Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-549

F/A-18E/F

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

F/A-18E/F Super Hornet (F/A-18E/F)

DoD Component

Navy

Responsible Office

Responsible Office

CAPT Frank Morley, USN
Program Executive Officer (PMA265)
Bldg 2272, Suite 445 NAVAIRSYSCOMHQ
47123 Buse Road, Unit IPT
Patuxent River, MD 20670-1547
francis.morley@navy.mil

Phone 301-757-7669
Fax 301-757-7520
DSN Phone 757-7669
DSN Fax 757-7520

Date Assigned July 14, 2011

References

SAR Baseline (Production Estimate)

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated September 17, 2000

Approved APB

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated February 15, 2011

Mission and Description

The F/A-18E/F Super Hornet is the second major model upgrade since the inception of the F/A-18 aircraft program. The single-seat F/A-18E and the two-seat F/A-18F are high performance, twin-engine, mid-wing, and multi-mission tactical aircraft designed to replace the F/A-18C (single-seat) and F/A-18D (two-seat) aircraft as they reach the end of their service lives and retire. The F/A-18E/F is designed to meet current Navy fighter escort and interdiction mission requirements, to maintain F/A-18 fleet air defense and close air support roles, as well as an increasing range of missions, including Forward Air Controller (Airborne) and Aerial Tanking, as the F/A-18E/F has proven capability to replace the S-3 as an aerial tanker. F/A-18E/F enhancements include increased range and improved carrier suitability required for the F/A-18 to continue its key strike fighter role against the advanced threats of the 21st century.

Executive Summary

The F/A-18E/F Super Hornet program continues to excel. Cost, schedule, and performance were superb during this reporting period, and the program continues to deliver aircraft ahead of schedule.

As of December 31, 2011, Super Hornet aircraft have flown over 965,736 hours. The program has delivered 449 aircraft to the fleet (62 Low Rate Initial Production (LRIP) and 387 Full Rate Production (FRP)). All Multi-Year Procurement (MYP) II aircraft have been delivered as of December 31, 2011. Delivery of MYP III aircraft will begin in FY 2012.

Previous reports included 24 Royal Australian Air Force (RAAF) and seven (7) Engineering and Manufacturing Development (EMD) aircraft. However, this and all future reports have been updated to solely reflect the domestic program of record quantities.

The H6E System Configuration Set (SCS) was released to the Fleet on October 31, 2011. The H8E SCS is expected to go into operational testing (OT) at the end of March 2012.

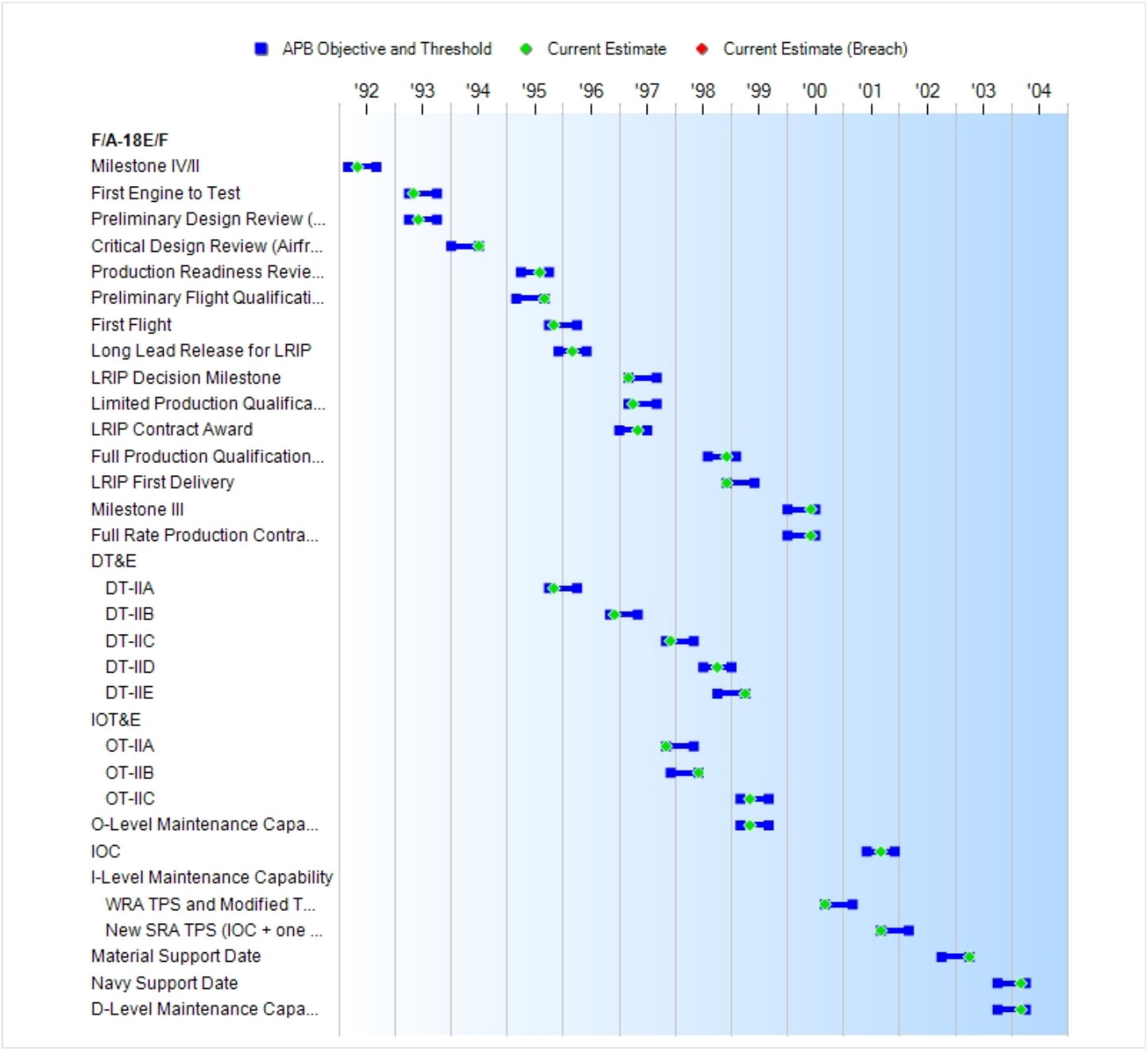
There are no significant software-related issues with this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule


