poland (PL) **Activity Date:** 1/31/2020

Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** PL-D-SAI

Notes: 1/31/2020 FMSLOA PL-D-SAI Poland Qty: 32 Funding ($M) 4590

Poland (PL)

Fiscal Year	Funding (TY$M)	Quantity
2020	4,590.0	32
Total	**4,590.0**	**32**

(U) Agreement Information

Partner(s): Belgium (BE) **Activity Date:** 10/27/2018

Type: Foreign Military Sales: Letter of Offer and Acceptance **Agreement Number:** BE-D-SAD

Notes: 10/27/2018 FMSLOA BE-D-SAD Belgium Qty: 34 Funding ($M) 5100

Belgium (BE)

Fiscal Year	Funding (TY$M)	Quantity
2018	5,100.0	34

Belgium (BE)

Fiscal Year	Funding (TY$M)	Quantity
Total	**5,100.0**	**34**

(U) Agreement Information			
Partner(s):	Korea (Seoul) (KS)	**Activity Date:**	9/30/2014
Type:	Foreign Military Sales: Letter of Offer and Acceptance	**Agreement Number:**	KS-D-SAC
Notes:	9/30/2014 FMSLOA KS-D-SAC Korea Qty: 40 Funding ($M) 10340		

Korea (Seoul) (KS)

Fiscal Year	Funding (TY$M)	Quantity
2014	10,340.0	40
Total	**10,340.0**	**40**

(U) Agreement Information			
Partner(s):	Japan (JA)	**Activity Date:**	6/29/2012
Type:	Foreign Military Sales: Letter of Offer and Acceptance	**Agreement Number:**	JA-D-SBC/ JA-D-SGN
Notes:	6/29/2012 FMSLOA JA-D-SBC/JA-D-SGN Japan Qty: 67 Funding ($M) 11270		

Japan (JA)

Fiscal Year	Funding (TY$M)	Quantity
2012	11,270.0	67
Total	**11,270.0**	**67**

(U) Agreement Information			
Partner(s):	Israel (IS)	**Activity Date:**	9/30/2010
Type:	Foreign Military Sales: Letter of Offer and Acceptance	**Agreement Number:**	IS-D-SAC
Notes:	9/30/2010 FMSLOA IS-D-SAC Israel Qty: 50 Funding ($M) 8966		

Israel (IS)

Fiscal Year	Funding (TY$M)	Quantity
2010	8,966.0	50
Total	**8,966.0**	**50**

(U) F-35 Aircraft Subprogram

No Data

(U) F-35 Engine Subprogram

No Data

Modernized
Selected Acquisition Report
Supplement

F-35 Lightning II Joint Strike Fighter (JSF) Program
(F-35)

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
F-35 Lightning II Joint Strike Fighter (JSF) Program

Short Name
F-35

PNO
198

Lead Component
Navy

AAF Pathway
MCA

Acquisition Type
MDAP

Acquired Systems

Subprograms

Full Name	Short Name	Acquired Systems
F-35 Aircraft	F-35 Aircraft	F-35A; F-35B; F-35C
F-35 Engine	F-35 Engine	F-35 Engine

Related Programs

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

Program Use of the Adaptive Acquisition Framework

The F-35 Lightning II Program will develop and field an affordable, highly common family of next-generation strike aircraft for the U.S. Navy, Air Force, Marine Corps, and allies. The three variants are the F-35A; F-35B; and the F-35C. The F-35A will be a stealthy multi-role aircraft, primarily air-to-ground, for the Air Force to replace the F-16 and A-10 and complement the F-22. The F-35B variant will be a multi-role strike fighter aircraft to replace the AV-8B and F/A-18A/C/D for the Marine Corps. The F- 35C will provide the U.S. Navy a multi-role, stealthy strike fighter aircraft to complement the F/A-18E/F. The planned DoD F-35 Fleet will replace the joint services' legacy fleets. The transition from multiple type/model/series to a common platform will result in a smaller total force over time and operational and overall cost efficiencies.

Technologies and Systems Engineering

F-35 Aircraft Subprogram

Major Software Efforts

Title	Status	Fielding Date	Description
Block 4	Development	Dec 2030	Improved system capabilities enhancing survivability, lethality, reliability, maintainability, etc. Note: Fielding date in contingent on approval of Block 4 re-imagined and reflects the end of a series of incremental deliveries.

Major Engineering Changes

Title	Original Need Date	Fielding Date	Description, Rationale and Program Impacts
Path to 8k Aircraft	Oct 2001	Dec 2029	Expected delivery of 8000 hour structural life airframe has been delayed until efforts originally planned for development (“SDD”) could be completed. That work is ongoing with the Engineering Change Proposal Integration Contracts (“EPIC”). Note: This fielding date is the completion of a eries of incremental lot "cut-ins" and represents the final design change activities envisioned under this effort.
Technical Refresh 3 (TR-3)	Jul 2023	Sep 2024	Hardware and Software upgrades necessary to implement most Block 4 capabilities. Cost and schedule overruns due to testing delays and findings. Delayed delivery of 40PXX software has impacted fielding of mission critical Block 4 capabilities

Technologies and Systems Engineering

F-35 Engine Subprogram

Major Software Efforts

Title	Status	Fielding Date	Description

Major Engineering Changes

Title	Original Need Date	Fielding Date	Description, Rationale and Program Impacts
Engine and Power Thermal Management System Modernization (EPM)			Modernization effort consisting of Engine Core Upgrade (ECU) and Power Thermal Management Upgrade (PTMU) to address power and cooling need to support future capabilities for the F-35, while recovering engine life and reducing life cycle cost.

Funding Sources (Acquisition)

Acquisition Funding Notes

None.

F-35 Aircraft Subprogram

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673501 - Air Vehicle - Technology Refresh 3 (TR3)		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673502 - Air Vehicle Block 4 Planning and Sys Eng		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673503 - Test and Evaluation (T&E)		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673505 - Maintenance Systems (MxS)		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673506 - Combat Data Systems (CDS)		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673507 - Training Systems and Simulation (TSS)		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673508 - Infrastructure and Support Costs		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673509 - DevSecOps		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	674871 - Information Operations Technology		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	675346 - F-35		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2567 - Air Vehicle - Technology Refresh 3 (TR-3)		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2568 - Air Vehicle Block 4 Planning & Sys Eng		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2569 - Test and Evaluation (T&E)		

F-35 Aircraft Subprogram

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2571 - Maintenance Systems (MxS)		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2572 - Combat Data Systems (CDS)		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2573 - Training Systems and Simulation (TSS)		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2574 - Infrastructure and Support Costs		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2575 - DevSecOps		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2576 - F-35 USMC Unique		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2553 - Air Vehicle - Technology Refresh 3 (TR-3)		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2554 - Air Vehicle Block 4 Planning & Sys Eng		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2555 - Test and Evaluation (T&E)		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2557 - Maintenance Systems (MxS)		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2558 - Combat Data Systems (CDS)		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2559 - Training Systems and Simulation (TSS)		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2560 - Infrastructure and Support Costs		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2561 - DevSecOps		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2562 - F-35 USN Unique		
RDT&E	3600F	07	0207142F - F-35 Squadrons	0207142F	675346 - F-35		
RDT&E	3600F	07	0207142F - F-35 Squadrons	0207142F	675349 - F-35 HPSI		
RDT&E	3600F	07	0207142F - F-35 Squadrons	0207142F	676011 - JSF Dual Capable Aircraft		

F-35 Aircraft Subprogram

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
Procurement	3010F	01	ATA000 - F-35	0207142F	-		
Procurement	1506N	01	0152 - JSF STOVL	0204146M	-		
Procurement	1506N	01	0147 - Joint Strike Fighter CV	0204146N	-		

Funding Sources (Acquisition)

Acquisition Funding Notes

None.

F-35 Engine Subprogram

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673504 - Propulsion (PP)		
RDT&E	3600F	07	0604840F - F-35 C2D2	0604840F	673510 - Utility and Subsystem Support to Mission		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	0358 - Utility and Subsystem Support to Mission Syst		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	2570 - Propulsion (PP)		
RDT&E	1319N	07	0604840M - F-35 C2D2	0604840M	9999 - Congressional Add		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	0358 - Utility and Subsystem Support to Mission Syst		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	2556 - Propulsion (PP)		
RDT&E	1319N	07	0604840N - F-35 C2D2	0604840N	9999 - Congressional Add		
RDT&E	3600F	07	0207142F - F-35 Squadrons	0207142F	676011 - JSF Dual Capable Aircraft		
Procurement	3010F	01	ATA000 - F-35	0207142F	-		

Funding Sources (Operating and Support)

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

Operating and Support Funding Notes

None.

F-35 Aircraft Subprogram

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
O&M	3400F	01	011W - Contractor Logistics Support and System Support	0207142F	-		
O&M	3740F	01	011W - Contractor Logistics Support and System Support	0502734F	-		
O&M	3840F	01	011W - Contractor Logistics Support and System Support	0502635F	-		
O&M	1804N	01	1A9A - Aviation Logistics	0204146M	-		
O&M	1804N	01	1A9A - Aviation Logistics	0204146N	-		

Funding Sources (Operating and Support)

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

Operating and Support Funding Notes

None.

