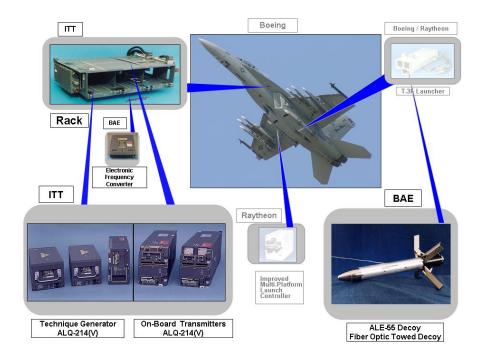


# **Selected Acquisition Report (SAR)**

RCS: DD-A&T(Q&A)823-418



# **Integrated Defensive Electronic Countermeasures (IDECM)**

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**

Integrated Defensive Electronic Countermeasures (IDECM)

#### **DoD Component**

Navy

### **Responsible Office**

CAPT Scott Porter, USN Program Executive Office (Tactical Aircraft) Bldg. 2272, Suite 535 47123 Buse Rd Patuxent River, MD 20670-1547 Phone:301-757-7951Fax:301-757-7954DSN Phone:757-7951DSN Fax:757-7954

Date Assigned: October 9, 2012

scott.d.porter@navy.mil

#### References

**IDECM Blocks 2/3** 

#### **SAR Baseline (Production Estimate)**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated June 16, 2008

#### **Approved APB**

Assistant Secretary of the Navy (Research, Development & Acquisition) (ASN(RDA)) Approved Acquisition Program Baseline (APB) dated April 13, 2012

#### **IDECM Block 4**

### **SAR Baseline (Development Estimate)**

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated June 16, 2008

#### **Approved APB**

Component Acquisition Executive (CAE) Approved Acquisition Program Baseline (APB) dated February 3, 2014

## **Mission and Description**

The Integrated Defensive Electronic Countermeasures (IDECM) System is a Radio Frequency (RF), self-protection electronic countermeasure suite on the F/A-18 aircraft. IDECM improves the survivability of the F/A-18 aircraft against RF guided threats during Air-to-Ground/Surface and Air-to-Air missions. The system is comprised of onboard components, which receive and process radar signals, along with onboard and offboard jammer components that transmit appropriate RF jamming responses.

There are four IDECM variants in development, production, or sustainment. Blocks 1-3 are compatible with F/A-18E/F aircraft only. Block 4 is compatible with F/A-18C-F aircraft.

IDECM Block 1: A federated suite, consisting of the ALQ-165 On-Board Jammer (OBJ) and ALE-50 expendable decoy.

IDECM Block 2: An integrated suite, consisting of the ALQ-214 OBJ and ALE-50 expendable decoy.

IDECM Block 3: An integrated suite, consisting of the ALQ-214 OBJ and ALE-55 Fiber Optic Towed Decoy.

IDECM Block 4: A Hardware Engineering Change Proposal to the ALQ-214 OBJ to render it suitable for operation on F/A-18C/D aircraft, while retaining all functionality, when installed on F/A-18E/F.

ALQ-214 Software Improvement Program (SWIP): ALQ-214 Software/Firmware updates that will enhance F/A-18 mission execution and improve mission survivability against modern air, land and naval threat systems by degrading (denying/delaying) threat ability to engage.

## **Executive Summary**

#### IDECM Block-2 (IB-2) ALQ-214(V)3:

ALQ-214(V)3 deliveries are 100% complete and all systems were delivered at least one month ahead of the contracted schedule. Harris (formerly Exelis) delivered two hundred seventy-six (276) ALQ-214(V) 3 production systems under the LRIP 1 through FRP 8 contracts.

#### IDECM Block-3 (IB-3) ALE-55:

The ALE-55 is in FRP and all production contracts are performing well. As of February 9, 2016, BAE Systems has delivered 1,902 Fiber Optic Towed Decoys (FOTD) and 424 Electronic Frequency Converters (EFC) under the LRIP 4 through FRP 5 contracts. EFC deliveries are 100% complete. FRP 5 deliveries began in December 2015.

IB-2/3 current APB threshold deviation for APUC and procurement are due to reductions in the procurement rate of the ALE-55 FOTD. Reduced rate of ALE-55 FOTD procurements caused by continual budget reductions and increased Forward Pricing Rate Agreements between DCMA and ALE-55 vendor BAE. A Program Deviation Report (PDR) has been drafted notifying Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) of the deviation.

IDECM Block-4 (IB-4) ALQ-214 Engineering Change Proposal (ECP) and Software Improvement Program (SWIP): On March 10, 2015, PMA 272 submitted a PDR for IB-4 ECP schedule breach. As a result of delays to Operational Test (OT) execution, caused by the combined lack of test aircraft and threat simulators/range availability, the schedule could not be met for conduct of In-Process Review (IPR) 6. Based on IDECM maturity, ASN(RD&A) concurred with the IDECM program plan to award the FY 2015 ALQ-214 production contract and remove the requirement for IPR 6 via ADM signed on May 26, 2015. The FY 2015 production contract was awarded in 4th Quarter FY 2015 for a quantity of 46 systems and spares. A revised APB which reflects the current schedule estimate (removes IPR 6 (Production Transition)) is in signature routing. With respect to the IB-4 ECP OT which officially ended November 17, 2015, that test period has officially been changed to an Operational Assessment (OA) for SWIP. The data from that test period will be used to inform the effectiveness and suitability decision when SWIP is tested. SWIP OT is planned in 2nd Quarter FY 2017. IB-4 SWIP Build 4 delivered in October 2015. IB-4 SWIP Build 5 will deliver in March 2016.

#### IDECM Block-4 (IB-4) Production:

The FRP 9 through 11 contract was awarded on April 16, 2012. FRP 9 and 10 deliveries are complete. As of February 9, 2016, Harris has delivered 98 ALQ-214(V)4 production systems under the FRP 9 through 11 contracts. FRP 11 deliveries began in January 2016 and are currently one month ahead of contracted schedule. The FRP 12/13 contract was awarded on July 30, 2015. FRP 12 deliveries are planned to begin in January 2017. FRP 13 option award planned for 2nd Quarter FY 2016.

IB-4 current APB threshold deviation for procurement due to the addition of 134 ALQ-214(V)4 systems, documented in N98 memo Serial Number: N98/13U146134, dated February 4, 2013. A PDR has been drafted notifying ASN(RD&A) of the deviation. A revised APB will be submitted to ASN(RD&A) to reflect current/new objective and threshold for the affected cost parameters.

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

#### **Threshold Breaches**

#### **IDECM Blocks 2/3**

APB Breaches							
е							
RDT&E							
Procurement	V						
MILCON							
Acq O&M							
PAUC							
APUC	V						
	e RDT&E Procurement MILCON Acq O&M PAUC						

### **Explanation of Breach**

IB-2/3 current APB threshold deviations for APUC and procurement are due to reductions in the procurement rate of the ALE-55 Fiber Optic Towed Decoy (FOTD). The reduced rate of ALE-55 FOTD procurements was caused by continual budget reductions and increased Forward Pricing Rate Agreements between Defense Contract Management Agency (DCMA) and ALE-55 vendor BAE. A Program Deviation Report (PDR) has been drafted notifying Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN RD&A) of the deviation.