APB Objective and Threshold
Current Estimate
Current Estimate (Breach)
'92
'93
'94
'95
'96
'97
'98
'99
'00
'01
'02
'03
'04
F/A-18E/F
Milestone IV/II
First Engine to Test
Preliminary Design Review (...
Critical Design Review (Airfr...
Production Readiness Revie...
Preliminary Flight Qualificati...
First Flight
Long Lead Release for LRIP
LRIP Decision Milestone
Limited Production Qualifica...
LRIP Contract Award
Full Production Qualification...
LRIP First Delivery
Milestone III
Full Rate Production Contra...
DT&E
DT-IIA
DT-IIB
DT-IIC
DT-IID
DT-IIE
IOT&E
OT-IIA
OT-IIB
OT-IIC
O-Level Maintenance Capa...
IOC
I-Level Maintenance Capability
WRA TPS and Modified T...
New SRA TPS (IOC + one ...
Material Support Date
Navy Support Date
D-Level Maintenance Capa...

Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
Milestone IV/II	MAR 1992	MAR 1992	SEP 1992	MAY 1992
First Engine to Test	APR 1993	APR 1993	OCT 1993	MAY 1993
Preliminary Design Review (Airframe)	APR 1993	APR 1993	OCT 1993	JUN 1993
Critical Design Review (Airframe)	JAN 1994	JAN 1994	JUL 1994	JUL 1994
Production Readiness Review (Airframe)	APR 1995	APR 1995	OCT 1995	AUG 1995
Preliminary Flight Qualification (Engine)	MAR 1995	MAR 1995	SEP 1995	SEP 1995
First Flight	OCT 1995	OCT 1995	APR 1996	NOV 1995
Long Lead Release for LRIP	DEC 1995	DEC 1995	JUN 1996	MAR 1996
LRIP Decision Milestone	MAR 1997	MAR 1997	SEP 1997	MAR 1997
Limited Production Qualification (Engine)	MAR 1997	MAR 1997	SEP 1997	APR 1997
LRIP Contract Award	JAN 1997	JAN 1997	JUL 1997	MAY 1997
Full Production Qualification (Engine)	AUG 1998	AUG 1998	FEB 1999	DEC 1998
LRIP First Delivery	DEC 1998	DEC 1998	JUN 1999	DEC 1998
Milestone III	JAN 2000	JAN 2000	JUL 2000	JUN 2000
Full Rate Production Contract Award	JAN 2000	JAN 2000	JUL 2000	JUN 2000
DT&E				
DT-IIA	OCT 1995	OCT 1995	APR 1996	NOV 1995
DT-IIB	NOV 1996	NOV 1996	MAY 1997	DEC 1996
DT-IIC	NOV 1997	NOV 1997	MAY 1998	DEC 1997
DT-IID	JUL 1998	JUL 1998	JAN 1999	OCT 1998
DT-IIE	OCT 1998	OCT 1998	APR 1999	APR 1999
IOT&E				
OT-IIA	NOV 1997	NOV 1997	MAY 1998	NOV 1997
OT-IIB	DEC 1997	DEC 1997	JUN 1998	JUN 1998
OT-IIC	MAR 1999	MAR 1999	SEP 1999	MAY 1999
O-Level Maintenance Capability (OPEVAL)	MAR 1999	MAR 1999	SEP 1999	MAY 1999
IOC	JUN 2001	JUN 2001	DEC 2001	SEP 2001
I-Level Maintenance Capability				
WRA TPS and Modified TPSs (IOC)	SEP 2000	SEP 2000	MAR 2001	SEP 2000
New SRA TPS (IOC + one year)	SEP 2001	SEP 2001	MAR 2002	SEP 2001
Material Support Date	OCT 2002	OCT 2002	APR 2003	APR 2003
Navy Support Date	OCT 2003	OCT 2003	APR 2004	MAR 2004

cont.				
Milestones	**SAR Baseline Prod Est**	**Current APB Production Objective/Threshold**		**Current Estimate**
D-Level Maintenance Capability	OCT 2003	OCT 2003	APR 2004	MAR 2004

