



Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-198



F-35 Joint Strike Fighter Aircraft (F-35)

As of FY 2017 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Common Acronyms and Abbreviations for MDAP Programs

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

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

Program Information

Program Name

F-35 Joint Strike Fighter Aircraft (F-35)

DoD Component

DoD

Joint Participants

United States Navy; United States Air Force; United States Marine Corps; United Kingdom; Italy; The Netherlands; Turkey; Canada; Australia; Denmark; Norway

The F-35 Program is a joint DoD program for which Service Acquisition Executive Authority alternates between the Department of the Navy (DoN) and the Department of the Air Force, and currently resides with the DoN.

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References

F-35 Aircraft

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 26, 2012

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 18, 2014

F-35 Engine

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 26, 2012

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 18, 2014

Mission and Description

The F-35 Joint Strike Fighter Aircraft (F-35) 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.

Executive Summary

The F-35 remains the DoD's largest cooperative acquisition program, with eight International Partners participating with the U.S. under Memorandums of Understanding for System Development and Demonstration (SDD) and Production, Sustainment and Follow-on Development. Additionally, the program currently has three FMS customers. The F-35 program is executing well across the entire spectrum of acquisition, to include development and design, flight test, production, fielding and base stand-up, sustainment of fielded aircraft, and building a global sustainment enterprise.

The program is transitioning from slow and steady progress to a rapidly growing and accelerating Program. However, the Program is not without risks and challenges. The completion of Mission Systems Software development and Autonomic Logistics Information System (ALIS) development are the most prominent, current technical risks. The ability to standup four separate Reprogramming Labs, complete all weapons envelope testing for Block 3F, and start Operational Test (OT) on time, constitute the main schedule risks. Program leadership remains confident that it will deliver the full F-35 capability as promised.

Successes and challenges in 2015: The F-35 Program closed out 2015 by executing the plan for test flights, total test points and baseline test points. The test teams at Edwards Air Force Base (AFB) and Naval Air Station, Patuxent River, MD completed 1374 actual flights (plan: 1286), 9582 total test points (plan: 9427) and 7798 baseline test points (plan: 7786).

The Program also met the production goal for the year by accepting its 45th aircraft delivery. This represented a 25 percent increase from last year's goal that was also met: the most aircraft delivered in one year in program history. These deliveries included the first international delivery from the Italian Final Assembly and Check Out (FACO), and bring the overall operational delivery total to 157 (146 U.S. aircraft as reflected in the Deliveries and Expenditure Section of the SAR, and 11 International Partner Aircraft) as of February 3, 2016. Along with Italy, Norway took its first delivery in 2015. Five partner nations: Australia, Italy, the Netherlands, Norway and the United Kingdom, along with the Air Force, Marine Corps and Navy, now fly the F-35. Israel and Japan will take their first deliveries in 2016.

Block 3i software was released for flight test in May 2015, to support the U.S. Air Force IOC declaration later in 2016. Coding for the final development software block 3F, was completed in June 2015 and the software has been released for flight testing. Additional updates are planned throughout the year with 3F tracking for completion by the end of the SDD in the fall of 2017, to support U.S. Navy IOC in 2018 and the start of Initial Operational Test and Evaluation (IOT&E). Throughout testing, interim software test builds are provided to both the developmental test and operational test teams, allowing them to experience the software as early as possible and provide feedback. As of December 31, 2015, the program completed 80 percent of SDD test points and is on track for completion in the fourth quarter of 2017.

At the completion of the F-35 SDD program, the objective is to deliver full Block 3F capabilities (Mission Systems, Weapons & Flight Envelope) for the Services and International customers. The F-35 program will continue to coordinate closely with the JSF Operational Test Team and Director, Operational Test and Evaluation, on key test planning and priorities to successfully meet significant SDD program milestones and objectives.

Currently, mission systems software and the ALIS system, are the program's top technical risks. Disciplined systems engineering processes, addressing the complexity of writing, testing, and integrating mission systems and ALIS software, have improved the delivery of capability, although challenges remain.

F-35 Total Program Cost:

The BY dollar increase in RDT&E of approximately \$300M is the result of a transfer of money from the Procurement account to the RDT&E account to fund the modification of 24 OT aircraft for IOT&E. This transfer out of Procurement into RDT&E had a zero net effect on Total Program Cost.

The BY dollar reduction in the estimated \$7.5B Procurement Costs through the life of the program was the result of a combination of increases and decreases within the Procurement account. Elements of the account that increased when compared to last year's SAR estimate included increased labor rates, the addition of Electronic Warfare Band 2/5 capability

and updating the quantity profile. Elements in the account that decreased included; updated actuals for aircraft and engine cost, and a change in inflation indices.

The net BY dollar increase in the estimated O&S of \$23B (CAPE) and \$43.3B (Joint Program Office (JPO)) were the result of both increases and decreases within the O&S account, with U.S. Services' changes in aircraft life expectancy and bed down plans overshadowing real reductions in O&S costs.

Business perspective: The price of the F-35 variants continues to decline steadily. For example, the price (including airframe, engine and profit) of an LRIP Lot 8 aircraft was approximately 3.6 percent less than an LRIP Lot 7 aircraft, and an LRIP Lot 7 aircraft, was 4.2 percent lower than an LRIP Lot 6 aircraft. LRIP Lots 9 and 10 contract negotiations are nearing completion and the contract award is anticipated by late spring of this year.

The F-35 JPO is exploring the possibility of entering into a Block Buy Contract, for LRIP Lots 12-14 (FY 2018- FY2020). A block buy would enable the JPO to save a significant amount of money by allowing the contractors to use Economic Order Quantity purchases; enabling manufacturers to maximize production economies of scale, through bulk orders.

Earlier this year, the program reached agreement with Pratt & Whitney on the next two lots of F135 propulsion systems. The LRIP Lots 9 and 10 will continue the price improvements realized on previous lots and the F135 engine is meeting War on Cost commitments. For calendar year 2015, F135 production deliveries met contract requirements. However, recurring manufacturing quality issues continue to hamper consistent engine deliveries. Recent quality escapes on turbine blades and electronic control systems resulted in maintenance activity to remove suspect hardware from the operational fleet. Pratt & Whitney has taken action to improve quality surveillance within their manufacturing processes and program office manufacturing quality experts have engaged to ensure quality improvements are in place to meet production ramp requirements.

Sustainment: Last year the JPO provided information regarding its efforts toward the establishment of the Global Sustainment posture across Europe, Asia-Pacific and North America. In 2015, the F-35's strong international team made marked progress in delivering this capability to F-35 users and the program is on track to standing up regional Maintenance, Repair, Overhaul, and Upgrade (MRO&U) capabilities for airframes and engines, for both the European and Pacific Regions. These initial MRO&U assignments will support near-term F-35 airframe and engine overseas operations and maintenance and will be reviewed and updated approximately every five years.

In the European region, Italy will provide F-35 initial airframe MRO&U capability in 2018. Also in 2018, engine heavy maintenance in the European region will initially be provided by Turkey. The Netherlands and Norway will provide additional engine heavy maintenance approximately two-to-three years after Turkey's initial capability.

In the Pacific region, F-35 airframe MRO&U capability will be provided by Japan for the Northern Pacific and in the Southern Pacific by Australia, with both capabilities required by early 2018. For F-35 engine heavy maintenance in the Pacific, the initial capability will be provided by Australia by early 2018, with Japan providing additional capability five-to-seven years later.

In 2015, the program also kicked-off initial planning efforts for expansion of component repair into the European and Pacific regions. Working through the F-35 Regional Capabilities Working Group forum, efforts began to identify 'best value' repair sources in each region for approximately 18 key depot-level repairable items. Early program analysis indicates that grouping certain components by common repair, test set and skills, can yield life cycle cost savings. Partners and their industries will be requested to propose groupings, that leverage their strongest industrial competencies, to deliver optimum repair capability at best cost to the global sustainment solution.

International and FMS: International participation in the program remains strong and the program is now training International Partner pilots at Luke AFB.

In 2015, the first Royal Norwegian Air Force, F-35 rolled out and had its first flight from the Fort Worth Texas assembly facility. The first Italian Air Force, F-35A rolled out of the production facility in Cameri Italy, and a few months later completed the first F-35 transatlantic flight, landing at Naval Air Station, Patuxent River, Maryland. Additionally, the program began F-35A aerial refueling flight testing with a Royal Australian Air Force KC-30A tanker and completed F-35A aerial refueling flight testing with an Italian Air Force KC-767 tanker.

Initial site planning for the standup of maintenance capabilities in Norway, the Netherlands, Turkey, United Kingdom, Israel, Japan and Korea commenced in 2015. The Japanese FACO assembly facility is now complete with both Electronic Mate Assembly Stations, tools installed and accepted and the first Japanese F-35A is scheduled to rollout of the facility in November 2016. Finally, construction and installation activities remain on schedule, with major components currently being shipped.

In March 2012, in conjunction with the Milestone B decision, certification was made pursuant to section 2366b of title 10, United States Code (U.S.C.). However, at that time, the MDA waived provision (3)(C) (now 3(G)), which certifies that the JROC has accomplished its duties pursuant to section 181(b) of title 10, U.S.C., including an analysis of the operational requirements for the program. The JROC accomplished the bulk of its duties under section 181(b); however, because at that time, the IOC dates remained "TBD" by the Services, a waiver had been in place. In June 2013, the Services sent a joint report to the U.S. Congress detailing their IOC requirements and dates. On April 22, 2015, the USD(AT&L) certified that this provision has been satisfied because IOC Objective and Threshold dates for each of the three Services, Air Force, Marine Corps, and Navy, have now been established.

Threshold Breaches

F-35 Aircraft

APB Breaches

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

Nunn-McCurdy Breaches

Current UCR Baseline

| | |
|------|------|
| PAUC | None |
| APUC | None |

Original UCR Baseline

| | |
|------|------|
| PAUC | None |
| APUC | None |

F-35 Engine

APB Breaches

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

Nunn-McCurdy Breaches

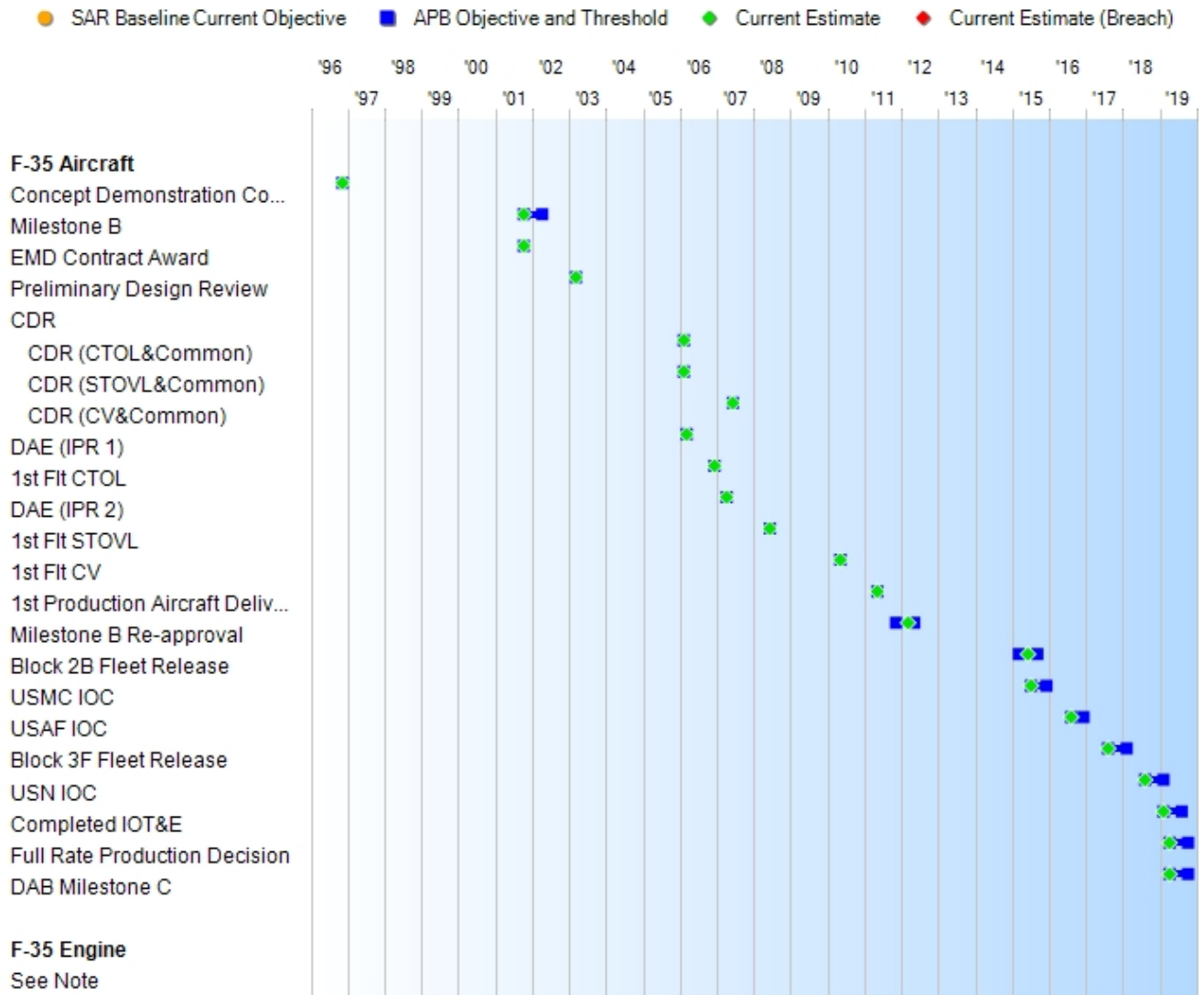
Current UCR Baseline

| | |
|------|------|
| PAUC | None |
| APUC | None |

Original UCR Baseline

| | |
|------|------|
| PAUC | None |
| APUC | None |

Schedule



F-35 Aircraft

| Schedule Events | | | | |
|--------------------------------------|-----------------------------------|---|----------|------------------|
| Events | SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Current Estimate |
| Concept Demonstration Contract Award | Nov 1996 | Nov 1996 | Nov 1996 | Nov 1996 |
| Milestone B | Oct 2001 | Oct 2001 | Apr 2002 | Oct 2001 |
| EMD Contract Award | Oct 2001 | Oct 2001 | Oct 2001 | Oct 2001 |
| Preliminary Design Review | Apr 2003 | Mar 2003 | Mar 2003 | Mar 2003 |
| CDR | | | | |
| CDR (CTOL&Common) | Feb 2006 | Feb 2006 | Feb 2006 | Feb 2006 |
| CDR (STOVL&Common) | Feb 2006 | Feb 2006 | Feb 2006 | Feb 2006 |
| CDR (CV&Common) | Jun 2007 | Jun 2007 | Jun 2007 | Jun 2007 |
| DAE (IPR 1) | Mar 2006 | Mar 2006 | Mar 2006 | Mar 2006 |
| 1st Flt CTOL | Dec 2006 | Dec 2006 | Dec 2006 | Dec 2006 |
| DAE (IPR 2) | Apr 2007 | Apr 2007 | Apr 2007 | Apr 2007 |
| 1st Flt STOVL | Jun 2008 | Jun 2008 | Jun 2008 | Jun 2008 |
| 1st Flt CV | Jun 2010 | May 2010 | May 2010 | May 2010 |
| 1st Production Aircraft Delivered | May 2011 | May 2011 | May 2011 | May 2011 |
| Milestone B Re-approval | Mar 2012 | Nov 2011 | May 2012 | Mar 2012 |
| Block 2B Fleet Release | Mar 2015 | Mar 2015 | Sep 2015 | Jun 2015 |
| USMC IOC | TBD | Jul 2015 | Dec 2015 | Jul 2015 |
| USAF IOC | TBD | Aug 2016 | Dec 2016 | Aug 2016 |
| Block 3F Fleet Release | Aug 2017 | Aug 2017 | Feb 2018 | Aug 2017 |
| USN IOC | TBD | Aug 2018 | Feb 2019 | Aug 2018 |
| Completed IOT&E | Feb 2019 | Feb 2019 | Aug 2019 | Feb 2019 |
| Full Rate Production Decision | Apr 2019 | Apr 2019 | Oct 2019 | Apr 2019 |
| DAB Milestone C | Apr 2019 | Apr 2019 | Oct 2019 | Apr 2019 |

Change Explanations

None

Acronyms and Abbreviations

CDR - Critical Design Review

CTOL - Conventional Takeoff and Landing

CV - Aircraft Carrier Suitable Variant

Flt - Flight

IOT&E - Initial Operational Test and Evaluation

IPR - Interim Progress Review

STOVL - Short Takeoff and Vertical Landing

USAF - United States Air Force

USMC - United States Marine Corps

USN - United States Navy

F-35 Engine

| Schedule Events | | | | |
|-----------------|-----------------------------------|---|-----|------------------|
| Events | SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Current Estimate |
| See Note | N/A | N/A | N/A | N/A |

Change Explanations

None

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.

Performance

F-35 Aircraft

| Performance Characteristics | | | | |
|--|--|---|--------------------------|---|
| SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Demonstrated Performance | Current Estimate |
| STOVL Mission Performance - STO Distance Flat Deck | | | | |
| 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. | 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. | 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. | TBD | Execute 558 ft. STO with 2 JDAM (internal), 2 AIM-120 (internal), fuel to fly 467nm |
| Combat Radius NM -CTOL Variant | | | | |
| 690 | 690 | 590 | TBD | 625 |
| Combat Radius NM -STOVL Variant | | | | |
| 550 | 550 | 450 | TBD | 467 |
| Combat Radius NM -CV Variant | | | | |
| 730 | 730 | 600 | TBD | 630 |
| Mission Reliability - CTOL Variant | | | | |
| 98% | 98% | 93% | TBD | 97% |
| Mission Reliability - CV Variant | | | | |
| 98% | 98% | 95% | TBD | 98% |
| Mission Reliability - STOVL Variant | | | | |
| 98% | 98% | 95% | TBD | 98% |
| Logistics Footprint - CTOL Variant | | | | |
| Less than or equal to 6 C-17 equivalents | Less than or equal to 6 C-17 equivalents | Less than or equal to 8 C-17 equivalent loads | TBD | Less than or equal to 8 C-17 equivalents |

(Ch-1)

(Ch-1)

(Ch-1)

(Ch-1)

(Ch-2)

| Logistics Footprint - CV Variant | | | | | |
|---|---|---|-----|---|--------|
| Less than or equal to 34,000 cu ft., 183 ST | Less than or equal to 34,000 cu ft., 183 ST | Less than or equal to 46,000 cu ft., 243 ST | TBD | Less than or equal to 38,800 cu ft., 217 ST | (Ch-2) |
| Logistics Footprint - STOVL Variant | | | | | |
| Less than or equal to 4 C-17 equivalents | Less than or equal to 4 C-17 equivalents | Less than or equal to 8 C-17 equivalent loads | TBD | Less than or equal to 7 C-17 equivalents | (Ch-2) |
| Logistics Footprint - STOVL Variant L-Class | | | | | |
| Less than or equal to 15,000 cu ft, 104 ST | Less than or equal to 15,000 cu ft, 104 ST | Less than or equal to 21,000 cu ft, 136 ST | TBD | Less than or equal to 17,400 cu ft, 100 ST | (Ch-2) |
| Sortie Generation Rates - CTOL Variant | | | | | |
| 4.0/3.0/2.0 2.5 ASD | 4.0/3.0/2.0 2.5 ASD | 3.0/2.0/1.0 2.5 ASD | TBD | 3.4/3.0/2.0 2.5 ASD | (Ch-2) |
| Sortie Generation Rates - CV Variant | | | | | |
| 4.0/3.0/1.0 1.8 ASD | 4.0/3.0/1.0 1.8 ASD | 3.0/2.0/1.0 1.8 ASD | TBD | 3.0/3.0/1.0 1.8 ASD | (Ch-2) |
| Sortie Generation Rates - STOVL Variant (USMC) | | | | | |
| 6.0/4.0/2.0 1.1 ASD | 6.0/4.0/2.0 1.1 ASD | 4.0/3.0/1.0 1.1 ASD | TBD | 5.2/4.0/2.0 1.1 ASD | (Ch-2) |
| CV Recovery Performance (Vpa) | | | | | |
| Vpa. Maximum approach speed (Vpa) at required carrier landing weight (RCLW) of less than 140 knots. | Vpa at required carrier landing weight (RCLW) of less than 140 knots. | Vpa at required carrier landing weight (RCLW) of less than 145 knots. | TBD | Vpa. Maximum approach speed (Vpa) at required carrier landing weight (RCLW) of less than 144 knots. | |

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

Requirements Reference

Operational Requirements Document (ORD) Change 3 dated August 19, 2008 as modified by Joint Requirements Oversight Council Memorandum 040-12 dated March 16, 2012

Change Explanations

(Ch-1) Performance characteristic current estimate updated to reflect a change in the Combat Radius and STOVL Mission Performance characteristics. Fuel use margin was reduced from 4% to 3% based on refined understanding of drag and installed propulsion performance. Program anticipates further margin reduction and concomitant performance improvements as flight test draws to a conclusion over the next 18 months.

