

# F-35 Lightning II Program Fact Sheet Selected Acquisition Report (SAR) 2016 Cost Data

The annual Selected Acquisition Reports (SAR) for 2016 will be delivered to Congress by the Undersecretary of Defense for Acquisition, Technology, and Logistics, to include the 2016 F-35 SAR. This report provides status on program cost, schedule, and performance as of June 2016, and reflects the procurement quantities approved in the 2018 U.S. President's Budget. The SAR16 Total Program Costs are based on the latest F-35 Joint Program Office (JPO) cost estimates for Research, Development, Test, and Evaluation (RDT&E) and Procurement, and the latest U.S. Service estimates for Military Construction (MILCON). The Operations and Support (O&S) costs reflect the 2015 SAR estimate, as they were not updated for 2016 by the Office of the Secretary of Defense (OSD) Cost Analysis and Program Evaluation (CAPE). While the SAR only reports on U.S. costs, the estimates take into account the efficiencies gained through international partner and Foreign Military Sales (FMS) contributions and quantities.

The overall Acquisition Cost (RDT&E, Procurement, and MILCON) of the program increased by \$11.3B in base year 2012 dollars (BY12\$) and \$27.5B in then-year dollars (TY\$). The Total Program Costs (RDT&E, Procurement, MILCON, and O&S) reflect the same increase as the overall Acquisition Cost since the O&S estimate was unchanged from 2015.

Development: The RDT&E costs have remained steady, with the exception of a transfer of funds from the Procurement account of approximately \$300M (BY12\$). RDT&E costs increased due to additional costs incurred to close out System Development and Demonstration (SDD), and allow us to deliver full Block 3F warfighting capability.

Procurement: The increase in Procurement cost of \$11B (BY12\$) is largely driven by the adjustments made to the U.S. planned production profile, which includes the U.S. Air Force reducing its maximum annual rate of aircraft procured from 80 per year down to 60 per year and thus extending the planned purchases 6 additional years. These cost increases have been partially offset by reductions made in the estimate due to the incorporation of latest contractor actuals, settlements, rates/factors, and latest exchange rate projections. The overall average Unit Recurring Flyaway (URF) cost of the aircraft in BY12\$ increased by \$3.6M for the F-35A, decreased by \$0.7M for the F-35B, and increased \$1.0M for the F-35C. The Average Procurement Unit Cost (APUC) for the program increased by \$4.0M (BY12\$) and the Program Acquisition Unit Cost (PAUC) increased by \$3.9M (BY12\$).

MILCON: The estimated MILCON costs were revised based on Service inputs reflecting a decrease of approximately \$67M (BY12\$). The F-35 JPO does not manage MILCON funds but reports the latest Service projections.

Sustainment: The 2016 SAR O&S cost estimate was not updated by OSD CAPE, and remains unchanged from 2015; therefore, it does not accurately reflect the O&S changes captured by the program office. The JPO O&S cost estimate increased by \$23.2B (BY12\$) and \$35.3B (TY\$). The JPO 2016 life cycle O&S cost estimate increased 4 percent from the 2015 estimate. This increase was driven by an OSD update to the FY16 fuel escalation index that increased the BY12 fuel cost per gallon, as well as a change to the DoD beddown plans that added over 135,000 flight hours and 63,000 operation aircraft years to the program. Without these two updates, the F-35 estimated O&S costs would have decreased by approximately \$6.2B (BY12\$), or 1 percent, from last year's JPO estimate. The JPO's estimated steady state cost per flying hour increased by 2.9 percent for the F-35A, 4.8 percent for the F-35B, and 0.7 percent for the F-35C. These increases were driven by an OSD update to the FY16 fuel escalation index that increased the BY12 fuel cost per gallon. Without the updated fuel escalation index the estimated steady state cost per flying hour would have decreased by 1.0 percent for the F-35A, increased by 1.9 percent for the F-35B, and decreased by 3.0 percent for the F-35C.