F-35 Engine Subprogram

Category	Account	BA	Line Item	Program Element	RDT&E Project	Shared	Sunk
O&M	3400F	01	011W - Contractor Logistics Support and System Support	0207142F	-		
O&M	3740F	01	011W - Contractor Logistics Support and System Support	0502734F	-		
O&M	3840F	01	011W - Contractor Logistics Support and System Support	0502635F	-		
O&M	1804N	01	1A9A - Aviation Logistics	0204146M	-		
O&M	1804N	01	1A9A - Aviation Logistics	0204146N	-		

Acquisition Estimate and Quantity Summary

F-35 Aircraft Subprogram

Acquisiton Estimates

Category	PB 2025	TY ($M)	Current Base Year CY2012 ($M)	Original Base Year CY2012 ($M)	Report Fiscal Year CY2024 ($M)
RDT&E		71,300.3	66,902.2	66,902.2	89,489.3
Procurement		325,797.7	221,345.2	221,345.2	296,074.4
MILCON		4,022.7	3,522.9	3,522.9	4,712.3
O&M		-	-	-	-
Total Acquisition		401,120.7	291,770.4	291,770.4	390,276.1
PAUC		162.397	118.126	118.126	158.006
APUC		132.654	90.124	90.124	120.551

Acquisiton End-Item Quantities

System	PB 2025	Development	Procurement
F-35A		5	1,763
F-35B		-	353
F-35C		9	340
Total		**14**	**2,456**

Unit Description

Program Summary for End Items (Aircraft)

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

Appropriation	Prior	2024	2025	2026	2027	2028	2029	To Complete	Total
RDT&E	54,136.5	2,406.6	2,071.9	2,278.3	2,057.3	1,775.1	1,688.8	4,885.9	71,300.3
Procurement	110,751.0	9,805.8	9,556.1	10,300.4	11,377.4	11,407.8	12,383.9	150,215.4	325,797.7
MILCON	4,022.7	-	-	-	-	-	-	-	4,022.7
O&M	-	-	-	-	-	-	-	-	-
PB 2025 Total	**168,910.2**	**12,212.4**	**11,628.1**	**12,578.7**	**13,434.7**	**13,182.8**	**14,072.6**	**155,101.2**	**401,120.7**

Acquisition Estimate and Quantity Summary

F-35 Engine Subprogram

Acquisiton Estimates

Category	PB 2025	TY ($M)	Current Base Year CY2012 ($M)	Original Base Year CY2012 ($M)	Report Fiscal Year CY2024 ($M)
RDT&E		16,111.6	16,016.4	16,016.4	21,423.8
Procurement		68,020.9	44,940.1	44,940.1	60,112.5
MILCON		-	-	-	-
O&M		-	-	-	-
Total Acquisition		84,132.5	60,956.5	60,956.5	81,536.3
PAUC		34.062	24.679	24.679	33.011
APUC		27.696	18.298	18.298	24.476

Acquisiton End-Item Quantities

System	PB 2025	Development	Procurement
F-35 Engine		14	2,456
Total		**14**	**2,456**

Unit Description

Program End Item Quantities (Engine)

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

Appropriation	Prior	2024	2025	2026	2027	2028	2029	To Complete	Total
RDT&E	12,405.1	683.6	712.9	599.9	589.6	522.9	523.8	73.9	16,111.6
Procurement	22,366.3	2,043.1	1,481.7	1,499.2	1,712.5	1,799.4	1,900.9	35,217.8	68,020.9
MILCON	-	-	-	-	-	-	-	-	-
O&M	-	-	-	-	-	-	-	-	-
PB 2025 Total	**34,771.3**	**2,726.7**	**2,194.5**	**2,099.1**	**2,302.1**	**2,322.3**	**2,424.6**	**35,291.8**	**84,132.5**

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

0400D - Research, Development, Test & Eval, DW					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**94.9**	**94.9**	**-**	**121.9**
1994			-	0.742975	-
1995			-	0.757293	-
1996		23.200	23.2	0.770085	30.1
1997		54.800	54.8	0.779528	70.3
1998		16.900	16.9	0.785913	21.5

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

3600F - Research, Development, Test & Eval, AF					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**31,114.2**	**31,114.2**	**-**	**29,064.0**
1994			-	0.742975	-
1995		67.501	67.5	0.757293	89.1
1996		65.400	65.4	0.770085	84.9
1997		202.300	202.3	0.779528	259.5
1998		357.200	357.2	0.785913	454.5
1999		366.500	366.5	0.795167	460.9
2000		200.300	200.3	0.806805	248.3
2001		274.300	274.3	0.817875	335.4
2002		302.640	302.6	0.826142	366.3
2003		1,210.126	1,210.1	0.838253	1,443.6
2004		1,584.077	1,584.1	0.861652	1,838.4
2005		1,465.758	1,465.8	0.884330	1,657.5
2006		1,678.536	1,678.5	0.911886	1,840.7
2007		1,632.421	1,632.4	0.934220	1,747.4
2008		1,358.978	1,359.0	0.951262	1,428.6
2009		1,197.514	1,197.5	0.963477	1,242.9
2010		1,567.421	1,567.4	0.977928	1,602.8
2011		715.399	715.4	1.001278	714.5
2012		1,271.190	1,271.2	1.017884	1,248.9
2013		986.279	986.3	1.028573	958.9
2014		567.560	567.6	1.043106	544.1
2015		545.138	545.1	1.056231	516.1
2016		611.272	611.3	1.075835	568.2
2017		461.508	461.5	1.095964	421.1
2018		591.871	591.9	1.122809	527.1
2019		551.073	551.1	1.144434	481.5
2020		708.765	708.8	1.186520	597.3
2021		765.456	765.5	1.239847	617.4
2022		1,000.791	1,000.8	1.304619	767.1
2023		1,009.491	1,009.5	1.343458	751.4
2024		1,076.339	1,076.3	1.374126	783.3
2025		876.126	876.1	1.403276	624.3
2026		1,007.261	1,007.3	1.432744	703.0
2027		974.693	974.7	1.462832	666.3
2028		815.807	815.8	1.493552	546.2
2029		826.853	826.9	1.524916	542.2

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

3600F - Research, Development, Test & Eval, AF					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
2030		610.635	610.6	1.556939	392.2
2031		533.669	533.7	1.589635	335.7
2032		537.937	537.9	1.623017	331.4
2033		538.093	538.1	1.657101	324.7

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

1319N - Research, Development, Test & Eval, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**30,259.8**	**30,259.8**	**-**	**28,700.6**
1994		23.700	23.7	0.742975	31.9
1995		78.700	78.7	0.757293	103.9
1996		64.600	64.6	0.770085	83.9
1997		195.600	195.6	0.779528	250.9
1998		360.400	360.4	0.785913	458.6
1999		378.900	378.9	0.795167	476.5
2000		191.700	191.7	0.806805	237.6
2001		274.300	274.3	0.817875	335.4
2002		370.870	370.9	0.826142	448.9
2003		1,090.115	1,090.1	0.838253	1,300.5
2004		1,548.216	1,548.2	0.861652	1,796.8
2005		1,511.279	1,511.3	0.884330	1,709.0
2006		1,657.291	1,657.3	0.911886	1,817.4
2007		1,470.679	1,470.7	0.934220	1,574.2
2008		1,284.983	1,285.0	0.951262	1,350.8
2009		1,271.150	1,271.2	0.963477	1,319.3
2010		1,440.475	1,440.5	0.977928	1,473.0
2011		987.948	987.9	1.001278	986.7
2012		960.529	960.5	1.017884	943.7
2013		1,081.976	1,082.0	1.028573	1,051.9
2014		719.320	719.3	1.043106	689.6
2015		827.581	827.6	1.056231	783.5
2016		976.704	976.7	1.075835	907.9
2017		1,039.684	1,039.7	1.095964	948.6
2018		530.888	530.9	1.122809	472.8
2019		547.122	547.1	1.144434	478.1
2020		711.987	712.0	1.186520	600.1
2021		731.845	731.8	1.239847	590.3
2022		943.233	943.2	1.304619	723.0
2023		913.204	913.2	1.343458	679.7
2024		744.763	744.8	1.374126	542.0
2025		660.692	660.7	1.403276	470.8
2026		777.960	778.0	1.432744	543.0
2027		696.861	696.9	1.462832	476.4
2028		672.379	672.4	1.493552	450.2
2029		646.755	646.8	1.524916	424.1

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

1319N - Research, Development, Test & Eval, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
2030		533.419	533.4	1.556939	342.6
2031		449.840	449.8	1.589635	283.0
2032		447.863	447.9	1.623017	275.9
2033		444.319	444.3	1.657101	268.1

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

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

Non-Treasury Funds (RDT&E)					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**9,831.4**	**9,831.4**	**-**	**9,015.6**
1994			-	0.742975	-
1995			-	0.757293	-
1996		11.300	11.3	0.770085	14.7
1997		67.100	67.1	0.779528	86.1
1998		72.100	72.1	0.785913	91.7
1999		49.000	49.0	0.795167	61.6
2000		27.700	27.7	0.806805	34.3
2001		7.000	7.0	0.817875	8.6
2002		258.000	258.0	0.826142	312.3
2003		299.000	299.0	0.838253	356.7
2004		494.900	494.9	0.861652	574.4
2005		733.300	733.3	0.884330	829.2
2006		813.400	813.4	0.911886	892.0
2007		680.300	680.3	0.934220	728.2
2008		607.300	607.3	0.951262	638.4
2009		267.500	267.5	0.963477	277.6
2010		141.200	141.2	0.977928	144.4
2011		176.900	176.9	1.001278	176.7
2012		104.900	104.9	1.017884	103.1
2013		169.200	169.2	1.028573	164.5
2014		12.900	12.9	1.043106	12.4
2015		46.000	46.0	1.056231	43.6
2016		83.600	83.6	1.075835	77.7
2017		84.600	84.6	1.095964	77.2
2018		86.900	86.9	1.122809	77.4
2019		139.400	139.4	1.144434	121.8
2020		248.800	248.8	1.186520	209.7
2021		242.600	242.6	1.239847	195.7
2022		318.394	318.4	1.304619	244.1
2023		296.548	296.5	1.343458	220.7
2024		585.542	585.5	1.374126	426.1
2025		535.123	535.1	1.403276	381.3
2026		493.063	493.1	1.432744	344.1
2027		385.737	385.7	1.462832	263.7
2028		286.870	286.9	1.493552	192.1
2029		215.151	215.2	1.524916	141.1