(Ch-2) The PEO completed the initial portion of a more comprehensive and accurate assessment of the SGR and Log Footprint KPPs. This update more accurately reflects the capability of the design when operated in accordance with current fleet policies and procedures. This differs from the prior, contractual analysis by capturing the demonstrated and predicted performance of the air system design (vice modeled) and adding operationally representative fleet policies and procedures (in the SGR case).

Notes

The F-35 Program is currently in developmental testing, and will provide demonstrated performance with the Block 3F full capability aircraft.

Acronyms and Abbreviations

ASD - Average Sortie Duration
CTOL - Conventional Takeoff and Landing
CU FT - Cubic Feet
CV - Aircraft Carrier Suitable Variant
JDAM - Joint Direct Attack Munitions
KTS - Knots
NM - Nautical Miles
RCLW - Required Carrier Landing Weight
SGR - Sortie Generation Rate
ST - Short Tons
STO - Short Takeoff
STOVL - Short Takeoff and Vertical Landing
V_{pa} - Max Approach Speed
WOD - Wind Over the Deck

F-35 Engine

| Performance Characteristics | | | | |
|-----------------------------------|---|-----|--------------------------|------------------|
| SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Demonstrated Performance | Current Estimate |
| See Note | | | | |
| N/A | N/A | N/A | TBD | N/A |

Requirements Reference

Operational Requirements Document (ORD) Change 3 dated August 19, 2008 as modified by Joint Requirements Oversight Council Memorandum 040-12 dated March 16, 2012

Change Explanations

None

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.

Track to Budget

F-35 Aircraft

General Notes

F-35 is DoD's largest cooperative development program. In addition to DoD's funding lines, eight International Partners are providing funding in the System Development and Demonstration (SDD) Phase under a Memorandum of Understanding (MOU): United Kingdom, Italy, The Netherlands, Turkey, Canada, Australia, Denmark, and Norway. All but Turkey and Australia were partners in the prior phase. Associated financial contributions are reflected in the Annual Funding section as Appropriation 9999, RDT&E Non-Treasury Funds. RDT&E cost excludes Follow-on Modernization Funding: F-35A/B/C Follow-on Development (FOD); F-35B/C Sustainment/Capability Enhancements; F-35A Deployability and Suitability Enhancements; and F-35A Dual Capable Aircraft Enhancements.

RDT&E

| Appn | BA | PE | | |
|--------------|----------------|----|--|--------|
| Navy | 1319 | 04 | 0603800N | |
| | Project | | Name | |
| | 2209 | | RDT&E, Navy CDP | (Sunk) |
| Navy | 1319 | 05 | 0604800M | |
| | Project | | Name | |
| | 2262 | | Joint Strike Fighter - EMD | |
| Navy | 1319 | 05 | 0604800N | |
| | Project | | Name | |
| | 2261 | | JT Strike Fighter - EMD | |
| | 3194 | | RDT&E, Navy EMD/Joint Reprogramming Center | (Sunk) |
| Air Force | 3600 | 04 | 0603800F | |
| | Project | | Name | |
| | 2025 | | RDT&E, Air Force CDP | (Sunk) |
| Air Force | 3600 | 05 | 0604800F | |
| | Project | | Name | |
| | 3831 | | F-35 - EMD | |
| Defense-Wide | 0400 | 03 | 0603800E | |
| | Project | | Name | |
| | | | RDT&E, DARPA | (Sunk) |

Procurement

| Appn | BA | PE | | |
|------|------------------|----|-------------------------|--|
| Navy | 1506 | 01 | 0204146N | |
| | Line Item | | Name | |
| | 0147 | | Joint Strike Fighter CV | |
| Navy | 1506 | 01 | 0204146M | |
| | Line Item | | Name | |

| | | | | |
|-----------|------------------|----|-----------------------------|----------|
| | 0152 | | JSF STOVL | |
| Navy | 1506 | 05 | 0204146M | |
| | Line Item | | Name | |
| | 0592 | | F-35 STOVL Series | |
| Navy | 1506 | 05 | 0204146N | |
| | Line Item | | Name | |
| | 0593 | | F-35 CV Series | |
| Navy | 1506 | 06 | 0204146M | |
| | Line Item | | Name | |
| | 0605 | | Spares and Repair Parts | (Shared) |
| Navy | 1506 | 06 | 0204146N | |
| | Line Item | | Name | |
| | 0605 | | Spares and Repair Parts | (Shared) |
| Air Force | 3010 | 06 | 0207142F | |
| | Line Item | | Name | |
| | 000999 | | Initial Spares/Repair Parts | (Shared) |
| Air Force | 3010 | 01 | 0207142F | |
| | Line Item | | Name | |
| | ATA000 | | F-35 | |
| Air Force | 3010 | 05 | 0207142F | |
| | Line Item | | Name | |
| | F03500 | | F-35 Modifications | |

MILCON

| | Appn | BA | PE | |
|-----------|----------------|----|-------------|-----------------|
| Navy | 1205 | 01 | 0212576N | |
| | Project | | Name | |
| | | | MILCON, USN | (Shared) |
| Navy | 1205 | 01 | 0216496M | |
| | Project | | Name | |
| | | | MILCON, USN | (Shared) |
| Navy | 1205 | 01 | 0816376N | |
| | Project | | Name | |
| | | | MILCON, USN | (Shared) (Sunk) |
| Air Force | 3300 | 01 | 0052635F | |
| | Project | | Name | |
| | | | MILCON, AF | (Shared) |
| Air Force | 3300 | 01 | 0207142F | |
| | Project | | Name | |
| | | | MILCON, AF | (Shared) |
| Air Force | 3300 | 01 | 0207597F | |
| | Project | | Name | |
| | | | MILCON, AF | (Shared) |

F-35 Engine

General Notes

F-35 is DoD's largest cooperative development program. In addition to DoD's funding lines, eight International Partners are providing funding in the System Development and Demonstration (SDD) Phase under a Memorandum of Understanding (MOU): United Kingdom, Italy, The Netherlands, Turkey, Canada, Australia, Denmark, and Norway. All but Turkey and Australia were partners in the prior phase. Associated financial contributions are reflected in the Annual Funding section as Appropriation 9999, RDT&E Non-Treasury Funds. RDT&E cost excludes Follow-on Modernization funding: F-35A/B/C Follow-on Development (FOD); F-35B/C Sustainment/Capability Enhancements; F-35A Deployability and Suitability Enhancements; and F-35A Dual Capable Aircraft Enhancements.

RDT&E

| Appn | BA | PE | |
|--------------|----------------|---|----------|
| Navy | 1319 | 04 | 0603800N |
| | Project | Name | |
| | 2209 | RDT&E, Navy CDP (Sunk) | |
| Navy | 1319 | 05 | 0604800M |
| | Project | Name | |
| | 2262 | RDT&E, Marine Corps | |
| Navy | 1319 | 05 | 0604800N |
| | Project | Name | |
| | 2261 | RDT&E, Navy EMD/JSF | |
| | 3194 | RDT&E, Navy EMD/Joint Reprogramming Center (Sunk) | |
| | 9999 | RDT&E, Navy EMD/Congressional Adds (Sunk) | |
| Air Force | 3600 | 04 | 0603800F |
| | Project | Name | |
| | 2025 | RDT&E, Air Force CDP (Sunk) | |
| Air Force | 3600 | 05 | 0604800F |
| | Project | Name | |
| | 3831 | RDT&E, Air Force EMD/Joint Strike Fighter Quantity of RDT&E Articles | |
| Defense-Wide | 0400 | 03 | 0603800E |
| | Project | Name | |
| | | RDT&E, DARPA (Sunk) | |

Procurement

| Appn | BA | PE | |
|------|------------------|--------------------|----------|
| Navy | 1506 | 01 | 0204146N |
| | Line Item | Name | |
| | 0147 | JSF (Navy) | |
| Navy | 1506 | 01 | 0204146M |
| | Line Item | Name | |
| | 0152 | JSF (Marine Corps) | |

Navy 1506 06 0204146M

| Line Item | Name |
|-----------|------|
|-----------|------|

0605 Initial Spares (Marine Corps) (Shared)

Navy 1506 06 0204146N

| Line Item | Name |
|-----------|------|
|-----------|------|

0605 Initial Spares (Navy) (Shared)

Air Force 3010 06 0207142F

| Line Item | Name |
|-----------|------|
|-----------|------|

000999 Initial Spares (Air Force) (Shared)

Air Force 3010 01 0207142F

| Line Item | Name |
|-----------|------|
|-----------|------|

ATA000 JSF (Air Force)

Air Force 3010 05 0207142F

| Line Item | Name |
|-----------|------|
|-----------|------|

F03500 Mods (Air Force)

Cost and Funding

Cost Summary - Total Program

| Total Acquisition Cost - Total Program | | | | | | | |
|--|-----------------------------------|---|-----|------------------|-----------------------------------|-----------------------------------|------------------|
| Appropriation | BY 2012 \$M | | | BY 2012 \$M | TY \$M | | |
| | SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Current Estimate | SAR Baseline Development Estimate | Current APB Development Objective | Current Estimate |
| RDT&E | 59677.3 | 59398.1 | -- | 59491.2 | 55233.8 | 55182.9 | 55133.0 |
| Procurement | 266665.8 | 266665.8 | -- | 249667.8 | 335680.7 | 335680.7 | 319115.7 |
| Flyaway | -- | -- | -- | 222668.7 | -- | -- | 286951.9 |
| Recurring | -- | -- | -- | 197002.0 | -- | -- | 255294.7 |
| Non Recurring | -- | -- | -- | 25666.7 | -- | -- | 31657.2 |
| Support | -- | -- | -- | 26999.1 | -- | -- | 32163.8 |
| Other Support | -- | -- | -- | 16223.6 | -- | -- | 19225.3 |
| Initial Spares | -- | -- | -- | 10775.5 | -- | -- | 12938.5 |
| MILCON | 4168.0 | 4168.0 | -- | 4101.4 | 4797.3 | 4797.3 | 4793.3 |
| Acq O&M | 0.0 | 0.0 | -- | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 330511.1 | 330231.9 | N/A | 313260.4 | 395711.8 | 395660.9 | 379042.0 |

Cost and Funding

Cost Summary - F-35 Aircraft

| Total Acquisition Cost - F-35 Aircraft | | | | | | | |
|--|-----------------------------------|---|----------|------------------|-----------------------------------|-----------------------------------|------------------|
| Appropriation | BY 2012 \$M | | | BY 2012 \$M | TY \$M | | |
| | SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Current Estimate | SAR Baseline Development Estimate | Current APB Development Objective | Current Estimate |
| RDT&E | 47982.1 | 46457.5 | 51103.3 | 46368.6 | 44410.1 | 43360.7 | 43170.1 |
| Procurement | 224332.9 | 224332.9 | 246766.2 | 211290.9 | 282647.8 | 282647.8 | 270427.5 |
| Flyaway | -- | -- | -- | 189120.8 | -- | -- | 244057.7 |
| Recurring | -- | -- | -- | 166222.4 | -- | -- | 215735.2 |
| Non Recurring | -- | -- | -- | 22898.4 | -- | -- | 28322.5 |
| Support | -- | -- | -- | 22170.1 | -- | -- | 26369.8 |
| Other Support | -- | -- | -- | 14549.0 | -- | -- | 17248.4 |
| Initial Spares | -- | -- | -- | 7621.1 | -- | -- | 9121.4 |
| MILCON | 4168.0 | 4168.0 | 4584.8 | 4101.4 | 4797.3 | 4797.3 | 4793.3 |
| Acq O&M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 276483.0 | 274958.4 | N/A | 261760.9 | 331855.2 | 330805.8 | 318390.9 |

Current APB Cost Estimate Reference

Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) dated March 09, 2012

Confidence Level

Confidence Level of cost estimate for current APB: 50%

This estimate, like all previous Cost Analysis Improvement Group (CAIG) and Cost Assessment and Program Evaluation (CAPE) estimates, is built upon a product-oriented work breakdown structure; is based on historical actual cost information to the maximum extent possible; and, most importantly, is based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition program (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimates will prove too low or too high for execution of the program described.

| Total Quantity - F-35 Aircraft | | | |
|--------------------------------|-----------------------------------|-------------------------|------------------|
| Quantity | SAR Baseline Development Estimate | Current APB Development | Current Estimate |
| RDT&E | 14 | 14 | 14 |
| Procurement | 2443 | 2443 | 2443 |
| Total | 2457 | 2457 | 2457 |

Cost Summary - F-35 Engine

| Total Acquisition Cost - F-35 Engine | | | | | | | |
|--------------------------------------|-----------------------------------|---|---------|------------------|-----------------------------------|-----------------------------------|------------------|
| Appropriation | BY 2012 \$M | | | BY 2012 \$M | TY \$M | | |
| | SAR Baseline Development Estimate | Current APB Development Objective/Threshold | | Current Estimate | SAR Baseline Development Estimate | Current APB Development Objective | Current Estimate |
| RDT&E | 11695.2 | 12940.6 | 14234.7 | 13122.6 | 10823.7 | 11822.2 | 11962.9 |
| Procurement | 42332.9 | 42332.9 | 46566.2 | 38376.9 | 53032.9 | 53032.9 | 48688.2 |
| Flyaway | -- | -- | -- | 33547.9 | -- | -- | 42894.2 |
| Recurring | -- | -- | -- | 30779.6 | -- | -- | 39559.5 |
| Non Recurring | -- | -- | -- | 2768.3 | -- | -- | 3334.7 |
| Support | -- | -- | -- | 4829.0 | -- | -- | 5794.0 |
| Other Support | -- | -- | -- | 1674.6 | -- | -- | 1976.9 |
| Initial Spares | -- | -- | -- | 3154.4 | -- | -- | 3817.1 |
| MILCON | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Acq O&M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 54028.1 | 55273.5 | N/A | 51499.5 | 63856.6 | 64855.1 | 60651.1 |

Current APB Cost Estimate Reference

Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) dated March 09, 2012

Confidence Level

Confidence Level of cost estimate for current APB: 50%

This estimate, like all previous Cost Analysis Improvement Group (CAIG) and Cost Assessment and Program Evaluation (CAPE) estimates, is built upon a product-oriented work breakdown structure; is based on historical actual cost information to the maximum extent possible; and, most importantly, is based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition program (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimates will prove too low or too high for execution of the program described.

| Total Quantity - F-35 Engine | | | |
|------------------------------|-----------------------------------|-------------------------|------------------|
| Quantity | SAR Baseline Development Estimate | Current APB Development | Current Estimate |
| RDT&E | 14 | 14 | 14 |
| Procurement | 2443 | 2443 | 2443 |
| Total | 2457 | 2457 | 2457 |

Cost and Funding

Funding Summary - Total Program

| Appropriation Summary | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|-------------|----------|
| FY 2017 President's Budget / December 2015 SAR (TY\$ M) | | | | | | | | | |
| Appropriation | Prior | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | To Complete | Total |
| RDT&E | 51881.1 | 1506.2 | 1436.9 | 273.3 | 14.9 | 11.2 | 9.4 | 0.0 | 55133.0 |
| Procurement | 46173.0 | 9876.8 | 8703.0 | 10593.3 | 10402.1 | 11278.6 | 13107.0 | 208981.9 | 319115.7 |
| MILCON | 1489.6 | 292.7 | 571.7 | 165.7 | 183.5 | 135.7 | 116.2 | 1838.2 | 4793.3 |
| Acq O&M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| PB 2017 Total | 99543.7 | 11675.7 | 10711.6 | 11032.3 | 10600.5 | 11425.5 | 13232.6 | 210820.1 | 379042.0 |
| PB 2016 Total | 99532.9 | 10959.5 | 11586.7 | 12093.5 | 12034.6 | 11906.9 | 12358.6 | 220662.0 | 391134.7 |
| Delta | 10.8 | 716.2 | -875.1 | -1061.2 | -1434.1 | -481.4 | 874.0 | -9841.9 | -12092.7 |

Cost and Funding

Funding Summary - F-35 Aircraft

| Appropriation Summary | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|-------------|----------|
| FY 2017 President's Budget / December 2015 SAR (TY\$ M) | | | | | | | | | |
| Appropriation | Prior | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | To Complete | Total |
| RDT&E | 40174.4 | 1306.6 | 1380.3 | 273.3 | 14.9 | 11.2 | 9.4 | 0.0 | 43170.1 |
| Procurement | 39405.5 | 8625.9 | 7194.4 | 8784.0 | 8627.7 | 9366.7 | 10866.2 | 177557.1 | 270427.5 |
| MILCON | 1489.6 | 292.7 | 571.7 | 165.7 | 183.5 | 135.7 | 116.2 | 1838.2 | 4793.3 |
| Acq O&M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| PB 2017 Total | 81069.5 | 10225.2 | 9146.4 | 9223.0 | 8826.1 | 9513.6 | 10991.8 | 179395.3 | 318390.9 |
| PB 2016 Total | 81040.1 | 9508.6 | 10072.4 | 10305.4 | 10076.7 | 9893.0 | 10216.9 | 183008.2 | 324121.3 |
| Delta | 29.4 | 716.6 | -926.0 | -1082.4 | -1250.6 | -379.4 | 774.9 | -3612.9 | -5730.4 |

| Quantity Summary | | | | | | | | | | |
|---|---------------|-------|---------|---------|---------|---------|---------|---------|-------------|-------|
| FY 2017 President's Budget / December 2015 SAR (TY\$ M) | | | | | | | | | | |
| Quantity | Undistributed | Prior | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | To Complete | Total |
| Development | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Production | 0 | 217 | 68 | 63 | 70 | 80 | 86 | 105 | 1754 | 2443 |
| PB 2017 Total | 14 | 217 | 68 | 63 | 70 | 80 | 86 | 105 | 1754 | 2457 |
| PB 2016 Total | 14 | 217 | 57 | 66 | 88 | 90 | 92 | 100 | 1733 | 2457 |
| Delta | 0 | 0 | 11 | -3 | -18 | -10 | -6 | 5 | 21 | 0 |

Funding Summary - F-35 Engine

| Appropriation Summary | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|-------------|---------|
| FY 2017 President's Budget / December 2015 SAR (TY\$ M) | | | | | | | | | |
| Appropriation | Prior | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | To Complete | Total |
| RDT&E | 11706.7 | 199.6 | 56.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11962.9 |
| Procurement | 6767.5 | 1250.9 | 1508.6 | 1809.3 | 1774.4 | 1911.9 | 2240.8 | 31424.8 | 48688.2 |
| MILCON | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Acq O&M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| PB 2017 Total | 18474.2 | 1450.5 | 1565.2 | 1809.3 | 1774.4 | 1911.9 | 2240.8 | 31424.8 | 60651.1 |
| PB 2016 Total | 18492.8 | 1450.9 | 1514.3 | 1788.1 | 1957.9 | 2013.9 | 2141.7 | 37653.8 | 67013.4 |
| Delta | -18.6 | -0.4 | 50.9 | 21.2 | -183.5 | -102.0 | 99.1 | -6229.0 | -6362.3 |

| Quantity Summary | | | | | | | | | | |
|---|---------------|-------|---------|---------|---------|---------|---------|---------|-------------|-------|
| FY 2017 President's Budget / December 2015 SAR (TY\$ M) | | | | | | | | | | |
| Quantity | Undistributed | Prior | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | To Complete | Total |
| Development | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Production | 0 | 217 | 68 | 63 | 70 | 80 | 86 | 105 | 1754 | 2443 |
| PB 2017 Total | 14 | 217 | 68 | 63 | 70 | 80 | 86 | 105 | 1754 | 2457 |
| PB 2016 Total | 14 | 217 | 57 | 66 | 88 | 90 | 92 | 100 | 1733 | 2457 |
| Delta | 0 | 0 | 11 | -3 | -18 | -10 | -6 | 5 | 21 | 0 |