#### **Nunn-McCurdy Breaches**

**Current UCR Baseline** 

PAUC None APUC None

**Original UCR Baseline** 

PAUC None APUC None

#### **IDECM Block 4**

## APB Breaches

Schedule 

Performance 

Cost 

RDT&E

Procurement MILCON Acq O&M

П

O&S Cost
Unit Cost PAUC

**APUC** 

## **Nunn-McCurdy Breaches**

**Current UCR Baseline** 

PAUC None APUC None

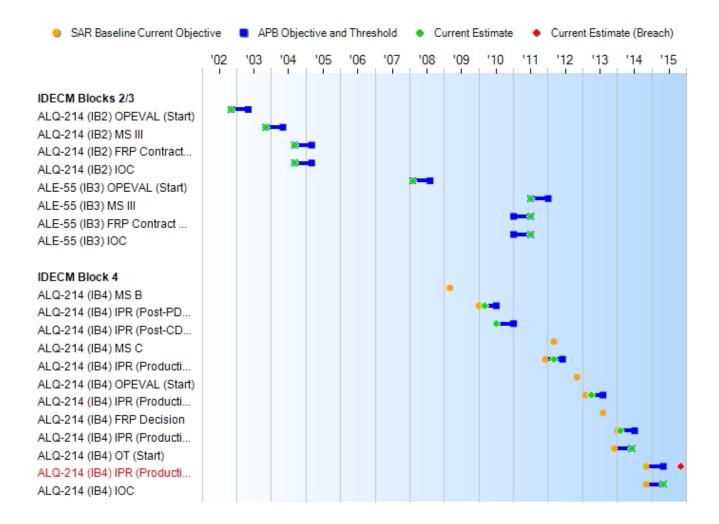
**Original UCR Baseline** 

PAUC None APUC None

#### **Explanation of Breach**

IB-4 current APB threshold deviation for procurement and O&S due to the addition of 134 ALQ-214(V)4 systems, documented in N98 memo Serial Number: N98/13U146134, dated February 4, 2013. A PDR has been drafted notifying ASN(RD&A) of the deviation.

### **Schedule**



### **IDECM Blocks 2/3**

Schedule Events						
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate		
ALQ-214 (IB2) OPEVAL (Start)	Nov 2002	Nov 2002	May 2003	Nov 2002		
ALQ-214 (IB2) MS III	Nov 2003	Nov 2003	May 2004	Nov 2003		
ALQ-214 (IB2) FRP Contract Award	Sep 2004	Sep 2004	Mar 2005	Sep 2004		
ALQ-214 (IB2) IOC	Sep 2004	Sep 2004	Mar 2005	Sep 2004		
ALE-55 (IB3) OPEVAL (Start)	Feb 2008	Feb 2008	Aug 2008	Feb 2008		
ALE-55 (IB3) MS III	Jan 2009	Jul 2011	Jan 2012	Jul 2011		
ALE-55 (IB3) FRP Contract Award	Feb 2009	Jan 2011	Jul 2011	Jul 2011		
ALE-55 (IB3) IOC	Feb 2010	Jan 2011	Jul 2011	Jul 2011		

## Change Explanations

None

## **Acronyms and Abbreviations**

IB2 - IDECM Block 2

IB3 - IDECM Block 3

MS - Milestone

**OPEVAL** - Operational Evaluation

IDECM December 2015 SAR

#### **IDECM Block 4**

Schedule Events							
Events	SAR Baseline Development Estimate	Proc	ent APB duction e/Threshold	Current Estimate			
ALQ-214 (IB4) MS B	Mar 2009	N/A	N/A	N/A			
ALQ-214 (IB4) IPR (Post-PDR Assessment)	N/A	Jan 2010	Jul 2010	Mar 2010			
ALQ-214 (IB4) IPR (Post-CDR Assessment)	N/A	Jul 2010	Jan 2011	Jul 2010			
ALQ-214 (IB4) MS C	Mar 2012	N/A	N/A	N/A			
ALQ-214 (IB4) IPR (Production Cut-in Review 1)	N/A	Dec 2011	Jun 2012	Mar 2012			
ALQ-214 (IB4) OPEVAL (Start)	Nov 2012	N/A	N/A	N/A			
ALQ-214 (IB4) IPR (Production Cut-in Review 2)	N/A	Feb 2013	Aug 2013	Apr 2013			
ALQ-214 (IB4) FRP Decision	Aug 2013	N/A	N/A	N/A			
ALQ-214 (IB4) IPR (Production Cut-in Review 3)	N/A	Jan 2014	Jul 2014	Feb 2014			
ALQ-214 (IB4) OT (Start)	N/A	Dec 2013	Jun 2014	Jun 2014			
ALQ-214 (IB4) IPR (Production Transition)	N/A	Nov 2014	May 2015	Nov 2015 <sup>1</sup>			
ALQ-214 (IB4) IOC	Feb 2014	Nov 2014	May 2015	May 2015			

<sup>1</sup> APB Breach

## **Change Explanations**

(Ch-1) ALQ-214 (IB4) IPR (Production Transition) current estimate changed from May 2015 to November 2015 due to delays in OT caused by lack of aircraft and threat simulator availability at the test range.

### **Acronyms and Abbreviations**

CDR - Critical Design Review

IB4 - IDECM Block 4

IPR - In-Process Review

MS - Milestone

**OPEVAL - Operational Evaluation** 

OT - Operational Test

PDR - Preliminary Design Review

### **Performance**

#### **IDECM Blocks 2/3**

Performance Characteristics							
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate			
ALQ-214 (IB2/3 On-Board	ALQ-214 (IB2/3 On-Board Jammer) Ao						
0.95	0.95	0.9	0.92	0.92			
ALQ-214 (IB3 Off-Board Jammer) Ao							
0.95	0.95	0.9	0.997	0.997			
ALQ-214 (IB2) Operating Envelope							
N/A	LBA	LBA	LBA	LBA			

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

## Requirements Reference

Operational Requirements Document (ORD) (Block 2) dated November 2003 and Capability Production Document (CPD) (Block 3) dated November 13, 2007

### **Change Explanations**

None

### **Acronyms and Abbreviations**

Ao - Operational Availability

IB-2 - IDECM Block 2

IB-3 - IDECM Block 3

LBA - Limits of Basic Airframe

#### **IDECM Block 4**

Performance Characteristics							
SAR Baseline Development Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate			
ALQ-214 (IB2/3/4 On-Board Jammer) Ao							
0.95	0.95	0.9	0.92	0.92			
ALQ-214 (IB2) Operating	ALQ-214 (IB2) Operating Envelope						
N/A	LBA	LBA	LBA	LBA			
ALQ-214 (IB2/3/4 On-board Jammer) Operational Availability							
Ao >= 0.95	N/A	N/A	N/A	N/A			

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

## Requirements Reference

Operational Requirements Document (ORD) (Block 4) dated November 2003 and Statement of Functionality (SOF) dated October 12, 2010

## **Change Explanations**

None

### **Acronyms and Abbreviations**

Ao - Operational Availability

IB-2 - IDECM Block 2

IB-3 - IDECM Block 3

IB-4 - IDECM Block 4

LBA - Limits of Basic Airframe

# **Track to Budget**

## **IDECM Blocks 2/3**

RDT&E				
Appr	1	ВА	PE	
Navy	1319	05	0604270N	
,	Proj	ect	Name	
	2175		Tactical Air Electronic Warfare	(Sunk)
Procurement				
Appr	)	ВА	PE	
Navy	1506	05	0204161N	
-	Line I	tem	Name	
	0576		Common ECM Equipment	(Shared) (Sunk)
Navy	1506	06	0204161N	
	Line I	tem	Name	
	0605		Spares and Repair Parts	(Shared) (Sunk)
Navy	1508	01	0204162N	
	Line I	tem	Name	
	0182		Air Expendable Countermeasures	(Shared)
DECM Block	4			
DDTOF				
RDT&E				
Appr	1	BA	PE	
Navy	1319	05	0604270N	
	Proj	ect	Name	
	2175		Tactical Air Electronic Warfare	
D				
Procurement				
Appr	1	BA	PE	
Navy	1506	05	0204161N	
	Line I	tem	Name	
	0576		Common ECM Equipment	(Shared)
Navy	1506	06	0204161N	
	Line I	tem	Name	
	0605		Spares and Repair Parts	(Shared)