F-35 Aircraft Subprogram

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

Non-Treasury Funds (RDT&E)					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
2030		218.877	218.9	1.556939	140.6
2031		184.078	184.1	1.589635	115.8
2032		201.181	201.2	1.623017	124.0
2033		185.974	186.0	1.657101	112.2

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Inidices

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($M)	Weighted Rate	Total CY2012 ($M)
Total	**176,728.3**	**-**	**20,133.5**	**8,650.6**	**1,483.0**	**19,354.6**	**226,350.0**	**-**	**145,701.1**
1994							-	0.756574	-
1995							-	0.768736	-
1996							-	0.779537	-
1997							-	0.786225	-
1998							-	0.795356	-
1999							-	0.805569	-
2000							-	0.816261	-
2001							-	0.825989	-
2002							-	0.836437	-
2003							-	0.853137	-
2004							-	0.875660	-
2005							-	0.900321	-
2006	107.600						107.6	0.925289	116.3
2007	428.500		80.800	40.700		50.400	600.4	0.946863	634.1
2008	983.100		172.300	58.700		72.800	1,286.9	0.961065	1,339.0
2009	1,009.200		277.600	78.500		97.300	1,462.6	0.974453	1,500.9
2010	1,471.200		355.700	124.000		153.700	2,104.6	0.994829	2,115.5
2011	2,751.200		569.100	303.500		376.100	3,999.9	1.014573	3,942.4
2012	2,041.500		375.700	334.200		438.800	3,190.2	1.029161	3,099.8
2013	2,074.600		76.600	149.100		379.800	2,680.1	1.040176	2,576.6
2014	2,034.600		586.700	71.100		361.900	3,054.3	1.053766	2,898.5
2015	2,715.800		542.000	162.400		460.600	3,880.8	1.070285	3,625.9
2016	4,076.000		503.500	164.000		460.200	5,203.7	1.094005	4,756.6
2017	3,799.400		213.800	234.100		372.800	4,620.1	1.117358	4,134.8
2018	4,453.560		742.800	280.284		494.200	5,970.8	1.139955	5,237.8
2019	3,725.282		543.856	228.938		382.900	4,881.0	1.171403	4,166.8
2020	4,063.450		800.933	280.911		470.646	5,615.9	1.217610	4,612.3
2021	3,937.230		759.370	140.894		776.982	5,614.5	1.273459	4,408.8
2022	2,575.665		530.184	88.676		904.909	4,099.4	1.323595	3,097.2
2023	3,012.739		519.009	52.027		450.932	4,034.7	1.360141	2,966.4
2024	3,837.082		306.240	261.010	250.037	662.722	5,317.1	1.390574	3,823.7
2025	3,120.365		494.855	365.902	245.812	977.480	5,204.4	1.420021	3,665.0
2026	3,587.762		496.092	259.726	189.421	934.510	5,467.5	1.449841	3,771.1
2027	3,995.184		541.754	267.180	98.641	896.742	5,799.5	1.480288	3,917.8
2028	3,953.258		528.681	353.028	115.158	858.148	5,808.3	1.511374	3,843.0
2029	4,093.540		544.892	381.055	65.967	878.423	5,963.9	1.543113	3,864.8

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Inidices

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($M)	Weighted Rate	Total CY2012 ($M)
2030	4,548.260		883.485	151.706	49.706	410.488	6,043.6	1.575518	3,836.0
2031	3,972.581		793.840	166.242	28.982	418.670	5,380.3	1.608604	3,344.7
2032	4,061.072		720.464	169.824	29.271	411.191	5,391.8	1.642385	3,282.9
2033	4,303.731		659.935	132.241	29.886	608.210	5,734.0	1.676875	3,419.5
2034	4,457.273		567.175	122.523	30.514	361.159	5,538.6	1.712089	3,235.0
2035	5,493.446		364.951	119.202	64.110	461.124	6,502.8	1.748043	3,720.1
2036	4,818.305		380.913	176.429	65.456	395.891	5,837.0	1.784752	3,270.5
2037	4,964.161		364.630	210.556	32.477	595.951	6,167.8	1.822232	3,384.7
2038	5,249.873		374.861	137.209	61.219	488.139	6,311.3	1.860499	3,392.3
2039	5,431.374		383.558	207.234	62.505	439.198	6,523.9	1.899569	3,434.4
2040	6,633.172		391.075	165.192	63.817	543.075	7,796.3	1.939460	4,019.8
2041	5,658.957		397.013	152.114		511.488	6,719.6	1.980189	3,393.4
2042	5,773.616		402.626	157.962		584.983	6,919.2	2.021773	3,422.3
2043	5,885.199		409.191	98.512		192.313	6,585.2	2.064230	3,190.2
2044	5,892.878		415.745	71.415		172.933	6,553.0	2.107579	3,109.2
2045	7,223.303		422.833	75.787		163.363	7,885.3	2.151838	3,664.4
2046	6,435.188		429.251	72.810		181.167	7,118.4	2.197027	3,240.0
2047	6,566.241		430.462	80.293		170.738	7,247.7	2.243164	3,231.0
2048	6,571.262		424.519	77.150		160.137	7,233.1	2.290271	3,158.2
2049	4,940.632		337.985	83.437		151.918	5,514.0	2.338367	2,358.0
2050			8.176	71.512		19.486	99.2	2.387472	41.5
2051			8.348	75.412			83.8	2.437609	34.4
2052				72.157			72.2	2.488799	29.0
2053				78.114			78.1	2.541064	30.7
2054				73.666			73.7	2.594426	28.4
2055				78.832			78.8	2.648909	29.8
2056				75.924			75.9	2.704536	28.1
2057				58.942			58.9	2.761331	21.3
2058				54.707			54.7	2.819319	19.4
2059				59.935			59.9	2.878525	20.8
2060				55.539			55.5	2.938974	18.9
2061				62.697			62.7	3.000693	20.9
2062				54.838			54.8	3.063707	17.9
2063				60.806			60.8	3.128045	19.4
2064				55.665			55.7	3.193734	17.4
2065				56.614			56.6	3.260802	17.4
2066				48.243			48.2	3.329279	14.5
2067				50.782			50.8	3.399194	14.9
2068				36.842			36.8	3.470577	10.6
2069				38.364			38.4	3.543459	10.8

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Inidices

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($M)	Weighted Rate	Total CY2012 ($M)
2070				33.312			33.3	3.617872	9.2
2071				17.806			17.8	3.693847	4.8
2072				34.658			34.7	3.771418	9.2
2073				18.525			18.5	3.850618	4.8
2074				18.896			18.9	3.931481	4.8

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Inidices

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($M)	Weighted Rate	Total CY2012 ($M)
Total	**65,186.0**	**-**	**12,126.4**	**4,998.1**	**1,621.0**	**15,516.3**	**99,447.7**	**-**	**75,644.2**
1994							-	0.756574	-
1995							-	0.768736	-
1996							-	0.779537	-
1997							-	0.786225	-
1998							-	0.795356	-
1999							-	0.805569	-
2000							-	0.816261	-
2001							-	0.825989	-
2002							-	0.836437	-
2003							-	0.853137	-
2004							-	0.875660	-
2005							-	0.900321	-
2006							-	0.925289	-
2007	96.900						96.9	0.946863	102.3
2008	923.200		38.600	3.600		7.100	972.5	0.961065	1,011.9
2009	1,062.000		182.000	70.100		136.000	1,450.1	0.974453	1,488.1
2010	2,681.200		305.400	190.900		370.000	3,547.5	0.994829	3,565.9
2011	1,494.800		251.000	146.900		284.900	2,177.6	1.014573	2,146.3
2012	1,477.700		330.200	254.100		492.600	2,554.6	1.029161	2,482.2
2013	1,107.300		44.100	125.100		432.200	1,708.7	1.040176	1,642.7
2014	1,205.500		375.600	220.800		421.490	2,223.4	1.053766	2,109.9
2015	1,115.000		636.300	65.100		345.000	2,161.4	1.070285	2,019.5
2016	2,130.300		573.100	120.900		524.000	3,348.3	1.094005	3,060.6
2017	2,497.074		269.245	221.517		395.600	3,383.4	1.117358	3,028.1
2018	3,264.700		421.500	384.067		425.400	4,495.7	1.139955	3,943.7
2019	2,812.800		637.407	138.571		417.039	4,005.8	1.171403	3,419.7
2020	2,517.711		436.944	248.132		723.493	3,926.3	1.217610	3,224.6
2021	2,771.909		741.210	114.422		360.494	3,988.0	1.273459	3,131.7
2022	2,497.102		575.865	156.371		922.634	4,152.0	1.323595	3,136.9
2023	2,790.039		646.460	79.262		635.482	4,151.2	1.360141	3,052.1
2024	3,089.623		262.317	132.111	260.660	743.973	4,488.7	1.390574	3,227.9
2025	2,363.844		449.672	218.457	256.753	1,062.984	4,351.7	1.420021	3,064.5
2026	2,878.805		426.106	206.927	198.377	1,122.677	4,832.9	1.449841	3,333.4
2027	3,575.872		488.710	223.963	107.882	1,181.485	5,577.9	1.480288	3,768.1
2028	3,616.515		499.293	326.548	106.371	1,050.787	5,599.5	1.511374	3,704.9
2029	4,590.849		560.764	288.426	76.727	903.209	6,420.0	1.543113	4,160.4