Cost and Funding

Annual Funding By Appropriation - F-35 Aircraft

| Annual Funding - F-35 Aircraft | | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|----|---------------|
| 0400 RDT&E Research, Development, Test, and Evaluation, Defense-Wide | | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | | Total Program |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | | |
| 1996 | -- | -- | -- | -- | -- | -- | -- | 23.2 |
| 1997 | -- | -- | -- | -- | -- | -- | -- | 54.8 |
| 1998 | -- | -- | -- | -- | -- | -- | -- | 16.9 |
| Subtotal | -- | -- | -- | -- | -- | -- | -- | 94.9 |

| Annual Funding - F-35 Aircraft | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 0400 RDT&E Research, Development, Test, and Evaluation, Defense-Wide | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1996 | -- | -- | -- | -- | -- | -- | 30.1 |
| 1997 | -- | -- | -- | -- | -- | -- | 70.2 |
| 1998 | -- | -- | -- | -- | -- | -- | 21.5 |
| Subtotal | -- | -- | -- | -- | -- | -- | 121.8 |

| Annual Funding - F-35 Aircraft | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 3600 RDT&E Research, Development, Test, and Evaluation, Air Force | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1995 | -- | -- | -- | -- | -- | -- | 67.5 |
| 1996 | -- | -- | -- | -- | -- | -- | 65.4 |
| 1997 | -- | -- | -- | -- | -- | -- | 202.3 |
| 1998 | -- | -- | -- | -- | -- | -- | 357.2 |
| 1999 | -- | -- | -- | -- | -- | -- | 366.5 |
| 2000 | -- | -- | -- | -- | -- | -- | 200.3 |
| 2001 | -- | -- | -- | -- | -- | -- | 274.3 |
| 2002 | -- | -- | -- | -- | -- | -- | 302.6 |
| 2003 | -- | -- | -- | -- | -- | -- | 1210.1 |
| 2004 | -- | -- | -- | -- | -- | -- | 1584.1 |
| 2005 | -- | -- | -- | -- | -- | -- | 1465.8 |
| 2006 | -- | -- | -- | -- | -- | -- | 1678.6 |
| 2007 | -- | -- | -- | -- | -- | -- | 1632.4 |
| 2008 | -- | -- | -- | -- | -- | -- | 1359.0 |
| 2009 | -- | -- | -- | -- | -- | -- | 1197.5 |
| 2010 | -- | -- | -- | -- | -- | -- | 1567.4 |
| 2011 | -- | -- | -- | -- | -- | -- | 715.4 |
| 2012 | -- | -- | -- | -- | -- | -- | 1262.2 |
| 2013 | -- | -- | -- | -- | -- | -- | 972.1 |
| 2014 | -- | -- | -- | -- | -- | -- | 553.6 |
| 2015 | -- | -- | -- | -- | -- | -- | 479.8 |
| 2016 | -- | -- | -- | -- | -- | -- | 457.1 |
| 2017 | -- | -- | -- | -- | -- | -- | 389.0 |
| 2018 | -- | -- | -- | -- | -- | -- | 113.6 |
| 2019 | -- | -- | -- | -- | -- | -- | 5.3 |
| 2020 | -- | -- | -- | -- | -- | -- | 5.4 |
| 2021 | -- | -- | -- | -- | -- | -- | 5.5 |
| Subtotal | 5 | -- | -- | -- | -- | -- | 18490.0 |

| Annual Funding - F-35 Aircraft | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 3600 RDT&E Research, Development, Test, and Evaluation, Air Force | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1995 | -- | -- | -- | -- | -- | -- | 89.1 |
| 1996 | -- | -- | -- | -- | -- | -- | 84.9 |
| 1997 | -- | -- | -- | -- | -- | -- | 259.5 |
| 1998 | -- | -- | -- | -- | -- | -- | 454.5 |
| 1999 | -- | -- | -- | -- | -- | -- | 460.9 |
| 2000 | -- | -- | -- | -- | -- | -- | 248.3 |
| 2001 | -- | -- | -- | -- | -- | -- | 335.4 |
| 2002 | -- | -- | -- | -- | -- | -- | 366.3 |
| 2003 | -- | -- | -- | -- | -- | -- | 1443.6 |
| 2004 | -- | -- | -- | -- | -- | -- | 1838.4 |
| 2005 | -- | -- | -- | -- | -- | -- | 1657.5 |
| 2006 | -- | -- | -- | -- | -- | -- | 1840.8 |
| 2007 | -- | -- | -- | -- | -- | -- | 1747.3 |
| 2008 | -- | -- | -- | -- | -- | -- | 1428.6 |
| 2009 | -- | -- | -- | -- | -- | -- | 1242.9 |
| 2010 | -- | -- | -- | -- | -- | -- | 1602.8 |
| 2011 | -- | -- | -- | -- | -- | -- | 714.5 |
| 2012 | -- | -- | -- | -- | -- | -- | 1240.0 |
| 2013 | -- | -- | -- | -- | -- | -- | 945.1 |
| 2014 | -- | -- | -- | -- | -- | -- | 530.7 |
| 2015 | -- | -- | -- | -- | -- | -- | 454.2 |
| 2016 | -- | -- | -- | -- | -- | -- | 425.8 |
| 2017 | -- | -- | -- | -- | -- | -- | 355.9 |
| 2018 | -- | -- | -- | -- | -- | -- | 101.9 |
| 2019 | -- | -- | -- | -- | -- | -- | 4.7 |
| 2020 | -- | -- | -- | -- | -- | -- | 4.7 |
| 2021 | -- | -- | -- | -- | -- | -- | 4.7 |
| Subtotal | 5 | -- | -- | -- | -- | -- | 19883.0 |

| Annual Funding - F-35 Aircraft | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 1319 RDT&E Research, Development, Test, and Evaluation, Navy | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1994 | -- | -- | -- | -- | -- | -- | 23.7 |
| 1995 | -- | -- | -- | -- | -- | -- | 78.7 |
| 1996 | -- | -- | -- | -- | -- | -- | 64.6 |
| 1997 | -- | -- | -- | -- | -- | -- | 195.6 |
| 1998 | -- | -- | -- | -- | -- | -- | 360.4 |
| 1999 | -- | -- | -- | -- | -- | -- | 378.9 |
| 2000 | -- | -- | -- | -- | -- | -- | 191.7 |
| 2001 | -- | -- | -- | -- | -- | -- | 274.3 |
| 2002 | -- | -- | -- | -- | -- | -- | 366.8 |
| 2003 | -- | -- | -- | -- | -- | -- | 1090.1 |
| 2004 | -- | -- | -- | -- | -- | -- | 1548.2 |
| 2005 | -- | -- | -- | -- | -- | -- | 1510.3 |
| 2006 | -- | -- | -- | -- | -- | -- | 1657.3 |
| 2007 | -- | -- | -- | -- | -- | -- | 1470.7 |
| 2008 | -- | -- | -- | -- | -- | -- | 1285.0 |
| 2009 | -- | -- | -- | -- | -- | -- | 1271.2 |
| 2010 | -- | -- | -- | -- | -- | -- | 1440.5 |
| 2011 | -- | -- | -- | -- | -- | -- | 987.9 |
| 2012 | -- | -- | -- | -- | -- | -- | 960.1 |
| 2013 | -- | -- | -- | -- | -- | -- | 1081.5 |
| 2014 | -- | -- | -- | -- | -- | -- | 683.6 |
| 2015 | -- | -- | -- | -- | -- | -- | 773.2 |
| 2016 | -- | -- | -- | -- | -- | -- | 832.5 |
| 2017 | -- | -- | -- | -- | -- | -- | 969.3 |
| 2018 | -- | -- | -- | -- | -- | -- | 132.2 |
| 2019 | -- | -- | -- | -- | -- | -- | 9.6 |
| 2020 | -- | -- | -- | -- | -- | -- | 5.8 |
| 2021 | -- | -- | -- | -- | -- | -- | 3.9 |
| Subtotal | 9 | -- | -- | -- | -- | -- | 19647.6 |

| Annual Funding - F-35 Aircraft | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 1319 RDT&E Research, Development, Test, and Evaluation, Navy | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1994 | -- | -- | -- | -- | -- | -- | 31.9 |
| 1995 | -- | -- | -- | -- | -- | -- | 103.9 |
| 1996 | -- | -- | -- | -- | -- | -- | 83.9 |
| 1997 | -- | -- | -- | -- | -- | -- | 250.9 |
| 1998 | -- | -- | -- | -- | -- | -- | 458.6 |
| 1999 | -- | -- | -- | -- | -- | -- | 476.5 |
| 2000 | -- | -- | -- | -- | -- | -- | 237.6 |
| 2001 | -- | -- | -- | -- | -- | -- | 335.4 |
| 2002 | -- | -- | -- | -- | -- | -- | 444.0 |
| 2003 | -- | -- | -- | -- | -- | -- | 1300.4 |
| 2004 | -- | -- | -- | -- | -- | -- | 1796.8 |
| 2005 | -- | -- | -- | -- | -- | -- | 1707.8 |
| 2006 | -- | -- | -- | -- | -- | -- | 1817.4 |
| 2007 | -- | -- | -- | -- | -- | -- | 1574.3 |
| 2008 | -- | -- | -- | -- | -- | -- | 1350.8 |
| 2009 | -- | -- | -- | -- | -- | -- | 1319.4 |
| 2010 | -- | -- | -- | -- | -- | -- | 1473.0 |
| 2011 | -- | -- | -- | -- | -- | -- | 986.6 |
| 2012 | -- | -- | -- | -- | -- | -- | 943.2 |
| 2013 | -- | -- | -- | -- | -- | -- | 1051.5 |
| 2014 | -- | -- | -- | -- | -- | -- | 655.3 |
| 2015 | -- | -- | -- | -- | -- | -- | 731.9 |
| 2016 | -- | -- | -- | -- | -- | -- | 775.5 |
| 2017 | -- | -- | -- | -- | -- | -- | 886.7 |
| 2018 | -- | -- | -- | -- | -- | -- | 118.6 |
| 2019 | -- | -- | -- | -- | -- | -- | 8.4 |
| 2020 | -- | -- | -- | -- | -- | -- | 5.0 |
| 2021 | -- | -- | -- | -- | -- | -- | 3.3 |
| Subtotal | 9 | -- | -- | -- | -- | -- | 20928.6 |

| Annual Funding - F-35 Aircraft 9999 RDT&E Non Treasury Funds | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1996 | -- | -- | -- | -- | -- | -- | 11.3 |
| 1997 | -- | -- | -- | -- | -- | -- | 67.1 |
| 1998 | -- | -- | -- | -- | -- | -- | 72.1 |
| 1999 | -- | -- | -- | -- | -- | -- | 49.0 |
| 2000 | -- | -- | -- | -- | -- | -- | 25.2 |
| 2001 | -- | -- | -- | -- | -- | -- | 9.5 |
| 2002 | -- | -- | -- | -- | -- | -- | 255.8 |
| 2003 | -- | -- | -- | -- | -- | -- | 298.7 |
| 2004 | -- | -- | -- | -- | -- | -- | 486.7 |
| 2005 | -- | -- | -- | -- | -- | -- | 734.8 |
| 2006 | -- | -- | -- | -- | -- | -- | 801.3 |
| 2007 | -- | -- | -- | -- | -- | -- | 635.4 |
| 2008 | -- | -- | -- | -- | -- | -- | 574.0 |
| 2009 | -- | -- | -- | -- | -- | -- | 236.0 |
| 2010 | -- | -- | -- | -- | -- | -- | 133.2 |
| 2011 | -- | -- | -- | -- | -- | -- | 171.3 |
| 2012 | -- | -- | -- | -- | -- | -- | 124.2 |
| 2013 | -- | -- | -- | -- | -- | -- | 148.5 |
| 2014 | -- | -- | -- | -- | -- | -- | 22.0 |
| 2015 | -- | -- | -- | -- | -- | -- | 15.0 |
| 2016 | -- | -- | -- | -- | -- | -- | 17.0 |
| 2017 | -- | -- | -- | -- | -- | -- | 22.0 |
| 2018 | -- | -- | -- | -- | -- | -- | 27.5 |
| Subtotal | -- | -- | -- | -- | -- | -- | 4937.6 |

| Annual Funding - F-35 Aircraft 9999 RDT&E Non Treasury Funds | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1996 | -- | -- | -- | -- | -- | -- | 14.7 |
| 1997 | -- | -- | -- | -- | -- | -- | 86.1 |
| 1998 | -- | -- | -- | -- | -- | -- | 91.7 |
| 1999 | -- | -- | -- | -- | -- | -- | 61.6 |
| 2000 | -- | -- | -- | -- | -- | -- | 31.2 |
| 2001 | -- | -- | -- | -- | -- | -- | 11.6 |
| 2002 | -- | -- | -- | -- | -- | -- | 309.6 |
| 2003 | -- | -- | -- | -- | -- | -- | 356.3 |
| 2004 | -- | -- | -- | -- | -- | -- | 564.8 |
| 2005 | -- | -- | -- | -- | -- | -- | 830.9 |
| 2006 | -- | -- | -- | -- | -- | -- | 878.7 |
| 2007 | -- | -- | -- | -- | -- | -- | 680.1 |
| 2008 | -- | -- | -- | -- | -- | -- | 603.4 |
| 2009 | -- | -- | -- | -- | -- | -- | 244.9 |
| 2010 | -- | -- | -- | -- | -- | -- | 136.2 |
| 2011 | -- | -- | -- | -- | -- | -- | 171.1 |
| 2012 | -- | -- | -- | -- | -- | -- | 122.0 |
| 2013 | -- | -- | -- | -- | -- | -- | 144.4 |
| 2014 | -- | -- | -- | -- | -- | -- | 21.1 |
| 2015 | -- | -- | -- | -- | -- | -- | 14.2 |
| 2016 | -- | -- | -- | -- | -- | -- | 15.8 |
| 2017 | -- | -- | -- | -- | -- | -- | 20.1 |
| 2018 | -- | -- | -- | -- | -- | -- | 24.7 |
| Subtotal | -- | -- | -- | -- | -- | -- | 5435.2 |

| Annual Funding - F-35 Aircraft | | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|--|
| 3010 Procurement Aircraft Procurement, Air Force | | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program | |
| 2006 | -- | 107.6 | -- | -- | 107.6 | -- | 107.6 | |
| 2007 | 2 | 428.5 | -- | 80.8 | 509.3 | 91.1 | 600.4 | |
| 2008 | 6 | 983.1 | -- | 172.3 | 1155.4 | 131.5 | 1286.9 | |
| 2009 | 7 | 1009.2 | -- | 277.6 | 1286.8 | 175.8 | 1462.6 | |
| 2010 | 10 | 1471.2 | -- | 355.7 | 1826.9 | 277.7 | 2104.6 | |
| 2011 | 22 | 2751.2 | -- | 569.1 | 3320.3 | 679.6 | 3999.9 | |
| 2012 | 18 | 2041.5 | -- | 375.7 | 2417.2 | 773.0 | 3190.2 | |
| 2013 | 19 | 2074.6 | -- | 76.6 | 2151.2 | 528.9 | 2680.1 | |
| 2014 | 19 | 2034.6 | -- | 617.8 | 2652.4 | 433.0 | 3085.4 | |
| 2015 | 28 | 2715.8 | -- | 625.0 | 3340.8 | 605.0 | 3945.8 | |
| 2016 | 47 | 4076.0 | -- | 561.5 | 4637.5 | 626.3 | 5263.8 | |
| 2017 | 43 | 3339.3 | -- | 649.7 | 3989.0 | 488.5 | 4477.5 | |
| 2018 | 44 | 3584.0 | -- | 1070.4 | 4654.4 | 559.4 | 5213.8 | |
| 2019 | 48 | 3247.9 | -- | 1079.3 | 4327.2 | 566.2 | 4893.4 | |
| 2020 | 48 | 3473.2 | -- | 886.9 | 4360.1 | 638.0 | 4998.1 | |
| 2021 | 60 | 4300.8 | -- | 709.3 | 5010.1 | 802.1 | 5812.2 | |
| 2022 | 80 | 6091.5 | -- | 640.6 | 6732.1 | 748.4 | 7480.5 | |
| 2023 | 80 | 5332.8 | -- | 609.7 | 5942.5 | 648.7 | 6591.2 | |
| 2024 | 80 | 5462.0 | -- | 620.7 | 6082.7 | 717.2 | 6799.9 | |
| 2025 | 80 | 6101.5 | -- | 634.5 | 6736.0 | 605.3 | 7341.3 | |
| 2026 | 80 | 6961.8 | -- | 647.4 | 7609.2 | 818.1 | 8427.3 | |
| 2027 | 80 | 6472.7 | -- | 598.4 | 7071.1 | 648.5 | 7719.6 | |
| 2028 | 80 | 5901.4 | -- | 607.9 | 6509.3 | 599.3 | 7108.6 | |
| 2029 | 80 | 5990.1 | -- | 616.6 | 6606.7 | 487.4 | 7094.1 | |
| 2030 | 80 | 6622.5 | -- | 634.0 | 7256.5 | 547.0 | 7803.5 | |
| 2031 | 80 | 7570.5 | -- | 649.8 | 8220.3 | 699.2 | 8919.5 | |
| 2032 | 80 | 7465.0 | -- | 676.1 | 8141.1 | 645.3 | 8786.4 | |
| 2033 | 80 | 6998.0 | -- | 694.7 | 7692.7 | 571.2 | 8263.9 | |
| 2034 | 80 | 7179.5 | -- | 698.4 | 7877.9 | 75.3 | 7953.2 | |
| 2035 | 80 | 7878.9 | -- | 711.8 | 8590.7 | 32.9 | 8623.6 | |
| 2036 | 80 | 8035.0 | -- | 722.5 | 8757.5 | 29.1 | 8786.6 | |
| 2037 | 80 | 8150.0 | -- | 676.7 | 8826.7 | 20.7 | 8847.4 | |
| 2038 | 62 | 6604.9 | -- | 552.2 | 7157.1 | 6.2 | 7163.3 | |
| Subtotal | 1763 | 152456.6 | -- | 19099.7 | 171556.3 | 15275.9 | 186832.2 | |