Acronyms And Abbreviations

DT - Developmental Testing
DT&E - Developmental Test and Evaluation
IOC - Initial Operational Capability
IOT&E - Initial Operational Test and Evaluation
LRIP - Low Rate Initial Production
OPEVAL - Operational Evaluation
OT - Operational Testing
SRA - Shop Replaceable Assembly
TPS - Test Program Set
WRA - Weapon Replaceable Assembly

Change Explanations

None

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate	
Interoperability of the F/A-18E/F Communications & Data Link Suite	Achieve all IERs	Achieve all IERs	Achieve all Critical IERs	Achieve all Critical IERs	Achieve all Critical IERs	
Deck Spot Factor (F/A-18A/B/C/D =1.2)	<= 1.4	<= 1.4	<1.5	1.46	1.46	
Fighter Escort Radius (F/A-18E)(internal fuel) (Nm)	>=425	>=425	>=410	462	434	
Interdiction Mission Radius (Nm)						
2 external tanks (retained)	>=400	>=400	>=390	444	419	
3 external tanks (retained)	>=450	>=450	>=430	489	463	
Combat Ceiling (max thrust) (ft)	>50000	>50000	>=50000	52,300	51,948	
Launch: Catapult WOD (C-13-1 Catapult MAXTOGW (kts))	<=25	<=25	<=30	19	19	
Recovery: WOD (MK-7MOD 3) (kts)	<=10	<=10	<=15	8	8	
Recovery Payload (lbs)	>9000	>9000	>=9000	9494	9327	
Usable Load Factor (Subsonic; Nz) (G's)	>= +7.5	>= +7.5	>= +7.5	+7.5	+7.5	(Ch-1)
Specific Excess Power (Max Thrust, .9M, 1G, 10kft) (fps)	>=650	>=650	>600	648	631	
Acceleration (.8M to 1.2M at 35kft) (sec)	<=60	<=60	<70	65	69	
Additional Internal Fuel Capacity (lbs) (greater than C/D)	>=3000	>=3000	>=3000	4090	4090	
Mean Time Between Operational Mission Failure (MTBOMF) (Replaces MFHBF)	>=3.2	>=3.2	>=2.6	10.0	9.3	
Direct Maintenance Manhours per Flight Hour (DMMH/FH) (Replaces MH/FH)	<=5.0	<=5.0	<=9.0	6.4	5.9	
Speed (Mach) Fighter Escort Mission Configuration @10,000	.98	.98	.96	.96	.96	

ft with Intermediate Rated Thrust					
Empty Weight (lbs)	29950	29950	31950	30801	30968
Built-In Test (All Avionics)					
Fault Detection (%)	75	75	65	94.5	98.9
Fault Isolation (%)	90	90	85	90.5	97.6
False Alarm Rate (%)	30	30	45	33.5	39.6
Approach Speed (kts)	<=140	<=140	<=150	142	142

Requirements Source:
The requirements source documents for the F/A-18E/F program are the Operational Requirements Document (ORD) 550-88-00 approved March 22, 2000 and the Joint Requirements Oversight Council Memorandum (JROCM) 053-00.

Acronyms And Abbreviations

fps - feet per second
Ft - Feet
G - Gravitational Acceleration
IER - Information Exchange Requirement
kft - Thousand Feet
KPP - Key Performance Parameter
kts - knots
lbs - pounds
M - Mach Number
MAX TOGW - Maximum Take Off Gross Weight
MFHBF - Mean Flight Hours Between Failure
MH/FH - Maintenance Hours per Flight Hour
Nm - Nautical Mile/s
Nz - Normal Load Factor, Normal Acceleration
OPEVAL - Operational Evaluation
ORD - Operational Requirements Document
sec - second
WOD - Wind Over Deck

Change Explanations

(Ch-1) The current estimate for Usable Load Factor was updated from 7.4 to +7.5 to reflect the use of a constant product of weight times load factor instead of a specific aircraft configuration.

Memo

Interdiction Mission Radius, Recovery Payload, Specific Excess Power, Additional Internal Fuel Capacity, Launch Wind Over Deck and Acceleration Time are estimates based on the F/A-18E aircraft.

Interdiction Mission Radius Nautical Miles (Nm) payload with:

a. 2 external tanks + 2 Airborne Intercept Missile (AIM) -9 + 4 MK 83 Low Drag (LD) on Low Drag Pylons + Forward Looking Infrared Radar/Navigation Forward Looking Infrared Radar (FLIR/NAVFLIR).

b. 3 external tanks + 2 AIM-9 + 4 MK 83 LD on Low Drag Pylons + Forward Looking Infrared Radar /Navigation Forward Looking Infrared Radar (FLIR/NAVFLIR).

MK is part of a serial number; it is not an acronym or an abbreviation.

Current estimated performance is based on Lot 33 Full Rate Production (FRP) 10 configuration as of October 2010.

Recovery Payload: F/A-18F: 44,000 Carrier Landing Design Gross Weight (CLDGW). The F/A-18E/F at Initial Operating Capability (IOC) provided for a threshold/objective of 9,000 pounds of recovery payload.

Specific Excess Power: F/A-18E: (2) AIM-9 + (2) AIM-120 + Gun and Ammo with 60% internal fuel; and the equivalent design gross weight for the F/A-18F.