F-35 Aircraft Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Inidices

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($M)	Weighted Rate	Total CY2012 ($M)
2030	3,218.854		555.642	55.189	52.558	310.761	4,193.0	1.575518	2,661.3
2031	3,016.103		471.149	71.822	37.474	418.708	4,015.3	1.608604	2,496.1
2032	3,224.559		426.188	46.588	37.941	334.209	4,069.5	1.642385	2,477.8
2033	1,068.995		296.648	56.453	38.738	365.227	1,826.1	1.676875	1,089.0
2034	1,073.666		153.583	63.140	39.551	345.799	1,675.7	1.712089	978.8
2035	1,023.097		142.244	58.703	73.337	261.296	1,558.7	1.748043	891.7
2036			63.914	41.980	74.877	109.250	290.0	1.784752	162.5
2037			63.274	39.265	42.096	27.398	172.0	1.822232	94.4
2038			64.119	34.815	71.040	26.223	196.2	1.860499	105.5
2039			64.983	40.551	72.532	26.575	204.6	1.899569	107.7
2040			65.864	36.287	74.055	27.135	203.3	1.939460	104.8
2041			65.700	40.020		27.706	133.4	1.980189	67.4
2042			65.524	34.610		28.289	128.4	2.021773	63.5
2043			65.338	39.816		28.918	134.1	2.064230	64.9
2044			65.139	31.070		29.492	125.7	2.107579	59.6
2045			64.927	37.063		30.134	132.1	2.151838	61.4
2046			64.703	32.323		30.747	127.8	2.197027	58.2
2047			64.460	38.675		31.394	134.5	2.243164	60.0
2048			70.157	33.181		32.099	135.4	2.290271	59.1
2049			71.169	39.773		32.830	143.8	2.338367	61.5
2050			4.916	33.894		33.419	72.2	2.387472	30.3
2051			4.988	33.773		-	38.8	2.437609	15.9
2052				25.986		-	26.0	2.488799	10.4
2053				26.330		-	26.3	2.541064	10.4
2054				22.233		0.112	22.3	2.594426	8.6
2055				20.768			20.8	2.648909	7.8
2056				12.949			12.9	2.704536	4.8
2057				9.568			9.6	2.761331	3.5
2058				4.955			5.0	2.819319	1.8

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

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($M)	Weighted Rate	Total CY2012 ($M)
Total		**-**	**1,921.8**	**-**	**1,702.7**
1994			-	0.758724	-
1995			-	0.771312	-
1996			-	0.781600	-
1997			-	0.786441	-
1998			-	0.793587	-
1999			-	0.806151	-
2000			-	0.816552	-
2001			-	0.825785	-
2002			-	0.837560	-
2003			-	0.856201	-
2004			1.7	0.878621	1.9
2005			10.0	0.903558	11.1
2006			-	0.928065	-
2007			-	0.946939	-
2008			100.3	0.963077	104.1
2009			116.0	0.976273	118.8
2010			125.1	1.000707	125.0
2011			139.6	1.023185	136.4
2012			24.3	1.038303	23.4
2013			13.5	1.053093	12.8
2014			56.0	1.068889	52.4
2015			66.7	1.099015	60.7
2016			201.3	1.124629	179.0
2017			336.3	1.153597	291.5
2018			253.6	1.196409	212.0
2019			315.1	1.242433	253.6
2020			33.3	1.294897	25.7
2021			-	1.339895	-
2022			129.0	1.370029	94.2

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

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

3300F - Military Construction, Air Force					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**-**	**2,100.9**	**-**	**1,820.2**
1994			-	0.760357	-
1995			-	0.769562	-
1996			-	0.780651	-
1997			-	0.786261	-
1998			-	0.794305	-
1999			-	0.803528	-
2000			-	0.815537	-
2001			-	0.825089	-
2002			-	0.836905	-
2003			-	0.855884	-
2004			24.4	0.879989	27.7
2005			-	0.905183	-
2006			0.1	0.928540	0.1
2007			-	0.948530	-
2008			0.2	0.961819	0.2
2009			0.7	0.975009	0.7
2010			34.1	0.990689	34.4
2011			377.9	1.011095	373.8
2012			172.2	1.029278	167.3
2013			94.9	1.053517	90.1
2014			1.2	1.069730	1.1
2015			118.4	1.089538	108.7
2016			64.7	1.113442	58.1
2017			66.7	1.139325	58.5
2018			15.7	1.166689	13.5
2019			274.6	1.202657	228.3
2020			396.5	1.255095	315.9
2021			112.2	1.310488	85.6
2022			346.4	1.352156	256.2

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

0400D - Research, Development, Test & Eval, DW					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**23.1**	**23.1**	**-**	**30.6**
1994		5.700	5.7	0.742975	7.7
1995		13.400	13.4	0.757293	17.7
1996		4.000	4.0	0.770085	5.2

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

3600F - Research, Development, Test & Eval, AF					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**7,278.4**	**7,278.4**	**-**	**7,306.1**
1994		-	-	0.742975	-
1995		16.400	16.4	0.757293	21.7
1996		15.900	15.9	0.770085	20.6
1997		49.300	49.3	0.779528	63.2
1998		87.100	87.1	0.785913	110.8
1999		89.400	89.4	0.795167	112.4
2000		48.800	48.8	0.806805	60.5
2001		66.900	66.9	0.817875	81.8
2002		409.800	409.8	0.826142	496.0
2003		400.500	400.5	0.838253	477.8
2004		435.800	435.8	0.861652	505.8
2005		614.300	614.3	0.884330	694.7
2006		586.300	586.3	0.911886	643.0
2007		441.600	441.6	0.934220	472.7
2008		596.000	596.0	0.951262	626.5
2009		544.600	544.6	0.963477	565.2
2010		466.100	466.1	0.977928	476.6
2011		216.200	216.2	1.001278	215.9
2012		101.800	101.8	1.017884	100.0
2013		143.600	143.6	1.028573	139.6
2014		52.000	52.0	1.043106	49.9
2015		53.700	53.7	1.056231	50.8
2016		36.700	36.7	1.075835	34.1
2017		46.300	46.3	1.095964	42.2
2018		15.400	15.4	1.122809	13.7
2019		7.248	7.2	1.144434	6.3
2020		28.365	28.4	1.186520	23.9
2021		25.112	25.1	1.239847	20.3
2022		143.492	143.5	1.304619	110.0
2023		50.934	50.9	1.343458	37.9
2024		282.685	282.7	1.374126	205.7
2025		295.213	295.2	1.403276	210.4
2026		234.315	234.3	1.432744	163.5
2027		233.626	233.6	1.462832	159.7
2028		208.855	208.9	1.493552	139.8
2029		212.979	213.0	1.524916	139.7

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

3600F - Research, Development, Test & Eval, AF					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
2030		5.113	5.1	1.556939	3.3
2031		5.221	5.2	1.589635	3.3
2032		5.330	5.3	1.623017	3.3
2033		5.442	5.4	1.657101	3.3

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

1319N - Research, Development, Test & Eval, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**7,761.4**	**7,761.4**	**-**	**7,818.9**
1994		5.800	5.8	0.742975	7.8
1995		19.300	19.3	0.757293	25.5
1996		15.800	15.8	0.770085	20.5
1997		47.700	47.7	0.779528	61.2
1998		87.800	87.8	0.785913	111.7
1999		92.400	92.4	0.795167	116.2
2000		46.700	46.7	0.806805	57.9
2001		66.900	66.9	0.817875	81.8
2002		350.400	350.4	0.826142	424.1
2003		550.800	550.8	0.838253	657.1
2004		533.200	533.2	0.861652	618.8
2005		572.500	572.5	0.884330	647.4
2006		528.100	528.1	0.911886	579.1
2007		639.100	639.1	0.934220	684.1
2008		563.900	563.9	0.951262	592.8
2009		433.100	433.1	0.963477	449.5
2010		445.700	445.7	0.977928	455.8
2011		252.900	252.9	1.001278	252.6
2012		187.200	187.2	1.017884	183.9
2013		199.200	199.2	1.028573	193.7
2014		116.100	116.1	1.043106	111.3
2015		172.900	172.9	1.056231	163.7
2016		100.600	100.6	1.075835	93.5
2017		48.700	48.7	1.095964	44.4
2018		11.600	11.6	1.122809	10.3
2019		20.220	20.2	1.144434	17.7
2020		21.482	21.5	1.186520	18.1
2021		24.436	24.4	1.239847	19.7
2022		24.694	24.7	1.304619	18.9
2023		94.981	95.0	1.343458	70.7
2024		276.596	276.6	1.374126	201.3
2025		286.253	286.3	1.403276	204.0
2026		233.506	233.5	1.432744	163.0
2027		230.724	230.7	1.462832	157.7
2028		205.952	206.0	1.493552	137.9
2029		210.219	210.2	1.524916	137.9