| Annual Funding - F-35 Aircraft | | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|--|
| 3010 Procurement Aircraft Procurement, Air Force | | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program | |
| 2006 | -- | 116.8 | -- | -- | 116.8 | -- | 116.8 | |
| 2007 | 2 | 452.5 | -- | 85.4 | 537.9 | 96.2 | 634.1 | |
| 2008 | 6 | 1022.9 | -- | 179.3 | 1202.2 | 136.8 | 1339.0 | |
| 2009 | 7 | 1035.7 | -- | 284.7 | 1320.4 | 180.5 | 1500.9 | |
| 2010 | 10 | 1478.8 | -- | 357.6 | 1836.4 | 279.1 | 2115.5 | |
| 2011 | 22 | 2711.7 | -- | 561.0 | 3272.7 | 669.8 | 3942.5 | |
| 2012 | 18 | 1983.8 | -- | 365.1 | 2348.9 | 751.1 | 3100.0 | |
| 2013 | 19 | 1994.5 | -- | 73.6 | 2068.1 | 508.5 | 2576.6 | |
| 2014 | 19 | 1930.9 | -- | 586.3 | 2517.2 | 411.0 | 2928.2 | |
| 2015 | 28 | 2539.2 | -- | 584.4 | 3123.6 | 565.6 | 3689.2 | |
| 2016 | 47 | 3746.2 | -- | 516.1 | 4262.3 | 575.6 | 4837.9 | |
| 2017 | 43 | 3011.8 | -- | 586.0 | 3597.8 | 440.6 | 4038.4 | |
| 2018 | 44 | 3170.3 | -- | 946.7 | 4117.0 | 494.9 | 4611.9 | |
| 2019 | 48 | 2816.6 | -- | 936.1 | 3752.7 | 491.0 | 4243.7 | |
| 2020 | 48 | 2953.0 | -- | 754.1 | 3707.1 | 542.4 | 4249.5 | |
| 2021 | 60 | 3584.9 | -- | 591.2 | 4176.1 | 668.6 | 4844.7 | |
| 2022 | 80 | 4978.0 | -- | 523.5 | 5501.5 | 611.6 | 6113.1 | |
| 2023 | 80 | 4272.5 | -- | 488.5 | 4761.0 | 519.7 | 5280.7 | |
| 2024 | 80 | 4290.2 | -- | 487.6 | 4777.8 | 563.3 | 5341.1 | |
| 2025 | 80 | 4698.6 | -- | 488.6 | 5187.2 | 466.1 | 5653.3 | |
| 2026 | 80 | 5255.9 | -- | 488.7 | 5744.6 | 617.7 | 6362.3 | |
| 2027 | 80 | 4790.9 | -- | 442.9 | 5233.8 | 480.0 | 5713.8 | |
| 2028 | 80 | 4282.4 | -- | 441.2 | 4723.6 | 434.8 | 5158.4 | |
| 2029 | 80 | 4261.5 | -- | 438.6 | 4700.1 | 346.8 | 5046.9 | |
| 2030 | 80 | 4619.0 | -- | 442.2 | 5061.2 | 381.5 | 5442.7 | |
| 2031 | 80 | 5176.7 | -- | 444.3 | 5621.0 | 478.1 | 6099.1 | |
| 2032 | 80 | 5004.5 | -- | 453.2 | 5457.7 | 432.6 | 5890.3 | |
| 2033 | 80 | 4599.4 | -- | 456.6 | 5056.0 | 375.4 | 5431.4 | |
| 2034 | 80 | 4626.2 | -- | 450.0 | 5076.2 | 48.5 | 5124.7 | |
| 2035 | 80 | 4935.2 | -- | 445.8 | 5381.0 | 20.6 | 5401.6 | |
| 2036 | 80 | 4934.3 | -- | 443.6 | 5377.9 | 17.9 | 5395.8 | |
| 2037 | 80 | 4906.7 | -- | 407.4 | 5314.1 | 12.5 | 5326.6 | |
| 2038 | 62 | 3898.5 | -- | 325.9 | 4224.4 | 3.7 | 4228.1 | |
| Subtotal | 1763 | 114080.1 | -- | 15076.2 | 129156.3 | 12622.5 | 141778.8 | |

| Cost Quantity Information - F-35 Aircraft 3010 Procurement Aircraft Procurement, Air Force | | |
|---|----------|---|
| Fiscal Year | Quantity | End Item Recurring Flyaway (Aligned With Quantity) BY 2012 \$M |
| 2006 | -- | -- |
| 2007 | 2 | 452.5 |
| 2008 | 6 | 1022.9 |
| 2009 | 7 | 1035.7 |
| 2010 | 10 | 1478.8 |
| 2011 | 22 | 2711.7 |
| 2012 | 18 | 1983.8 |
| 2013 | 19 | 1994.5 |
| 2014 | 19 | 1930.9 |
| 2015 | 28 | 2539.2 |
| 2016 | 47 | 3746.2 |
| 2017 | 43 | 3011.8 |
| 2018 | 44 | 3170.3 |
| 2019 | 48 | 2816.6 |
| 2020 | 48 | 2953.0 |
| 2021 | 60 | 3584.9 |
| 2022 | 80 | 4978.0 |
| 2023 | 80 | 4272.5 |
| 2024 | 80 | 4290.2 |
| 2025 | 80 | 4698.6 |
| 2026 | 80 | 5255.9 |
| 2027 | 80 | 4790.9 |
| 2028 | 80 | 4282.4 |
| 2029 | 80 | 4261.5 |
| 2030 | 80 | 4619.0 |
| 2031 | 80 | 5176.7 |
| 2032 | 80 | 5004.5 |
| 2033 | 80 | 4599.4 |
| 2034 | 80 | 4626.2 |
| 2035 | 80 | 4935.2 |
| 2036 | 80 | 4934.3 |
| 2037 | 80 | 4906.7 |
| 2038 | 62 | 4015.3 |
| Subtotal | 1763 | 114080.1 |

| Annual Funding - F-35 Aircraft | | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|--|
| 1506 Procurement Aircraft Procurement, Navy | | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program | |
| 2007 | -- | 96.9 | -- | -- | 96.9 | -- | 96.9 | |
| 2008 | 6 | 923.2 | -- | 38.6 | 961.8 | 10.7 | 972.5 | |
| 2009 | 7 | 1062.0 | -- | 182.0 | 1244.0 | 206.1 | 1450.1 | |
| 2010 | 20 | 2681.2 | -- | 305.4 | 2986.6 | 560.9 | 3547.5 | |
| 2011 | 10 | 1494.8 | -- | 251.0 | 1745.8 | 431.8 | 2177.6 | |
| 2012 | 13 | 1477.7 | -- | 330.2 | 1807.9 | 746.7 | 2554.6 | |
| 2013 | 10 | 1107.3 | -- | 44.1 | 1151.4 | 557.3 | 1708.7 | |
| 2014 | 10 | 1205.5 | -- | 406.3 | 1611.8 | 642.3 | 2254.1 | |
| 2015 | 10 | 1115.0 | -- | 650.9 | 1765.9 | 414.1 | 2180.0 | |
| 2016 | 21 | 2130.3 | -- | 601.9 | 2732.2 | 629.9 | 3362.1 | |
| 2017 | 20 | 1867.2 | -- | 422.9 | 2290.1 | 426.8 | 2716.9 | |
| 2018 | 26 | 2555.1 | -- | 668.2 | 3223.3 | 346.9 | 3570.2 | |
| 2019 | 32 | 2648.5 | -- | 603.2 | 3251.7 | 482.6 | 3734.3 | |
| 2020 | 38 | 3242.8 | -- | 501.5 | 3744.3 | 624.3 | 4368.6 | |
| 2021 | 45 | 3731.8 | -- | 535.4 | 4267.2 | 786.8 | 5054.0 | |
| 2022 | 45 | 4015.2 | -- | 396.9 | 4412.1 | 644.6 | 5056.7 | |
| 2023 | 45 | 3511.2 | -- | 377.5 | 3888.7 | 533.7 | 4422.4 | |
| 2024 | 45 | 3566.7 | -- | 368.0 | 3934.7 | 490.6 | 4425.3 | |
| 2025 | 45 | 3896.6 | -- | 377.9 | 4274.5 | 400.8 | 4675.3 | |
| 2026 | 45 | 4396.8 | -- | 381.4 | 4778.2 | 441.8 | 5220.0 | |
| 2027 | 45 | 4131.9 | -- | 358.6 | 4490.5 | 335.6 | 4826.1 | |
| 2028 | 45 | 3834.2 | -- | 364.0 | 4198.2 | 369.0 | 4567.2 | |
| 2029 | 45 | 3721.1 | -- | 356.9 | 4078.0 | 260.7 | 4338.7 | |
| 2030 | 28 | 2685.4 | -- | 373.5 | 3058.9 | 388.6 | 3447.5 | |
| 2031 | 24 | 2180.2 | -- | 326.5 | 2506.7 | 361.3 | 2868.0 | |
| Subtotal | 680 | 63278.6 | -- | 9222.8 | 72501.4 | 11093.9 | 83595.3 | |

| Annual Funding - F-35 Aircraft | | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|--|
| 1506 Procurement Aircraft Procurement, Navy | | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program | |
| 2007 | -- | 102.3 | -- | -- | 102.3 | -- | 102.3 | |
| 2008 | 6 | 960.6 | -- | 40.2 | 1000.8 | 11.1 | 1011.9 | |
| 2009 | 7 | 1089.8 | -- | 186.8 | 1276.6 | 211.5 | 1488.1 | |
| 2010 | 20 | 2695.1 | -- | 307.0 | 3002.1 | 563.8 | 3565.9 | |
| 2011 | 10 | 1473.3 | -- | 247.4 | 1720.7 | 425.6 | 2146.3 | |
| 2012 | 13 | 1435.9 | -- | 320.9 | 1756.8 | 725.6 | 2482.4 | |
| 2013 | 10 | 1064.5 | -- | 42.4 | 1106.9 | 535.8 | 1642.7 | |
| 2014 | 10 | 1144.1 | -- | 385.6 | 1529.7 | 609.5 | 2139.2 | |
| 2015 | 10 | 1042.5 | -- | 608.5 | 1651.0 | 387.2 | 2038.2 | |
| 2016 | 21 | 1957.9 | -- | 553.2 | 2511.1 | 578.9 | 3090.0 | |
| 2017 | 20 | 1684.1 | -- | 381.4 | 2065.5 | 385.0 | 2450.5 | |
| 2018 | 26 | 2260.2 | -- | 591.0 | 2851.2 | 306.9 | 3158.1 | |
| 2019 | 32 | 2296.8 | -- | 523.2 | 2820.0 | 418.5 | 3238.5 | |
| 2020 | 38 | 2757.1 | -- | 426.4 | 3183.5 | 530.8 | 3714.3 | |
| 2021 | 45 | 3110.6 | -- | 446.3 | 3556.9 | 655.8 | 4212.7 | |
| 2022 | 45 | 3281.2 | -- | 324.3 | 3605.5 | 526.8 | 4132.3 | |
| 2023 | 45 | 2813.1 | -- | 302.4 | 3115.5 | 427.6 | 3543.1 | |
| 2024 | 45 | 2801.5 | -- | 289.1 | 3090.6 | 385.3 | 3475.9 | |
| 2025 | 45 | 3000.6 | -- | 291.1 | 3291.7 | 308.6 | 3600.3 | |
| 2026 | 45 | 3319.4 | -- | 287.9 | 3607.3 | 333.6 | 3940.9 | |
| 2027 | 45 | 3058.3 | -- | 265.4 | 3323.7 | 248.4 | 3572.1 | |
| 2028 | 45 | 2782.3 | -- | 264.2 | 3046.5 | 267.7 | 3314.2 | |
| 2029 | 45 | 2647.3 | -- | 253.8 | 2901.1 | 185.5 | 3086.6 | |
| 2030 | 28 | 1873.0 | -- | 260.4 | 2133.4 | 271.1 | 2404.5 | |
| 2031 | 24 | 1490.8 | -- | 223.3 | 1714.1 | 247.0 | 1961.1 | |
| Subtotal | 680 | 52142.3 | -- | 7822.2 | 59964.5 | 9547.6 | 69512.1 | |

| Cost Quantity Information - F-35 Aircraft 1506 Procurement Aircraft Procurement, Navy | | |
|--|----------|---|
| Fiscal Year | Quantity | End Item Recurring Flyaway (Aligned With Quantity) BY 2012 \$M |
| 2007 | -- | -- |
| 2008 | 6 | 960.6 |
| 2009 | 7 | 1089.8 |
| 2010 | 20 | 2695.1 |
| 2011 | 10 | 1473.3 |
| 2012 | 13 | 1435.9 |
| 2013 | 10 | 1064.5 |
| 2014 | 10 | 1144.1 |
| 2015 | 10 | 1042.5 |
| 2016 | 21 | 1957.9 |
| 2017 | 20 | 1684.1 |
| 2018 | 26 | 2260.2 |
| 2019 | 32 | 2296.8 |
| 2020 | 38 | 2757.1 |
| 2021 | 45 | 3110.6 |
| 2022 | 45 | 3281.2 |
| 2023 | 45 | 2813.1 |
| 2024 | 45 | 2801.5 |
| 2025 | 45 | 3000.6 |
| 2026 | 45 | 3319.4 |
| 2027 | 45 | 3058.3 |
| 2028 | 45 | 2782.3 |
| 2029 | 45 | 2647.3 |
| 2030 | 28 | 1873.0 |
| 2031 | 24 | 1593.1 |
| Subtotal | 680 | 52142.3 |

| Annual Funding - F-35 Aircraft 1205 MILCON Military Construction, Navy and Marine Corps | |
|--|---------------|
| Fiscal Year | TY \$M |
| | Total Program |
| 2004 | 24.4 |
| 2005 | -- |
| 2006 | 0.1 |
| 2007 | -- |
| 2008 | 0.2 |
| 2009 | 0.7 |
| 2010 | 34.1 |
| 2011 | 377.9 |
| 2012 | 172.2 |
| 2013 | 94.9 |
| 2014 | -- |
| 2015 | 131.9 |
| 2016 | 94.4 |
| 2017 | 230.9 |
| 2018 | 64.7 |
| 2019 | 122.0 |
| 2020 | 119.8 |
| 2021 | 116.2 |
| 2022 | 75.9 |
| 2023 | 101.3 |
| 2024 | 145.0 |
| 2025 | -- |
| 2026 | 61.9 |
| 2027 | 75.0 |
| 2028 | 65.1 |
| 2029 | 2.0 |
| Subtotal | 2110.6 |

| Annual Funding - F-35 Aircraft 1205 MILCON Military Construction, Navy and Marine Corps | |
|--|---------------|
| Fiscal Year | BY 2012 \$M |
| | Total Program |
| 2004 | 27.8 |
| 2005 | -- |
| 2006 | 0.1 |
| 2007 | -- |
| 2008 | 0.2 |
| 2009 | 0.7 |
| 2010 | 34.1 |
| 2011 | 369.3 |
| 2012 | 165.9 |
| 2013 | 90.2 |
| 2014 | -- |
| 2015 | 121.5 |
| 2016 | 85.4 |
| 2017 | 204.9 |
| 2018 | 56.3 |
| 2019 | 104.0 |
| 2020 | 100.2 |
| 2021 | 95.2 |
| 2022 | 61.0 |
| 2023 | 79.8 |
| 2024 | 112.0 |
| 2025 | -- |
| 2026 | 46.0 |
| 2027 | 54.6 |
| 2028 | 46.5 |
| 2029 | 1.4 |
| Subtotal | 1857.1 |

All DoN MILCON funding is reflected in the Aircraft subprogram.

| Annual Funding - F-35 Aircraft 3300 MILCON Military Construction, Air Force | |
|--|------------------|
| Fiscal Year | TY \$M |
| | Total Program |
| 2004 | 1.7 |
| 2005 | 10.0 |
| 2006 | -- |
| 2007 | -- |
| 2008 | 100.3 |
| 2009 | 116.0 |
| 2010 | 125.1 |
| 2011 | 139.6 |
| 2012 | 24.3 |
| 2013 | 13.5 |
| 2014 | 56.0 |
| 2015 | 66.7 |
| 2016 | 198.3 |
| 2017 | 340.8 |
| 2018 | 101.0 |
| 2019 | 61.5 |
| 2020 | 15.9 |
| 2021 | -- |
| 2022 | 123.7 |
| 2023 | 167.0 |
| 2024 | 142.3 |
| 2025 | 122.1 |
| 2026 | 118.4 |
| 2027 | 129.9 |
| 2028 | 101.8 |
| 2029 | 102.7 |
| 2030 | 94.6 |
| 2031 | 71.7 |
| 2032 | 71.2 |
| 2033 | 37.5 |
| 2034 | 24.8 |
| 2035 | 4.3 |
| Subtotal | 2682.7 |

| Annual Funding - F-35 Aircraft 3300 MILCON Military Construction, Air Force | |
|--|------------------|
| Fiscal Year | BY 2012 \$M |
| | Total Program |
| 2004 | 1.9 |
| 2005 | 11.1 |
| 2006 | -- |
| 2007 | -- |
| 2008 | 104.1 |
| 2009 | 118.8 |
| 2010 | 125.0 |
| 2011 | 136.4 |
| 2012 | 23.4 |
| 2013 | 12.8 |
| 2014 | 52.5 |
| 2015 | 61.5 |
| 2016 | 179.4 |
| 2017 | 302.4 |
| 2018 | 87.9 |
| 2019 | 52.4 |
| 2020 | 13.3 |
| 2021 | -- |
| 2022 | 99.4 |
| 2023 | 131.6 |
| 2024 | 109.9 |
| 2025 | 92.5 |
| 2026 | 87.9 |
| 2027 | 94.5 |
| 2028 | 72.6 |
| 2029 | 71.8 |
| 2030 | 64.4 |
| 2031 | 47.9 |
| 2032 | 46.6 |
| 2033 | 24.0 |
| 2034 | 15.6 |
| 2035 | 2.7 |
| Subtotal | 2244.3 |

All Air Force F-35 MILCON funding is reflected in the Aircraft subprogram.

Annual Funding By Appropriation - F-35 Engine

| Annual Funding - F-35 Engine | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 3600 RDT&E Research, Development, Test, and Evaluation, Air Force | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1995 | -- | -- | -- | -- | -- | -- | 16.4 |
| 1996 | -- | -- | -- | -- | -- | -- | 15.9 |
| 1997 | -- | -- | -- | -- | -- | -- | 49.3 |
| 1998 | -- | -- | -- | -- | -- | -- | 87.1 |
| 1999 | -- | -- | -- | -- | -- | -- | 89.4 |
| 2000 | -- | -- | -- | -- | -- | -- | 48.8 |
| 2001 | -- | -- | -- | -- | -- | -- | 66.9 |
| 2002 | -- | -- | -- | -- | -- | -- | 409.8 |
| 2003 | -- | -- | -- | -- | -- | -- | 400.5 |
| 2004 | -- | -- | -- | -- | -- | -- | 435.8 |
| 2005 | -- | -- | -- | -- | -- | -- | 614.3 |
| 2006 | -- | -- | -- | -- | -- | -- | 586.3 |
| 2007 | -- | -- | -- | -- | -- | -- | 441.6 |
| 2008 | -- | -- | -- | -- | -- | -- | 596.0 |
| 2009 | -- | -- | -- | -- | -- | -- | 544.6 |
| 2010 | -- | -- | -- | -- | -- | -- | 466.1 |
| 2011 | -- | -- | -- | -- | -- | -- | 216.2 |
| 2012 | -- | -- | -- | -- | -- | -- | 101.8 |
| 2013 | -- | -- | -- | -- | -- | -- | 143.6 |
| 2014 | -- | -- | -- | -- | -- | -- | 52.0 |
| 2015 | -- | -- | -- | -- | -- | -- | 54.5 |
| 2016 | -- | -- | -- | -- | -- | -- | 58.4 |
| 2017 | -- | -- | -- | -- | -- | -- | 14.5 |
| Subtotal | 5 | -- | -- | -- | -- | -- | 5509.8 |

| Annual Funding - F-35 Engine | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 3600 RDT&E Research, Development, Test, and Evaluation, Air Force | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1995 | -- | -- | -- | -- | -- | -- | 21.7 |
| 1996 | -- | -- | -- | -- | -- | -- | 20.6 |
| 1997 | -- | -- | -- | -- | -- | -- | 63.2 |
| 1998 | -- | -- | -- | -- | -- | -- | 110.8 |
| 1999 | -- | -- | -- | -- | -- | -- | 112.4 |
| 2000 | -- | -- | -- | -- | -- | -- | 60.5 |
| 2001 | -- | -- | -- | -- | -- | -- | 81.8 |
| 2002 | -- | -- | -- | -- | -- | -- | 496.0 |
| 2003 | -- | -- | -- | -- | -- | -- | 477.8 |
| 2004 | -- | -- | -- | -- | -- | -- | 505.8 |
| 2005 | -- | -- | -- | -- | -- | -- | 694.7 |
| 2006 | -- | -- | -- | -- | -- | -- | 643.0 |
| 2007 | -- | -- | -- | -- | -- | -- | 472.7 |
| 2008 | -- | -- | -- | -- | -- | -- | 626.5 |
| 2009 | -- | -- | -- | -- | -- | -- | 565.2 |
| 2010 | -- | -- | -- | -- | -- | -- | 476.6 |
| 2011 | -- | -- | -- | -- | -- | -- | 215.9 |
| 2012 | -- | -- | -- | -- | -- | -- | 100.0 |
| 2013 | -- | -- | -- | -- | -- | -- | 139.6 |
| 2014 | -- | -- | -- | -- | -- | -- | 49.8 |
| 2015 | -- | -- | -- | -- | -- | -- | 51.6 |
| 2016 | -- | -- | -- | -- | -- | -- | 54.4 |
| 2017 | -- | -- | -- | -- | -- | -- | 13.3 |
| Subtotal | 5 | -- | -- | -- | -- | -- | 6053.9 |