# **Cost and Funding**

# **Cost Summary - Total Program**

Total Acquisition Cost - Total Program								
	В	Y 2008 \$M		BY 2008 \$M	TY \$M			
Appropriation	SAR Baseline Production Estimate	Current AF Productio Objective/Thre	n	Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate	
RDT&E	664.4	696.2		694.3	615.2	645.1	646.2	
Procurement	1407.2	1579.4		1964.7	1666.1	1885.5	2560.5	
Flyaway				1582.1			2126.2	
Recurring				1571.9			2115.6	
Non Recurring				10.2			10.6	
Support				382.6			434.3	
Other Support				254.0			307.3	
Initial Spares				128.6			127.0	
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	2071.6	2275.6	N/A	2659.0	2281.3	2530.6	3206.7	

## **Cost and Funding**

## Cost Summary - IDECM Blocks 2/3

	Total Acquisition Cost - IDECM Blocks 2/3								
	B	7 2008 \$M		BY 2008 \$M	TY \$M				
Appropriation	SAR Baseline Production Estimate	Curren Produc Objective/1	ction	Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate		
RDT&E	454.9	456.4	502.0	456.4	391.0	391.0	391.0		
Procurement	956.0	1037.5	1141.3	1154.11	1144.2	1276.4	1568.6		
Flyaway				923.2			1319.3		
Recurring				916.2			1312.2		
Non Recurring				7.0			7.1		
Support				230.9			249.3		
Other Support				151.4			177.6		
Initial Spares				79.5			71.7		
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	1410.9	1493.9	N/A	1610.5	1535.2	1667.4	1959.6		

<sup>1</sup> APB Breach

### **Confidence Level**

Confidence Level of cost estimate for current APB: 50%

The current APB cost estimate provided sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule and programmatic risk and external interference. It was consistent with average resource expenditures on historical efforts of similar size, scope, and complexity and represents a notional 50% confidence level when established.

Total Quantity - IDECM Blocks 2/3							
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate				
RDT&E	0	0	0				
Procurement	12809	12805	12805				
Total	12809	12805	12805				

# Cost Summary - IDECM Block 4

Total Acquisition Cost - IDECM Block 4								
	B	Y 2008 \$M		BY 2008 \$M	TY \$M			
Appropriation	SAR Baseline Development Estimate	Current Develop Objective/T	ment	Current Estimate	SAR Baseline Development Estimate	Current APB Development Objective	Current Estimate	
RDT&E	209.5	239.8	263.8	237.9	224.2	254.1	255.2	
Procurement	451.2	541.9	596.1	810.6 <sup>1</sup>	521.9	609.1	991.9	
Flyaway				658.9			806.9	
Recurring				655.7			803.4	
Non Recurring				3.2			3.5	
Support				151.7			185.0	
Other Support				102.6			129.7	
Initial Spares				49.1			55.3	
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	660.7	781.7	N/A	1048.5	746.1	863.2	1247.1	

<sup>1</sup> APB Breach

Total Quantity - IDECM Block 4								
Quantity	SAR Baseline Development Estimate	Current APB Development	Current Estimate					
RDT&E	0	0	0					
Procurement	160	190	324					
Total	160	190	324					

# **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												
RDT&E	629.4	6.6	3.9	2.1	2.1	2.1	0.0	0.0	646.2			
Procurement	809.2	130.1	78.5	74.4	71.8	73.1	74.5	1248.9	2560.5			
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	1438.6	136.7	82.4	76.5	73.9	75.2	74.5	1248.9	3206.7			
PB 2016 Total	1443.9	140.7	71.9	85.1	75.1	76.6	71.2	824.3	2788.8			
Delta	-5.3	-4.0	10.5	-8.6	-1.2	-1.4	3.3	424.6	417.9			

# **Cost and Funding**

# Funding Summary - IDECM Blocks 2/3

	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												
RDT&E	391.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	391.0			
Procurement	505.2	21.7	20.9	24.5	24.9	25.4	25.8	920.2	1568.6			
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	896.2	21.7	20.9	24.5	24.9	25.4	25.8	920.2	1959.6			
PB 2016 Total	896.2	21.7	22.2	24.8	25.3	25.8	26.3	810.0	1852.3			
Delta	0.0	0.0	-1.3	-0.3	-0.4	-0.4	-0.5	110.2	107.3			

	Quantity Summary											
	FY 2017 President's Budget / December 2015 SAR (TY\$ M)											
Quantity Undistributed Prior FY FY FY FY FY FY TO 2016 2017 2018 2019 2020 2021 Complete									To Complete	Total		
Development	0	0	0	0	0	0	0	0	0	0		
Production	0	2190	284	261	319	317	317	316	8801	12805		
PB 2017 Total	0	2190	284	261	319	317	317	316	8801	12805		
PB 2016 Total	0	2190	285	289	330	332	336	339	8704	12805		
Delta	0	0	-1	-28	-11	-15	-19	-23	97	0		

# Funding Summary - IDECM Block 4

	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												
RDT&E	238.4	6.6	3.9	2.1	2.1	2.1	0.0	0.0	255.2			
Procurement	304.0	108.4	57.6	49.9	46.9	47.7	48.7	328.7	991.9			
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	542.4	115.0	61.5	52.0	49.0	49.8	48.7	328.7	1247.1			
PB 2016 Total	547.7	119.0	49.7	60.3	49.8	50.8	44.9	14.3	936.5			
Delta	-5.3	-4.0	11.8	-8.3	-0.8	-1.0	3.8	314.4	310.6			

	Quantity Summary										
	FY 20	17 Presid	dent's Bเ	udget / D	ecember	2015 SA	R (TY\$ N	1)			
Quantity Undistributed Prior FY FY FY FY FY FY TO Complete								To Complete	Total		
Development	0	0	0	0	0	0	0	0	0	0	
Production	0	95	48	20	17	16	16	16	96	324	
PB 2017 Total	0	95	48	20	17	16	16	16	96	324	
PB 2016 Total	0	85	40	15	19	12	13	6	0	190	
Delta	0	10	8	5	-2	4	3	10	96	134	

## **Cost and Funding**

# **Annual Funding By Appropriation - IDECM Blocks 2/3**

	Annual Funding - IDECM Blocks 2/3 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					
1995							11.8					
1996							35.6					
1997							49.7					
1998							54.2					
1999							56.5					
2000							62.3					
2001							40.8					
2002							15.2					
2003							12.9					
2004							19.3					
2005							12.9					
2006							7.3					
2007							8.6					
2008		<b></b>					3.9					
Subtotal							391.0					

	Annual Funding - IDECM Blocks 2/3 1319   RDT&E   Research, Development, Test, and Evaluation, Navy										
				BY 2008 \$	M						
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
1995						<b></b>	14.7				
1996							43.5				
1997							60.0				
1998							64.9				
1999							66.9				
2000							72.7				
2001							47.0				
2002							17.3				
2003							14.5				
2004							21.1				
2005							13.7				
2006							7.5				
2007							8.7				
2008							3.9				
Subtotal							456.4				

	Annual Funding - IDECM Blocks 2/3 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					
2002						34.7	34.7					
2003						25.9	25.9					
2004	3	5.8			5.8	20.0	25.8					
2005	12	21.6			21.6	14.4	36.0					
2006	20	34.1			34.1	8.2	42.3					
2007	14	26.5			26.5	8.4	34.9					
2008	16	29.4			29.4	9.8	39.2					
2009	9	20.8		1.4	22.2	19.3	41.5					
2010	10	28.9			28.9	13.0	41.9					
2011	1	7.1			7.1	11.7	18.8					
Subtotal	85	174.2		1.4	175.6	165.4	341.0					

