

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-378



EA-18G Growler Aircraft (EA-18G)

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

EA-18G Growler Aircraft (EA-18G)

DoD Component

Navy

Responsible Office

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References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated July 18, 2007

Approved APB

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

December 2015 SAR

Mission and Description

The EA-18G Growler Aircraft (EA-18G) is the fourth major variant of the F/A-18 family of aircraft. The EA-18G serves as the Navy's replacement for the EA-6B providing a capability to detect, identify, locate, and suppress hostile emitters. The EA-18G provides organic accurate emitter targeting for employment of onboard suppression weapons such as High-Speed Anti-Radiation Missile. The EA-18G aircraft is a missionized F/A-18F airframe coupled with the integration of its primary Airborne Electronic Attack systems that include the ALQ-99 Tactical Jamming System pods, AN/ALQ-218 Receiver, Communication Countermeasures Set with functionality equivalent to the USQ-113, and the Multi-Mission Advanced Tactical Terminal.

Executive Summary

The procurement profile of the FY 2017 PB adds 7 EA-18G aircraft in FY 2016. The result of this addition will be a FY 2016 FRP contract for Lot 40 EA-18G aircraft, which increases the total Program of Record (PoR) from 150 to 157. As part of the A-12 settlement, the EA-18G Program received three EA-18G airframes, Contractor Furnished Equipment (CFE), and Airborne Electronic Attack (AEA) kits from the Boeing Company. The value to the program was \$198M. These aircraft are in the process of delivery and are annotated as Lot 37A aircraft. There was not a Total Obligation Authority (TOA) increase to the program. The three Growler aircraft have been added to FY 2013 and will be included in the PoR. FY 2016 \$198 Million A -12 In-kind Settlement does not reflect TOA. No additional resources were provided in FY 2016 to the Department of the Navy.

The Assistant Secretary of the Navy, Research, Development, and Acquisition (ASN (RD&A)) acknowledged and concurred with the FY 2015 Program Deviation Report (PDR) on June 2, 2015. ASN(RD&A) approved the APB on October 15, 2015. The additional 7 EA-18G aircraft and related support in FY 2016 caused Procurement and O&S cost breaches. Additionally, an RDT&E breach occurred as a result of increased funding for Complex Emitter, Tactical Targeting Network Technology, and Distributed Targeting Processor-Networked efforts. As a result, a PDR and updated APB will be submitted.

A contract modification to the Lot 38 FRP contract for the Lot 39 FRP procurement awarded on October 26, 2015.

As of November 30, 2015, EA-18G aircraft have flown 141,141 hours.

As of January 31, 2016, the program has delivered 114 aircraft to the Fleet.

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

Threshold Breaches

APB Breaches Schedule Performance V Cost RDT&E V Procurement **MILCON** Acq O&M V **O&S Cost Unit Cost PAUC APUC Nunn-McCurdy Breaches Current UCR Baseline PAUC** None **APUC** None **Original UCR Baseline PAUC** None **APUC** None

Explanation of Breach

As a result of the changes in the FY 2017 PB, the EA-18G program APB thresholds for RDT&E, Procurement, and O&S cost are breached.

The RDT&E cost breach is the result of increased funding for Complex Emitter, Tactical Targeting Network Technology, and Distributed Targeting Processor-Networked efforts.

The Procurement cost breach is the result of 7 aircraft being added to the Program of Record (PoR) in FY 2016.

The O&S cost breach is the result of updated methodology being used to estimate flight hours to more closely align flight hour projections with those in the Naval Synchronization Tool (NST). The updated methodology calculates aircraft operating years based on EA -18G Total Aircraft Inventory (TAI) that includes pipeline aircraft to align with NST. Previous methodology utilized Primary Aircraft Authorized (PAA) that does not include pipeline aircraft. Also contributing to the O&S cost breach are 7 aircraft being added to the POR in FY 2016 (Lot 40).

A Program Deviation Report and an APB will be prepared for submission to the Assistant Secretary of the Navy, Research, Development, and Acquisition for review and approval.

Schedule



Schedule Events									
Events	SAR Baseline Production Estimate	Prod	ent APB duction e/Threshold	Current Estimate					
Milestone B	Dec 2003	Nov 2003	Apr 2004	Dec 2003					
Critical Design Review (CDR)	Apr 2005	Apr 2005	Oct 2005	Apr 2005					
Milestone C	Jul 2007	Apr 2007	Oct 2007	Jul 2007					
Initial Operational Test and Evaluation (IOT&E)(Start)	Sep 2008	Sep 2008	Mar 2009	Sep 2008					
Initial Operational Capability (IOC)	Sep 2009	Sep 2009	Mar 2010	Sep 2009					
Full Rate Production (FRP)	Apr 2009	Apr 2009	Nov 2009	Nov 2009					