| Annual Funding - F-35 Engine | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 1319 RDT&E Research, Development, Test, and Evaluation, Navy | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1994 | -- | -- | -- | -- | -- | -- | 5.8 |
| 1995 | -- | -- | -- | -- | -- | -- | 19.3 |
| 1996 | -- | -- | -- | -- | -- | -- | 15.8 |
| 1997 | -- | -- | -- | -- | -- | -- | 47.7 |
| 1998 | -- | -- | -- | -- | -- | -- | 87.8 |
| 1999 | -- | -- | -- | -- | -- | -- | 92.4 |
| 2000 | -- | -- | -- | -- | -- | -- | 46.7 |
| 2001 | -- | -- | -- | -- | -- | -- | 66.9 |
| 2002 | -- | -- | -- | -- | -- | -- | 350.4 |
| 2003 | -- | -- | -- | -- | -- | -- | 550.8 |
| 2004 | -- | -- | -- | -- | -- | -- | 533.2 |
| 2005 | -- | -- | -- | -- | -- | -- | 573.5 |
| 2006 | -- | -- | -- | -- | -- | -- | 528.1 |
| 2007 | -- | -- | -- | -- | -- | -- | 639.1 |
| 2008 | -- | -- | -- | -- | -- | -- | 563.9 |
| 2009 | -- | -- | -- | -- | -- | -- | 433.1 |
| 2010 | -- | -- | -- | -- | -- | -- | 445.7 |
| 2011 | -- | -- | -- | -- | -- | -- | 252.9 |
| 2012 | -- | -- | -- | -- | -- | -- | 187.6 |
| 2013 | -- | -- | -- | -- | -- | -- | 199.2 |
| 2014 | -- | -- | -- | -- | -- | -- | 116.1 |
| 2015 | -- | -- | -- | -- | -- | -- | 173.7 |
| 2016 | -- | -- | -- | -- | -- | -- | 141.2 |
| 2017 | -- | -- | -- | -- | -- | -- | 42.1 |
| Subtotal | 9 | -- | -- | -- | -- | -- | 6113.0 |

| Annual Funding - F-35 Engine 1319 RDT&E Research, Development, Test, and Evaluation, Navy | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1994 | -- | -- | -- | -- | -- | -- | 7.8 |
| 1995 | -- | -- | -- | -- | -- | -- | 25.5 |
| 1996 | -- | -- | -- | -- | -- | -- | 20.5 |
| 1997 | -- | -- | -- | -- | -- | -- | 61.2 |
| 1998 | -- | -- | -- | -- | -- | -- | 111.7 |
| 1999 | -- | -- | -- | -- | -- | -- | 116.2 |
| 2000 | -- | -- | -- | -- | -- | -- | 57.9 |
| 2001 | -- | -- | -- | -- | -- | -- | 81.8 |
| 2002 | -- | -- | -- | -- | -- | -- | 424.1 |
| 2003 | -- | -- | -- | -- | -- | -- | 657.1 |
| 2004 | -- | -- | -- | -- | -- | -- | 618.8 |
| 2005 | -- | -- | -- | -- | -- | -- | 648.5 |
| 2006 | -- | -- | -- | -- | -- | -- | 579.1 |
| 2007 | -- | -- | -- | -- | -- | -- | 684.1 |
| 2008 | -- | -- | -- | -- | -- | -- | 592.8 |
| 2009 | -- | -- | -- | -- | -- | -- | 449.5 |
| 2010 | -- | -- | -- | -- | -- | -- | 455.8 |
| 2011 | -- | -- | -- | -- | -- | -- | 252.6 |
| 2012 | -- | -- | -- | -- | -- | -- | 184.3 |
| 2013 | -- | -- | -- | -- | -- | -- | 193.7 |
| 2014 | -- | -- | -- | -- | -- | -- | 111.3 |
| 2015 | -- | -- | -- | -- | -- | -- | 164.4 |
| 2016 | -- | -- | -- | -- | -- | -- | 131.5 |
| 2017 | -- | -- | -- | -- | -- | -- | 38.5 |
| Subtotal | 9 | -- | -- | -- | -- | -- | 6668.7 |

| Annual Funding - F-35 Engine | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 0400 RDT&E Research, Development, Test, and Evaluation, Defense-Wide | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1994 | -- | -- | -- | -- | -- | -- | 5.7 |
| 1995 | -- | -- | -- | -- | -- | -- | 13.4 |
| 1996 | -- | -- | -- | -- | -- | -- | 4.0 |
| Subtotal | -- | -- | -- | -- | -- | -- | 23.1 |

| Annual Funding - F-35 Engine | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| 0400 RDT&E Research, Development, Test, and Evaluation, Defense-Wide | | | | | | | |
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1994 | -- | -- | -- | -- | -- | -- | 7.7 |
| 1995 | -- | -- | -- | -- | -- | -- | 17.7 |
| 1996 | -- | -- | -- | -- | -- | -- | 5.2 |
| Subtotal | -- | -- | -- | -- | -- | -- | 30.6 |

| Annual Funding - F-35 Engine 9999 RDT&E Non Treasury Funds | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| Fiscal Year | Quantity | TY \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1996 | -- | -- | -- | -- | -- | -- | 2.7 |
| 1997 | -- | -- | -- | -- | -- | -- | 3.9 |
| 1998 | -- | -- | -- | -- | -- | -- | 5.1 |
| 1999 | -- | -- | -- | -- | -- | -- | 5.7 |
| 2000 | -- | -- | -- | -- | -- | -- | 1.8 |
| 2001 | -- | -- | -- | -- | -- | -- | 0.5 |
| 2002 | -- | -- | -- | -- | -- | -- | 43.3 |
| 2003 | -- | -- | -- | -- | -- | -- | 124.3 |
| 2004 | -- | -- | -- | -- | -- | -- | 54.1 |
| 2005 | -- | -- | -- | -- | -- | -- | 0.3 |
| 2006 | -- | -- | -- | -- | -- | -- | -- |
| 2007 | -- | -- | -- | -- | -- | -- | 75.0 |
| 2008 | -- | -- | -- | -- | -- | -- | -- |
| 2009 | -- | -- | -- | -- | -- | -- | -- |
| 2010 | -- | -- | -- | -- | -- | -- | -- |
| 2011 | -- | -- | -- | -- | -- | -- | -- |
| 2012 | -- | -- | -- | -- | -- | -- | -- |
| 2013 | -- | -- | -- | -- | -- | -- | 0.3 |
| Subtotal | -- | -- | -- | -- | -- | -- | 317.0 |

| Annual Funding - F-35 Engine 9999 RDT&E Non Treasury Funds | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 1996 | -- | -- | -- | -- | -- | -- | 3.5 |
| 1997 | -- | -- | -- | -- | -- | -- | 5.0 |
| 1998 | -- | -- | -- | -- | -- | -- | 6.5 |
| 1999 | -- | -- | -- | -- | -- | -- | 7.2 |
| 2000 | -- | -- | -- | -- | -- | -- | 2.2 |
| 2001 | -- | -- | -- | -- | -- | -- | 0.6 |
| 2002 | -- | -- | -- | -- | -- | -- | 52.4 |
| 2003 | -- | -- | -- | -- | -- | -- | 148.3 |
| 2004 | -- | -- | -- | -- | -- | -- | 62.8 |
| 2005 | -- | -- | -- | -- | -- | -- | 0.3 |
| 2006 | -- | -- | -- | -- | -- | -- | -- |
| 2007 | -- | -- | -- | -- | -- | -- | 80.3 |
| 2008 | -- | -- | -- | -- | -- | -- | -- |
| 2009 | -- | -- | -- | -- | -- | -- | -- |
| 2010 | -- | -- | -- | -- | -- | -- | -- |
| 2011 | -- | -- | -- | -- | -- | -- | -- |
| 2012 | -- | -- | -- | -- | -- | -- | -- |
| 2013 | -- | -- | -- | -- | -- | -- | 0.3 |
| Subtotal | -- | -- | -- | -- | -- | -- | 369.4 |

| Annual Funding - F-35 Engine | | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|--|
| 3010 Procurement Aircraft Procurement, Air Force | | | | | | | | |
| Fiscal Year | Quantity | TY \$M | | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program | |
| 2006 | -- | 9.8 | -- | -- | 9.8 | -- | 9.8 | |
| 2007 | 2 | 47.5 | -- | 6.9 | 54.4 | 27.7 | 82.1 | |
| 2008 | 6 | 123.6 | -- | 35.0 | 158.6 | 30.9 | 189.5 | |
| 2009 | 7 | 127.0 | -- | 63.9 | 190.9 | 33.3 | 224.2 | |
| 2010 | 10 | 176.7 | -- | 72.6 | 249.3 | 59.1 | 308.4 | |
| 2011 | 22 | 353.2 | -- | 91.6 | 444.8 | 136.6 | 581.4 | |
| 2012 | 18 | 275.3 | -- | 65.7 | 341.0 | 123.0 | 464.0 | |
| 2013 | 19 | 262.5 | -- | 11.9 | 274.4 | 89.6 | 364.0 | |
| 2014 | 19 | 282.1 | -- | 31.2 | 313.3 | 47.5 | 360.8 | |
| 2015 | 28 | 386.7 | -- | 15.5 | 402.2 | 116.2 | 518.4 | |
| 2016 | 47 | 606.1 | -- | 23.2 | 629.3 | 126.7 | 756.0 | |
| 2017 | 43 | 606.7 | -- | 48.9 | 655.6 | 116.7 | 772.3 | |
| 2018 | 44 | 651.2 | -- | 80.6 | 731.8 | 135.8 | 867.6 | |
| 2019 | 48 | 590.1 | -- | 81.2 | 671.3 | 145.4 | 816.7 | |
| 2020 | 48 | 631.1 | -- | 66.8 | 697.9 | 153.6 | 851.5 | |
| 2021 | 60 | 781.4 | -- | 53.4 | 834.8 | 172.1 | 1006.9 | |
| 2022 | 80 | 1066.3 | -- | 48.2 | 1114.5 | 178.5 | 1293.0 | |
| 2023 | 80 | 976.1 | -- | 45.9 | 1022.0 | 189.3 | 1211.3 | |
| 2024 | 80 | 997.2 | -- | 46.7 | 1043.9 | 177.6 | 1221.5 | |
| 2025 | 80 | 1094.6 | -- | 47.8 | 1142.4 | 184.4 | 1326.8 | |
| 2026 | 80 | 1123.6 | -- | 48.7 | 1172.3 | 218.3 | 1390.6 | |
| 2027 | 80 | 1068.0 | -- | 45.0 | 1113.0 | 135.7 | 1248.7 | |
| 2028 | 80 | 977.9 | -- | 45.8 | 1023.7 | 130.3 | 1154.0 | |
| 2029 | 80 | 996.6 | -- | 46.4 | 1043.0 | 119.0 | 1162.0 | |
| 2030 | 80 | 1091.1 | -- | 47.7 | 1138.8 | 122.4 | 1261.2 | |
| 2031 | 80 | 1237.8 | -- | 48.9 | 1286.7 | 153.9 | 1440.6 | |
| 2032 | 80 | 1185.7 | -- | 50.9 | 1236.6 | 143.0 | 1379.6 | |
| 2033 | 80 | 1090.4 | -- | 52.3 | 1142.7 | 137.1 | 1279.8 | |
| 2034 | 80 | 1110.8 | -- | 52.6 | 1163.4 | 18.8 | 1182.2 | |
| 2035 | 80 | 1219.4 | -- | 53.6 | 1273.0 | 3.7 | 1276.7 | |
| 2036 | 80 | 1241.5 | -- | 54.4 | 1295.9 | 3.2 | 1299.1 | |
| 2037 | 80 | 1243.9 | -- | 50.9 | 1294.8 | 2.3 | 1297.1 | |
| 2038 | 62 | 902.2 | -- | 41.6 | 943.8 | 0.5 | 944.3 | |
| Subtotal | 1763 | 24534.1 | -- | 1575.8 | 26109.9 | 3432.2 | 29542.1 | |

| Annual Funding - F-35 Engine 3010 Procurement Aircraft Procurement, Air Force | | | | | | | |
|--|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 2006 | -- | 10.6 | -- | -- | 10.6 | -- | 10.6 |
| 2007 | 2 | 50.2 | -- | 7.3 | 57.5 | 29.2 | 86.7 |
| 2008 | 6 | 128.6 | -- | 36.4 | 165.0 | 32.2 | 197.2 |
| 2009 | 7 | 130.3 | -- | 65.6 | 195.9 | 34.2 | 230.1 |
| 2010 | 10 | 177.6 | -- | 73.0 | 250.6 | 59.4 | 310.0 |
| 2011 | 22 | 348.1 | -- | 90.3 | 438.4 | 134.7 | 573.1 |
| 2012 | 18 | 267.5 | -- | 63.8 | 331.3 | 119.6 | 450.9 |
| 2013 | 19 | 252.4 | -- | 11.4 | 263.8 | 86.1 | 349.9 |
| 2014 | 19 | 267.7 | -- | 29.6 | 297.3 | 45.1 | 342.4 |
| 2015 | 28 | 361.6 | -- | 14.5 | 376.1 | 108.6 | 484.7 |
| 2016 | 47 | 557.1 | -- | 21.3 | 578.4 | 116.4 | 694.8 |
| 2017 | 43 | 547.2 | -- | 44.1 | 591.3 | 105.3 | 696.6 |
| 2018 | 44 | 576.0 | -- | 71.3 | 647.3 | 120.1 | 767.4 |
| 2019 | 48 | 511.7 | -- | 70.4 | 582.1 | 126.2 | 708.3 |
| 2020 | 48 | 536.6 | -- | 56.8 | 593.4 | 130.6 | 724.0 |
| 2021 | 60 | 651.3 | -- | 44.5 | 695.8 | 143.5 | 839.3 |
| 2022 | 80 | 871.4 | -- | 39.4 | 910.8 | 145.8 | 1056.6 |
| 2023 | 80 | 782.0 | -- | 36.8 | 818.8 | 151.7 | 970.5 |
| 2024 | 80 | 783.3 | -- | 36.7 | 820.0 | 139.4 | 959.4 |
| 2025 | 80 | 842.9 | -- | 36.8 | 879.7 | 142.0 | 1021.7 |
| 2026 | 80 | 848.3 | -- | 36.8 | 885.1 | 164.8 | 1049.9 |
| 2027 | 80 | 790.5 | -- | 33.3 | 823.8 | 100.4 | 924.2 |
| 2028 | 80 | 709.6 | -- | 33.2 | 742.8 | 94.6 | 837.4 |
| 2029 | 80 | 709.0 | -- | 33.0 | 742.0 | 84.7 | 826.7 |
| 2030 | 80 | 761.0 | -- | 33.3 | 794.3 | 85.4 | 879.7 |
| 2031 | 80 | 846.4 | -- | 33.4 | 879.8 | 105.3 | 985.1 |
| 2032 | 80 | 794.9 | -- | 34.1 | 829.0 | 95.9 | 924.9 |
| 2033 | 80 | 716.7 | -- | 34.4 | 751.1 | 90.0 | 841.1 |
| 2034 | 80 | 715.8 | -- | 33.9 | 749.7 | 12.1 | 761.8 |
| 2035 | 80 | 763.8 | -- | 33.6 | 797.4 | 2.3 | 799.7 |
| 2036 | 80 | 762.4 | -- | 33.4 | 795.8 | 2.0 | 797.8 |
| 2037 | 80 | 748.9 | -- | 30.6 | 779.5 | 1.4 | 780.9 |
| 2038 | 62 | 532.5 | -- | 24.6 | 557.1 | 0.3 | 557.4 |
| Subtotal | 1763 | 18353.9 | -- | 1277.6 | 19631.5 | 2809.3 | 22440.8 |

| Cost Quantity Information - F-35 Engine 3010 Procurement Aircraft Procurement, Air Force | | |
|---|----------|---|
| Fiscal Year | Quantity | End Item Recurring Flyaway (Aligned With Quantity) BY 2012 \$M |
| 2006 | -- | -- |
| 2007 | 2 | 50.2 |
| 2008 | 6 | 128.6 |
| 2009 | 7 | 130.3 |
| 2010 | 10 | 177.6 |
| 2011 | 22 | 348.1 |
| 2012 | 18 | 267.5 |
| 2013 | 19 | 252.4 |
| 2014 | 19 | 267.7 |
| 2015 | 28 | 361.6 |
| 2016 | 47 | 557.1 |
| 2017 | 43 | 547.2 |
| 2018 | 44 | 576.0 |
| 2019 | 48 | 511.7 |
| 2020 | 48 | 536.6 |
| 2021 | 60 | 651.3 |
| 2022 | 80 | 871.4 |
| 2023 | 80 | 782.0 |
| 2024 | 80 | 783.3 |
| 2025 | 80 | 842.9 |
| 2026 | 80 | 848.3 |
| 2027 | 80 | 790.5 |
| 2028 | 80 | 709.6 |
| 2029 | 80 | 709.0 |
| 2030 | 80 | 761.0 |
| 2031 | 80 | 846.4 |
| 2032 | 80 | 794.9 |
| 2033 | 80 | 716.7 |
| 2034 | 80 | 715.8 |
| 2035 | 80 | 763.8 |
| 2036 | 80 | 762.4 |
| 2037 | 80 | 748.9 |
| 2038 | 62 | 543.1 |
| Subtotal | 1763 | 18353.9 |

| Annual Funding - F-35 Engine 1506 Procurement Aircraft Procurement, Navy | | | | | | | | |
|---|----------|----------------------------|--------------------------------|-----------------------|---------------|---------------|---------------|--|
| Fiscal Year | Quantity | TY \$M | | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program | |
| 2007 | -- | 27.4 | -- | -- | 27.4 | -- | 27.4 | |
| 2008 | 6 | 246.1 | -- | 1.3 | 247.4 | 1.2 | 248.6 | |
| 2009 | 7 | 298.0 | -- | 54.3 | 352.3 | 65.6 | 417.9 | |
| 2010 | 20 | 599.0 | -- | 118.5 | 717.5 | 127.6 | 845.1 | |
| 2011 | 10 | 400.5 | -- | 112.5 | 513.0 | 122.3 | 635.3 | |
| 2012 | 13 | 191.4 | -- | 57.7 | 249.1 | 62.0 | 311.1 | |
| 2013 | 10 | 236.9 | -- | 26.6 | 263.5 | 169.8 | 433.3 | |
| 2014 | 10 | 227.1 | -- | 21.6 | 248.7 | 142.4 | 391.1 | |
| 2015 | 10 | 259.5 | -- | 27.6 | 287.1 | 68.0 | 355.1 | |
| 2016 | 21 | 362.7 | -- | 22.3 | 385.0 | 109.9 | 494.9 | |
| 2017 | 20 | 568.4 | -- | 87.3 | 655.7 | 80.6 | 736.3 | |
| 2018 | 26 | 742.3 | -- | 138.0 | 880.3 | 61.4 | 941.7 | |
| 2019 | 32 | 750.5 | -- | 124.6 | 875.1 | 82.6 | 957.7 | |
| 2020 | 38 | 840.1 | -- | 103.6 | 943.7 | 116.7 | 1060.4 | |
| 2021 | 45 | 937.1 | -- | 110.6 | 1047.7 | 186.2 | 1233.9 | |
| 2022 | 45 | 994.1 | -- | 82.0 | 1076.1 | 117.3 | 1193.4 | |
| 2023 | 45 | 910.7 | -- | 76.0 | 986.7 | 117.0 | 1103.7 | |
| 2024 | 45 | 926.6 | -- | 89.5 | 1016.1 | 93.2 | 1109.3 | |
| 2025 | 45 | 1012.3 | -- | 85.4 | 1097.7 | 93.6 | 1191.3 | |
| 2026 | 45 | 1006.6 | -- | 89.5 | 1096.1 | 104.3 | 1200.4 | |
| 2027 | 45 | 970.3 | -- | 61.5 | 1031.8 | 82.5 | 1114.3 | |
| 2028 | 45 | 910.7 | -- | 57.4 | 968.1 | 90.6 | 1058.7 | |
| 2029 | 45 | 865.2 | -- | 60.8 | 926.0 | 67.5 | 993.5 | |
| 2030 | 28 | 442.9 | -- | 71.8 | 514.7 | 95.9 | 610.6 | |
| 2031 | 24 | 299.0 | -- | 78.5 | 377.5 | 103.6 | 481.1 | |
| Subtotal | 680 | 15025.4 | -- | 1758.9 | 16784.3 | 2361.8 | 19146.1 | |