	Annual Funding - IDECM Blocks 2/3 1506   Procurement   Aircraft Procurement, Navy											
				BY 2008 \$	M							
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program					
2002				<b></b>	<b></b>	39.1	39.1					
2003						28.6	28.6					
2004	3	6.2			6.2	21.5	27.7					
2005	12	22.6			22.6	15.0	37.6					
2006	20	34.7			34.7	8.3	43.0					
2007	14	26.3			26.3	8.4	34.7					
2008	16	28.8			28.8	9.6	38.4					
2009	9	20.1		1.4	21.5	18.6	40.1					
2010	10	27.3			27.3	12.3	39.6					
2011	1	6.6			6.6	10.8	17.4					
Subtotal	85	172.6		1.4	174.0	172.2	346.2					

	Annual Funding - IDECM Blocks 2/3 1508   Procurement   Procurement of Ammunition, Navy and Marine Corps										
				TY \$M							
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
2006						3.8	3.8				
2007						0.4	0.4				
2008	150	13.3		4.3	17.6	1.7	19.3				
2009	251	14.0		1.4	15.4	1.5	16.9				
2010	334	20.6			20.6	3.2	23.8				
2011	282	17.2			17.2	1.8	19.0				
2012	274	17.8			17.8	3.0	20.8				
2013	269	17.5			17.5	1.0	18.5				
2014 2015	262 283	18.4 19.9			18.4 19.9	1.7 1.7	20.1 21.6				
2015	284	20.1	<b></b>		20.1	1.7	21.0				
2010	261	19.2			19.2	1.7	20.9				
2018	319	22.8			22.8	1.7	24.5				
2019	317	23.2			23.2	1.7	24.9				
2020	317	23.7			23.7	1.7	25.4				
2021	316	24.1			24.1	1.7	25.8				
2022	317	24.6			24.6	1.7	26.3				
2023	318	25.1			25.1	1.8	26.9				
2024	319	25.6			25.6	1.8	27.4				
2025	320	26.1			26.1	1.8	27.9				
2026	321	26.7			26.7	1.8	28.5				
2027	322	27.2			27.2	1.8	29.0				
2028	323	27.8			27.8	1.9	29.7				
2029	324	28.4			28.4	1.9	30.3				
2030	325	28.9			28.9	1.9	30.8				
2031	326	29.5			29.5	1.9	31.4				
2032	327	30.1			30.1	1.9	32.0				
2033	328	30.8			30.8	2.0	32.8				
2034	329	31.4			31.4	2.0	33.4				
2035	330	32.0			32.0	2.0	34.0				
2036	331	32.7			32.7	2.0	34.7				
2037	332	33.4			33.4	2.0	35.4				
2038 2039	333	34.1 34.8			34.1	2.1 2.1	36.2 36.9				
2039	334 335	35.5			34.8 35.5	2.1	37.6				
2040	336	36.2			36.2	2.1	38.3				
2041	337	37.0			37.0	2.1	39.1				
2042	338	37.0		 	37.0	2.1	39.1				
2043	339	38.5		 	38.5	2.2	40.7				
2045	340	39.3	<del></del>	<del></del>	39.3	2.2	41.5				
2010	0-10	00.0			55.5	2.2	71.0				

	2046	341	40.1	 	40.1	2.2	42.3
	2047	342	40.9	 	40.9	2.2	43.1
	2048	234	31.8	 	31.8	2.3	34.1
Ī	Subtotal	12720	1138 0	 5.7	1143 7	83.9	1227 6

	Annual Funding - IDECM Blocks 2/3 1508   Procurement   Procurement of Ammunition, Navy and Marine Corps										
				BY 2008 \$1	M						
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
2006						3.9	3.9				
2007						0.4	0.4				
2008	150	13.0		4.2	17.2	1.7	18.9				
2009	251	13.5		1.4	14.9	1.4	16.3				
2010	334	19.5			19.5	3.0	22.5				
2011	282	16.0			16.0	1.6	17.6				
2012	274	16.3			16.3	2.7	19.0				
2013	269	15.8			15.8	0.9	16.7				
2014 2015	262 283	16.4 17.4			16.4 17.4	1.5 1.5	17.9 18.9				
2015	284	17.4	<b></b>		17.4	1.5	18.7				
2017	261	16.2			16.2	1.4	17.6				
2018	319	18.9			18.9	1.4	20.3				
2019	317	18.8			18.8	1.4	20.2				
2020	317	18.9			18.9	1.3	20.2				
2021	316	18.8			18.8	1.3	20.1				
2022	317	18.8			18.8	1.3	20.1				
2023	318	18.8			18.8	1.4	20.2				
2024	319	18.8			18.8	1.3	20.1				
2025	320	18.8			18.8	1.3	20.1				
2026	321	18.9			18.9	1.2	20.1				
2027	322	18.8			18.8	1.3	20.1				
2028	323	18.9			18.9	1.3	20.2				
2029	324	18.9			18.9	1.3	20.2				
2030	325	18.9			18.9	1.2	20.1				
2031	326	18.9			18.9	1.2	20.1				
2032	327	18.9			18.9	1.2	20.1				
2033	328	18.9			18.9	1.3	20.2				
2034	329	18.9			18.9	1.2	20.1				
2035	330	18.9			18.9	1.2	20.1				
2036	331	18.9			18.9	1.2	20.1				
2037	332	19.0			19.0	1.1	20.1				
2038	333	19.0			19.0	1.2	20.2				
2039	334	19.0			19.0	1.1	20.1				
2040	335	19.0			19.0	1.1	20.1				
2041	336	19.0			19.0	1.1	20.1				
2042	337	19.0			19.0	1.1	20.1				
2043 2044	338 339	19.0 19.0			19.0	1.1 1.1	20.1				
2044	339				19.0 19.1		20.1 20.1				
20 <del>4</del> 0	340	19.1			19.1	1.0	∠∪. I				

2046	341	19.1	 	19.1	1.0	20.1
2047	342	19.1	 	19.1	1.0	20.1
2048	234	14.5	 	14.5	1.1	15.6
Subtotal	12720	743.6	 5.6	749.2	58.7	807.9

# **Annual Funding By Appropriation - IDECM Block 4**

	Annual Funding - IDECM Block 4 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				
2008							5.2				
2009							9.8				
2010							62.3				
2011							49.3				
2012							60.3				
2013							26.9				
2014							13.5				
2015							11.1				
2016							6.6				
2017							3.9				
2018							2.1				
2019							2.1				
2020					<b></b>		2.1				
Subtotal							255.2				

	Annual Funding - IDECM Block 4 1319   RDT&E   Research, Development, Test, and Evaluation, Navy										
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program				
2008				<b></b>		<b></b>	5.1				
2009							9.6				
2010							60.0				
2011							46.3				
2012							55.8				
2013							24.6				
2014							12.2				
2015							9.9				
2016							5.8				
2017							3.4				
2018							1.8				
2019							1.7				
2020						<b></b>	1.7				
Subtotal							237.9				

	Annual Funding - IDECM Block 4 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							
2012	7	33.1		3.5	36.6	15.5	52.1							
2013	17	42.7			42.7	21.0	63.7							
2014	25	66.5			66.5	15.0	81.5							
2015	46	87.3			87.3	19.4	106.7							
2016	48	90.2			90.2	18.2	108.4							
2017	20	50.5			50.5	7.1	57.6							
2018	17	42.7			42.7	7.2	49.9							
2019	16	39.7			39.7	7.2	46.9							
2020	16	40.6			40.6	7.1	47.7							
2021	16	41.5			41.5	7.2	48.7							
2022	16	42.4			42.4	7.3	49.7							
2023	16	43.3			43.3	7.3	50.6							
2024	16	44.3			44.3	7.4	51.7							
2025	16	45.2			45.2	7.5	52.7							
2026	16	46.2			46.2	7.5	53.7							
2027	16	47.2			47.2	7.6	54.8							
2028						7.7	7.7							
2029						7.8	7.8							
Subtotal	324	803.4		3.5	806.9	185.0	991.9							