Change Explanations

None

Performance

Performance Characteristics									
SAR Baseline Production Estimate	Produ	nt APB uction Threshold	Demonstrated Performance	Current Estimate					
Net-ready									
EA-18G must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services, 4) Information assurance requirements including availability, integrity, authenticat-ion, confidentiality, and nonrepudiat-ion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	EA-18G must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services, 4) Information assurance requirements including availability, integrity, authenticat-ion, confidentiality, and nonrepudiat-ion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	EA-18G must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services, 4) Information assurance requirements including availability, integrity, authenticat-ion, confidentiality, and nonrepudiat-ion, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	Meets all Net-Centric Require - ments	Meets all Net- Centric Require- ments					
Receive Azimuth Coverage									
360 deg	360 deg	360 deg	360 deg	360 deg					
Operational Availability									
>=0.98	>=0.98	>=0.85	0.98	>=0.98					
Carrier Suitability									
Launch Catapult WOD (N	lax Gross Weight, Tropical	Day)							

<=25 knots	<=25 knots	<=30 knots	21 knots	<=25 knots				
Deck Spot Factor								
<=1.4	<=1.4	<=1.5	1.46	1.46				
Recovery Payload (empty wing and centerline pylons and nacelle ejectors, 47,000 lbs, 14 knots WOD)								
>=9,000 lbs	>=9,000 lbs	>=9,000 lbs	11,037 lbs	>=9,000 lbs				
Additional Internal Fuel Capacity (over F/A-18C/D)								
>=3,000 lbs	>=3,000 lbs	>=3,000 lbs	3,802 lbs	>=3,000 lbs				

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

Requirements Reference

CPD Change 1 dated October 19, 2009

Change Explanations

None

Acronyms and Abbreviations

ATO - Authority to Operate

DAA - Designated Approval Authority

deg - Degrees

DISR - DoD Information Technology Standards and Profile Registry

GIG IT - Global Information Grid Information Technology

IATO - Interim Authority to Operate

KIP - Key Interface Profile

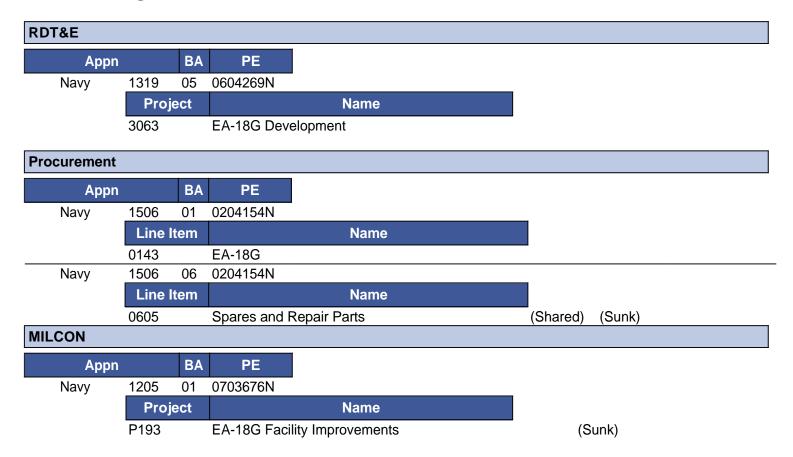
lbs - Pounds

NCOW RM - Net-Centric Operations and Warfare Reference Model

TV - Technical View

WOD - Wind Over Deck

Track to Budget



Cost and Funding

Cost Summary

	Total Acquisition Cost											
	B	Y 2004 \$M		BY 2004 \$M	TY \$M							
Appropriation	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate					
RDT&E	1755.3	1700.8	1870.9	2120.5 ¹	1899.9	1832.3	2419.3					
Procurement	5754.6	8329.7	9162.7	11045.0 ¹	6712.5	9693.8	13229.1					
Flyaway				9328.2			11138.0					
Recurring				9239.8			11036.9					
Non Recurring				88.4			101.1					
Support				1716.8			2091.1					
Other Support				1477.6			1815.4					
Initial Spares				239.2			275.7					
MILCON	20.9	21.4	23.5	21.4	24.0	24.0	24.0					
Acq O&M	0.0	0.0		0.0	0.0	0.0	0.0					
Total	7530.8	10051.9	N/A	13186.9	8636.4	11550.1	15672.4					

¹ APB Breach

Confidence Level

Confidence Level of cost estimate for current APB: 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 interference. It is consistent with average resource expenditures on historical efforts of similar size, scope, and complexity.