| Annual Funding - F-35 Engine 1506 Procurement Aircraft Procurement, Navy | | | | | | | |
|---|----------|----------------------------------|---|-----------------------------|------------------|------------------|------------------|
| Fiscal Year | Quantity | BY 2012 \$M | | | | | |
| | | End Item Recurring Flyaway | Non End Item Recurring Flyaway | Non Recurring Flyaway | Total Flyaway | Total Support | Total Program |
| 2007 | -- | 28.9 | -- | -- | 28.9 | -- | 28.9 |
| 2008 | 6 | 256.1 | -- | 1.4 | 257.5 | 1.2 | 258.7 |
| 2009 | 7 | 305.8 | -- | 55.8 | 361.6 | 67.3 | 428.9 |
| 2010 | 20 | 602.1 | -- | 119.2 | 721.3 | 128.2 | 849.5 |
| 2011 | 10 | 394.8 | -- | 110.8 | 505.6 | 120.6 | 626.2 |
| 2012 | 13 | 186.0 | -- | 56.0 | 242.0 | 60.3 | 302.3 |
| 2013 | 10 | 227.8 | -- | 25.6 | 253.4 | 163.2 | 416.6 |
| 2014 | 10 | 215.5 | -- | 20.5 | 236.0 | 135.2 | 371.2 |
| 2015 | 10 | 242.6 | -- | 25.8 | 268.4 | 63.6 | 332.0 |
| 2016 | 21 | 333.4 | -- | 20.5 | 353.9 | 101.0 | 454.9 |
| 2017 | 20 | 512.7 | -- | 78.7 | 591.4 | 72.7 | 664.1 |
| 2018 | 26 | 656.6 | -- | 122.1 | 778.7 | 54.3 | 833.0 |
| 2019 | 32 | 650.8 | -- | 108.1 | 758.9 | 71.6 | 830.5 |
| 2020 | 38 | 714.3 | -- | 88.1 | 802.4 | 99.2 | 901.6 |
| 2021 | 45 | 781.1 | -- | 92.2 | 873.3 | 155.2 | 1028.5 |
| 2022 | 45 | 812.4 | -- | 67.0 | 879.4 | 95.8 | 975.2 |
| 2023 | 45 | 729.6 | -- | 60.9 | 790.5 | 93.8 | 884.3 |
| 2024 | 45 | 727.8 | -- | 70.3 | 798.1 | 73.2 | 871.3 |
| 2025 | 45 | 779.5 | -- | 65.8 | 845.3 | 72.1 | 917.4 |
| 2026 | 45 | 759.9 | -- | 67.7 | 827.6 | 78.7 | 906.3 |
| 2027 | 45 | 718.2 | -- | 45.5 | 763.7 | 61.1 | 824.8 |
| 2028 | 45 | 660.9 | -- | 41.7 | 702.6 | 65.6 | 768.2 |
| 2029 | 45 | 615.5 | -- | 43.3 | 658.8 | 48.0 | 706.8 |
| 2030 | 28 | 308.9 | -- | 50.1 | 359.0 | 66.9 | 425.9 |
| 2031 | 24 | 204.5 | -- | 53.6 | 258.1 | 70.9 | 329.0 |
| Subtotal | 680 | 12425.7 | -- | 1490.7 | 13916.4 | 2019.7 | 15936.1 |

| Cost Quantity Information - F-35 Engine 1506 Procurement Aircraft Procurement, Navy | | |
|--|----------|---|
| Fiscal Year | Quantity | End Item Recurring Flyaway (Aligned With Quantity) BY 2012 \$M |
| 2007 | -- | -- |
| 2008 | 6 | 256.1 |
| 2009 | 7 | 305.8 |
| 2010 | 20 | 602.1 |
| 2011 | 10 | 394.8 |
| 2012 | 13 | 186.0 |
| 2013 | 10 | 227.8 |
| 2014 | 10 | 215.5 |
| 2015 | 10 | 242.6 |
| 2016 | 21 | 333.4 |
| 2017 | 20 | 512.7 |
| 2018 | 26 | 656.6 |
| 2019 | 32 | 650.8 |
| 2020 | 38 | 714.3 |
| 2021 | 45 | 781.1 |
| 2022 | 45 | 812.4 |
| 2023 | 45 | 729.6 |
| 2024 | 45 | 727.8 |
| 2025 | 45 | 779.5 |
| 2026 | 45 | 759.9 |
| 2027 | 45 | 718.2 |
| 2028 | 45 | 660.9 |
| 2029 | 45 | 615.5 |
| 2030 | 28 | 308.9 |
| 2031 | 24 | 233.4 |
| Subtotal | 680 | 12425.7 |

Low Rate Initial Production

F-35 Aircraft

| Item | Initial LRIP Decision | Current Total LRIP |
|--------------------------|-----------------------|--------------------|
| Approval Date | 10/26/2001 | 5/23/2015 |
| Approved Quantity | 465 | 518 |
| Reference | Milestone B ADM | LRIP Approval ADM |
| Start Year | 2006 | 2006 |
| End Year | 2015 | 2019 |

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the necessity to prevent a break in production and to ramp up to FRP.

F-35 Engine

| Item | Initial LRIP Decision | Current Total LRIP |
|--------------------------|-----------------------|--------------------|
| Approval Date | 10/26/2001 | 5/23/2015 |
| Approved Quantity | 465 | 518 |
| Reference | Milestone B ADM | LRIP Approval ADM |
| Start Year | 2006 | 2006 |
| End Year | 2015 | 2019 |

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the necessity to prevent a break in production and to ramp up to FRP.

Foreign Military Sales

F-35 Aircraft

| Country | Date of Sale | Quantity | Total Cost \$M | Description |
|---------|--------------|----------|----------------|---|
| Japan | 9/14/2015 | 16 | 4360.4 | Japan signed an amendment to add 6 F-35A's in September 2015. Japan has an option to purchase 26 additional F-35A aircraft. |
| Israel | 2/15/2015 | 33 | 5008.0 | Israel signed an amendment to add 14 F-35A's in February 2015. Israel has an option to purchase 17 additional F-35A aircraft. |
| Korea | 9/14/2014 | 40 | 6277.0 | All 40 aircraft will be the F-35A aircraft. |

Notes

F-35 Engine

Notes

FMS information for the F-35 Engine subprogram are reflected in the F-35 Aircraft subprogram.

Nuclear Costs

F-35 Aircraft

None

F-35 Engine

None

Unit Cost

F-35 Aircraft

Unit Cost Report

| Item | BY 2012 \$M | BY 2012 \$M | % Change |
|--------------------------------------|-------------------------------------|---------------------------------|----------|
| | Current UCR Baseline (Jun 2014 APB) | Current Estimate (Dec 2015 SAR) | |
| Program Acquisition Unit Cost | | | |
| Cost | 274958.4 | 261760.9 | |
| Quantity | 2457 | 2457 | |
| Unit Cost | 111.908 | 106.537 | -4.80 |
| Average Procurement Unit Cost | | | |
| Cost | 224332.9 | 211290.9 | |
| Quantity | 2443 | 2443 | |
| Unit Cost | 91.827 | 86.488 | -5.81 |

| Item | BY 2012 \$M | BY 2012 \$M | % Change |
|--------------------------------------|--|---------------------------------|----------|
| | Revised Original UCR Baseline (Mar 2012 APB) | Current Estimate (Dec 2015 SAR) | |
| Program Acquisition Unit Cost | | | |
| Cost | 276482.2 | 261760.9 | |
| Quantity | 2458 | 2457 | |
| Unit Cost | 112.483 | 106.537 | -5.29 |
| Average Procurement Unit Cost | | | |
| Cost | 224333.7 | 211290.9 | |
| Quantity | 2443 | 2443 | |
| Unit Cost | 91.827 | 86.488 | -5.81 |

The DoD average F-35 Aircraft Unit Recurring Flyaway (URF) Cost consists of the Hardware (Airframe, Vehicle Systems, Mission Systems, and Engineering Change Order) costs over the life of the program. The URF assumes the quantity benefits of 115 FMS aircraft and 612 International Partner aircraft.

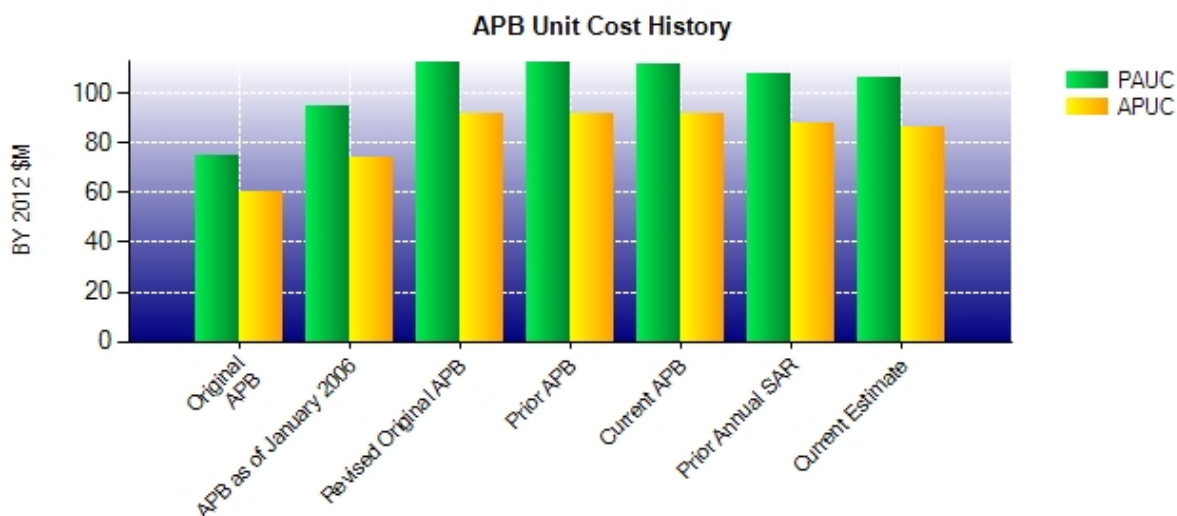
F-35A (Conventional Take Off and Landing) URF - \$65.7 M (BY 2012)

F-35B (Short Takeoff and Vertical Landing) URF - \$77.3M (BY 2012)

F-35C (Carrier Variant) URF - \$78 M (BY 2012)

F-35 Aircraft

Unit Cost History



| Item | Date | BY 2012 \$M | | TY \$M | |
|------------------------|----------|-------------|--------|---------|---------|
| | | PAUC | APUC | PAUC | APUC |
| Original APB | Oct 2001 | 74.567 | 60.632 | 81.298 | 68.934 |
| APB as of January 2006 | Mar 2004 | 94.837 | 73.845 | 100.407 | 81.826 |
| Revised Original APB | Mar 2012 | 112.529 | 91.827 | 135.065 | 115.697 |
| Prior APB | Mar 2012 | 112.529 | 91.827 | 135.065 | 115.697 |
| Current APB | Jun 2014 | 111.908 | 91.827 | 134.638 | 115.697 |
| Prior Annual SAR | Dec 2014 | 107.755 | 87.889 | 131.918 | 113.208 |
| Current Estimate | Dec 2015 | 106.537 | 86.488 | 129.585 | 110.695 |

SAR Unit Cost History

| Current SAR Baseline to Current Estimate (TY \$M) | | | | | | | | | |
|---|---------|-------|-------|-------|--------|-------|--------|--------|-----------------------|
| Initial PAUC Development Estimate | Changes | | | | | | | | PAUC Current Estimate |
| | Econ | Qty | Sch | Eng | Est | Oth | Spt | Total | |
| 135.065 | 0.422 | 0.000 | 1.592 | 0.744 | -4.257 | 0.000 | -3.981 | -5.480 | 129.585 |

| Current SAR Baseline to Current Estimate (TY \$M) | | | | | | | | | |
|---|---------|-------|-------|-------|--------|-------|--------|--------|-----------------------|
| Initial APUC Development Estimate | Changes | | | | | | | | APUC Current Estimate |
| | Econ | Qty | Sch | Eng | Est | Oth | Spt | Total | |
| 115.697 | 0.427 | 0.000 | 1.602 | 0.748 | -3.775 | 0.000 | -4.004 | -5.002 | 110.695 |

| SAR Baseline History | | | | | |
|----------------------|-----------------------|--------------------------|-------------------------|------------------|--|
| Item | SAR Planning Estimate | SAR Development Estimate | SAR Production Estimate | Current Estimate | |
| Milestone I | N/A | Nov 1996 | N/A | Nov 1996 | |
| Milestone B | Mar 2001 | Mar 2012 | N/A | Mar 2012 | |
| Milestone C | TBD | Apr 2019 | N/A | Apr 2019 | |
| IOC | TBD | TBD | N/A | Jul 2015 | |
| Total Cost (TY \$M) | 24800.0 | 331855.2 | N/A | 318390.9 | |
| Total Quantity | N/A | 2457 | N/A | 2457 | |
| PAUC | N/A | 135.065 | N/A | 129.585 | |

The Service IOC reflected in the above table is the U.S. Marine Corps Objective date. In addition, the U.S. Air Force IOC objective date is August 2016, and the U.S. Navy IOC objective date is August 2018.

F-35 Engine

Unit Cost Report

| Item | BY 2012 \$M | BY 2012 \$M | % Change |
|--------------------------------------|-------------------------------------|---------------------------------|----------|
| | Current UCR Baseline (Jun 2014 APB) | Current Estimate (Dec 2015 SAR) | |
| Program Acquisition Unit Cost | | | |
| Cost | 55273.5 | 51499.5 | |
| Quantity | 2457 | 2457 | |
| Unit Cost | 22.496 | 20.960 | -6.83 |
| Average Procurement Unit Cost | | | |
| Cost | 42332.9 | 38376.9 | |
| Quantity | 2443 | 2443 | |
| Unit Cost | 17.328 | 15.709 | -9.34 |

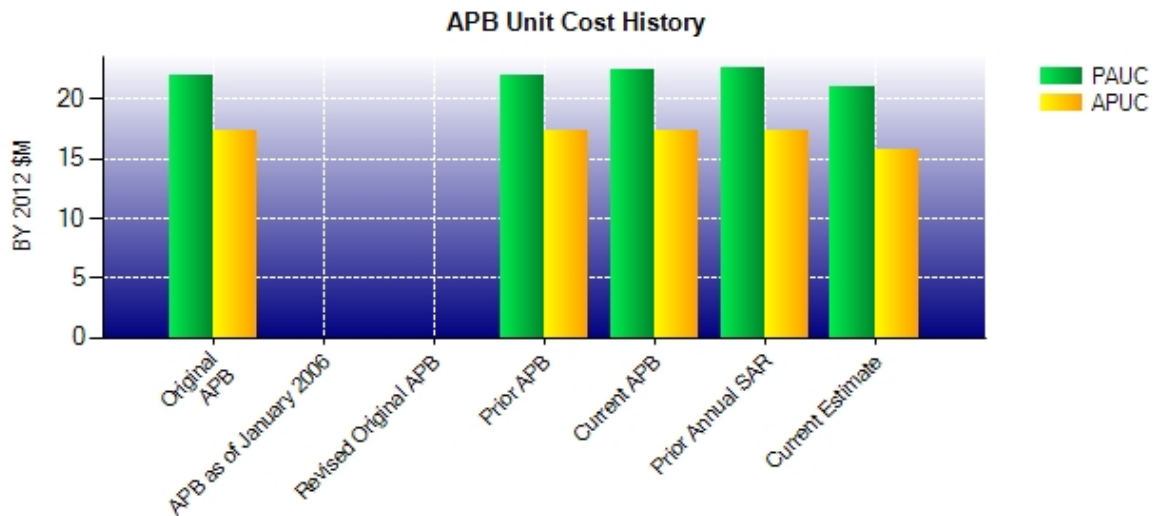
| Item | BY 2012 \$M | BY 2012 \$M | % Change |
|--------------------------------------|--------------------------------------|---------------------------------|----------|
| | Original UCR Baseline (Mar 2012 APB) | Current Estimate (Dec 2015 SAR) | |
| Program Acquisition Unit Cost | | | |
| Cost | 53916.4 | 51499.5 | |
| Quantity | 2458 | 2457 | |
| Unit Cost | 21.935 | 20.960 | -4.44 |
| Average Procurement Unit Cost | | | |
| Cost | 42332.9 | 38376.9 | |
| Quantity | 2443 | 2443 | |
| Unit Cost | 17.328 | 15.709 | -9.34 |

The DoD average F-35 Engine Unit Recurring Flyaway (URF) Cost consists of the Hardware (Propulsion and Engineering Change Order) costs over the life of the program. The URF assumes the quantity benefits of 115 FMS engines and 612 International Partner engines.

F-35A (Conventional Take Off and Landing) URF - \$11 M (BY 2012)
 F-35B (Short Takeoff and Vertical Landing) URF - \$27.7 M (BY 2012)
 F-35C (Carrier Variant) URF - \$10.9 M (BY 2012)

F-35 Engine

Unit Cost History



| Item | Date | BY 2012 \$M | | TY \$M | |
|------------------------|----------|-------------|--------|--------|--------|
| | | PAUC | APUC | PAUC | APUC |
| Original APB | Mar 2012 | 21.989 | 17.328 | 25.990 | 21.708 |
| APB as of January 2006 | N/A | N/A | N/A | N/A | N/A |
| Revised Original APB | N/A | N/A | N/A | N/A | N/A |
| Prior APB | Mar 2012 | 21.989 | 17.328 | 25.990 | 21.708 |
| Current APB | Jun 2014 | 22.496 | 17.328 | 26.396 | 21.708 |
| Prior Annual SAR | Dec 2014 | 22.626 | 17.378 | 27.274 | 22.526 |
| Current Estimate | Dec 2015 | 20.960 | 15.709 | 24.685 | 19.930 |

SAR Unit Cost History

| Current SAR Baseline to Current Estimate (TY \$M) | | | | | | | | | |
|---|---------|-------|-------|-------|--------|-------|--------|--------|-----------------------|
| Initial PAUC Development Estimate | Changes | | | | | | | | PAUC Current Estimate |
| | Econ | Qty | Sch | Eng | Est | Oth | Spt | Total | |
| 25.990 | 0.054 | 0.000 | 0.303 | 0.000 | -0.501 | 0.000 | -1.161 | -1.305 | 24.685 |

| Current SAR Baseline to Current Estimate (TY \$M) | | | | | | | | | |
|---|---------|-------|-------|-------|--------|-------|--------|--------|-----------------------|
| Initial APUC Development Estimate | Changes | | | | | | | | APUC Current Estimate |
| | Econ | Qty | Sch | Eng | Est | Oth | Spt | Total | |
| 21.708 | 0.048 | 0.000 | 0.305 | 0.000 | -0.963 | 0.000 | -1.167 | -1.777 | 19.930 |

| SAR Baseline History | | | | | |
|----------------------|-----------------------|--------------------------|-------------------------|------------------|---------|
| Item | SAR Planning Estimate | SAR Development Estimate | SAR Production Estimate | Current Estimate | |
| Milestone A | | N/A | N/A | N/A | N/A |
| Milestone B | | N/A | N/A | N/A | N/A |
| Milestone C | | N/A | N/A | N/A | N/A |
| IOC | | N/A | N/A | N/A | N/A |
| Total Cost (TY \$M) | | | 63856.6 | N/A | 60651.1 |
| Total Quantity | | | 2457 | N/A | 2457 |
| PAUC | | | 25.990 | N/A | 24.685 |