	Annual Funding - IDECM Block 4 1506   Procurement   Aircraft Procurement, Navy													
		BY 2008 \$M												
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program							
2012	7	30.3		3.2	33.5	14.2	47.7							
2013	17	38.6			38.6	19.0	57.6							
2014	25	59.4			59.4	13.4	72.8							
2015	46	76.8			76.8	17.1	93.9							
2016	48	78.0			78.0	15.8	93.8							
2017	20	42.9			42.9	6.0	48.9							
2018	17	35.6			35.6	5.9	41.5							
2019	16	32.4			32.4	5.9	38.3							
2020	16	32.5			32.5	5.7	38.2							
2021	16	32.6			32.6	5.6	38.2							
2022	16	32.6			32.6	5.6	38.2							
2023	16	32.7			32.7	5.5	38.2							
2024	16	32.8			32.8	5.4	38.2							
2025	16	32.8			32.8	5.4	38.2							
2026	16	32.8			32.8	5.4	38.2							
2027	16	32.9			32.9	5.3	38.2							
2028						5.3	5.3							
2029					<b></b>	5.2	5.2							
Subtotal	324	655.7		3.2	658.9	151.7	810.6							

## **Low Rate Initial Production**

### **IDECM Blocks 2/3**

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	12/1/2000	6/28/2010
<b>Approved Quantity</b>	1	735
Reference	Program Review ADM	Gate 6 Program Review ADM
Start Year	2003	2003
End Year	2004	2012

Total LRIP is a summation of six LRIP authorizations between CY 2000 and CY 2010.

### **IDECM Block 4**

There is no LRIP for this program.

## **Foreign Military Sales**

### **IDECM Blocks 2/3**

Country	Date of Sale	Quantity	Total Cost \$M	Description
Australia	7/21/2011		9.9	Australia procured IDECM Block 2/3 (ALE-55) systems as part of the Australian Super Hornet procurement, per Line 32, Amendment 2 of Case AT-P-SAF.
Australia	6/28/2010		2.4	Australia procured IDECM Block 2/3 (EFC) systems as part of the Australian Super Hornet procurement, per Line 32, Amendment 2 of Case AT-P-SAF.
Australia	4/17/2009		4.0	Australia procured IDECM Block 2/3 (ALE-55) systems as part of the Australian Super Hornet procurement, per Line 32, Amendment 2 of Case AT-P-SAF.
Australia	4/17/2009		2.1	Australia procured IDECM Block 2/3 (EFC) systems as part of the Australian Super Hornet procurement, per Line 32, Amendment 2 of Case AT-P-SAF.
Australia	2/7/2008		43.5	Australia procured IDECM Block 2/3 (ALQ-214) systems and spares as part of the Australian Super Hornet procurement, per Line 25, Amendment 1 of Case AT-P-SAF.

### **Notes**

Australian quantities are considered sensitive by the country.

### **IDECM Block 4**

None

## **Nuclear Costs**

**IDECM Blocks 2/3** 

None

**IDECM Block 4** 

None

## **Unit Cost**

### **IDECM Blocks 2/3**

## **Unit Cost Report**

	BY 2008 \$M	Y 2008 \$M BY 2008 \$M	
Item	Current UCR Baseline (Apr 2012 APB)  Current Estimate (Dec 2015 SAR)		% Change
Program Acquisition Unit Cost			
Cost	1493.9	1610.5	
Quantity	12805	12805	
Unit Cost	0.117	0.126	+7.69
Average Procurement Unit Cost			
Cost	1037.5	1154.1	
Quantity	12805	12805	
Unit Cost	0.081	<b>0.090</b> <sup>1</sup>	+11.11

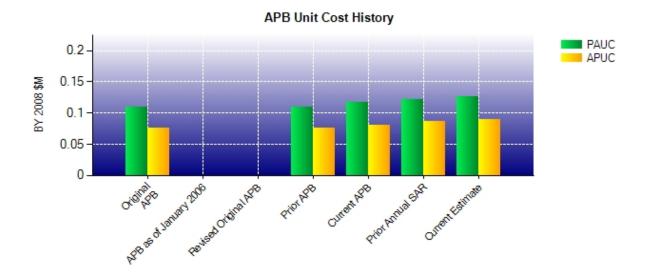
	BY 2008 \$M		
Item	Original UCR Baseline (Jun 2008 APB)	Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost			
Cost	1410.9	1610.5	
Quantity	12809	12805	
Unit Cost	0.110	0.126	+14.55
Average Procurement Unit Cost			
Cost	956.0	1154.1	
Quantity	12809	12805	
Unit Cost	0.075	0.090	+20.00

<sup>1</sup> APB Unit Cost Breach

IDECM December 2015 SAR

### **IDECM Blocks 2/3**

## **Unit Cost History**



ltem	Data	BY 2008 \$M		TY	\$M
item	Date	PAUC	APUC	PAUC	APUC
Original APB	Jun 2008	0.110	0.075	0.120	0.089
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	Jun 2011	0.110	0.075	0.120	0.089
Current APB	Feb 2014	0.117	0.081	0.130	0.100
Prior Annual SAR	Dec 2014	0.122	0.086	0.145	0.114
Current Estimate	Dec 2015	0.126	0.090	0.153	0.122

## **SAR Unit Cost History**

Current SAR Baseline to Current Estimate (TY \$M)									
Initial PAUC				Chang	ges				PAUC
Production Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate
0.120	-0.001	-0.001	0.021	0.000	0.010	0.000	0.004	0.033	0.153

Current SAR Baseline to Current Estimate (TY \$M)									
Initial APUC	onanges							APUC	
Production Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate
0.089	-0.001	-0.001	0.021	0.000	0.010	0.000	0.004	0.033	0.122

SAR Baseline History									
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate					
Milestone I	N/A	N/A	N/A	N/A					
Milestone II	N/A	N/A	N/A	N/A					
Milestone III	N/A	N/A	Nov 2003	Nov 2003					
IOC	N/A	N/A	Sep 2004	Sep 2004					
Total Cost (TY \$M)	N/A	N/A	1535.2	1959.6					
Total Quantity	N/A	N/A	12809	12805					
PAUC	N/A	N/A	0.120	0.153					

Milestone III and IOC dates in the table above reflects IDECM Block 2 only.

### **IDECM Block 4**

# **Unit Cost Report**

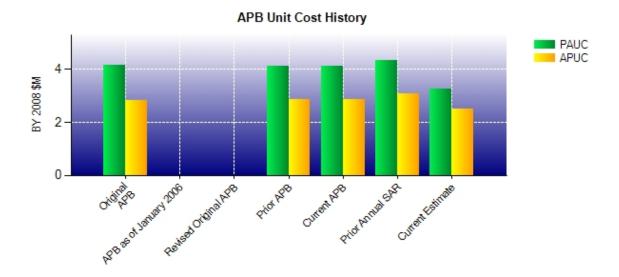
	BY 2008 \$M	BY 2008 \$M	
Item	Current UCR Baseline (Feb 2014 APB)	Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost	,		
Cost	781.7	1048.5	
Quantity	190	324	
Unit Cost	4.114	3.236	-21.34
Average Procurement Unit Cost			
Cost	541.9	810.6	
Quantity	190	324	
Unit Cost	2.852	2.502	-12.27

	BY 2008 \$M	BY 2008 \$M	
Item	Original UCR Baseline (Jun 2008 APB)	Current Estimate (Dec 2015 SAR)	% Change
Program Acquisition Unit Cost			
Cost	660.7	1048.5	
Quantity	160	324	
Unit Cost	4.129	3.236	-21.63
Average Procurement Unit Cost			
Cost	451.2	810.6	
Quantity	160	324	
Unit Cost	2.820	2.502	-11.28