	Total Quantity									
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate							
RDT&E	0	0	0							
Procurement	84	114	160							
Total	84	114	160							

Cost and Funding

Funding Summary

	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	1814.8	46.9	116.8	165.0	142.8	65.6	67.4	0.0	2419.3		
Procurement	12371.1	858.0	0.0	0.0	0.0	0.0	0.0	0.0	13229.1		
MILCON	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0		
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PB 2017 Total	14209.9	904.9	116.8	165.0	142.8	65.6	67.4	0.0	15672.4		
PB 2016 Total	14089.6	56.9	47.3	104.4	56.4	40.6	0.0	0.0	14395.2		
Delta	120.3	848.0	69.5	60.6	86.4	25.0	67.4	0.0	1277.2		

Funding Notes

As part of the A-12 settlement, the EA-18G Program received three EA-18G airframes, Contractor Furnished Equipment (CFE), and Airborne Electronic Attack (AEA) kits from the Boeing Company. The value to the program was \$198M. These aircraft are in the process of delivery and are annotated as Lot 37A aircraft. There was not a TOA increase to the program. The three Growler aircraft have been added to FY 2013 and will be included in the Program of Record.

FY 2016 \$198 Million A-12 In-kind Settlement does not reflect Total Obligation Authority (TOA). No additional resources were provided in FY 2016 to the Department of the Navy. The three EA-18G aircraft from the A-12 settlement and the FY 2017 PB addition of 7 EA-18G aircraft in FY 2016 increases the total PoR from 150 to 160.

	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	0	0	0	0	0	0	0	0	0	0	
Production	0	153	7	0	0	0	0	0	0	160	
PB 2017 Total	0	153	7	0	0	0	0	0	0	160	
PB 2016 Total	0	150	0	0	0	0	0	0	0	150	
Delta	0	3	7	0	0	0	0	0	0	10	

Cost and Funding

Annual Funding By Appropriation

	Annual Funding 1319 RDT&E Research, Development, Test, and Evaluation, Navy										
		TY \$M									
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
2004							203.7				
2005							353.7				
2006							379.7				
2007							361.0				
2008							269.4				
2009							115.7				
2010							55.5				
2011							20.2				
2012							14.8				
2013							11.8				
2014							10.6				
2015							18.7				
2016							46.9				
2017							116.8				
2018							165.0				
2019							142.8				
2020							65.6				
2021							67.4				
Subtotal							2419.3				

Annual Funding 1319 RDT&E Research, Development, Test, and Evaluation, Navy										
		BY 2004 \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
2004							199.6			
2005							337.8			
2006							351.6			
2007							326.3			
2008							239.2			
2009							101.4			
2010							47.9			
2011							17.0			
2012							12.3			
2013							9.7			
2014							8.6			
2015							14.9			
2016							36.9			
2017							90.2			
2018							125.1			
2019							106.1			
2020							47.8			
2021							48.1			
Subtotal							2120.5			

Annual Funding 1506 Procurement Aircraft Procurement, Navy										
		TY \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
2005		8.2			8.2		8.2			
2006	4	308.0		7.5	315.5	55.7	371.2			
2007	9	638.7		5.8	644.5	104.9	749.4			
2008	21	1396.4		63.4	1459.8	164.9	1624.7			
2009	22	1563.3		17.1	1580.4	157.3	1737.7			
2010	22	1482.0			1482.0	85.6	1567.6			
2011	12	819.0		0.2	819.2	144.4	963.6			
2012	12	799.4		0.3	799.7	147.7	947.4			
2013	15	816.0		0.1	816.1	184.0	1000.1			
2014	21	1463.9		6.7	1470.6	426.7	1897.3			
2015	15	1178.9			1178.9	325.0	1503.9			
2016	7	563.1			563.1	294.9	858.0			
Subtotal	160	11036.9		101.1	11138.0	2091.1	13229.1			

Annual Funding 1506 Procurement Aircraft Procurement, Navy										
	BY 2004 \$M									
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
2005		7.7			7.7		7.7			
2006	4	281.1		6.8	287.9	50.9	338.8			
2007	9	569.7		5.2	574.9	93.5	668.4			
2008	21	1227.0		55.7	1282.7	145.0	1427.7			
2009	22	1354.8		14.8	1369.6	136.4	1506.0			
2010	22	1258.1			1258.1	72.6	1330.7			
2011	12	681.7		0.2	681.9	120.2	802.1			
2012	12	656.0		0.2	656.2	121.3	777.5			
2013	15	662.5		0.1	662.6	149.4	812.0			
2014	21	1173.3		5.4	1178.7	341.9	1520.6			
2015	15	930.8			930.8	256.7	1187.5			
2016	7	437.1			437.1	228.9	666.0			
Subtotal	160	9239.8		88.4	9328.2	1716.8	11045.0			

Cost Quantity Information 1506 Procurement Aircraft Procurement, Navy								
Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned With Quantity) BY 2004 \$M						
2005								
2006	4	288.8						
2007	9	569.7						
2008	21	1227.0						
2009	22	1354.8						
2010	22	1258.1						
2011	12	681.7						
2012	12	656.0						
2013	15	662.5						
2014	21	1173.3						
2015	15	930.8						
2016	7	437.1						
Subtotal	160	9239.8						