Track To Budget

RDT&E				
APPN 1319	BA 07	PE 0204136N	(Navy)	
	Project E2130	(E2130) F/A-18 Squadrons/Follow-on Variant		(Sunk)

Procurement				
APPN 1506	BA 01	PE 0204136N	(Navy)	
	ICN 0145	APN 1 F/A-18E/F (Fighter) Hornet (MYP)		
APPN 1506	BA 06	PE 0204136N	(Navy)	
	ICN 0605	APN 6 Spares	(Shared)	

Current Aircraft Procurement, Navy (APN 1) funding level includes funding incorrectly tagged to the Multifunction Information Distribution System Joint Tactical Radio System (MIDS JTRS) Program (PNO 554) in the President's Budget (PB) 2012 submit. The correct funding request is captured in this report. Program will ensure correct tagging for the PB 2013 submit.

Project 1662 of PE 0204136N (F/A-18 Improvement) is currently tagged to the program's PNO 549, but does not provide Research, Development Test & Evaluation (RDT&E) funding. Tagging will be removed to improve transparency.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2000 $M			BY2000 $M	TY $M		
Appropriation	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	5889.4	5895.2	6484.7	5895.2	5574.0	5557.6	5557.6
Procurement	32995.3	41460.3	45606.3	40657.7	36063.3	46347.3	45441.1
Flyaway	27850.7	--	--	33544.2	30453.8	--	37455.4
Recurring	27001.3	--	--	32061.3	29575.6	--	35836.7
Non Recurring	849.4	--	--	1482.9	878.2	--	1618.7
Support	5144.6	--	--	7113.5	5609.5	--	7985.7
Other Support	4304.8	--	--	5992.9	4709.4	--	6769.9
Initial Spares	839.8	--	--	1120.6	900.1	--	1215.8
MILCON	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
Total	38884.7	47355.5	N/A	46552.9	41637.3	51904.9	50998.7

CONFIDENCE LEVEL for current APB cost is 50% - The current estimate recommendation aims to provide sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule and programmatic risk and external influence. It is consistent with average resource expenditures on historical efforts of similar size, scope, and complexity.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	0	0	0
Procurement	458	565	565
Total	458	565	565

The program of record increased from 556 to 565 due to the additional nine (9) Overseas Contingency Operations (OCO) aircraft.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2013 President's Budget / December 2011 SAR (TY$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	5557.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5557.6
Procurement	39846.7	2356.7	2083.7	1154.0	0.0	0.0	0.0	0.0	45441.1
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 2013 Total	45404.3	2356.7	2083.7	1154.0	0.0	0.0	0.0	0.0	50998.7
PB 2012 Total	45052.5	2508.9	2375.6	1043.2	0.0	0.0	0.0	0.0	50980.2
Delta	351.8	-152.2	-291.9	110.8	0.0	0.0	0.0	0.0	18.5

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	498	28	26	13	0	0	0	0	565
PB 2013 Total	0	498	28	26	13	0	0	0	0	565
PB 2012 Total	0	489	28	28	11	0	0	0	0	556
Delta	0	9	0	-2	2	0	0	0	0	9

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
1992	--	--	--	--	--	--	349.5
1993	--	--	--	--	--	--	842.1
1994	--	--	--	--	--	--	1396.2
1995	--	--	--	--	--	--	1246.0
1996	--	--	--	--	--	--	801.1
1997	--	--	--	--	--	--	345.4
1998	--	--	--	--	--	--	234.6
1999	--	--	--	--	--	--	195.6
2000	--	--	--	--	--	--	132.1
2001	--	--	--	--	--	--	13.9
2002	--	--	--	--	--	--	1.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**5557.6**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2000 $M	Non End Item Recurring Flyaway BY 2000 $M	Non Recurring Flyaway BY 2000 $M	Total Flyaway BY 2000 $M	Total Support BY 2000 $M	Total Program BY 2000 $M
1992	--	--	--	--	--	--	391.7
1993	--	--	--	--	--	--	922.4
1994	--	--	--	--	--	--	1501.2
1995	--	--	--	--	--	--	1314.4
1996	--	--	--	--	--	--	831.0
1997	--	--	--	--	--	--	354.0
1998	--	--	--	--	--	--	238.5
1999	--	--	--	--	--	--	196.5
2000	--	--	--	--	--	--	130.8
2001	--	--	--	--	--	--	13.6
2002	--	--	--	--	--	--	1.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**5895.2**

Annual Funding TY$
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
1996	--	233.5	--	--	233.5	--	233.5
1997	12	1471.5	--	200.0	1671.5	436.8	2108.3
1998	20	1678.7	--	163.4	1842.1	331.0	2173.1
1999	30	2237.9	--	195.5	2433.4	451.3	2884.7
2000	36	2230.9	--	85.9	2316.8	580.3	2897.1
2001	39	2377.2	--	63.4	2440.6	524.0	2964.6
2002	48	2651.8	--	72.7	2724.5	531.2	3255.7
2003	45	2684.5	--	71.0	2755.5	482.1	3237.6
2004	42	2529.2	--	168.0	2697.2	503.6	3200.8
2005	42	2560.9	--	75.8	2636.7	401.1	3037.8
2006	38	2209.2	--	44.6	2253.8	514.2	2768.0
2007	37	2175.7	--	39.8	2215.5	474.8	2690.3
2008	37	2190.6	--	56.7	2247.3	537.5	2784.8
2009	23	1396.5	--	88.6	1485.1	404.0	1889.1
2010	18	1043.9	--	36.2	1080.1	399.6	1479.7
2011	31	1704.1	--	70.5	1774.6	467.0	2241.6
2012	28	1864.6	--	69.8	1934.4	422.3	2356.7
2013	26	1569.2	--	95.0	1664.2	419.5	2083.7
2014	13	1026.8	--	21.8	1048.6	105.4	1154.0
Subtotal	**565**	**35836.7**	**--**	**1618.7**	**37455.4**	**7985.7**	**45441.1**