IDECM December 2015 SAR

### **IDECM Block 4**

# **Unit Cost History**



liom	Data	BY 200	8 \$M	TY \$M		
Item	Date	PAUC	APUC	PAUC	APUC	
Original APB	Jun 2008	4.129	2.820	4.663	3.262	
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	Apr 2012	4.114	2.852	4.543	3.206	
Current APB	Feb 2014	4.114	2.852	4.543	3.206	
Prior Annual SAR	Dec 2014	4.311	3.062	4.929	3.588	
Current Estimate	Dec 2015	3.236	2.502	3.849	3.061	

# **SAR Unit Cost History**

Current SAR Baseline to Current Estimate (TY \$M)									
Initial PAUC				Char	nges				PAUC
Development Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate
4.663	-0.061	-1.668	0.689	0.195	-0.220	0.000	0.251	-0.814	3.849

Current SAR Baseline to Current Estimate (TY \$M)									
Initial APUC	Silariges							APUC	
Development Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate
3.262	-0.052	-0.960	0.689	0.000	-0.129	0.000	0.251	-0.201	3.061

	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	Mar 2009	N/A	N/A
Milestone C	N/A	Mar 2012	N/A	N/A
IOC	N/A	Feb 2014	N/A	May 2015
Total Cost (TY \$M)	N/A	746.1	N/A	1247.1
Total Quantity	N/A	160	N/A	324
PAUC	N/A	4.663	N/A	3.849

# **Cost Variance**

# **IDECM Blocks 2/3**

Summary TY \$M									
Item	RDT&E	Procurement	MILCON	Total					
SAR Baseline (Production Estimate)	391.0	1144.2		1535.2					
Previous Changes									
Economic	-1.3	-0.7		-2.0					
Quantity		-11.2		-11.2					
Schedule		+239.6		+239.6					
Engineering									
Estimating	+1.3	+52.7		+54.0					
Other									
Support		+36.7		+36.7					
Subtotal		+317.1		+317.1					
Current Changes									
Economic		-8.9		-8.9					
Quantity									
Schedule		+29.7		+29.7					
Engineering									
Estimating		+76.1		+76.1					
Other									
Support		+10.4		+10.4					
Subtotal		+107.3		+107.3					
Total Changes		+424.4		+424.4					
CE - Cost Variance	391.0	1568.6		1959.6					
CE - Cost & Funding	391.0	1568.6		1959.6					

Summary BY 2008 \$M									
Item	RDT&E	Procurement	MILCON	Total					
SAR Baseline (Production Estimate)	454.9	956.0		1410.9					
Previous Changes									
Economic									
Quantity		-10.5		-10.5					
Schedule		+90.4		+90.4					
Engineering									
Estimating	+1.5	+37.1		+38.6					
Other									
Support		+28.5		+28.5					
Subtotal	+1.5	+145.5		+147.0					
Current Changes									
Economic									
Quantity									
Schedule		+2.0		+2.0					
Engineering									
Estimating		+44.8		+44.8					
Other									
Support		+5.8		+5.8					
Subtotal		+52.6		+52.6					
Total Changes	+1.5	+198.1		+199.6					
CE - Cost Variance	456.4	1154.1		1610.5					
CE - Cost & Funding	456.4	1154.1		1610.5					

Previous Estimate: December 2014

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-8.9
Stretch-out of procurement buy profile of ALE-55 Fiber-Optic Towed Decoy (FOTD) from FY 2045 to FY 2048. (Schedule)	0.0	+20.5
Additional schedule variance for stretch-out of procurement buy profile of ALE-55 FOTD from FY 2045 to FY2048. (Schedule)	+2.0	+9.2
Adjustment for current and prior escalation. (Estimating)	+0.6	+0.5
Estimate updated to reflect actuals. (Estimating)	+44.2	+75.6
Adjustment for current and prior escalation. (Support)	-0.1	0.0
Increase in Other Support to reflect revised Government in-house support due to extension of end of program from FY 2045 to FY 2048. (Support)	+5.9	+10.4
Procurement Subtotal	+52.6	+107.3

# **Cost Variance**

# **IDECM Block 4**

Summary TY \$M									
Item	RDT&E	Procurement	MILCON	Total					
SAR Baseline (Development Estimate)	224.2	521.9		746.1					
Previous Changes									
Economic	-2.4	-12.7		-15.1					
Quantity		+69.8		+69.8					
Schedule		+63.1		+63.1					
Engineering	+63.3			+63.3					
Estimating	-30.4	-12.9		-43.3					
Other									
Support		+52.6		+52.6					
Subtotal	+30.5	+159.9		+190.4					
Current Changes									
Economic	-0.3	-4.3		-4.6					
Quantity		+154.6		+154.6					
Schedule		+160.0		+160.0					
Engineering									
Estimating	+0.8	-28.9		-28.1					
Other									
Support		+28.7		+28.7					
Subtotal	+0.5	+310.1		+310.6					
Total Changes	+31.0	+470.0		+501.0					
CE - Cost Variance	255.2	991.9		1247.1					
CE - Cost & Funding	255.2	991.9		1247.1					

	Summary BY 2008 \$M						
Item	RDT&E	Procurement	MILCON	Total			
SAR Baseline (Development Estimate)	209.5	451.2	'	660.7			
Previous Changes							
Economic							
Quantity		+59.5		+59.5			
Schedule		+42.0		+42.0			
Engineering	+57.9			+57.9			
Estimating	-30.2	-10.9		-41.1			
Other							
Support		+40.0		+40.0			
Subtotal	+27.7	+130.6		+158.3			
Current Changes							
Economic							
Quantity		+108.1		+108.1			
Schedule		+123.7		+123.7			
Engineering							
Estimating	+0.7	-20.8		-20.1			
Other							
Support		+17.8		+17.8			
Subtotal	+0.7	+228.8		+229.5			
Total Changes	+28.4	+359.4		+387.8			
CE - Cost Variance	237.9	810.6		1048.5			
CE - Cost & Funding	237.9	810.6		1048.5			

Previous Estimate: December 2014

RDT&E	\$N	Λ
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-0.3
Adjustment for current and prior escalation. (Estimating)	+0.2	+0.2
Revised estimate to reflect actuals (Estimating)	+0.5	+0.6
RDT&E Subtotal	+0.7	+0.5

Procurement	\$N	1
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-4.3
Acceleration of procurement buy profile for ALQ-214(V)4/5s. (Schedule)	0.0	-5.4
Total Quantity variance resulting from an increase of 134 ALQ-214(V)4/5s from 190 to 324. (Subtotal)	+324.8	+433.6
Quantity variance resulting from an increase of 134 ALQ-214(V)4/5s from 190 to 324. (Quantity)	(+226.5)	(+302.1)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+123.7)	(+165.4)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-25.4)	(-33.9)
Additional quantity variance resulting from an increase of 134 ALQ-214(V)4/5s from 190 to 324. (Quantity)	-118.4	-147.5
Adjustment for current and prior escalation. (Estimating)	+1.3	+1.4
Revised estimate to reflect actuals. (Estimating)	+3.3	+3.6
Adjustment for current and prior escalation. (Support)	+0.5	+0.6
Increase in Other Support to reflect revised Government in-house support due to extension of end of program from FY 2023 to FY 2027. (Support)	+25.1	+37.1
Decrease in Initial Spares to reflect actuals. (Support)	-7.8	-9.0
Procurement Subtotal	+228.8	+310.1

(QR) Quantity Related

IDECM December 2015 SAR

### **Contracts**

### **Contract Identification**

**Appropriation:** Procurement

Contract Name: IDECM Block 3 (ALE-55/EFC) FRP 2, 3 & 4

Contractor: BAE Systems

Contractor Location: 66 Spit Brook Road

Nashua, NH 06060

Contract Number: N00019-13-C-0010
Contract Type: Firm Fixed Price (FFP)

Award Date: December 17, 2012

**Definitization Date:** July 01, 2015

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	
50.8	N/A	660	80.8	N/A	1007	80.8	80.8	

## **Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the award of FRP 4.

## **Cost and Schedule Variance Explanations**

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

#### **Notes**

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

## **Contract Identification**

**Appropriation:** Procurement

Contract Name: IDECM Block 3 (ALE-55 FOTD) FRP 6

Contractor: BAE Systems

Contractor Location: 65 Spit Brook Road

Nashua, NH 06060

**Contract Number:** N00019-16-C-0020

Contract Type: Firm Fixed Price (FFP)

Award Date: December 17, 2015

Definitization Date: December 17, 2015

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	
20.9	N/A	284	20.9	N/A	284	20.9	20.9	

## **Cost and Schedule Variance Explanations**

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

### Notes

This is the first time this contract is being reported.