Annual Funding
1205 | MILCON | Military Construction, Navy and Marine
Corps

TY \$M

Total
Program

2007

Subtotal

24.0

Annual Funding
1205 | MILCON | Military Construction, Navy and Marine
Corps

BY 2004 \$M

Total
Program

2007

Subtotal

21.4

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	12/18/2003	5/8/2008
Approved Quantity	9	30
Reference	Milestone B ADM	Milestone C ADM
Start Year	2006	2006
End Year	2009	2009

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the determination that 30 EA-18G aircraft would be the minimum requirement to conduct LRIP, permit a systematic increase in the production rate of the ALQ-218 system, and avoid a break in the production line.

In LRIP I (FY 2007), the EA-18G program office procured nine EA-18G systems (including one FY 2007 supplemental). For LRIP II (FY 2008), the EA-18G program office procured 21 EA-18G systems (including three FY 2008 supplementals).

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Description
Australia	9/24/2013	0	17.7	FMS Case, AT-P-GTM, provides for EA-18G Aircrew initial training and support related to AT-P- SCI and AT-P-LEN FMS Cases.
Australia	7/4/2013	12	1346.7	FMS Case, AT-P-SCI, provides for the procurement of 12 EA-18G aircraft and support. The 12 aircraft were included in the Lot 38 procurement contract, which was awarded on June 30, 2014.
Australia	8/30/2012	12	992.4	FMS Case, AT-P-LEN, provides for the procurement of 12 Airborne Electronic Attack (AEA) kit sets, the modification effort to convert six Australian Lot 33 F/A-18F to AEA-18G Aircraft, and support. Per AT-P-SCI, Australia elected to obtain 12 new build EA-18G aircraft vice converting six Australian Lot 33 F/A-18F to EA-18G.

Notes

Nuclear Costs

None

Unit Cost

Unit Cost Report

	BY 2004 \$M	BY 2004 \$M	
Item	Current UCR Baseline (Feb 2011 APB)	Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost			
Cost	10051.9	13186.9	
Quantity	114	160	
Unit Cost	88.175	82.418	-6.53
Average Procurement Unit Cost			
Cost	8329.7	11045.0	
Quantity	114	160	
Unit Cost	73.068	69.031	-5.52
	BY 2004 \$M	BY 2004 \$M	
ltem	BY 2004 \$M Original UCR Baseline (Dec 2003 APB)	BY 2004 \$M Current Estimate (Dec 2015 SAR)	% Change
Item Program Acquisition Unit Cost	Original UCR Baseline	Current Estimate	% Change
	Original UCR Baseline	Current Estimate	% Change
Program Acquisition Unit Cost	Original UCR Baseline (Dec 2003 APB)	Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost Cost	Original UCR Baseline (Dec 2003 APB)	Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost Cost Quantity	Original UCR Baseline (Dec 2003 APB) 7662.6 90	Current Estimate (Dec 2015 SAR) 13186.9 160	
Program Acquisition Unit Cost Cost Quantity Unit Cost	Original UCR Baseline (Dec 2003 APB) 7662.6 90	Current Estimate (Dec 2015 SAR) 13186.9 160	
Program Acquisition Unit Cost Cost Quantity Unit Cost Average Procurement Unit Cost	Original UCR Baseline (Dec 2003 APB) 7662.6 90 85.140	Current Estimate (Dec 2015 SAR) 13186.9 160 82.418	

Unit Cost History



Item	Date	BY 200	4 \$M	TY \$M		
item	Date	PAUC	APUC	PAUC	APUC	
Original APB	Dec 2003	85.140	67.006	93.573	74.600	
APB as of January 2006	Dec 2003	85.140	67.006	93.573	74.600	
Revised Original APB	N/A	N/A	N/A	N/A	N/A	
Prior APB	Jan 2010	90.989	71.149	103.828	82.449	
Current APB	Feb 2011	88.175	73.068	101.317	85.033	
Prior Annual SAR	Dec 2014	81.188	68.401	95.968	81.672	
Current Estimate	Dec 2015	82.418	69.031	97.952	82.682	

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY \$M)								
Initial PAUC	Changes						PAUC Production	
Estimate								Estimate
93.573								102.814

Current SAR Baseline to Current Estimate (TY \$M)									
PAUC Production				Chang	jes				PAUC Current
Production Estimate Econ Qty Sch Eng Est Oth Spt Total								Estimate	
102.814 -0.522 -11.764 -0.082 1.062 -2.048 0.000 8.492 -4.862									97.952