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD RDTENPur Indices

1319N - Research, Development, Test & Eval, Navy					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
2030		10.647	10.6	1.556939	6.8
2031		10.870	10.9	1.589635	6.8
2032		11.098	11.1	1.623017	6.8
2033		11.332	11.3	1.657101	6.8

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

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

Non-Treasury Funds (RDT&E)					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
Total		**1,048.7**	**1,048.7**	**-**	**860.9**
1994			-	0.742975	-
1995			-	0.757293	-
1996		2.700	2.7	0.770085	3.5
1997		3.900	3.9	0.779528	5.0
1998		5.100	5.1	0.785913	6.5
1999		5.700	5.7	0.795167	7.2
2000		1.800	1.8	0.806805	2.2
2001		0.500	0.5	0.817875	0.6
2002		55.700	55.7	0.826142	67.4
2003		79.800	79.8	0.838253	95.2
2004		44.800	44.8	0.861652	52.0
2005		0.200	0.2	0.884330	0.2
2006		-	-	0.911886	-
2007		75.000	75.0	0.934220	80.3
2008		0.500	0.5	0.951262	0.5
2009		-	-	0.963477	-
2010		-	-	0.977928	-
2011		0.700	0.7	1.001278	0.7
2012		0.200	0.2	1.017884	0.2
2013		0.600	0.6	1.028573	0.6
2014		-	-	1.043106	-
2015		-	-	1.056231	-
2016		-	-	1.075835	-
2017		-	-	1.095964	-
2018		-	-	1.122809	-
2019		8.100	8.1	1.144434	7.1
2020		4.100	4.1	1.186520	3.5
2021		13.400	13.4	1.239847	10.8
2022		11.104	11.1	1.304619	8.5
2023		4.200	4.2	1.343458	3.1
2024		124.309	124.3	1.374126	90.5
2025		131.386	131.4	1.403276	93.6
2026		132.078	132.1	1.432744	92.2
2027		125.289	125.3	1.462832	85.6
2028		108.051	108.1	1.493552	72.3
2029		100.568	100.6	1.524916	65.9

F-35 Engine Subprogram

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

Non-Treasury Funds (RDT&E)					
fiscal year		Other/ Unallocated	Total TY($M)	Weighted Rate	Total CY2012 ($M)
2030		2.155	2.2	1.556939	1.4
2031		2.200	2.2	1.589635	1.4
2032		2.246	2.2	1.623017	1.4
2033		2.293	2.3	1.657101	1.4

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Indices

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($M)	Weighted Rate	Total CY2012 ($M)
Total	**29,426.4**	**-**	**1,482.5**	**8,691.9**	**932.4**	**2,104.3**	**42,637.4**	**-**	**26,493.0**
1994							-	0.756574	-
1995							-	0.768736	-
1996							-	0.779537	-
1997							-	0.786225	-
1998							-	0.795356	-
1999							-	0.805569	-
2000							-	0.816261	-
2001							-	0.825989	-
2002							-	0.836437	-
2003							-	0.853137	-
2004							-	0.875660	-
2005							-	0.900321	-
2006	9.800						9.8	0.925289	10.6
2007	47.500		6.900	21.200		6.500	82.1	0.946863	86.7
2008	123.600		35.000	23.700		7.200	189.5	0.961065	197.2
2009	127.000		63.900	25.500		7.800	224.2	0.974453	230.1
2010	176.700		72.600	45.200		13.900	308.4	0.994829	310.0
2011	353.200		91.600	104.600		32.000	581.4	1.014573	573.0
2012	275.300		65.700	94.200		28.800	464.0	1.029161	450.9
2013	262.500		11.900	20.000		69.600	364.0	1.040176	349.9
2014	282.100		31.200	19.700		27.800	360.8	1.053766	342.4
2015	386.700		15.500	74.000		44.200	520.4	1.070285	486.2
2016	606.100		23.200	74.700		52.000	756.0	1.094005	691.0
2017	641.500		1.100	128.700		169.600	940.9	1.117358	842.1
2018	711.864		56.212	120.122		55.640	943.8	1.139955	828.0
2019	714.818		41.006	127.577		43.080	926.5	1.171403	790.9
2020	767.002		77.633	120.391		18.127	983.2	1.217610	807.4
2021	674.272		57.606	129.595		238.315	1,099.8	1.273459	863.6
2022	497.978		60.280	348.491		219.053	1,125.8	1.323595	850.6
2023	549.976		50.789	199.720		231.822	1,032.3	1.360141	759.0
2024	736.961			185.460	77.090	15.741	1,015.3	1.390574	730.1
2025	580.624			74.944	70.993	16.266	742.8	1.420021	523.1
2026	588.383			53.197	61.459	14.308	717.3	1.449841	494.8
2027	663.353			54.724	44.586	5.441	768.1	1.480288	518.9
2028	675.024			72.307	25.054	12.602	785.0	1.511374	519.4
2029	700.488			78.047	25.357	8.615	812.5	1.543113	526.5

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Indices

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($M)	Weighted Rate	Total CY2012 ($M)
2030	853.191		66.499	295.643	31.574	12.833	1,259.7	1.575518	799.6
2031	724.831		59.751	275.120	24.492	19.741	1,103.9	1.608604	686.3
2032	740.078		54.228	43.937	94.880	18.969	952.1	1.642385	579.7
2033	825.136		49.673	80.602	76.468	51.156	1,083.0	1.676875	645.9
2034	832.401		42.691	44.497	47.493	36.085	1,003.2	1.712089	585.9
2035	1,016.524		27.469	159.619	42.750	40.585	1,286.9	1.748043	736.2
2036	860.412		28.671	311.630	83.652	47.285	1,331.7	1.784752	746.1
2037	877.127		27.445	130.027	54.442	68.241	1,157.3	1.822232	635.1
2038	896.708		28.215	71.328	37.232	59.394	1,092.9	1.860499	587.4
2039	915.559		28.870	79.070	27.150	55.098	1,105.7	1.899569	582.1
2040	1,110.383		29.436	79.724	22.750	56.220	1,298.5	1.939460	669.5
2041	945.835		29.883	144.316	22.952	49.053	1,192.0	1.980189	602.0
2042	964.048		30.305	164.385	16.128	45.226	1,220.1	2.021773	603.5
2043	980.302		30.799	140.105	12.086	34.252	1,197.5	2.064230	580.1
2044	1,005.465		31.293	240.439	12.052	31.703	1,321.0	2.107579	626.8
2045	1,160.064		31.826	361.643	12.012	28.995	1,594.5	2.151838	741.0
2046	1,044.650		32.309	827.906	1.993	26.134	1,933.0	2.197027	879.8
2047	1,065.657		32.400	723.621	1.887	23.101	1,846.7	2.243164	823.2
2048	1,057.873		31.953	550.268	1.925	19.890	1,661.9	2.290271	725.6
2049	397.381		25.440	6.575	1.964	16.493	447.9	2.338367	191.5
2050			0.615	12.419	2.003	12.902	27.9	2.387472	11.7
2051			0.628	5.183		8.259	14.1	2.437609	5.8
2052				6.862		4.239	11.1	2.488799	4.5
2053				9.181			9.2	2.541064	3.6
2054				489.406			489.4	2.594426	188.6
2055				1,239.097			1,239.1	2.648909	467.8
2056				3.185			3.2	2.704536	1.2

Annual Acquisition Estimates by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Indices

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($M)	Weighted Rate	Total CY2012 ($M)
Total	**15,217.0**	**-**	**1,778.3**	**5,537.5**	**941.6**	**1,909.0**	**25,383.4**	**-**	**18,447.1**
1994							-	0.756574	-
1995							-	0.768736	-
1996							-	0.779537	-
1997							-	0.786225	-
1998							-	0.795356	-
1999							-	0.805569	-
2000							-	0.816261	-
2001							-	0.825989	-
2002							-	0.836437	-
2003							-	0.853137	-
2004							-	0.875660	-
2005							-	0.900321	-
2006							-	0.925289	-
2007	27.400						27.400	0.946863	28.9
2008	246.100		1.300	0.800		0.400	248.600	0.961065	258.7
2009	298.000		54.300	42.600		23.000	417.900	0.974453	428.9
2010	599.000		118.500	82.900		44.700	845.100	0.994829	849.5
2011	400.500		112.500	79.500		42.800	635.300	1.014573	626.2
2012	191.400		57.700	40.300		21.700	311.100	1.029161	302.3
2013	236.900		26.600	30.800		139.000	433.300	1.040176	416.6
2014	227.100		21.600	92.500		49.900	391.100	1.053766	371.1
2015	259.500		38.000	27.300		40.700	365.500	1.070285	341.5
2016	362.700		22.300	50.600		59.300	494.900	1.094005	452.4
2017	648.547		19.809	94.936		137.800	901.092	1.117358	806.4
2018	799.500		86.300	172.552		43.748	1,102.100	1.139955	966.8
2019	897.420		151.160	59.388		51.700	1,159.668	1.171403	990.0
2020	615.037		55.468	111.479		44.386	826.370	1.217610	678.7
2021	526.787		96.442	228.037		239.747	1,091.013	1.273459	856.7
2022	629.275		107.351	171.799		229.195	1,137.621	1.323595	859.5
2023	614.239		98.911	150.379		201.816	1,065.345	1.360141	783.3
2024	752.404			171.347	79.962	24.167	1,027.879	1.390574	739.2
2025	570.995			65.907	70.993	30.950	738.845	1.420021	520.3
2026	625.341			63.212	61.459	31.871	781.883	1.449841	539.3
2027	793.855			68.530	44.586	37.401	944.373	1.480288	638.0
2028	854.903			105.136	28.186	26.206	1,014.432	1.511374	671.2
2029	970.783			82.871	28.527	6.193	1,088.374	1.543113	705.3