Annual Funding BY$
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2000 $M	Non End Item Recurring Flyaway BY 2000 $M	Non Recurring Flyaway BY 2000 $M	Total Flyaway BY 2000 $M	Total Support BY 2000 $M	Total Program BY 2000 $M
1996	--	239.3	--	--	239.3	--	239.3
1997	12	1495.2	--	203.2	1698.4	443.8	2142.2
1998	20	1686.1	--	164.1	1850.2	332.5	2182.7
1999	30	2219.3	--	193.9	2413.2	447.5	2860.7
2000	36	2183.4	--	84.1	2267.5	567.9	2835.4
2001	39	2299.1	--	61.3	2360.4	506.8	2867.2
2002	48	2532.7	--	69.4	2602.1	507.4	3109.5
2003	45	2513.7	--	66.5	2580.2	451.4	3031.6
2004	42	2307.4	--	153.3	2460.7	459.4	2920.1
2005	42	2272.3	--	67.3	2339.6	355.9	2695.5
2006	38	1907.3	--	38.5	1945.8	444.0	2389.8
2007	37	1835.6	--	33.6	1869.2	400.6	2269.8
2008	37	1820.7	--	47.1	1867.8	446.8	2314.6
2009	23	1144.5	--	72.6	1217.1	331.1	1548.2
2010	18	839.9	--	29.1	869.0	321.6	1190.6
2011	31	1346.7	--	55.7	1402.4	369.1	1771.5
2012	28	1448.7	--	54.2	1502.9	328.2	1831.1
2013	26	1198.7	--	72.6	1271.3	320.4	1591.7
2014	13	770.7	--	16.4	787.1	79.1	866.2
Subtotal	**565**	**32061.3**	**--**	**1482.9**	**33544.2**	**7113.5**	**40657.7**

Cost Quantity Information
1506 | Procurement | Aircraft Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2000 $M
1996	--	--
1997	12	1493.4
1998	20	1839.1
1999	30	2200.2
2000	36	2132.9
2001	39	2359.9
2002	48	2545.6
2003	45	2516.7
2004	42	2311.8
2005	42	2274.7
2006	38	1908.2
2007	37	1864.4
2008	37	1826.4
2009	23	1141.2
2010	18	840.9
2011	31	1385.9
2012	28	1401.4
2013	26	1224.7
2014	13	793.9
Subtotal	**565**	**32061.3**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	3/14/1997	1/29/1999
Approved Quantity	62	62
Reference	Milestone II Acquisition Decision Memorandum	Navy Program Review Acquisition Decision Memorandum
Start Year	1997	1997
End Year	1999	1999

This quantity was approved during the Low Rate Initial Production (LRIP) Defense Acquisition Board (DAB) in March 1997 and was below the 10% guideline for LRIP quantities. The Quadrennial Defense Review (QDR) subsequently reduced the total procurement to a range of 548 to 785 aircraft. Due to the overall aircraft quantity reduction caused by the QDR, the LRIP quantities are above the current 10% guideline. The LRIP quantities remain as approved during the March 1997 DAB.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost $M	Memo
Australia	4/14/2011		357.9	This case (number AT-P-GQY) was implemented for the sustainment of 24 F/A-18F aircraft in the amount of $357.9M.
Australia	5/2/2007	24	2474.0	The Program Office has a Foreign Military Sales (FMS) case with Australia for 24 F/A-18F aircraft. This case (number SAF) was implemented for acquisition and initial support.

There have been no changes in quantity.