Initial SAR Baseline to Current SAR Baseline (TY \$M)									
Initial APUC				Chan	nges				APUC
Development Estimate								Production Estimate	
74.600	3.679	0.057	-0.319	0.138	-1.613	0.000	3.369	5.311	79.911

Current SAR Baseline to Current Estimate (TY \$M)									
Shangos - Shango							APUC		
Production Estimate	Econ Qty Sch Eng Est Oth Spt Total							Current Estimate	
79.911	-0.593	-0.885	-0.082	0.000	-4.161	0.000	8.492	2.771	82.682

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	Nov 2003	Dec 2003	Dec 2003					
Milestone C	N/A	Apr 2007	Jul 2007	Jul 2007					
IOC	N/A	Sep 2009	Sep 2009	Sep 2009					
Total Cost (TY \$M)	N/A	8421.6	8636.4	15672.4					
Total Quantity	N/A	90	84	160					
PAUC	N/A	93.573	102.814	97.952					

Cost Variance

	Summary TY \$M										
Item	RDT&E	Procurement	MILCON	Total							
SAR Baseline (Production Estimate)	1899.9	6712.5	24.0	8636.4							
Previous Changes											
Economic	+13.5	-70.9		-57.4							
Quantity		+5180.2		+5180.2							
Schedule		-6.7		-6.7							
Engineering	+170.0			+170.0							
Estimating	+37.0	-444.0		-407.0							
Other											
Support		+879.7		+879.7							
Subtotal	+220.5	+5538.3		+5758.8							
Current Changes											
Economic	-2.2	-24.0		-26.2							
Quantity		+751.5		+751.5							
Schedule		-6.4		-6.4							
Engineering											
Estimating	+301.1	-221.8		+79.3							
Other											
Support		+479.0		+479.0							
Subtotal	+298.9	+978.3		+1277.2							
Total Changes	+519.4	+6516.6		+7036.0							
CE - Cost Variance	2419.3	13229.1	24.0	15672.4							
CE - Cost & Funding	2419.3	13229.1	24.0	15672.4							

	Summary BY 2004 \$M										
Item	RDT&E	Procurement	MILCON	Total							
SAR Baseline (Production Estimate)	1755.3	5754.6	20.9	7530.8							
Previous Changes											
Economic											
Quantity		+4159.9		+4159.9							
Schedule		-4.2		-4.2							
Engineering	+126.1			+126.1							
Estimating	+15.2	-354.8	+0.5	-339.1							
Other											
Support		+704.7		+704.7							
Subtotal	+141.3	+4505.6	+0.5	+4647.4							
Current Changes											
Economic											
Quantity		+586.3		+586.3							
Schedule		-0.4		-0.4							
Engineering											
Estimating	+223.9	-176.1		+47.8							
Other											
Support		+375.0		+375.0							
Subtotal	+223.9	+784.8		+1008.7							
Total Changes	+365.2	+5290.4	+0.5	+5656.1							
CE - Cost Variance	2120.5	11045.0	21.4	13186.9							
CE - Cost & Funding	2120.5	11045.0	21.4	13186.9							

Previous Estimate: December 2014

RDT&E	\$N	1
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-2.2
Adjustment for current and prior escalation. (Estimating)	+0.4	+0.5
Revised estimate for Tactical Targeting Network Technology in FY 2017 to FY 2019. (Estimating)	+38.5	+50.9
Revised estimate for Distributed Targeting Processor-Networked in FY 2017 to FY 2021. (Estimating)	+38.1	+52.4
Revised estimate for Complex Emitter in FY 2017 to FY 2020. (Estimating)	+154.8	+207.3
Decrease in FY 2016 funding due to Congressional reduction. (Estimating)	-7.9	-10.0
RDT&E Subtotal	+223.9	+298.9

Procurement	\$N	Л
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-24.0
Quantity variance resulting from an increase of 7 aircraft from 153 to 160. (Subtotal)	+562.2	+720.7
Quantity variance resulting from an increase of 7 aircraft from 153 to 160. (Quantity)	(+586.3)	(+751.5)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-0.4)	(-0.5)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-23.7)	(-30.3)
Acceleration of procurement buy profile. (Schedule) (QR)	0.0	-5.9
Decrease in FY 2013, FY 2014, and FY 2015 due to internal Navy realignments. (Estimating)	-168.5	-211.4
Adjustment for current and prior escalation. (Estimating)	+16.1	+19.9
Adjustment for current and prior escalation. (Support)	+3.2	+4.1
Increase in Other Support resulting from increase in 7 additional aircraft. (Support) (QR)	+371.5	+474.5
Increase in Initial Spares resulting from increase in 7 additional aircraft. (Support) (QR)	+0.3	+0.4
Procurement Subtotal	+784.8	+978.3

(QR) Quantity Related

EA-18G December 2015 SAR

Contracts

Contract Identification

Appropriation: Procurement

Contract Name: Airframe Multi-Year Procurement III (MYP III)

Contractor: The Boeing Company
Contractor Location: 6200 JS McDonnell Blvd.
St. Louis. MO 63166

Contract Number: N00019-09-C-0019
Contract Type: Firm Fixed Price (FFP)
Award Date: December 04, 2008
Definitization Date: September 28, 2010

Contract Price								
Initial Co	ntract Price ((\$M)	Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
2528.7	N/A	58	2644.3	N/A	58	2644.3	2644.3	

Target Price Change Explanation

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.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

The EA-18G aircraft (Lots 34 through 37) are being procured on the MYP III contract from FY 2010 through FY 2013. The MYP III contract values above reflect the EA-18G portion of this contract only.