Cost Variance

F-35 Aircraft

| Summary TY \$M | | | | |
|-------------------------------------|---------|-------------|--------|----------|
| Item | RDT&E | Procurement | MILCON | Total |
| SAR Baseline (Development Estimate) | 44410.1 | 282647.8 | 4797.3 | 331855.2 |
| Previous Changes | | | | |
| Economic | +24.6 | +2886.2 | +29.5 | +2940.3 |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | +3425.5 | -- | +3425.5 |
| Engineering | -- | -- | -- | -- |
| Estimating | -1507.9 | -7348.4 | -199.7 | -9056.0 |
| Other | -- | -- | -- | -- |
| Support | -- | -5043.7 | -- | -5043.7 |
| Subtotal | -1483.3 | -6080.4 | -170.2 | -7733.9 |
| Current Changes | | | | |
| Economic | -36.7 | -1842.6 | -25.2 | -1904.5 |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | +487.2 | -- | +487.2 |
| Engineering | -- | +1826.8 | -- | +1826.8 |
| Estimating | +280.0 | -1873.1 | +191.4 | -1401.7 |
| Other | -- | -- | -- | -- |
| Support | -- | -4738.2 | -- | -4738.2 |
| Subtotal | +243.3 | -6139.9 | +166.2 | -5730.4 |
| Total Changes | -1240.0 | -12220.3 | -4.0 | -13464.3 |
| Current Estimate | 43170.1 | 270427.5 | 4793.3 | 318390.9 |

| Summary BY 2012 \$M | | | | |
|-------------------------------------|---------|-------------|--------|----------|
| Item | RDT&E | Procurement | MILCON | Total |
| SAR Baseline (Development Estimate) | 47982.1 | 224332.9 | 4168.0 | 276483.0 |
| Previous Changes | | | | |
| Economic | -- | -- | -- | -- |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | -- | -- | -- |
| Engineering | -- | -- | -- | -- |
| Estimating | -1870.0 | -5117.6 | -238.6 | -7226.2 |
| Other | -- | -- | -- | -- |
| Support | -- | -4502.9 | -- | -4502.9 |
| Subtotal | -1870.0 | -9620.5 | -238.6 | -11729.1 |
| Current Changes | | | | |
| Economic | -- | -- | -- | -- |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | -- | -- | -- |
| Engineering | -- | +1346.4 | -- | +1346.4 |
| Estimating | +256.5 | -1349.7 | +172.0 | -921.2 |
| Other | -- | -- | -- | -- |
| Support | -- | -3418.2 | -- | -3418.2 |
| Subtotal | +256.5 | -3421.5 | +172.0 | -2993.0 |
| Total Changes | -1613.5 | -13042.0 | -66.6 | -14722.1 |
| Current Estimate | 46368.6 | 211290.9 | 4101.4 | 261760.9 |

Previous Estimate: December 2014

| RDT&E | \$M | |
|--|---------------|---------------|
| Current Change Explanations | Base Year | Then Year |
| Revised escalation indices. (Economic) | N/A | -36.7 |
| Adjustment for current and prior escalation. (Estimating) | +26.7 | +27.8 |
| Realignment of cost between the aircraft subprogram and engine subprogram (Air Force (AF)). (Estimating) | +60.5 | +64.3 |
| Realignment of cost between the aircraft subprogram and engine subprogram (Navy). (Estimating) | -44.4 | -46.2 |
| Revised estimate for Small Business Innovation Research in FY 2015 (Navy). (Estimating) | -24.1 | -25.4 |
| Revised estimate for additional operational testing requirements (AF). (Estimating) | +74.3 | +81.2 |
| Revised estimate for additional operational testing requirements (Navy). (Estimating) | +147.7 | +161.7 |
| Revised estimate to reflect application of new outyear inflation indices (Non- Treasury Funds). (Estimating) | +1.3 | +0.8 |
| Increase due to realignment of program funding, congressional addition, and actual funding investment (AF). (Estimating) | +8.6 | +9.1 |
| Decrease due to realignment of program funding, congressional reductions, and actual funding investment (AF). (Estimating) | -0.8 | -0.8 |
| Increase due to realignment of program funding, congressional addition, and actual funding investment (Navy). (Estimating) | +6.7 | +7.5 |
| RDT&E Subtotal | +256.5 | +243.3 |

| Procurement | \$M | |
|--|-----------|-----------|
| Current Change Explanations | Base Year | Then Year |
| Revised escalation indices. (Economic) | N/A | -1842.6 |
| Adjustment for current and prior escalation. (Estimating) | +120.5 | +128.9 |
| Stretch-out of procurement buy profile in FY 2016 to FY 2038 (Aircraft Procurement, AF (APAF)). (Schedule) | 0.0 | +1446.0 |
| Acceleration of procurement buy profile in FY 2016 to FY 2031 (Aircraft Procurement, Navy (APN)). (Schedule) | 0.0 | -958.8 |
| Revised estimate for International procurement quantity profile adjustments (APAF). (Estimating) | -128.1 | -160.6 |
| Revised estimate for International procurement quantity profile adjustments (APN). (Estimating) | -18.1 | -23.7 |
| Revised estimate of Airframe cost due to the incorporation of the latest prime and subcontractor actuals and labor/exchange rates (APAF). (Estimating) | +11.7 | +131.1 |
| Revised estimate of Airframe cost due to the incorporation of the latest prime and subcontractor actuals and labor/exchange rates (APN). (Estimating) | +572.8 | +676.1 |
| Update for fact of life changes for prior years/lots 2006-2016 (APAF). (Estimating) | -266.9 | -291.1 |
| Update for fact of life changes for prior years/lots 2006-2016 (APN). (Estimating) | -71.4 | -75.5 |
| Decrease based on revised estimating assumptions for Block Buy and Multi-Year Procurement (APN). (Estimating) | -733.8 | -922.1 |
| Decrease based on revised estimating assumptions for Block Buy and Multi-Year Procurement (APAF). (Estimating) | -1259.9 | -1713.6 |
| Revised estimate of non-recurring costs (APAF). (Estimating) | +224.3 | +254.6 |
| Revised estimate of non-recurring costs (APN). (Estimating) | +199.2 | +122.8 |

| | | |
|---|----------------|----------------|
| Additional funding for Band 2/5 requirements (APAF) (Engineering) | +945.2 | +1313.8 |
| Additional funding for Band 2/5 requirements (APN). (Engineering) | +401.2 | +513.0 |
| Revised estimate for Other Support due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (APAF). (Support) | +1.8 | +92.0 |
| Adjustment for current and prior escalation. (Support) | +25.7 | +27.1 |
| Revised estimate for Other Support due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (APN). (Support) | -494.5 | -544.4 |
| Revised estimate for Initial Spares due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (APAF). (Support) | -2480.8 | -3648.8 |
| Revised estimate for Initial Spares due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (APN). (Support) | -470.4 | -664.1 |
| Procurement Subtotal | -3421.5 | -6139.9 |

| MILCON | \$M | |
|--|---------------|---------------|
| | Base Year | Then Year |
| Current Change Explanations | | |
| Revised escalation indices. (Economic) | N/A | -25.2 |
| Adjustment for current and prior escalation. (Estimating) | +5.1 | +5.4 |
| Revised estimate as a result of refined requirements (AF). (Estimating) | +313.1 | +361.9 |
| Revised estimate as a result of refined requirements (AF). (Estimating) | -153.8 | -185.3 |
| Revised estimate as a result of refined requirements (Navy). (Estimating) | +7.6 | +9.4 |
| MILCON Subtotal | +172.0 | +166.2 |

Cost Variance

F-35 Engine

| Summary TY \$M | | | | |
|-------------------------------------|---------|-------------|--------|---------|
| Item | RDT&E | Procurement | MILCON | Total |
| SAR Baseline (Development Estimate) | 10823.7 | 53032.9 | -- | 63856.6 |
| Previous Changes | | | | |
| Economic | +21.2 | +489.3 | -- | +510.5 |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | +645.6 | -- | +645.6 |
| Engineering | -- | -- | -- | -- |
| Estimating | +1136.7 | +1695.7 | -- | +2832.4 |
| Other | -- | -- | -- | -- |
| Support | -- | -831.7 | -- | -831.7 |
| Subtotal | +1157.9 | +1998.9 | -- | +3156.8 |
| Current Changes | | | | |
| Economic | -4.7 | -373.1 | -- | -377.8 |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | +98.5 | -- | +98.5 |
| Engineering | -- | -- | -- | -- |
| Estimating | -14.0 | -4048.7 | -- | -4062.7 |
| Other | -- | -- | -- | -- |
| Support | -- | -2020.3 | -- | -2020.3 |
| Subtotal | -18.7 | -6343.6 | -- | -6362.3 |
| Total Changes | +1139.2 | -4344.7 | -- | -3205.5 |
| Current Estimate | 11962.9 | 48688.2 | -- | 60651.1 |

| Summary BY 2012 \$M | | | | |
|-------------------------------------|---------|-------------|--------|---------|
| Item | RDT&E | Procurement | MILCON | Total |
| SAR Baseline (Development Estimate) | 11695.2 | 42332.9 | -- | 54028.1 |
| Previous Changes | | | | |
| Economic | -- | -- | -- | -- |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | -- | -- | -- |
| Engineering | -- | -- | -- | -- |
| Estimating | +1440.8 | +888.6 | -- | +2329.4 |
| Other | -- | -- | -- | -- |
| Support | -- | -766.3 | -- | -766.3 |
| Subtotal | +1440.8 | +122.3 | -- | +1563.1 |
| Current Changes | | | | |
| Economic | -- | -- | -- | -- |
| Quantity | -- | -- | -- | -- |
| Schedule | -- | -- | -- | -- |
| Engineering | -- | -- | -- | -- |
| Estimating | -13.4 | -2670.3 | -- | -2683.7 |
| Other | -- | -- | -- | -- |
| Support | -- | -1408.0 | -- | -1408.0 |
| Subtotal | -13.4 | -4078.3 | -- | -4091.7 |
| Total Changes | +1427.4 | -3956.0 | -- | -2528.6 |
| Current Estimate | 13122.6 | 38376.9 | -- | 51499.5 |

Previous Estimate: December 2014

| RDT&E | \$M | |
|--|--------------|--------------|
| Current Change Explanations | Base Year | Then Year |
| Revised escalation indices. (Economic) | N/A | -4.7 |
| Adjustment for current and prior escalation. (Estimating) | +4.3 | +4.3 |
| Realignment of cost between the engine subprogram and aircraft subprogram (AF). (Estimating) | -60.9 | -64.3 |
| Realignment of cost between the engine subprogram and aircraft subprogram (Navy). (Estimating) | +43.4 | +46.2 |
| Decrease due to realignment of program funding, congressional reductions, and actual funding investment (AF). (Estimating) | -0.2 | -0.2 |
| RDT&E Subtotal | -13.4 | -18.7 |

| Procurement | \$M | |
|--|-----------|-----------|
| Current Change Explanations | Base Year | Then Year |
| Revised escalation indices. (Economic) | N/A | -373.1 |
| Adjustment for current and prior escalation. (Estimating) | +17.8 | +19.0 |
| Stretch-out of procurement buy profile in FY 2016 to FY 2038 (Engine Procurement, AF). (Schedule) | 0.0 | +293.2 |
| Acceleration of procurement buy profile in FY 2016 to FY 2031 (Engine Procurement, Navy). (Schedule) | 0.0 | -194.7 |
| Revised estimate for International procurement quantity adjustments (Engine Procurement, AF). (Estimating) | -9.2 | -12.5 |
| Revised estimate for International procurement quantity adjustments (Engine Procurement, Navy). (Estimating) | -3.8 | -5.1 |
| Revised estimate to reflect actuals (Engine Procurement, AF). (Estimating) | -1445.7 | -2326.2 |
| Revised estimate to reflect actuals (Engine Procurement, Navy). (Estimating) | -330.6 | -547.2 |
| Decrease based on revised estimating assumptions for Block Buy and Multi-Year Procurement (Engine Procurement, AF). (Estimating) | -457.1 | -643.3 |
| Decrease based on revised estimating assumptions for Block Buy and Multi-Year Procurement (Engine Procurement, Navy). (Estimating) | -266.8 | -343.0 |
| Update for fact of life changes for prior years/lots 2006-2016 (Engine Procurement, AF). (Estimating) | -47.9 | -52.1 |
| Update for fact of life changes for prior years/lots 2006-2016 (Engine Procurement, Navy). (Estimating) | -127.0 | -138.3 |
| Adjustment for current and prior escalation. (Support) | +4.8 | +5.0 |
| Revised estimate for Other Support due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (Engine Procurement, AF). (Support) | -17.7 | -11.6 |
| Revised estimate for Other Support due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (Engine Procurement, Navy). (Support) | -85.3 | -96.7 |
| Revised estimate for Initial Spares due to maturation of technical baseline, definition of customer requirements, and further definition of Service beddown plans (Engine Procurement, AF). (Support) | -1143.5 | -1680.7 |
| Revised estimate for Initial Spares due to maturation of technical baseline, definition of | -166.3 | -236.3 |

customer requirements, and further definition of Service beddown plans (Engine Procurement, Navy). (Support)

| | | |
|----------------------|---------|---------|
| Procurement Subtotal | -4078.3 | -6343.6 |
|----------------------|---------|---------|

Contracts

General Notes

The Israel System Development and Demonstration and F135 LRIP 7 contracts no longer meet the threshold for the six largest contracts.

Contract Identification

Appropriation: Procurement
Contract Name: F-35 LRIP 6
Contractor: Lockheed Martin
Contractor Location: 1 Lockheed Boulevard
 Ft. Worth, TX 76108
Contract Number: N00019-11-C-0083
Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Cost Plus Incentive Fee (CPIF)
Award Date: December 28, 2012
Definitization Date: September 27, 2013

| Contract Price | | | | | | | |
|------------------------------|---------|-----|------------------------------|---------|-----|-------------------------------------|-----------------|
| Initial Contract Price (\$M) | | | Current Contract Price (\$M) | | | Estimated Price At Completion (\$M) | |
| Target | Ceiling | Qty | Target | Ceiling | Qty | Contractor | Program Manager |
| 4392.1 | N/A | 36 | 7233.6 | N/A | 36 | 7093.6 | 7233.6 |

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to definitization of Production Non Recurring, Annualized Sustainment, Non-Annualized Sustainment, Depot, and Spares scope.

| Contract Variance | | | |
|---|---------------|-------------------|--|
| Item | Cost Variance | Schedule Variance | |
| Cumulative Variances To Date (12/31/2015) | -131.2 | -203.4 | |
| Previous Cumulative Variances | -183.0 | -193.0 | |
| Net Change | +51.8 | -10.4 | |

Cost and Schedule Variance Explanations

The favorable net change in the cost variance is due to sustainment supplier rate underruns, staffing shortfalls and material procurement efficiencies.

The unfavorable net change in the schedule variance is due to the remaining two Italian aircraft performing behind schedule and due to tooling delays.

Notes

As a whole, the CLIN consist of multiple contract types including Fixed Price Incentive Fee as well as Cost Plus Incentive Fee and Cost Plus Fixed-Fee. For this reason, the overall contract type is mixed and there is not a true contract ceiling.

Contract Identification

Appropriation: Procurement
Contract Name: F135 LRIP 6
Contractor: Pratt & Whitney
Contractor Location: 400 Aircraft Road
 Middletown, CT 06457
Contract Number: N00019-12-C-0090
Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Cost Plus Incentive Fee (CPIF)
Award Date: January 06, 2012
Definitization Date: February 15, 2013

| Contract Price | | | | | | | |
|------------------------------|---------|-----|------------------------------|---------|-----|-------------------------------------|-----------------|
| Initial Contract Price (\$M) | | | Current Contract Price (\$M) | | | Estimated Price At Completion (\$M) | |
| Target | Ceiling | Qty | Target | Ceiling | Qty | Contractor | Program Manager |
| 1122.0 | 1128.8 | 38 | 1131.9 | 1139.0 | 38 | 1099.3 | 1091.6 |

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the incorporation of a contract modification that extended the period of performance for CLIN 12 Service Specific Site Activation and added some additional support equipment.

| Contract Variance | | | |
|---|---------------|--|-------------------|
| Item | Cost Variance | | Schedule Variance |
| Cumulative Variances To Date (12/31/2015) | -10.9 | | -36.5 |
| Previous Cumulative Variances | -8.6 | | -31.0 |
| Net Change | -2.3 | | -5.5 |

Cost and Schedule Variance Explanations

The unfavorable net change in the cost variance is due to general and administrative rate changes, additional costs with design changes with Low Observables Advanced Baseline Acceptance Radar Inspection System work and the Low Pressure Turbine Rotor hardware is over cost due to not enough cost reduction initiatives or engineering changes implemented or better pricing from suppliers to support the baseline cost targets.

The unfavorable net change in the schedule variance is due to the Low Pressure Turbine and High Pressure Turbine casting tools are late and the initial spares deliveries are late as the contractor is managing the demand requirements and prioritizing the deliveries between the production requirements and spares.

Notes

The contract is a combination of Fixed Price Incentive Fee and Cost Plus Incentive Fee CLINs. For this reason, the overall contract type is mixed and there is not a true contract ceiling. This contract includes both engines and Sustainment work scope. All engines have been delivered and the remaining work is for tooling, support equipment and spare parts.

The Current Contract Ceiling Price is estimated based on the FPIF and CPIF CLINs.

Total Quantity includes aircraft engines and spare engines = 36 installs and two whole spares.

The earned value completion date and Contractor Performance Report reporting will be determined as the contract nears completion.

Pratt & Whitney's EVM System was decertified on September 30, 2013 due to sixteen significant deficiencies that affect four of the 32 EVMS Guidelines. In accordance with Defense Federal Acquisition Regulation Supplement, 5% of each request for payment is being withheld until all significant deficiencies have been corrected.

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

Contract Identification

Appropriation: Procurement
Contract Name: F-35 LRIP 7
Contractor: Lockheed Martin
Contractor Location: 1 Lockheed Boulevard
 Ft. Worth, TX 76108
Contract Number: N00019-12-C-0004
Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Cost Plus Incentive Fee (CPIF)
Award Date: September 27, 2013
Definitization Date: September 27, 2013

| Contract Price | | | | | | | |
|------------------------------|---------|-----|------------------------------|---------|-----|-------------------------------------|-----------------|
| Initial Contract Price (\$M) | | | Current Contract Price (\$M) | | | Estimated Price At Completion (\$M) | |
| Target | Ceiling | Qty | Target | Ceiling | Qty | Contractor | Program Manager |
| 4447.1 | N/A | 35 | 5640.4 | N/A | 35 | 5547.1 | 5640.4 |

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to definitization of Tech Assist, Non-Annualized Sustainment and Depot scope.

| Contract Variance | | |
|---|---------------|-------------------|
| Item | Cost Variance | Schedule Variance |
| Cumulative Variances To Date (12/31/2015) | -78.6 | -84.8 |
| Previous Cumulative Variances | -10.0 | -46.0 |
| Net Change | -68.6 | -38.8 |

Cost and Schedule Variance Explanations

The unfavorable net change in the cost variance is due to Wing and Mate through Delivery due to part shortages driving out-of-station work and labor inefficiencies. Unfavorable assembly cost performance is somewhat offset by Sustainment due to supplier rate underruns, staffing shortfalls and material procurement efficiencies.

The unfavorable net change in the schedule variance is due to multiple late Fire Control and Stores deliveries.

Notes

As a whole, the CLIN consist of multiple contract types including Fixed Price Incentive Fee as well as Cost Plus Incentive Fee and Cost Plus Fixed-Fee. For this reason, the overall contract type is mixed and there is not a true contract ceiling.

Contract Identification

Appropriation: Procurement
Contract Name: F135 LRIP 8
Contractor: Pratt & Whitney
Contractor Location: 400 Aircraft Road
 Middletown, CT 06457
Contract Number: N00019-13-C-0016
Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Cost Plus Incentive Fee (CPIF)
Award Date: August 27, 2013
Definitization Date: October 30, 2014

| Contract Price | | | | | | | |
|------------------------------|---------|-----|------------------------------|---------|-----|-------------------------------------|-----------------|
| Initial Contract Price (\$M) | | | Current Contract Price (\$M) | | | Estimated Price At Completion (\$M) | |
| Target | Ceiling | Qty | Target | Ceiling | Qty | Contractor | Program Manager |
| 1009.1 | 1011.9 | 48 | 1185.1 | 1191.4 | 48 | 1141.7 | 1185.1 |

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the incorporation of many contract modifications relating to tooling, Sustainment, extra long lead hardware options, operations and maintenance work scope and unit and depot support equipment.

| Contract Variance | | |
|---|---------------|-------------------|
| Item | Cost Variance | Schedule Variance |
| Cumulative Variances To Date (12/31/2015) | -68.9 | -9.5 |
| Previous Cumulative Variances | -- | -- |
| Net Change | -68.9 | -9.5 |

Cost and Schedule Variance Explanations

The unfavorable cumulative cost variance is due to general & administrative rate changes, higher costs with the Fan Integrally Bladed Rotors and Externals Systems due to not enough cost reduction initiatives or engineering changes implemented or better pricing from suppliers to support the baseline cost targets.