Nuclear Cost

None

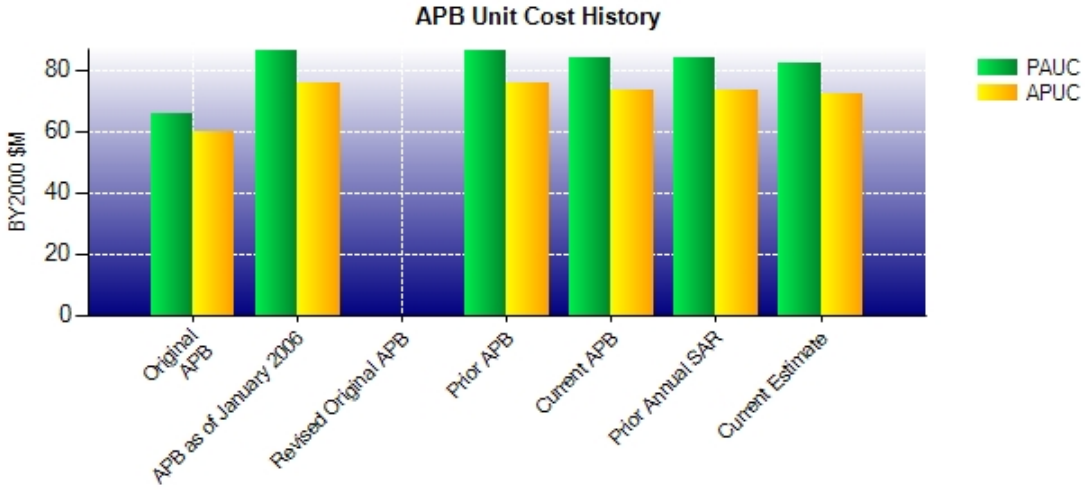
Unit Cost

Unit Cost Report

Unit Cost	BY2000 $M Current UCR Baseline (FEB 2011 APB)	BY2000 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	47355.5	46552.9	
Quantity	565	565	
Unit Cost	83.815	82.395	-1.69
Average Procurement Unit Cost (APUC)			
Cost	41460.3	40657.7	
Quantity	565	565	
Unit Cost	73.381	71.961	-1.94

Unit Cost	BY2000 $M Original UCR Baseline (JUN 1992 APB)	BY2000 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	65944.7	46552.9	
Quantity	1000	565	
Unit Cost	65.945	82.395	+24.95
Average Procurement Unit Cost (APUC)			
Cost	59976.8	40657.7	
Quantity	1000	565	
Unit Cost	59.977	71.961	+19.98

Unit Cost History



		BY2000 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUN 1992	65.942	59.970	94.583	88.750
APB as of January 2006	JUL 2003	86.175	75.505	91.968	81.871
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	JUL 2003	86.175	75.505	91.968	81.871
Current APB	FEB 2011	83.815	73.381	91.867	82.031
Prior Annual SAR	DEC 2010	83.880	73.277	91.691	81.695
Current Estimate	DEC 2011	82.395	71.961	90.263	80.427

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
94.583	-16.460	25.278	1.930	-2.510	0.670	0.000	-12.580	-3.672	90.911

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
90.911	0.260	-4.929	1.964	0.457	-2.287	0.000	3.887	-0.648	90.263

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
88.750	-16.090	18.461	2.200	-2.510	0.510	0.000	-12.580	-10.009	78.741

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
78.741	0.302	-2.624	1.964	0.457	-2.300	0.000	3.887	1.686	80.427

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	N/A	N/A	N/A	N/A
Milestone II	DEC 1991	MAR 1992	MAR 1992	MAY 1992
Milestone III	DEC 1998	JAN 2000	JAN 2000	JUN 2000
IOC	N/A	SEP 2000	JUN 2001	SEP 2001
Total Cost (TY $M)	3974.4	94583.0	41637.3	50998.7
Total Quantity	N/A	1000	458	565
Prog. Acq. Unit Cost (PAUC)	N/A	94.583	90.911	90.263

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	5574.0	36063.3	--	41637.3
Previous Changes				
Economic	-23.7	+37.7	--	+14.0
Quantity	--	+6367.3	--	+6367.3
Schedule	--	+1125.9	--	+1125.9
Engineering	--	+258.3	--	+258.3
Estimating	+7.3	-643.1	--	-635.8
Other	--	--	--	--
Support	--	+2213.2	--	+2213.2
Subtotal	-16.4	+9359.3	--	+9342.9
Current Changes				
Economic	--	+132.9	--	+132.9
Quantity	--	+575.3	--	+575.3
Schedule	--	-16.5	--	-16.5
Engineering	--	--	--	--
Estimating	--	-656.3	--	-656.3
Other	--	--	--	--
Support	--	-16.9	--	-16.9
Subtotal	--	+18.5	--	+18.5
Total Changes	-16.4	+9377.8	--	+9361.4
CE - Cost Variance	5557.6	45441.1	--	50998.7
CE - Cost & Funding	5557.6	45441.1	--	50998.7

Summary Base Year 2000 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	5889.4	32995.3	--	38884.7
Previous Changes				
Economic	--	--	--	--
Quantity	--	+4990.1	--	+4990.1
Schedule	--	+990.1	--	+990.1
Engineering	--	+227.2	--	+227.2
Estimating	+5.8	-441.6	--	-435.8
Other	--	--	--	--
Support	--	+1980.9	--	+1980.9
Subtotal	+5.8	+7746.7	--	+7752.5
Current Changes				
Economic	--	--	--	--
Quantity	--	+431.8	--	+431.8
Schedule	--	+8.0	--	+8.0
Engineering	--	--	--	--
Estimating	--	-512.1	--	-512.1
Other	--	--	--	--
Support	--	-12.0	--	-12.0
Subtotal	--	-84.3	--	-84.3
Total Changes	+5.8	+7662.4	--	+7668.2
CE - Cost Variance	5895.2	40657.7	--	46552.9
CE - Cost & Funding	5895.2	40657.7	--	46552.9