The MYPIII contract was awarded on December 4, 2008, for the advance procurement of long-lead materials. A contract modification, P00009, funded the contract for the procurement of Lot 34 aircraft and associated requirements.

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

Contract Number:

Appropriation: Procurement

Contract Name: F414 Engine Production Lots 16-19

Contractor: GE Aircraft Engines
Contractor Location: 1000 Western Ave.
Lvnn. MA 01910

N00019-11-C-0045

Contract Type: Firm Fixed Price (FFP)

Award Date: April 20, 2011

Definitization Date: September 26, 2012

Contract Price								
Initial Cor	ntract Price ((\$M)	Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
5.2	N/A	0	507.9	N/A	114	507.9	507.9	

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the FY 2012 procurement of 24 engines and devices, FY 2013 procurement of long lead material, FY 2013 procurement of 18 engines and devices, modifications executed for advanced procurement for FY 2014 engines, modification executed for the FY 2014 procurement of 42 engines and devices, and the modification executed for the FY 2015 procurement of 30 engines and devices.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

The original contract value only reflects the procurement of time-critical long-lead material in support of the FY 2012 F414 engine production.

Appropriation: Procurement

Contract Name: EA-18G FRP AEA Kits
Contractor: The Boeing Company
Contractor Location: 6200 JS McDonnell Blvd.

St. Louis. MO 63166-0516

Contract Number: N00019-09-C-0086
Contract Type: Firm Fixed Price (FFP)
Award Date: December 23, 2008

Definitization Date: May 11, 2009

Contract Price								
Initial Co	ntract Price (\$M)	Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
50.3	N/A	N/A	993.8	N/A	92	993.8	993.8	

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to adding Lots 33, 34, 35, 36, 37 and Royal Australian Air Force Airborne Electronic Attack (AEA) kits after program approval into FRP, dated November 23, 2009.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

The original contract value reflected the advanced procurement of time-critical parts only.

The December 2013 SAR erroneously reported a Current Quantity of 68 kits vice 92 kits. There are no additional quantity changes this year and the Current Contract Price and Estimated Price at Completion values remain the same.

AEA kit deliveries on this contract were completed ahead of schedule.

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

Appropriation: Procurement

Contract Name: System Configuration Sets (SCS) Contract

Contractor: The Boeing Company

Contractor Location: 6200 JS McDonnell Blvd.
St. Louis, MO 63166

Negoce 44 D 0000

Contract Number: N68936-14-D-0008

Contract Type: Indefinite Delivery Indefinite Quantity (IDIQ), Cost Plus Incentive Fee (CPIF), Cost Plus Fixed

Fee (CPFF)

Award Date: December 12, 2013

Definitization Date: December 12, 2013

Contract Price								
Initial Co	ntract Price (\$M)	Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
872.8	N/A	90	872.8	N/A	90	872.8	872.8	

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (IDIQ/CPIF/CPFF) contract.

Notes

The Program Executive Officer for Tactical Aircraft Programs approved a deviation (dated July 24, 2013) to exclude EVM requirements for CPFF level-of-effort task orders on this contract. There have been no CPIF orders awarded on this contract. As a result, there are no EVM metrics reported.

The Current Contract Price Target for the basic contract reflects the value at contract award.

The value, quantities, and funding for each delivery or task order issued under this IDIQ contract are individually negotiated.

This contract includes shared costs and quantities for U.S. Navy and Royal Australian Air Force F/A-18 and EA-18G platforms.

Appropriation: RDT&E

Contract Name: EA-18G ALQ-218 Operational Test Program Sets (OTPSs)

Contractor: The Boeing Company

Contractor Location: 6200 James S McDonnell Boulevard

Berkeley, MO 63134

Contract Number: N68335-10-G-0012/46

Contract Type: Cost Plus Fixed Fee (CPFF)

Award Date: September 25, 2013

Definitization Date: September 25, 2013

Contract Price								
Initial Co	ntract Price ((\$M)	Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
41.8	N/A	14	49.8	N/A	14	49.8	49.8	

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to contract modifications being awarded to fund technical support for the development efforts from Northrop Grumman (NGC) to Boeing on CLIN 0001.