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	SAR YEAR	BY12 \$B	TY \$B
Acquisition Cost	SAR 15	\$313.3	\$379.0
(RDT&E + Procurement +	SAR 16	\$324.6	\$406.5
MILCON)	DELTA	\$11.3 (3.5% increase)	\$27.5 (6.8% increase)
Total Program Cost	SAR 15	\$934.1	\$1502.8
(RDT&E + Procurement + MILCON + O&S)	SAR 16	\$945.4	\$1530.3
	DELTA	\$11.3 (1.2% increase)	\$27.5 (1.8% increase)

#### Research Development Test & Evaluation

	<b>SAR 15</b>	SAR 16	SAR 15	SAR 16
	BY12 \$B	BY12 \$B	TY \$B	TY \$B
RDT&E	\$59.5	\$59.8	\$55.1	\$55.5

RDT&E: The RDT&E costs have remained steady, with the exception of a transfer of funds from the Procurement account of approximately \$300M (BY12\$). RDT&E costs increased due to additional costs incurred to close out System Development and Demonstration (SDD) to meet full Block 3F warfighting capability.

#### **Procurement**

	SAR 15	SAR 16	SAR 15	SAR 16
	BY12 \$B	BY12 \$B	TY \$B	TY \$B
Procurement	\$249.7	\$260.8	\$319.1	\$346.2

#### Military Construction

	SAR 15	SAR 16	SAR 15	SAR 16
	BY12 \$B	BY12 \$B	TY \$B	TY \$B
MILCON	\$4.1	\$4.0	\$4.8	\$4.8

PROC: The increase in Procurement is largely driven by the
adjustments made to the U.S. planned production profile
which includes the U.S. Air Force reducing its maximum
annual rate of aircraft procured from 80 per year down to 60
per year and thus extending the planned purchases 6
additional years.

### Operating & Support Costs

	SAR 15 BY12 \$B	SAR 16 BY12 \$B	SAR 15 TY \$B	SAR 16 TY \$B
CAPE O&S	\$620.8	\$620.8	\$1123.8	\$1123.8
JP0 0&S	\$579.1	\$602.3	\$1026.4	\$1061.7

O&S: The 2016 SAR O&S cost estimate was not updated by OSD CAPE. The JPO O&S cost estimate increased by \$23.2B (BY12\$) and \$35.3B (TY\$). The increase was mainly driven by an OSD update to FY16 fuel escalation index for BY12 fuel cost per gallon, and updates to the DoD Services Aircraft Beddown plan.

## Unit Delivery Cost Estimates (Aircraft & Engine & Fee):

Unit Recurring Flyaway (URF) Cost Estimate (Weighted avg. price over life of program)

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Variant (QTY)	SAR 15 BY12 \$M	SAR 16 BY12 \$M	SAR 15 TY \$M	SAR 16 TY \$M	LRIP 9 (FY15) Neg. TY \$M	LRIP 10 (FY16) Neg. TY \$M
F-35A (1763)	\$75.0	\$78.6	\$100.6	\$111.3	\$102	\$94
F-35B (353)	\$104.4	\$103.7	\$122.9	\$123.4	\$132	\$122
F-35C (340)	\$88.1	\$89.1	\$110.7	\$112.4	\$132	\$121

URF: The average Unit
 Recurring Flyaway (URF) costs
 for F-35A and F-35C variants
 increased due to profile
 changes. F-35B variant
 decreased due to USMC
 adding 13 aircraft. Actual
 negotiated prices continue to
 be below SAR estimates.

### PAUC and APUC (Composite Values)

	SAR 15 BY12 \$M	SAR 16 BY12 \$M	SAR 15 TY \$B	SAR 16 TY \$M	APB Threshold (BY12\$)
APUC	\$102.2	\$106.2	\$130.6	\$141.0	\$109.2
PAUC	\$127.5	\$131.4	\$154.3	\$164.6	\$134.4

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- APUC Average Procurement Unit Cost (Procurement/Procurement Quantity)
- PAUC Program Acquisition Unit Cost (RDT&E+Procurement+MILCON/ Total Quantity); Total quantity includes RDT&E jets
- APUC & PAUC increases are driven by significant profile extension changes to USAF quantities.
- APUC & PAUC remain well below the APB threshold.