Previous Estimate: December 2010

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+132.9
Total variance resulting from an increase of 9 F/A-18 E/Fs from 556 to 565. (Subtotal)	+348.8	+470.1
Quantity variance resulting from an increase of 9 F/A-18 E/Fs from 556 to 565. (Quantity)	(+431.8)	(+575.3)
Decrease due to rate effect impacts of Multi-Year Procurement III contract. (Estimating)	(-83.0)	(-105.2)
Decrease in costs to existing aircraft from adding 9 aircraft in FY 2011, due to rate effects. (Estimating)	-70.8	-90.4
Re-phasing of procurement buy profile from 5 F/A-18Fs to 3 in FY 2013 and from 5 F/A-18Fs to 7 in FY 2014, resulting in a decrease in costs due to rate effects. (Schedule)	0.0	-26.9
Increase in costs due to moving two aircraft from FY 2013 to FY 2014. (Schedule)	+8.0	+10.4
Adjustment for current and prior escalation. (Estimating)	-53.4	-67.3
Decrease in costs due to update to actuals. (Estimating)	-60.9	-79.6
Decrease in costs due to Prior Year Congressional Rescission in FY 2010. (Estimating)	-71.8	-89.1
Decrease due to Budget Adjustments (e.g. reductions in Engineering Change Order funding, armament funding and negotiation margin for engines and Government-Furnished Equipment electronics contracts). (Estimating)	-172.2	-224.7
Adjustment for current and prior escalation. (Support)	-13.9	-17.6
Increase in Other Support due to addition of 9 F/A-18 E/Fs in FY 2011 for Overseas Contingency Operations. (Support) (QR)	+47.5	+61.1
Decrease in Initial Spares due to internal DoD adjustments within the Future Years Defense Program (FYDP). (Support)	-45.6	-60.4
Procurement Subtotal	-84.3	+18.5

(QR) Quantity Related

Contracts

Appropriation: Procurement

Contract Name	**Airframe Multi-Year Procurement II (MYP II)**
Contractor	The Boeing Company
Contractor Location	St. Louis, MO 63166
Contract Number, Type	N00019-04-C-0014, FPEPA
Award Date	December 29, 2003
Definitization Date	December 29, 2003

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
6309.0	N/A	154	7797.0	N/A	179	7797.0	7797.0

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPEPA contract.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to multiple funded modifications, the incorporation of Engineering Change Proposals (ECPs), and removing Royal Australian Air Force (RAAF) costs to only reflect domestic costs.

The MYP II contract value and quantities represent only the F/A-18E/F portion of the contract and do not include the EA-18G portion.

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

Appropriation: Procurement

Contract Name	**Airframe Multi-Year Procurement III (MYP III)**
Contractor	The Boeing Company
Contractor Location	St. Louis, MO 63134
Contract Number, Type	N00019-09-C-0019, FPIF
Award Date	December 04, 2008
Definitization Date	September 28, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
2770.5	2945.6	66	3265.1	3465.5	75	3465.5	3465.5

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost And Schedule Variance Explanations

None

Contract Comments

The difference between the initial contract price target and the current contract price target is due to multiple funded modifications and the incorporation of engineering change proposals (ECPs).

The MYP III contract value and quantities represent only the F/A-18E/F portion of the contract and do not include the EA-18G portion.

A Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 234.2 Individual Deviation request was approved on June 10, 2010, by the Deputy Assistant Secretary of the Navy (Acquisition and Logistics Management) (DASN(AL&M)), to omit Earned Value Management (EVM) requirements from the contract.

Appropriation: Procurement

Contract Name	**F414 Engine Production Lots 11-15**
Contractor	GE Aircraft Engines
Contractor Location	Lynn, MA 01905-2655
Contract Number, Type	N00019-06-C-0088, FFP/FPEPA
Award Date	April 26, 2006
Definitization Date	September 27, 2007

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
255.9	N/A	224	1520.8	N/A	355	1520.8	1520.8

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP/FPEPA contract.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to exercising contract options, incorporation of Engine Program Descriptions (EPDs) in support of the F414 Component Improvement Program, and procurement of Long Lead Material in support of FY 2010 and FY 2011 engines.

The current quantity of 355 represents the total F/A-18E/F engine quantity procured to date. This quantity is based upon the base contract (68), FY 2007 supplemental (6), option year one (48) engines, Royal Australian Air Force (RAAF) engines (24), FY 2008 supplemental (26), option year two (46), RAAF engines (24), RAAF spare engines (2) and option year three FY 2010 (36) engines, two (2) spares, devices and FY 2011 (44) engines, (11) spare engines, devices, spare modules and additional engines and devices in support of Overseas Contingency Operations (OCO) (18).

Appropriation: Procurement

Contract Name	**System Configuration Sets (SCS) Contract**
Contractor	The Boeing Company
Contractor Location	St. Louis, MO 63166
Contract Number, Type	N68936-09-D-0002, CPIF/CPFF/IDIQ
Award Date	December 19, 2008
Definitization Date	December 18, 2013

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
905.3	N/A	80	585.2	N/A	22	905.3	905.3

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost And Schedule Variance Explanations

None

Contract Comments

The difference between the initial contract price target and the current contract price target is due to the nature of the contract type (i.e., IDIQ). The initial contract price target represents the ceiling for the entire contract. The current contract price target represents the sum of all delivery orders to date.

This contract includes shared costs and quantities for the F/A-18E/F and EA-18G platforms; therefore, all data is duplicated in the EA-18G SAR.

The initial quantity of this IDIQ contract includes (20) SCSs, (10) System Improvement and Demonstration Products, and (50) Studies and Analyses. The current quantity of this IDIQ contract includes nine (9) SCSs, five (5) System Improvement and Demonstration Products, and eight (8) Studies and Analyses.