## **Contract Identification**

**Appropriation:** Procurement

Contract Name: IDECM Block 4 (ALQ-214) FRP 9, 10 & 11

Contractor: ITT Exelis

**Contractor Location:** 77 River Road

Clifton, NJ 07014

Contract Number: N00019-12-C-0002
Contract Type: Firm Fixed Price (FFP)

Award Date: April 16, 2012

**Definitization Date:** December 03, 2015

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	
64.3	N/A	23	291.6	N/A	131	291.6	291.6	

## **Target Price Change Explanation**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the addition of two ALQ-214 systems, award of FRPs 10 and 11, and modification for FRP 9 test equipment.

## **Cost and Schedule Variance Explanations**

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

### **Contract Identification**

**Appropriation:** Procurement

Contract Name: IDECM Block 4 (ALQ-214) FRP 12

Contractor: ITT Exelis

**Contractor Location:** 77 River Road

Clifton, NJ 07014

Contract Number: N00019-15-C-0104

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

Award Date: July 30, 2015

Definitization Date: July 30, 2015

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	
97.3	100.1	46	97.3	100.1	46	97.3	97.3	

# **Cost and Schedule Variance Explanations**

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

## Notes

This is the first time this contract is being reported.

EVM waiver approved on July 23, 2015 by Deputy Assistant Secretary of the Navy (Acquisition and Procurement) (DASN (AP)).

# **Deliveries and Expenditures**

#### **IDECM Blocks 2/3**

Deliveries					
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered	
Development	0	0	0		
Production	1987	1987	12805	15.52%	
Total Program Quantity Delivered	1987	1987	12805	15.52%	

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	1959.6	Years Appropriated	22
Expended to Date	847.1	Percent Years Appropriated	40.74%
Percent Expended	43.23%	Appropriated to Date	917.9
Total Funding Years	54	Percent Appropriated	46.84%

The above data is current as of February 09, 2016.

Deliveries reflect 85 ALQ-214s and 1,902 Fiber Optic Towed Decoys (FOTD). ALQ-214(V)3 deliveries are complete. Expenditures reflect IDECM Block 2/3 RDT&E, Aircraft Procurement, Navy (APN-5) and Procurement of Ammunition, Navy and Marine Corps.

### **IDECM Block 4**

Deliveries						
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered		
Development	0	0	0			
Production	32	32	324	9.88%		
Total Program Quantity Delivered	32	32	324	9.88%		

Expended and Appropriated (TY \$M)			
Total Acquisition Cost 1	247.1	Years Appropriated	9
Expended to Date	339.7	Percent Years Appropriated	40.91%
Percent Expended 27	7.24%	Appropriated to Date	657.4
Total Funding Years	22	Percent Appropriated	52.71%

The above data is current as of February 09, 2016.

## **Operating and Support Cost**

#### **IDECM Blocks 2/3**

#### **Cost Estimate Details**

Date of Estimate: February 01, 2015

Source of Estimate: POE

Quantity to Sustain: 85

Unit of Measure: System

Service Life per Unit: 20.00 Years

Fiscal Years in Service: FY 2006 - FY 2033

System - ALQ-214 (V)3 (quantity 85 ALQ-214(V)3 systems)

The ALE-55(V) is an expendable. The 12,720 ALE-55(V) systems are not included in the quantity of systems to sustain.

Flight Hours per aircraft per month: 30 Number of Operating System Years: 1,770 Total Life Cycle Flight Hours: 63,720

#### **Sustainment Strategy**

The maintenance concept for the ALQ-214(V)2/3 and ALE-55(V) is two levels, Organizational to Depot. Organizational Level activities will include: removal and replacement of faulty Weapons Replacement Assemblies (WRAs) identified by Built In Test (BIT)/Maintenance Service Panel (MSP) Code; removal and replacement of the Magazine containing the faulty decoy identified by BIT/MSP Code; loading of Operational Flight Program/Mission Data File with Memory Loader Verifier System as required; retest by BIT to verify repair action; end-to-end testing with Organizational Support Equipment (OSE) as required; corrosion control and phase inspections. Maintenance Support for the IDECM Blocks 2/3 is performed by fleet personnel. There are presently no Contractor Engineering & Technical Services or United States Navy Engineering & Technical Services representatives. If additional support is required, the Type Commander can then request technical assistance for the IDECM Deputy Assistant Program Manager Logistics (DAPML). The DAPML will assess the issue and request support from the Fleet Support Team (FST) and/or Original Equipment Manufacturer (OEM).

Depot Level activities will include: removal and replacement of faulty modules/parts to the component or Shop Replaceable Assembly (SRA) level and verification of repair. Depot level maintenance consists of inspection, test, troubleshooting, repair, overhaul and disposal of WRAs/SRAs which are beyond repair. Depot support is provided by the OEMs managed by the Naval Supply System Command Weapons Systems Support, Philadelphia.

The ALQ-214(V)2/3 and ALE-55(V) will contain a BIT capability consisting of Periodic BIT (PBIT) and Initiated BIT (IBIT). IBIT will be used as a preflight and maintenance test on the ground when commanded by the mission computer or other controller. These BIT test determine if the ALQ-214(V)2/3 WRAs and the ALE-55(V) are operational. PBIT provides automatic and continuous monitoring of mission critical parameters on a background basis during normal system operation. PBIT will not fault isolate but will give clear indications of mission critical failures signaling that IBIT needs to be run. IBIT consists of a series of tests to assess the operational status of the system as well as fault isolate problem hardware. End-to-end testing with utilizing a combination of OSE and BIT as required. On the F/A-18E/F, the ALE-55(V) IBIT is run simultaneously with the ALQ-214(V)2/3.

A Maintenance Plan (MaPI) for IDECM Blocks 2/3 is currently available to support the logistics program. The MaPIs are updated as necessary to reflect configuration changes. IDECM Blocks 2/3 MaPI is a deliverable from the Logistics Management Information database and contains all necessary information for interim supply support and development of

source data for the F/A-18 Interactive Electronic Technical Manual. The FST at Jacksonville presently manages the MaPls for the ALQ-214(V)2/3 and ALE-55(V).

### **Antecedent Information**

- Antecedent program: Aircraft Self Protection Jammer (ASPJ)
- # of Aircraft Operating Years: 1,770 (Not actual, but used in order to provide a comparison between the ALQ-214(V)
   3 Suite and its antecedent system)

The BY Antecedent Average Annual Cost per System is derived from total FY 2009 - FY 2011 cost from Naval Visibility and Management of Operating and Support Costs database Naval Aviation Maintenance Subsystem Report (NAMSR) divided by the total number of systems in NAMSR for FY 2009 - FY 2011. This value is then multiplied by the total number of operating system years associated with the ALQ-214(V)3 Suite to provide a point of comparison.