Contract Variance						
Item	Cost Variance	Schedule Variance				
Cumulative Variances To Date (1/28/2016)	+2.4	-1.2				
Previous Cumulative Variances	+1.8	-0.7				
Net Change	+0.6	-0.5				

Cost and Schedule Variance Explanations

The favorable net change in the cost variance is due to the ability to automate requirements generation, use of existing Boeing Unigraphics models of Weapons Replaceable Assemblies, and use of existing cable designs provided by Northrop Grumman.

The unfavorable net change in the schedule variance is due to additional time required to complete requirements documentation primarily due to Critical Design Review documentation associated with the Ancillary Set, resulting in a scheduled delay starting Integration.

Appropriation: Procurement

Contract Name:EA-18G FRP (Lot 38-39)Contractor:The Boeing CompanyContractor Location:6200 JS McDonnell Blvd.

St. Louis, MO 63166

Contract Number: N00019-14-C-0032

Contract Type: Fixed Price Incentive(Firm Target) (FPIF)

Award Date: June 30, 2014

Definitization Date: June 30, 2014

Contract Price								
Initial Cor	ntract Price (\$M)	Current Contract Price (\$M)			Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager	
1466.9	1488.9	33	2568.0	2635.3	48	2568.0	2568.0	

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the contract modification to include the procurement of Lot 38-39 AEA kits, Airborne Electronic Attack (AEA) specific obsolescence efforts, and Royal Australian Air Force (RAAF) unique hardware and support.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FPIF) contract.

Notes

The EA-18G FRP (Lot 38) contract was awarded on June 30, 2014 for the procurement of 33 EA-18G aircraft with Airborne Electronic Attack (AEA) kits, which includes 21 U.S. Navy (USN) aircraft and 12 RAAF aircraft. A contract modification was awarded on October 26, 2015 for the procurement of 15 EA-18G aircraft with AEA kits.

The Deputy Assistant Secretary of the Navy for Acquisition and Procurement approved a deviation (Deviation No. 14-N-907, dated May 29, 2014) to exclude EVM requirements on this contract.

All contract values above reflect the procurement of the EA-18G variant only.

Deliveries and Expenditures

Deliveries							
Delivered to Date	Total Quantity	Percent Delivered					
Development	0	0	0				
Production	114	114	160	71.25%			
Total Program Quantity Delivered	114	114	160	71.25%			

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	15672.4	Years Appropriated	13
Expended to Date	10583.0	Percent Years Appropriated	72.22%
Percent Expended	67.53%	Appropriated to Date	15114.8
Total Funding Years	18	Percent Appropriated	96.44%

The above data is current as of February 17, 2016.

The previous reported aircraft deliveries of 116 aircraft was an error due to miscalculation.

EA-18G December 2015 SAR

Operating and Support Cost

Cost Estimate Details

Date of Estimate: February 16, 2016

Source of Estimate: POE

Quantity to Sustain: 160

Unit of Measure: Aircraft

Service Life per Unit: 29.00 Years

Fiscal Years in Service: FY 2008 - FY 2046

The variable components of the cost estimate such as the Flying Hour Program (FHP) are based on the number of aircraft operational years available and the flight hours which they generate. Some elements such as personnel and their associated indirect and training costs are dependent on the number of squadrons and their manning requirements. Other fixed elements such as sustaining engineering are based on a cost per aircraft. Modification and airframe and support equipment depot maintenance are estimated as the total requirement and then applied on a cost per aircraft basis.

Consumption rate, gallons per hour: 1,305

Number of Aircraft Operating Years: 4,449

Flight Hours per aircraft per month: 26.4

Petroleum, Oil, Lubrication (POL) cost, JP-5 per gallon FY 2004\$: 1.00

Fatigue Life (Flight Hours): 7,500

Operational Service Life (Flight Hours): 9,000

Total Life Cycle Flight Hours: 1,334,563

Sustainment Strategy

The EA-18G Support strategy is based on the following assumptions for basing and utilization.

Primary Mission Authorized Aircraft (PMAA) will be comprised of ten Carrier Air Wing (CVW) squadrons (each with 7 PMAA), one of which will be part of the Forward Deployed Naval Force (FDNF) stationed out of Yokosuka, Japan, five Expeditionary Squadrons (each with 5 PMAA), and one reserve Squadron (5 PMAA). All squadrons are manned to the level required to execute the Expeditionary mission for a total of 100 PMAA aircraft. The Fleet Replacement Squadron will consist of 26 Aircraft Primary Training Aircraft Authorization (PTAA) aircraft.

EA-18G and F/A-18E/F common maintenance training will be conducted at Naval Air Station (NAS), Lemoore, California (CA), with peculiar EA-18G AEA maintenance training being conducted at NAS Whidbey Island, WA. Initial aircrew training will be conducted at NAS Whidbey Island, WA.