This is an IDIQ contract; therefore, there is no baseline established for Earned Value Management (EVM) reporting.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	449	449	565	79.47%
Total Program Quantities Delivered	449	449	565	79.47%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	50998.7	Years Appropriated	21
Expenditures To Date	40050.4	Percent Years Appropriated	91.30%
Percent Expended	78.53%	Appropriated to Date	47761.0
Total Funding Years	23	Percent Appropriated	93.65%

The actual deliveries-to-date and expenditures are updated as of December 31, 2011. The program has delivered 449 aircraft to the fleet (62 Low Rate Initial Production (LRIP) and 387 Full Rate Production (FRP)).

Previous reports included 24 Royal Australian Air Force (RAAF) and seven (7) Engineering and Manufacturing Development (EMD) aircraft. However, this and all future reports have been updated to solely reflect the domestic program of record quantities.

All Multi-Year Procurement (MYP) II aircraft have been delivered as of December 31, 2011. Delivery of MYP III aircraft will begin in FY 2012.

Operating and Support Cost

Assumptions And Ground Rules

Current Program: F/A-18 E/F
Flight hours per aircraft per month: 28.3
Number of 12 Primary Authorized Aircraft (PAA) E/F Squadrons in FY 2016: 19
Number of 10 PAA E/F Squadrons in FY 2016: 11
Consumption rate, gallons per hour: 1,291
Petroleum, Oil, and Lubricant (POL) cost, JP-5 per gallon FY 2000 $: 0.74
# of Aircraft Operating Years: 9,168
Operational Service Life: 20
Fleet Readiness Squadron (FRS) at 12-14 E & 29-31 F: 2

Antecedent program: F/A-18C/D
Consumption rate, gallons per hour: 1,127
# of Aircraft Operating Years: 1,460
Flight Hours per aircraft per month: 23.5
POL Cost, JP-5 per gallon FY 2000 $: 0.74

The cost estimates reflect Primary Aircraft Authorization (PAA) of 455. The Total Aircraft Authorization of 565 includes pipeline (spare aircraft to ensure PAA squadrons can employ the full complement) aircraft which only require modifications and Depot rework. These Depot costs are spread across the entire PAA base on a cost per aircraft basis. Manpower (Both Cost Analysis Improvement Group (CAIG) elements 1.0 & 6.0) is only based on the number of PAA squadrons.

Date of Estimate: February 2012
Source: Air-4.2 Operating & Support (O&S) Cost Estimate

Costs BY2000 $M		
Cost Element	F/A-18E/F Average Annual Cost per Aircraft	F/A-18C/D Average Annual Cost per Aircraft
Unit-Level Manpower	1.2	1.0
Unit Operations	0.4	0.3
Maintenance	1.7	2.1
Sustaining Support	0.1	0.1
Continuing System Improvements	0.6	0.5
Indirect Support	0.2	0.2
Other	--	--
Total Unitized Cost (Base Year 2000 $)	4.2	4.2

Total O&S Costs $M	F/A-18E/F	F/A-18C/D
Base Year	38247.0	--
Then Year	66936.0	--

Estimate Use: Multiply the cost to operate an aircraft per year by the number of projected aircraft operating years.

General: The estimate was generated using the F/A-18A-F Tactical Aircraft (TACAIR) Sustainment Cost Model V14, which updates the V12 model Inventory and Data inputs while also incorporating bottoms up commodity

estimating for ~95% of the Aviation Depot Level Repairable (AVDLR) and Aviation Fleet Maintenance (AFM) costs associated with operating the platform. Aircraft, delivery and inventory are based on President's Budget (PB) 2013. Flight hours, also based on PB 2013, were used during the Future Years Defense Program (FYDP) and extrapolated for the out years. Composite pay rates published in 2012 by the Office of the Secretary of Defense (OSD) were used to calculate all military and government civilian annual salaries.

This O&S estimate is based on the current funded quantity of 565 aircraft.

Antecedent System Values: These are based on Navy Visibility and Management of Operation and Support Costs (VAMOSC) Aircraft Type Model Series Report (ATMSR) FY 2008-2010 Data Averages for the following: 1) Cost Per Aircraft Per Year, 2) Fuel Consumption Rate, and 3) Flight Hours Per Month. Aircraft operating years represent the total for Navy VAMOSC ATMSR FY 2008-2010.

Rationale for Exclusion of Antecedent Total O&S Costs: The capture of O&S data in available reporting systems has changed significantly over time. VAMOSC, the Navy's official system for collecting and reporting O&S costs, provides cost data from 1997 - present. The cost data for platforms in existence prior to 1997 is either unavailable or incomplete. In summary, sufficient historical data and resources do not exist to create a comparable, credible Total O&S cost.

The F/A-18C/D, which is the antecedent for the F/A-18E/F, reached Initial Operational Capability (IOC) in 1988, and a hence data gap of nine years exists, making it impossible to generate a credible Total O&S cost. As such, NAVAIR has provided the weighted annual average to operate a single aircraft.

Disposal Costs: While these costs are not part of the Cost Assessment and Program Evaluation (CAPE) 2007 Cost Element Structure (CES) and hence are not included in the totals above, their Life Cycle Cost (LCC) impact has been estimated at $57.6 Base Year (BY) 2000 $M and $102.7 Then Year (TY) $M.