F-35 Engine Subprogram

Source for TY$-CY$ Conversion: 2024 OSD APN Indices

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($M)	Weighted Rate	Total CY2012 ($M)
2030	874.982		82.685	244.721	31.574	12.480	1,246.4	1.575518	791.1
2031	829.108		103.808	150.564	24.492	13.266	1,121.2	1.608604	697.0
2032	918.890		114.567	30.349	94.880	14.555	1,173.2	1.642385	714.4
2033	152.955		79.744	62.876	76.468	30.926	403.0	1.676875	240.3
2034	152.197		41.286	11.322	47.493	27.187	279.5	1.712089	163.2
2035	141.178		38.238	64.677	42.750	27.188	314.0	1.748043	179.6
2036			17.181	196.688	83.652	26.347	323.9	1.784752	181.5
2037			17.009	81.697	54.442	29.160	182.3	1.822232	100.0
2038			17.236	93.736	37.232	27.198	175.4	1.860499	94.3
2039			17.468	126.837	27.150	26.954	198.4	1.899569	104.4
2040			17.705	155.224	22.750	26.681	222.4	1.939460	114.7
2041			17.661	204.779	22.952	26.376	271.8	1.980189	137.2
2042			17.614	289.501	16.128	13.030	336.3	2.021773	166.3
2043			17.564	293.315	12.086	12.386	335.4	2.064230	162.5
2044			17.510	450.890	12.052	11.700	492.2	2.107579	233.5
2045			17.454	162.180	12.012	10.972	202.6	2.151838	94.2
2046			17.393	304.886	1.993	10.198	334.5	2.197027	152.2
2047			17.328	88.432	1.887	9.379	117.0	2.243164	52.2
2048			18.859	84.733	1.925	8.511	114.0	2.290271	49.8
2049			19.131	2.853	1.964	7.592	31.5	2.338367	13.5
2050			1.321	6.247	2.003	6.621	16.2	2.387472	6.8
2051			1.341	1.793		2.361	5.5	2.437609	2.3
2052				3.519		1.211	4.7	2.488799	1.9
2053				1.500			1.5	2.541064	0.6
2054				20.320			20.3	2.594426	7.8
2055				408.747			408.7	2.648909	154.3
2056				2.292			2.3	2.704536	0.8

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

3600F - Research, Development, Test & Eval, AF				
fiscal year	F-35A	F-35B	F-35C	Total
Total	**5**	**-**	**-**	**5**
Undistributed	5			5

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

1319N - Research, Development, Test & Eval, Navy				
fiscal year	**F-35A**	**F-35B**	**F-35C**	**Total**
Total	**-**	**-**	**9**	**9**
Undistributed			9	9

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

3010F - Aircraft Procurement, Air Force				
fiscal year	F-35A	F-35B	F-35C	Total
Total	**1,763**	**-**	**-**	**1,763**
Undistributed				-
2007	2			2
2008	6			6
2009	7			7
2010	10			10
2011	22			22
2012	18			18
2013	19			19
2014	19			19
2015	28			28
2016	47			47
2017	48			48
2018	56			56
2019	56			56
2020	62			62
2021	59			59
2022	41			41
2023	43			43
2024	48			48
2025	42			42
2026	42			42
2027	47			47
2028	47			47
2029	48			48
2030	48			48
2031	48			48
2032	48			48
2033	48			48
2034	48			48
2035	48			48
2036	48			48
2037	48			48
2038	48			48
2039	48			48
2040	48			48
2041	48			48

F-35 Aircraft Subprogram

3010F - Aircraft Procurement, Air Force				
fiscal year	F-35A	F-35B	F-35C	Total
2042	48			48
2043	48			48
2044	48			48
2045	48			48
2046	48			48
2047	48			48
2048	48			48
2049	34			34

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Aircraft Subprogram

1506N - Aircraft Procurement, Navy				
fiscal year	F-35A	F-35B	F-35C	Total
Total	**-**	**353**	**340**	**693**
Undistributed				-
2007				-
2008		6		6
2009		7		7
2010		16	4	20
2011		3	7	10
2012		6	7	13
2013		6	4	10
2014		6	4	10
2015		6	4	10
2016		15	6	21
2017		18	8	26
2018		24	10	34
2019		22	15	37
2020		14	20	34
2021		9	25	34
2022		17	15	32
2023		15	19	34
2024		16	19	35
2025		13	13	26
2026		13	14	27
2027		17	17	34
2028		20	14	34
2029		19	24	43
2030		20	15	35
2031		20	15	35
2032		25	15	40
2033			15	15
2034			15	15
2035			16	16

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

3600F - Research, Development, Test & Eval, AF				
fiscal year	F-35 Engine			Total
Total	**5**			**5**
Undistributed	5			5

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

1319N - Research, Development, Test & Eval, Navy				
fiscal year	F-35 Engine			Total
Total	**9**			**9**
Undistributed	9			9

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

3010F - Aircraft Procurement, Air Force				
fiscal year	F-35 Engine			Total
Total	**1,763**			**1,763**
Undistributed				-
2007	2			2
2008	6			6
2009	7			7
2010	10			10
2011	22			22
2012	18			18
2013	19			19
2014	19			19
2015	28			28
2016	47			47
2017	48			48
2018	56			56
2019	56			56
2020	62			62
2021	59			59
2022	41			41
2023	43			43
2024	48			48
2025	42			42
2026	42			42
2027	47			47
2028	47			47
2029	48			48
2030	48			48
2031	48			48
2032	48			48
2033	48			48
2034	48			48
2035	48			48
2036	48			48
2037	48			48
2038	48			48
2039	48			48
2040	48			48
2041	48			48

F-35 Engine Subprogram

3010F - Aircraft Procurement, Air Force				
fiscal year	F-35 Engine			Total
2042	48			48
2043	48			48
2044	48			48
2045	48			48
2046	48			48
2047	48			48
2048	48			48
2049	34			34

Acquired System Annual End-Item Quantities by Appropriation Account

(Aligned to Budget Position: PB 2025)

F-35 Engine Subprogram

1506N - Aircraft Procurement, Navy				
fiscal year	F-35 Engine			Total
Total	**693**			**693**
Undistributed				-
2007				-
2008	6			6
2009	7			7
2010	20			20
2011	10			10
2012	13			13
2013	10			10
2014	10			10
2015	10			10
2016	21			21
2017	26			26
2018	34			34
2019	37			37
2020	34			34
2021	34			34
2022	32			32
2023	34			34
2024	35			35
2025	26			26
2026	27			27
2027	34			34
2028	34			34
2029	43			43
2030	35			35
2031	35			35
2032	40			40
2033	15			15
2034	15			15
2035	16			16

Nuclear Costs

F-35 Aircraft Subprogram

Program's Use of Department of Energy Resources

None

Nuclear Costs

F-35 Engine Subprogram

Program's Use of Department of Energy Resources

None

Operational Fielding Plan

F-35 Aircraft Subprogram

System: F-35A

Fielding and Inventory Notes

Based on 2023 Weapons System Planning Document (WSPD) Approved Beddowns
Includes USAF F-35A

F-35A Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					419
2024		51	3		467
2025		57	2		522
2026		25	3		544
2027		39	3		580
2028		44	3		621
2029		47	4		664

Operational Fielding Plan

F-35 Aircraft Subprogram

System: F-35B

Fielding and Inventory Notes

Based on 2023 Weapons System Planning Document (WSPD) Approved Beddowns
Includes USMC F-35B

F-35B Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					152
2024		18	1		169
2025		17	1		185
2026		16	1		200
2027		16	1		215
2028		16	2		229
2029		17	1		245

Operational Fielding Plan

F-35 Aircraft Subprogram

System: F-35C

Fielding and Inventory Notes

Based on 2023 Weapons System Planning Document (WSPD) Approved Beddowns
Includes USMC F-35C and USN F-35C

F-35C Fielding Plan and Inventory

fiscal year	Store	Field	Expend/Loss	Decommission	Inventory
2023					96
2024		25	-		121
2025		26	1		146
2026		20	1		165
2027		19	-		184
2028		19	1		202
2029		18	1		219

O&S Independent Cost Estimate

F-35 Aircraft Subprogram

Independent and Current Cost Estimate Comparison

Category CY2012 ($M)	Independent Cost Estimate 6/18/2020	Current Estimate 8/8/2023	Variance with ICE (%)
Unit-Level Manpower	142,800.0	160,455.6	12%
Unit Operations	85,100.0	76,943.5	-10%
Maintenance	221,700.0	186,305.7	-16%
Sustaining Support	93,200.0	99,753.4	7%
Continued System Improvements	42,700.0	45,006.8	5%
Other	74,300.0	82,876.7	12%
Total O&S	**659,800.0**	**651,341.7**	**-1%**

Independent Cost Estimate Source

Event: FY 2020 NDAA Section 167

Type: Independent Cost Estimate

Approved by: OSD Cost Assessment & Program Evaluation, June 18, 2020

Note: This CAPE ICE is inclusive of the USAF F-35A, USMC F-35B, USMC F-35C, and USN F-35C, with operations through 2077. This estimate of $659.8 (CY12$B) / $1,265.6 (TY$B) is based on the 2020 v1.0 beddown plans and uses the department's 2020 inflation indices. The CAPE F-35 life cycle O&S cost estimate incorporated recent programmatic decisions and updates cost estimating techniques and data relative to the F-35 O&S cost estimate prepared in 2018.

