

## Operating and Support Cost

### Assumptions and Ground Rules

The F-35 family of highly common aircraft variants will replace or augment four current aircraft: F-16, A-10, F/A-18C/D, and AV-8B.

Where JSF specific data is not yet available, the F-35 O&S estimate is based on F-18C, F-16C, and AV-8B history.

The cost per Flying Hour (\$ in Thousands) comparison shown below reflects the F-35 Conventional Takeoff and Landing (CTOL) variant only. The CTOL variant will comprise the majority of the F-35 aircraft DoD buy, i.e., 1,763 of the 2,443 total quantity. The O&S differences between F-35 CTOL and F-16 are representative of the comparisons across legacy fleets. Since F-16 does not report certain cost elements (e.g., Support Equipment Replacement, Modifications, and Indirect costs), these are excluded from the below F-35A cost per flight estimate hour to better align with the antecedent program. The below F-35A estimate does include the cost of supporting the training centers, training devices at the operational sites, and Autonomic Logistics Information System (ALIS); legacy programs do not include these cost categories. F-35 CTOL costs reflect 24-aircraft squadrons operating at 300 flying hours per aircraft per year. The F-16 costs have been developed in a joint effort with the F-35 Program Office and the Air Force Cost Analysis Agency.

The total O&S Cost (\$ in Millions) shown below reflects total O&S costs, to include all categories, for all three US variants based on an estimated 8,000 hour service life and predicted attrition and usage rates, and are not a simple extrapolation of CTOL costs shown in the upper table. A comparable number for antecedent systems is not available.

#### Costs BY2002 \$K

Cost Element	JSF Cost per Flying Hour (\$)	F-16C/D Cost per Flying Hour (\$)
Mission Pay & Allowance	4.672	5.249
Unit Level Consumption	7.880	6.369
Intermediate Maintenance	374.85M per aircraft (2,443)	0.000
Depot Maintenance	46.856K per flying hour	0.762
Contractor Support	26.67 years @ 300 FH/Year	0.389
Sustaining Support	for 8,000 FH life	1.487
Indirect	--	--
Other	--	--
<b>Total Unitized Cost (Base Year 2002 \$)</b>	<b>15.190</b>	<b>1.1515</b>

F-16C  
12.434  
1.221

Total O&S Costs \$M	JSF	F-16C/D
Base Year	370844.1	--
Then Year	915761.4	--

Dec01 BY\$ 151923.0 **2.849 with 409 fewer acft (130136.0)**  
 Dec01 TY\$ 387615.0 2.758 with 409 fewer acft (332027.8)

#### Costs BY2002 \$M Base Year APB - Dec 2001

#### Cost Element JSF Cost per Flying Hour (\$BY02) F-16C/D Cost per Flying Hour (\$BY02)

Mission Pay & Allowance 3289 5233  
 Unit Level Consumption 3295 3507  
 Intermediate Maintenance 0 3  
 Depot Maintenance 399 293  
 Contractor Support 0 44  
 Sustaining Support 861 627  
 Indirect 1301 2329  
 Other -- --

Total Unitized Cost (Base Year 2002 \$) 9145 12036

#### Total O&S Costs \$M JSF F-16C/D

Base Year 151923.0 --  
 Then Year 387615.0 --

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