Annual O&S Costs BY2008 \$K					
Cost Element	IDECM Blocks 2/3 Average Annual Cost Per System	Aircraft Self Protection Jammer (ASPJ) (Antecedent) Average Annual Cost Per ASPJ			
Unit-Level Manpower	0.000	0.000			
Unit Operations	0.000	0.000			
Maintenance	97.200	91.883			
Sustaining Support	10.500	8.307			
Continuing System Improvements	20.100	7.692			
Indirect Support	0.000	0.000			
Other	0.000	0.000			
Total	127.800	107.882			

	Total O&S Cost \$M			
Item	IDECM Blocks 2/3			Aircraft Self Protection
	Current Production APB Objective/Threshold		Current Estimate	Jammer (ASPJ) (Antecedent)
Base Year	226.3	248.9	226.3	190.9
Then Year	290.6	N/A	290.6	N/A

#### **Equation to Translate Annual Cost to Total Cost**

The Average Annual Cost Per Aircraft for the ALQ-214(V)3 Suite is calculated by dividing the Total O&S Cost by the Total Operational System Years for the program.

ALQ-214(V)3 Total O&S Cost = ALQ-214(V)3 Annual O&S Cost per System \* Total Operating System Years \$226.3M Total O&S Cost = \$127.8K / System / Year \* 1,770 Operating Years

O&S Cost Variance			
Category	BY 2008 \$M	Change Explanations	
Prior SAR Total O&S Estimates - Dec	226.3		

2014 SAR		
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	226.3	

## **Disposal Estimate Details**

Date of Estimate: February 01, 2015

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2008 \$M): Total costs for disposal of all System are 0.7

While these costs are not part of the CAPE 2007 O&S Cost Element Structure and hence are not included in the totals above, their Life Cycle Cost impact has been estimated at 0.680 BY 2008 \$M and 1.059 TY \$M.

#### **IDECM Block 4**

#### **Cost Estimate Details**

Date of Estimate: March 01, 2016

Source of Estimate: POE

Quantity to Sustain: 324

Unit of Measure: System

Service Life per Unit: 20.00 Years

Fiscal Years in Service: FY 2014 - FY 2038

System - ALQ-214

Flight Hours per aircraft per month: 30 Number of Operating System Years: 4,934 Total Life Cycle Flight Hours: 888,120

### **Sustainment Strategy**

The IDECM Block 4 (IB-4), ALQ-214(V)4/5, is an Engineering Change Proposal to the ALQ-214(V)3 and as such will follow the same sustainment strategy and infrastructure established for the fielded ALQ-214(V)3.

The maintenance concept for the ALQ-214(V)4/5 is two levels, Organizational to Depot. Organizational Level activities will include: removal and replacement of faulty Weapons Replacement Assemblies (WRAs) identified by Built In Test (BIT)/Maintenance Service Panel Code; loading of Operational Flight Program/Mission Data File with Memory Loader Verifier System as required; retest by BIT to verify repair action; end-to-end testing with Organizational Support Equipment (OSE) as required; corrosion control and phase inspections. Maintenance Support for the IB-4 is performed by fleet personnel. There are presently no Contractor Engineering & Technical Services or Navy Engineering & Technical Services representatives. If additional support is required, the Type Commander can then request technical assistance for the IDECM Deputy Assistant Program Manager Logistics (DAPML). The DAPML will assess the issue and request support from the Fleet Support Team (FST) and/or Original Equipment Manfacturer (OEM).

Depot Level activities will include: removal and replacement of faulty modules/parts to the component or Shop Replaceable Assembly (SRA) level and verification of repair. Depot level maintenance consists of inspection, test, troubleshooting, repair, overhaul and disposal of WRAs/SRAs which are beyond repair. Depot support is provided by the OEMs managed by the Naval Supply Systems Command Weapon Systems Support, Philadelphia.

The ALQ-214(V)4/5 contain a BIT capability consisting of Periodic BIT (PBIT) and Initiated BIT (IBIT). IBIT is used as a preflight and maintenance test on the ground when commanded by the mission computer or other controller. These BIT determine if the ALQ-214(V)4/5 WRAs are operational. PBIT provides automatic and continuous monitoring of mission critical parameters on a background basis during normal system operation. PBIT will not fault isolate but will give clear indications of mission critical failures signaling that IBIT needs to be run. IBIT consists of a series of tests to assess the operational status of the system as well as fault isolate problem hardware. End-to-end testing utilizes a combination of OSE and BIT as required.

A preliminary Maintenance Plan (MaPl) for IB-4 is currently available to support the logistics program. The MaPls will be updated as necessary to reflect configuration changes. IB-4 MaPl is a deliverable from the Logistics Management Information database and contains all necessary information for interim supply support and development of source data for the F/A-18 Interactive Electronic Technical Manual. Following IOC, IB-4 MaPl management will transition to the FST at Fleet Readiness Center-Southeast, In-Service Support Center, Jacksonville, Florida.

### **Antecedent Information**

December 2015 SAR

- Antecedent program: Aircraft Self Protection Jammer (ASPJ)
- # of Aircraft Operating Years: 4,934 (Not actual, but used in order to provide a comparison between the ALQ-214(V)
   4 Suite and its antecedent system)

The BY Antecedent Average Annual Cost per System is derived from total FY 2009 - FY 2011 cost from Naval Visibility and Management of Operating and Support Costs database Naval Aviation Maintenance Subsystem Report (NAMSR) divided by the total number of systems in NAMSR for FY 2009 - FY 2011. This value is then multiplied by the total number of operating system years associated with ALQ-214(V)4 Suite to provide a point of comparison.

Annual O&S Costs BY2008 \$K				
Cost Element	IDECM Block 4 Average Annual Cost Per System	Aircraft Self Protection Jammer (ASPJ) (Antecedent) Average Annual Cost Per ASPJ		
Unit-Level Manpower	0.000	0.000		
Unit Operations	0.000	0.000		
Maintenance	63.268	91.883		
Sustaining Support	3.906	8.307		
Continuing System Improvements	8.243	7.692		
Indirect Support	0.000	0.000		
Other	0.000	0.000		
Total	75.417	107.882		

	Total O&S Cost \$M			
Item	IDECM Block 4			Aircraft Self Protection
Item	Current Development APB Objective/Threshold		Current Estimate	Jammer (ASPJ) (Antecedent)
Base Year	264.7	291.2	372.1 <sup>1</sup>	532.3
Then Year	378.8	N/A	545.9	N/A
<sup>1</sup> APB O&S Cost Breach				

### **Equation to Translate Annual Cost to Total Cost**

The Average Annual Cost Per Aircraft for the ALQ-214(V)4 Suite is calculated by dividing the Total O&S Cost by the Total Operational System Years for the program.

ALQ-214(V)4 Total O&S Cost = ALQ-214(V)4 Annual O&S Cost per System \* Total Operating System Years \$372.1M Total O&S Cost = \$75.4K / System / Year \* 4,934 Operating Years

O&S Cost Variance			
Category	BY 2008 \$M	Change Explanations	
Prior SAR Total O&S Estimates - Dec 2014 SAR	264.7		
Programmatic/Planning Factors	107.4 Increase in O&S estimate to resulting from an increase of 134 ALQ-214(V)4/5 systems from 190 to 324.		

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	107.4	
Current Estimate	372 1	

## **Disposal Estimate Details**

Date of Estimate: February 01, 2015

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2008 \$M): Total costs for disposal of all System are 1.5

While these costs are not part of the CAPE 2007 O&S Cost Element Structure and hence are not included in the totals above, their Life Cycle Cost impact has been estimated at 1.520 BY 2008 \$M and 2.490 TY \$M.