Current Cost Estimate Source

Type: Program Office Estimate

Approved by: F-35 Joint Program Office (JPO), August 8, 2023

Note: -The 2023 Sustainment ACE reflects costs for the U.S. DoD, inclusive of the USAF F-35A, USMC F-35B, USMC F-35C, and USN F-35C, with operations through 2088. This estimate of $651.3 (CY12$B) / $1,576.7 (TY$B) reflects a decrease of $54.4 (CY12$B) from the 2022 ACE. 2023 Beddowns maintain the USAF 2088 end of operations and adjust the USMC end of operations, average aircraft life, and squadron sizes. ECU inclusion captures reductions in scheduled overhaul events due to power module improvements. AV Depot Maintenance definition reflects F-35 specific planning assumptions. Propulsion updates capture the latest event forecasts and pricing details for the F135 engine as well as new Foreign Object Debris (FOD) Mitigation efforts.
-This includes 30 Affordability initiatives which reduce the estimate by $33.7 (CY12$B) / $83.9 (TY$B), meaning without these efforts the ACE would have appeared 5% higher.
-As of Milestone B in Feb 2012, operations extended through 2065 and included 56,741 aircraft operating years (PAA basis). The current APB, based on OSD CAPE's ICE as of Dec 2018, assumed operations extended through 2077 and included 61,274 aircraft operating years. The 2023 Sustainment ACE assumes operations extend through 2088 and include 70,229 aircraft operating years, +15% from the APB basis.

Cost Estimate Variance Explanation

N/A

Annual Operating and Support Estimates by Cost Element

F-35 Aircraft Subprogram

System: F-35A

Source for TY-CY Conversion: Gross Domestic Product Chain-Type Price Index (GDPPI)

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 CY2012 ($M)
Total	**135,429.3**	**59,653.9**	**135,898.3**	**73,285.7**	**34,525.5**	**54,037.0**	**492,829.7**
2009	1.033	0.830					1.9
2010	6.663	10.816					17.5
2011	20.935	6.423	0.030	14.631	0.009	4.628	46.7
2012	32.489	10.960	4.417	35.816	2.644	8.569	94.9
2013	66.066	13.855	44.033	2.559	0.044	24.035	150.6
2014	74.679	27.601	63.488	52.081	0.109	42.946	260.9
2015	115.783	51.139	111.672	72.195	0.200	67.387	418.4
2016	168.365	65.815	151.248	141.000	7.473	57.433	591.3
2017	237.980	102.260	226.862	203.779	9.970	82.859	863.7
2018	340.385	169.069	230.497	219.907	62.939	105.643	1,128.4
2019	396.887	233.850	206.407	432.280	26.751	170.844	1,467.0
2020	450.731	275.757	295.276	600.915	34.765	222.527	1,880.0
2021	520.828	264.351	296.960	654.059	75.034	250.805	2,062.0
2022	702.734	330.806	433.796	778.447	150.227	304.970	2,701.0
2023	758.549	364.239	435.672	665.326	196.442	328.372	2,748.6
2024	761.203	488.272	477.732	648.334	214.840	337.768	2,928.1
2025	909.893	538.826	581.893	738.368	228.906	405.012	3,402.9
2026	978.557	582.801	754.405	737.036	300.558	432.721	3,786.1
2027	1,063.402	612.266	836.584	745.428	305.177	468.171	4,031.0
2028	1,154.232	648.056	956.700	769.526	354.301	506.091	4,388.9
2029	1,229.341	693.219	1,031.189	788.992	382.273	534.842	4,659.9
2030	1,326.509	737.387	1,204.597	807.317	425.931	574.501	5,076.2
2031	1,425.246	783.035	1,398.673	839.941	448.968	618.705	5,514.6
2032	1,531.151	829.017	1,558.314	871.775	469.245	661.890	5,921.4
2033	1,568.092	871.688	1,606.228	901.204	408.317	674.042	6,029.6
2034	1,714.317	915.683	1,648.584	930.897	466.021	733.650	6,409.2
2035	1,835.753	955.026	1,440.355	970.416	487.506	782.082	6,471.1
2036	1,940.238	992.739	1,822.036	1,001.389	499.239	826.535	7,082.2
2037	2,002.691	1,027.706	1,957.852	1,034.495	516.765	850.385	7,389.9
2038	2,132.757	1,063.633	2,088.805	1,069.396	534.219	901.843	7,790.7
2039	2,289.726	1,096.018	2,209.059	1,101.450	554.035	961.184	8,211.5
2040	2,414.594	1,128.097	2,342.174	1,137.741	565.948	1,010.062	8,598.6
2041	2,479.160	1,160.272	2,480.979	1,168.901	582.540	1,035.409	8,907.3
2042	2,662.220	1,191.498	2,625.942	1,213.292	599.924	1,106.863	9,399.7
2043	2,776.171	1,224.087	2,409.969	1,253.871	620.956	1,149.035	9,434.1
2044	2,911.503	1,270.946	2,132.394	1,282.085	632.748	1,199.869	9,429.5
2045	3,002.839	1,314.240	2,474.833	1,301.161	649.325	1,232.793	9,975.2
2046	3,017.545	1,324.657	2,784.931	1,317.678	666.048	1,234.263	10,345.1
2047	3,027.429	1,329.433	2,944.774	1,333.255	688.408	1,233.691	10,557.0
2048	3,044.061	1,333.593	3,107.864	1,346.816	699.223	1,235.938	10,767.5

System: F-35A

Source for TY-CY Conversion: Gross Domestic Product Chain-Type Price Index (GDPPI)

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 CY2012 ($M)
2049	3,051.529	1,336.371	3,445.197	1,357.387	712.184	1,234.462	11,137.1
2050	3,038.215	1,334.561	3,538.275	1,427.710	715.799	1,224.604	11,279.2
2051	3,047.590	1,333.876	3,455.751	1,437.236	740.419	1,223.843	11,238.7
2052	3,055.283	1,332.251	3,238.976	1,453.629	739.260	1,222.604	11,042.0
2053	3,062.017	1,331.399	3,246.185	1,448.250	737.741	1,220.922	11,046.5
2054	3,075.186	1,331.689	3,276.148	1,440.375	736.568	1,221.737	11,081.7
2055	3,077.103	1,327.813	3,121.569	1,455.831	738.994	1,218.151	10,939.5
2056	3,081.059	1,321.573	2,854.919	1,461.237	725.360	1,215.191	10,659.3
2057	3,075.423	1,312.832	2,849.535	1,461.685	722.830	1,208.414	10,630.7
2058	3,055.419	1,290.868	2,973.130	1,445.340	724.122	1,195.953	10,684.8
2059	3,020.305	1,260.550	3,297.538	1,451.965	734.172	1,177.578	10,942.1
2060	3,017.926	1,241.573	3,644.506	1,444.706	714.941	1,172.293	11,235.9
2061	2,999.807	1,225.420	3,379.868	1,438.072	701.276	1,160.908	10,905.4
2062	2,943.983	1,193.865	3,478.600	1,415.371	685.923	1,135.204	10,852.9
2063	2,909.885	1,166.111	3,588.912	1,433.259	716.506	1,117.977	10,932.6
2064	2,855.234	1,138.304	3,972.282	1,411.527	678.909	1,093.384	11,149.6
2065	2,777.340	1,103.945	3,312.648	1,377.837	658.595	1,060.217	10,290.6
2066	2,623.812	1,043.469	3,033.939	1,345.710	636.851	998.927	9,682.7
2067	2,448.981	973.459	2,400.404	1,291.751	621.531	929.006	8,665.1
2068	2,343.862	925.406	2,825.469	1,219.535	586.583	885.185	8,786.0
2069	2,233.824	883.128	2,556.025	1,150.831	571.051	840.489	8,235.3
2070	2,150.656	852.114	2,495.432	1,155.065	565.154	806.620	8,025.0
2071	2,064.811	818.900	2,086.165	1,104.086	559.914	771.946	7,405.8
2072	1,981.918	783.323	1,740.816	1,062.695	528.928	738.624	6,836.3
2073	1,849.058	725.724	1,762.720	1,030.903	510.535	685.868	6,564.8
2074	1,713.660	667.985	1,516.865	965.320	489.138	632.991	5,986.0
2075	1,644.243	634.531	1,439.076	930.510	483.449	605.039	5,736.8
2076	1,532.777	586.055	1,345.148	900.219	452.468	562.529	5,379.2
2077	1,401.436	535.533	1,381.281	858.856	434.812	513.191	5,125.1
2078	1,264.070	473.822	1,288.413	808.008	415.635	459.618	4,709.6
2079	1,170.222	430.237	1,032.547	735.343	381.849	423.268	4,173.5
2080	1,020.071	368.862	939.521	669.462	350.713	367.657	3,716.3
2081	922.474	330.176	1,129.624	649.374	334.797	331.531	3,698.0
2082	801.157	285.842	1,030.304	635.434	322.517	287.397	3,362.7
2083	664.049	236.047	786.301	618.355	318.368	237.476	2,860.6
2084	501.352	174.158	392.929	563.776	181.514	176.730	1,990.5
2085	391.302	138.152	289.067	538.025	179.700	137.183	1,673.4
2086	299.753	104.216	239.843	536.957	179.929	104.916	1,465.6
2087	136.523	48.246	110.691	505.271	193.421	47.519	1,041.7
2088	33.224	11.522	24.471	465.085	175.049	11.460	720.8