EA-18G and F/A-18E/F common Intermediate Level (I-Level) maintenance will be conducted at NAS Lemoore, CA to include the F414 engine. Limited I-Level for some EA-18G and F/A-18E/F common maintenance tasks has been established at Whidbey Island, WA. Airborne Electronic Attack (AEA) I-Level maintenance will be stood up at Whidbey Island and aboard the CVWs commencing FY18. EA-18G Depot Level (D-Level) maintenance will follow the directives as

published in the ILS, SCM and F414 support contracts. This support strategy focuses on the integration of existing F/A-18F support, support that was developed for the EA-6B equipment common to the EA-18G, and development of support for EA-18G unique design circumstances. While the EA-18G AEA equipment is based on the ICAP-III system that was developed for the EA-6B, much of it is repackaged, some with added EA-18G unique components, and some new design EA-18G equipment.

Antecedent Information

Antecedent program: EA-6B

Consumption rate, gallons per hour: 1,084

Number of Aircraft Operating Years: 4,449 (not actual, but used in order to provide a comparison between the EA-18G

and its antecedent platform)

Flight Hours per aircraft per month: 29.2

POL Cost, JP-5 per gallon FY 2004\$: 1.00

Source of Antecedent Information: Naval Visibility and Management Operating and Support Costs (VAMOSC)

database Aircraft Type Model Series Report (ATMSR)

For comparison purposes, the BY Antecedent's Average Annual Cost per Aircraft is derived from total FY 2010 - FY 2014 cost from the Navy VAMOSC ATMSR, divided by the total number of aircraft in ATMSR for FY 2010 - FY 2014. This value is then multiplied by the total number of aircraft operating years associated with EA-18G to provide a point of comparison.

Annual O&S Costs BY2004 \$M						
Cost Element	EA-18G Average Annual Cost Per Aircraft	EA-6B (Antecedent) Average Annual Cost Per Aircraft				
Unit-Level Manpower	1.470	2.043				
Unit Operations	0.625	0.535				
Maintenance	2.390	3.313				
Sustaining Support	0.132	0.290				
Continuing System Improvements	1.053	1.629				
Indirect Support	0.341	0.341				
Other	0.000	0.000				
Total	6.011	8.151				

	Total O&S Cost \$M				
Item	EA-18G				
itom	Current Production APB Objective/Threshold		Current Estimate	EA-6B (Antecedent)	
Base Year	14743.0	16217.3	26743.0 ¹	36262.8	
Then Year	24508.2	N/A	48459.2	N/A	

Due to an updated methodology being used to estimate flight hours to more closely align flight hour projections with those in the Naval Synchronization Tool (NST) an additional 691 aircraft operating years and \$3,062 BY 2004 \$M was added to the O&S Cost Estimate. The updated methodology calculates aircraft operating years based on EA-18G Total Aircraft Inventory (TAI) that includes pipeline aircraft to align with NST. Previous methodology utilized Primary Aircraft Authorized (PAA) that does not include pipeline aircraft. Due to the addition of 7 aircraft to the Program of Record (PoR) in FY 2016 (Lot 40), 203 operating years have been added to the PoR which adds \$868 BY 2004 \$M to the O&S Cost Estimate. Both of these contributed to the O&S cost breach.

Equation to Translate Annual Cost to Total Cost

The Average Annual Cost Per Aircraft for the EA-18G is calculated by Dividing the Total O&S Cost of \$26,743.0 BY 2004 \$M by the Total Aircraft Operating Years of 4,449 for the program resulting in \$6.011 BY 2004 \$M per aircraft per year.

O&S Cost Variance				
Category	BY 2004 \$M	Change Explanations		
Prior SAR Total O&S Estimates - Dec 2014 SAR	23232.6			
Programmatic/Planning Factors	868.2	Seven EA-18G aircraft added to Lot 40: PMAA of CVW squadrons increased from six to seven.		
Cost Estimating Methodology	3061.9	Updated methodology used to calculate flight hours to more closely align with the flight hour projections in the NST.		
Cost Data Update	60.2	Updates in aviation depot-level repairable and aviation fleet maintenance pricing.		
Labor Rate	14.9	Slight increases in FY 2016 composite labor rates.		
Energy Rate	-103.7	Decrease in fuel price.		
Technical Input	-391.1	Decrease in the Service Life Extension Program (SLEP) estimate and increase in F414 Engine/Module Mean Engine Flight Hour Between Repair (MEFHBR).		
Other	0.0	- · · · · · · ·		
Total Changes	3510.4			
Current Estimate	26743.0			

Disposal Estimate Details

Date of Estimate: February 16, 2016

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2004 \$M): Total costs for disposal of all Aircraft are 29.8

The TY \$M value is \$55.1.