The unfavorable cumulative schedule variance is due to Fan, Externals and Turbine Exhaust hardware delivering late to baseline plan due to quality issue.

Notes

The contract is a combination of Fixed Price Incentive Fee, Cost Plus Incentive Fee and Firm Fixed Priced CLINs. For this reason, the overall contract type is mixed and there is not a true contract ceiling.

This contract includes both engines and Sustainment work scope. All engines have been delivered and the remaining work is for tooling, support equipment and spare parts.

The Current Contract Ceiling Price is estimated based on the FPIF and CPIF CLINs.

Total Quantity includes aircraft engines and spare engines = 45 installs and three whole spares.

The earned value completion date and Contractor Performance Report reporting will be determined as the contract nears completion. Pratt & Whitney's EVM System was decertified on September 30, 2013 due to sixteen significant deficiencies that affect four of the 32 EVMS Guidelines. In accordance with Defense Federal Acquisition Regulation Supplement, 5% of each request for payment is being withheld until all significant deficiencies have been corrected.

Contract Identification

Appropriation: Procurement
Contract Name: F-35 LRIP 8
Contractor: Lockheed Martin
Contractor Location: 1 Lockheed Boulevard
 Ft Worth, TX 76108
Contract Number: N00019-13-C-0008
Contract Type: Fixed Price Incentive(Firm Target) (FPIF), Cost Plus Incentive Fee (CPIF)
Award Date: February 28, 2013
Definitization Date: November 21, 2014

| Contract Price | | | | | | | |
|------------------------------|---------|-----|------------------------------|---------|-----|-------------------------------------|-----------------|
| Initial Contract Price (\$M) | | | Current Contract Price (\$M) | | | Estimated Price At Completion (\$M) | |
| Target | Ceiling | Qty | Target | Ceiling | Qty | Contractor | Program Manager |
| 5153.5 | N/A | 43 | 5171.3 | N/A | 43 | 5162.2 | 5171.3 |

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to authorization of Reprogramming Center West Prime Mission Equipment.

| Contract Variance | | |
|---|---------------|-------------------|
| Item | Cost Variance | Schedule Variance |
| Cumulative Variances To Date (12/31/2015) | -65.0 | -136.1 |
| Previous Cumulative Variances | -- | -- |
| Net Change | -65.0 | -136.1 |

Cost and Schedule Variance Explanations

The unfavorable cumulative cost variance is due to overruns within quality labor and material allocations. In addition, unfavorable performance is due to ongoing part shortages within Forward Fuselage and Wing driving out-of-station work and labor inefficiencies.

The unfavorable cumulative schedule variance is due to late spares and tool deliveries as well as assembly delays.

Notes

As a whole, the CLIN consist of multiple contract types including Fixed Price Incentive Fee as well as Cost Plus Incentive Fee and Cost Plus Fixed-Fee. For this reason, the overall contract type is mixed and there is not a true contract ceiling.

Contract Identification

Appropriation: Procurement
Contract Name: FY15 Annualized Sustainment
Contractor: Lockheed Martin
Contractor Location: 1 Lockheed Boulevard
 Ft Worth, TX 76108
Contract Number: N00019-15-C-0031
Contract Type: Cost Plus Incentive Fee (CPIF)
Award Date: October 28, 2014
Definitization Date: November 01, 2014

| Contract Price | | | | | | | |
|------------------------------|---------|-----|------------------------------|---------|-----|-------------------------------------|-----------------|
| Initial Contract Price (\$M) | | | Current Contract Price (\$M) | | | Estimated Price At Completion (\$M) | |
| Target | Ceiling | Qty | Target | Ceiling | Qty | Contractor | Program Manager |
| 5153.5 | N/A | 43 | 5171.3 | N/A | 43 | 5162.2 | 5171.3 |

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to Delta driven by authorization of Reprogramming Center West Prime Mission Equipment.

| Contract Variance | | |
|---|---------------|-------------------|
| Item | Cost Variance | Schedule Variance |
| Cumulative Variances To Date (12/31/2015) | -65.0 | -136.1 |
| Previous Cumulative Variances | -- | -- |
| Net Change | -65.0 | -136.1 |

Cost and Schedule Variance Explanations

The unfavorable cumulative cost variance is due to overruns within quality labor and material allocations. In addition, unfavorable performance is due to ongoing part shortages within Forward Fuselage and Wing driving out-of-station work and labor inefficiencies.

The unfavorable cumulative schedule variance is due to late spares and tool deliveries as well as assembly delays.

Notes

As a whole, the CLIN consist of multiple contract types including Fixed Price Incentive Fee as well as Cost Plus Incentive Fee and Cost Plus Fixed-Fee. For this reason, the overall contract type is mixed and there is not a true contract ceiling.

Deliveries and Expenditures

F-35 Aircraft

| Deliveries | | | | |
|----------------------------------|-----------------|----------------|----------------|-------------------|
| Delivered to Date | Planned to Date | Actual to Date | Total Quantity | Percent Delivered |
| Development | 14 | 14 | 14 | 100.00% |
| Production | 148 | 146 | 2443 | 5.98% |
| Total Program Quantity Delivered | 162 | 160 | 2457 | 6.51% |

Expended and Appropriated (TY \$M)

| | | | |
|------------------------|----------|----------------------------|---------|
| Total Acquisition Cost | 318390.9 | Years Appropriated | 23 |
| Expended to Date | 66171.9 | Percent Years Appropriated | 51.11% |
| Percent Expended | 20.78% | Appropriated to Date | 91294.7 |
| Total Funding Years | 45 | Percent Appropriated | 28.67% |

The above data is current as of February 03, 2016.

Totals reflect U.S. aircraft only-no International Partner aircraft.

F-35 Engine

| Deliveries | | | | |
|----------------------------------|-----------------|----------------|----------------|-------------------|
| Delivered to Date | Planned to Date | Actual to Date | Total Quantity | Percent Delivered |
| Development | 14 | 14 | 14 | 100.00% |
| Production | 148 | 146 | 2443 | 5.98% |
| Total Program Quantity Delivered | 162 | 160 | 2457 | 6.51% |

Expended and Appropriated (TY \$M)

| | | | |
|------------------------|---------|----------------------------|---------|
| Total Acquisition Cost | 60651.1 | Years Appropriated | 23 |
| Expended to Date | 17008.4 | Percent Years Appropriated | 51.11% |
| Percent Expended | 28.04% | Appropriated to Date | 19924.7 |
| Total Funding Years | 45 | Percent Appropriated | 32.85% |

The above data is current as of February 03, 2016.

Engines planned and actual to date only include production installs.

Operating and Support Cost

F-35 Aircraft

Cost Estimate Details

| | |
|---------------------------------|-------------------|
| Date of Estimate: | March 07, 2016 |
| Source of Estimate: | CAPE ICE |
| Quantity to Sustain: | 2443 |
| Unit of Measure: | Flying Hour |
| Service Life per Unit: | 32.00 Years |
| Fiscal Years in Service: | FY 2011 - FY 2070 |

Quantity to Sustain 2443 does not include 14 development aircraft.

Sustainment Strategy

The F-35 Product Support Manager (PSM) has developed and is executing a Sustainment Strategy that is consistent with warfighter requirements, technical specifications, extant contracts, government policies, and best practices. The F-35 Sustainment Strategy expressly states that the F-35 Program will:

- Design, develop, deliver and sustain a single, integrated, and global system of sustainment products, processes, and business practices. These actions will enable the F-35 Air System to achieve a high degree of effectiveness at an affordable cost.
- Tailor the global system to meet warfighter-defined and PSM-supported readiness and cost objectives. This action will ensure that the global system is responsive and flexible as operational needs vary over time.
- Maintain life-cycle focus, including the reduction of costs. This action will provide critical affordability benefits and further supports a high degree of effectiveness as Air System maturity grows.
- Create a mutually-beneficial enterprise that – with relevant metrics and incentives – operates, manages, and supports the global system. This action further improves responsiveness and enhances affordability.
- Leverage the global resource base – government and commercial – to take advantage of stakeholder capabilities, human capital, best practices, and similar critical contributions. This action increases robustness and scalability as the F-35 fleet grows and matures.

Antecedent Information

The F-35 family of aircraft variants will replace the following current aircraft: F-16C/D, A-10, F/A-18C/D, and AV-8B. The F-35 O&S estimate is based on legacy fleet history only when F-35 specific data is not available.

Comparing the costs of the 5th Generation F-35 to legacy aircraft is challenging. The cost table above compares an adjusted F-16C/D Cost per Flying Hour (CPFH) to a forecast of the CPFH for the F-35A variant. The F-35A CPFH figure is based on the Conventional Takeoff and Landing (CTOL) variant only. The F-35A CTOL variant will make up the majority of the DoD F-35 aircraft procurement, accounting for 1,763 of 2,443 total aircraft currently planned for U.S. forces.

The F-16C/D CPFH figures were developed in a joint effort between CAPE and the Air Force Cost Analysis Agency. The

figures have been normalized for comparison to the F-35A CPFH forecast. The starting point for the F-16C/D CPFH is an average of actual cost incurred for this fleet during FY 2008 through FY 2010. In order to enable the direct comparison of the CPFH figures, the actual F-16C/D CPFH is adjusted to reflect the cost of fuel, the number of flight hours forecast for the F-35A, and FY 2013 inflation indices. The F-16C/D figures include costs that F-16 shares with other Air Force platforms: Systems Engineering/Program Management (SEPM), maintenance training costs, certain software development efforts, and information systems. Costs for mission planning are included in the F-35A CPFH figure, but equivalent costs for the F-16C/D are not available, and no adjustment was made for this element of cost. Finally, the F-16C/D figures assume full funding of requirements consistent with the F-35A CPFH figures.

| Annual O&S Costs BY2012 \$K | | |
|--------------------------------|---|---|
| Cost Element | F-35 Aircraft Average Annual Cost Per Flying Hour | F-16C/D (Antecedent) Cost Per Flying Hour (\$) |
| Unit-Level Manpower | 8.470 | 10.042 |
| Unit Operations | 4.923 | 5.632 |
| Maintenance | 11.126 | 5.501 |
| Sustaining Support | 3.179 | 2.075 |
| Continuing System Improvements | 2.108 | 2.291 |
| Indirect Support | 0.000 | 0.000 |
| Other | 0.000 | 0.000 |
| Total | 29.806 | 25.541 |

The F-35A CTOL unitized cost figure shown in the table above decreased slightly relative to the comparable 2014 SAR figure. There are three considerations that result in a slight decrease for the F-35A unitized cost shown above: 1) a decrease in the assumed cost per gallon of JP-8 fuel; 2) a decrease in the fuel burn rate for the F-35A variant; and 3) a revised cost estimating relationship for hardware modifications.

Given the significant increase in military capabilities provided, it is reasonable to expect F-35A to cost more to operate and sustain than 4th generation legacy aircraft.

| Item | Total O&S Cost \$M | | | |
|------------------|--|------------------|----------------------|-----|
| | F-35 Aircraft | | F-16C/D (Antecedent) | |
| | Current Development APB Objective/Threshold | Current Estimate | | |
| Base Year | 617000.0 | 678700.0 | 620805.4 | N/A |
| Then Year | 1113272.6 | N/A | 1123844.0 | N/A |

The Total O&S Cost figures above reflect the CAPE ICE estimate of O&S costs updated in 2015 in accordance with tasking from Congress. The O&S cost estimate includes all three U.S. aircraft variants, is based on a forecast 30-year service-life, and is based on planned usage rates provided by each relevant military service. The planned F-35 usage rates, in terms of aircraft flight hours per year, are as follows: F-35A CTOL @ 250 hrs./yr.; F-35B STOVL @ 302 hrs./yr.; and F-35C CV @ 316 hrs./yr. The total life-cycle cost estimate is not a simple extrapolation of the F-35A flying hour cost shown in the unitized O&S cost table above. Total O&S costs are updated using FY 2015 inflation indices, and include revised forecasts of labor escalation rates for military, civilian, and contractor personnel. A comparable total cost figure for the antecedent system (i.e., F-16C/D) is not available.

The 2015 CAPE estimate of F-35 total life cycle O&S costs incorporates updated information regarding several key cost

elements relative to the CAPE O&S cost estimate shown in the 2014 SAR. This includes updated fuel burn rates for all variants, a reduction in the assumed price per gallon of both JP-5 and JP-8, use of updated escalation forecasts for government personnel, a revised cost estimating relationship for hardware modifications, new Service bed down plans for all variants, and updated depot-level repairable (DLR) costs. The updated information results in increased cost forecasts for certain cost elements, and decreased cost forecasts for other elements. The 2015 CAPE total O&S estimate is approximately 3.8% higher (in BY 2012 \$) than the total O&S cost estimate in the 2014 SAR.

Not included in the 2015 CAPE estimate are the intermediate maintenance costs for the Marine Corps as observed with the operational squadron at Marine Corps Air Station Yuma. Although the program of record (POR) acknowledges only unit and depot levels of maintenance, it appears that the Department of Navy (DoN) is moving towards incorporating some form of intermediate maintenance for its squadrons. However, the DoN has not made the decision to change the POR at this point. While the extent of the additional maintenance level is currently unclear, a change in F-35 maintenance strategy appears to be likely for at least the DoN. CAPE recommends that the Services develop business case analyses to determine the impact of intermediate maintenance levels on the respective F-35 variants, in terms of both cost and readiness.

As in 2014, the CAPE O&S cost estimate incorporates actual information on component reliabilities obtained from the ongoing F-35 flight operations, including flight test and field operations. This program information is provided from the DoD test community, through Director, Operational Test and Evaluation, and includes actual reliability information on many F-35 components based on data collected during approximately 31,000 hours of flight operations. The data include all variants and flight operations through May 2015.

The reliability information has been compared to expected reliabilities for this stage of the program, for all variants, based on reliability growth curves. The 2015 CAPE O&S estimate continues to reflect the increased DLR costs present in the 2014 SAR estimate, because component reliability information obtained from actual flight operations data remains inconsistent with expectations.

CAPE will continue to work with the DoD operational test community to improve the processes and methods used to incorporate actual data and information on component reliabilities and removal rates, obtained from ongoing flight operations, into the CAPE life-cycle O&S cost estimate for the F-35 program. This information will be used, together with reliability improvement forecasts, to update the O&S cost estimates as the program proceeds to and beyond IOC. In the future, the use of actual flight operations information could result in substantial changes in forecasts of DLR costs in CAPE O&S estimates.

Affordability remains the F-35 program office number one priority. As such, the F-35 program team is focused on reducing sustainment costs across the program. The program continues to target O&S cost avoidance through the Cost War Room (CWR) and Reliability and Maintainability Improvement Program (RMIP). Concurrent to CWR activity, the program office has taken strides to transition from analogy and parametric estimating approaches toward contracted values to improve the O&S cost estimate's accuracy. As a result of CWR affordability initiatives, requirement refinement, and improved cost data quality, the program has reduced the program's annual cost per flight hour.

The 2015 O&S POE of \$579.1B BY 2012\$ (\$1.026 Trillion TY\$) has been updated to reflect the latest technical baseline for the program and incorporates revised stakeholder requirements. Primary updates to the 2015 POE include service requirements, JP-5 and JP-8 fuel prices and consumption, hardware modification, and government/contractor manpower. Note: values below in parentheses represent the change from the 2014 POE to the 2015 POE.

- U.S. Air Force extended the program's life cycle by six years. In total, DoD assumes an additional 1.6 million flight hour (11% increase) for F-35 operations (+\$54.3B CY 2012 \$)
- JP-5 and JP-8 fuel prices reflect Defense Logistics Agency catalog with consumption rates updated to reflect actuals (-\$24.6B CY 2012 \$)
- Hardware modifications removed costs associated with capability updates as stated in 2014 CAPE guidance (-\$14.9B CY 2012 \$)

- Government / contractor manpower underwent a thorough assessment based on current LRIP requirements (+\$3.7B CY 2012 \$)

The CAPE estimate incorporates the program office updates while adjusting reliability metrics and military personnel compensation real price change. The program office does not support the CAPE's use of actual reliability data from ongoing flight operations. The reliability data used in the CAPE estimate is based on a mix of aircraft configurations and represent only 9% of the hours required to reach Reliability and Maintainability maturity of the F-35 fleet. The CAPE estimate accounted for the real price change of military personnel compensation. The program office does not have a position on military personnel real price change and will incorporate once it becomes DoD guidance.

The F-35 PEO believes that the inherent differences between the F-35 and the F-16 estimates, such as mission planning costs being included in F-35 but not F-16 and the fact that the F-16 is a mature weapons system with many reliability and maintenance costs "leaned out" over the years, result in an overstating of the differences in cost per flying hour between the two. Regardless of the difference, the F-35 program office is committed to, and has enacted multiple programs to drive the O&S costs of the F-35 down.

Equation to Translate Annual Cost to Total Cost

The F-35 steady state cost per flying hour reflected in the annual O&S cost section does not easily translate to the Total O&S value for the program because the total O&S costs reflect costs for all three variants of the F-35 for the U.S. Air Force, U.S. Marine Corps, and U.S. Navy, whereas the CPFH reflects the U.S. Air Force F-35A only.

| O&S Cost Variance | | |
|--|-------------|--|
| Category | BY 2012 \$M | Change Explanations |
| Prior SAR Total O&S Estimates - Dec 2015 SAR | 597773.6 | |
| Programmatic/Planning Factors | 41742.1 | Service beddown plans updated and CTOL Manpower Estimate Report revised. |
| Cost Estimating Methodology | -21304.7 | Hardware modification cost estimating relationship revised. |
| Cost Data Update | 4768.5 | Spare Parts Unit Database updated. |
| Labor Rate | 7369.2 | Escalation rates revised and inflation guidance updated. |
| Energy Rate | -30858.6 | Revised JP-5/JP-8 costs per gallon. |
| Technical Input | -5568.8 | Increased fuel efficiency. |
| Other | 26884.1 | Predicted cost per air vehicle induction increased and indirect costs revised. |
| Total Changes | 23031.8 | |
| Current Estimate | 620805.4 | |

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

Disposal/Demilitarization Total Cost (BY 2012 \$M):

Program maturity is not at a point where disposal costs can be estimated within an acceptable margin of error.

F-35 Engine

Cost Estimate Details

Date of Estimate:
Source of Estimate:
Quantity to Sustain:
Unit of Measure:
Service Life per Unit:
Fiscal Years in Service:

O&S costs for the engine subprogram are included in the overall program costs that are shown in the F-35 Aircraft subprogram.

Sustainment Strategy

Antecedent Information

| Annual O&S Costs BY2012 \$K | | | |
|--------------------------------|-------------|--|----------------------------|
| Cost Element | F-35 Engine | | No Antecedent (Antecedent) |
| Unit-Level Manpower | 0.000 | | 0.000 |
| Unit Operations | 0.000 | | 0.000 |
| Maintenance | 0.000 | | 0.000 |
| Sustaining Support | 0.000 | | 0.000 |
| Continuing System Improvements | 0.000 | | 0.000 |
| Indirect Support | 0.000 | | 0.000 |
| Other | 0.000 | | 0.000 |
| Total | -- | | -- |

| Item | Total O&S Cost \$M | | | |
|------------------|---|------------------|-----|----------------------------|
| | F-35 Engine | | | No Antecedent (Antecedent) |
| | Current Development APB Objective/Threshold | Current Estimate | | |
| Base Year | N/A | N/A | N/A | N/A |
| Then Year | N/A | N/A | N/A | 0.0 |

| O&S Cost Variance | | |
|--|-------------|---------------------|
| Category | BY 2012 \$M | Change Explanations |
| Prior SAR Total O&S Estimates - Dec 2015 SAR | 0.0 | |

| | |
|-------------------------------|-----|
| Programmatic/Planning Factors | 0.0 |
| Cost Estimating Methodology | 0.0 |
| Cost Data Update | 0.0 |
| Labor Rate | 0.0 |
| Energy Rate | 0.0 |
| Technical Input | 0.0 |
| Other | 0.0 |
| Total Changes | 0.0 |
| Current Estimate | 0.0 |

Disposal Estimate Details

Date of Estimate:

Source of Estimate:

Disposal/Demilitarization Total Cost (BY 2012 \$M):