Annual Operating and Support Estimates by Cost Element

F-35 Aircraft Subprogram

System: F-35B

Source for TY-CY Conversion: Gross Domestic Product Chain-Type Price Index (GDPPI)

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 CY2012 ($M)
Total	**12,777.8**	**9,263.3**	**30,150.3**	**14,954.6**	**5,652.9**	**15,746.2**	**88,545.1**
2009							-
2010							-
2011							-
2012	0.355	-	70.949	-	-	13.761	85.1
2013	12.630	18.394	68.563	0.209	-	31.649	131.4
2014	29.672	22.475	60.888	31.861	0.023	41.282	186.2
2015	41.881	30.958	73.142	40.672	0.028	56.418	243.1
2016	64.607	32.126	97.352	69.407	3.550	70.277	337.3
2017	75.347	40.016	123.244	86.942	8.150	80.417	414.1
2018	89.903	44.574	129.585	180.901	31.257	93.576	569.8
2019	88.678	63.525	137.370	178.933	37.967	114.619	621.1
2020	93.993	66.496	172.349	253.295	38.468	184.741	809.3
2021	86.944	94.998	175.324	264.392	40.067	227.570	889.3
2022	181.811	120.699	203.906	300.896	68.211	224.789	1,100.3
2023	198.491	125.502	192.510	300.931	114.247	251.776	1,183.5
2024	206.137	149.548	265.389	306.773	143.435	277.255	1,348.5
2025	224.516	158.527	279.361	294.888	156.179	298.957	1,412.4
2026	242.064	177.864	362.191	326.311	185.191	320.158	1,613.8
2027	276.507	204.153	460.818	330.231	156.112	362.548	1,790.4
2028	294.380	220.314	553.217	333.196	165.336	383.772	1,950.2
2029	312.731	232.794	612.886	335.936	164.026	405.031	2,063.4
2030	331.255	248.430	663.406	339.867	176.527	426.303	2,185.8
2031	349.952	266.093	734.661	341.200	163.124	447.587	2,302.6
2032	351.666	269.880	741.600	344.058	158.475	447.717	2,313.4
2033	353.388	270.613	760.063	408.792	135.034	447.848	2,375.7
2034	355.119	270.887	836.047	413.110	165.675	447.979	2,488.8
2035	356.858	271.263	716.880	406.113	165.921	448.110	2,365.1
2036	358.605	271.004	857.142	407.230	163.754	448.242	2,506.0
2037	360.362	270.604	896.967	402.154	162.768	448.375	2,541.2
2038	362.126	270.108	937.787	401.989	162.401	448.508	2,582.9
2039	363.900	269.540	974.887	401.846	163.399	448.642	2,622.2
2040	365.682	268.897	1,002.031	401.613	161.812	448.776	2,648.8
2041	367.473	268.168	1,039.933	400.149	160.933	448.910	2,685.6
2042	369.272	267.426	1,105.732	400.050	160.404	449.045	2,751.9
2043	371.081	267.503	1,010.400	400.603	161.064	449.181	2,659.8
2044	372.898	268.225	937.299	397.012	159.711	449.317	2,584.5
2045	374.724	268.950	1,002.243	394.289	159.642	449.454	2,649.3
2046	376.559	269.787	983.836	385.270	153.924	449.591	2,619.0
2047	378.403	270.615	1,055.896	374.456	150.466	449.729	2,679.6
2048	380.256	271.381	1,098.265	375.852	147.508	449.867	2,723.1

System: F-35B

Source for TY-CY Conversion: Gross Domestic Product Chain-Type Price Index (GDPPI)

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 CY2012 ($M)
2049	382.118	272.192	1,088.941	368.032	143.480	450.006	2,704.8
2050	383.990	272.994	1,046.387	359.442	135.067	450.145	2,648.0
2051	364.376	258.326	977.218	340.972	131.052	418.294	2,490.2
2052	347.240	246.176	894.449	348.862	127.242	397.130	2,361.1
2053	329.928	234.048	865.101	338.986	120.062	375.954	2,264.1
2054	312.438	221.868	776.107	321.640	112.837	354.766	2,099.7
2055	292.049	206.942	771.045	313.511	112.270	322.847	2,018.7
2056	241.074	155.945	577.757	273.278	101.157	266.569	1,615.8
2057	164.703	114.175	496.726	248.633	98.905	181.346	1,304.5
2058	146.026	101.449	411.069	231.326	42.648	160.070	1,092.6
2059	127.163	88.639	312.562	200.926	42.355	138.780	910.4
2060	108.112	75.744	226.758	192.370	39.404	117.478	759.9
2061	88.870	62.763	180.552	175.962	37.215	96.162	641.5
2062	69.438	49.692	131.532	209.267	64.465	74.832	599.2

Annual Operating and Support Estimates by Cost Element

F-35 Aircraft Subprogram

System: F-35C

Source for TY-CY Conversion: Gross Domestic Product Chain-Type Price Index (GDPPI)

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 CY2012 ($M)
Total	**12,248.6**	**8,026.3**	**20,257.0**	**11,513.0**	**4,828.3**	**13,093.7**	**69,966.9**
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	7.234	0.205	5.993	0.018	-	3.098	16.5
2014	12.323	3.299	16.576	8.199	0.007	12.392	52.8
2015	17.494	7.782	30.667	17.603	0.013	29.431	103.0
2016	25.559	9.111	28.212	40.453	3.537	42.868	149.7
2017	41.014	12.596	45.900	55.186	5.204	46.126	206.0
2018	43.914	16.622	52.621	112.762	46.229	49.421	321.6
2019	48.817	26.684	50.429	113.396	37.662	65.401	342.4
2020	74.595	33.262	67.164	164.852	45.672	93.215	478.8
2021	82.749	39.378	65.729	158.176	38.042	152.970	537.0
2022	118.052	71.021	86.828	154.876	62.312	133.366	626.5
2023	145.095	81.676	124.663	186.679	103.489	167.121	808.7
2024	177.011	132.806	182.085	220.913	104.191	205.099	1,022.1
2025	178.507	153.658	216.231	203.295	111.467	205.527	1,068.7
2026	196.020	165.599	290.276	257.214	122.186	226.763	1,258.1
2027	201.091	185.235	334.993	261.353	124.702	231.497	1,338.9
2028	225.879	190.852	365.950	267.372	128.953	258.181	1,437.2
2029	251.130	205.429	409.365	267.622	123.332	284.896	1,541.8
2030	292.712	241.972	523.492	270.117	125.595	328.699	1,782.6
2031	318.527	256.361	611.089	271.791	142.873	355.452	1,956.1
2032	344.588	271.402	677.693	283.349	151.493	382.221	2,110.7
2033	346.276	287.204	695.774	288.440	142.808	382.336	2,142.8
2034	347.971	295.009	731.051	292.462	143.443	382.451	2,192.4
2035	396.116	275.566	552.391	301.533	148.342	432.934	2,106.9
2036	398.056	283.034	680.917	377.332	150.296	433.065	2,322.7
2037	400.005	287.658	725.620	380.382	152.522	433.197	2,379.4
2038	401.964	281.383	738.734	377.839	152.263	433.328	2,385.5
2039	403.933	278.334	757.409	378.559	153.330	433.461	2,405.0
2040	405.911	274.671	774.807	377.550	150.931	433.594	2,417.5
2041	407.899	272.731	794.362	371.824	148.228	433.727	2,428.8
2042	409.896	272.383	797.277	369.105	146.894	433.861	2,429.4
2043	411.904	270.945	658.935	368.188	146.796	433.996	2,290.8
2044	413.921	272.263	563.955	361.509	144.803	434.131	2,190.6
2045	415.948	268.879	603.662	358.863	144.902	434.266	2,226.5
2046	417.985	267.200	672.671	358.706	144.044	434.402	2,295.0
2047	420.032	269.015	761.584	346.874	143.727	434.539	2,375.8
2048	403.380	255.369	792.133	327.174	137.395	413.352	2,328.8

System: F-35C

Source for TY-CY Conversion: Gross Domestic Product Chain-Type Price Index (GDPPI)

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 CY2012 ($M)
2049	378.733	236.742	766.623	314.476	132.871	386.680	2,216.1
2050	368.408	227.166	746.172	301.077	112.164	372.589	2,127.6
2051	343.328	197.971	607.199	285.887	108.519	345.888	1,888.8
2052	306.854	158.902	492.576	238.708	101.037	303.299	1,601.4
2053	279.269	161.723	492.333	224.224	96.141	276.559	1,530.2
2054	253.355	144.817	464.959	210.421	91.468	249.803	1,414.8
2055	235.237	94.380	294.550	190.793	83.673	228.515	1,127.1
2056	208.840	80.657	234.878	179.346	77.725	201.726	983.2
2057	182.178	69.190	190.965	164.259	42.732	174.921	824.2
2058	155.251	50.590	153.937	124.596	40.299	148.098	672.8
2059	137.473	37.770	125.735	119.093	40.263	130.911	591.2
2060	110.054	30.787	132.367	109.875	37.820	104.055	525.0
2061	86.092	19.007	67.502	98.668	35.917	80.222	387.4