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Department of Defense  
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

## **Selected Acquisition Report (SAR)**



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

FY 2024 President's Budget

Defense Acquisition Visibility Environment  
(DAVE)

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## Common Acronyms and Abbreviations

\$B - Billions of Dollars  
\$K - Thousands of Dollars  
\$M - Millions of Dollars  
ACAT - Acquisition Category  
Acq O&M - Acquisition-Related Operations and Maintenance  
ADM - Acquisition Decision Memorandum  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
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  
FMS - Foreign Military Sales  
FOC - Full Operational Capability  
FRP - Full Rate Production  
FY - Fiscal Year  
FYDP - Future Years Defense Program  
ICE - Independent Cost Estimate  
Inc - Increment  
IOC - Initial Operational Capability  
JROC - Joint Requirements Oversight Council  
KPP - Key Performance Parameter  
LRIP - Low Rate Initial Production  
MDA - Milestone Decision Authority  
MDAP - Major Defense Acquisition Program  
MILCON - Military Construction  
N/A - Not Applicable  
O&M - Operations and Maintenance  
O&S - Operating and Support  
ORD - Operational Requirements Document  
OSD - Office of the Secretary of Defense  
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
- U.S. - United States
- UCR - Unit Cost Reporting
- USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)
- USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

## Program Information

### Program Name

Integrated Defensive Electronic Countermeasures

### DoD Component

Navy

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## Responsible Office

## Program Manager

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## Mission and Description

The Integrated Defensive Electronic Countermeasures (IDECM) Program provides self protection capability against surface-to-air and air-to-air radar guided threats. IDECM equipment detects, identifies and manages electronic countermeasure response to radar threats.

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 and are no longer in reporting. 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.

ALQ-214 Adaptive Radar Countermeasures (ARC): ALQ-214 ARC will provide the ALQ-214 with improved RF Threat Detection algorithms and jamming against modern threat radars not programmed in mission data files (unknowns).

## Executive Summary

### IDECM

#### Program Highlights Since Last Report

#### History of Significant Developments Since Program Initiation

##### History of Significant Developments Since Program Initiation

Date	Significant Development Description

### IDECM Block 4

#### Program Highlights Since Last Report

The IDECM System is a Radio Frequency (RF), self-protection electronic countermeasure suite on 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.

IDECM Block-4 (IB-4) ALQ-214 Software Improvement (SWIP): SWIP Technical Directive Validation and Verification was completed June 2022. SWIP fleet introduction will commence upon introduction of the AN/ALQ-214A(V)4 hardware configuration baseline which is pending platform program office (PMA265) Technical Directive and Engineering Change Proposal completion, anticipated Q3 FY 2023.

Adaptive Radar Countermeasures (ARC): Contractual deliveries of the ARC SW/FW have been delayed due to development task complexity, Contractor Subject Matter Expert Availability Constraints and IDECM Systems Integration Lab Subsystem Component constraints. Delays experienced during development of Build 1 have impacted the programs critical path and caused delays in the overall programs completion. The USG is in receipt of updated projections for completion of the ARC Mainline Integration contract from Leidos. This estimate exceeds the current contracts total allocated budget and will present an over-run on the program. The USG is assessing contractual periods of performance, assessing program funding requirements and updating the EAC with recent EVM artifacts provided in order to course correct to progress development/integration of the ARC survivability enhancement. PMA-272 has identified funding to address the proposed over-run and complete the program.

IDECM Block-4 (IB -4) Production: The FRP Lot 14 through 16 contract (base with two options) was awarded on September 27, 2017. The FRP 17 & 18 contract (base with 1 option) was awarded on July 31, 2020. As of February 28, 2023, L3Harris shipped in place, at the Original Equipment Manufacturer (OEM) and in accordance with the Request for Variance, 125 FRP 14-16 ALQ-214A(V) production systems (APN-1/-5 Funded Assets; Excludes FMS and APN-6). Delivery of FRP 17-18 hardware has not begun and is scheduled to start January 2024.

A no-cost delivery schedule modification has been awarded in support of FRP 14-16 hardware delivery. The delivery schedule modification was requested by the OEM because of delays caused by manufacturing and quality challenges attributed to DMSMS, Supply Chain Quality Escapes, Automated Test Equipment Failures and Rework, which eroded the prior delivery schedules margin. In accordance with this revised delivery schedule, the OEM is projected to complete FRP14-16 deliveries by Q3 FY 2024. All hardware is currently being delivered ahead of the revised delivery schedule. A no-cost delivery schedule modification has been requested in support of FRP 17-18 hardware delivery and is projected to complete deliveries by Q1 FY 2025.

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

#### History of Significant Developments Since Program Initiation

##### History of Significant Developments Since Program Initiation

Date	Significant Development Description
Mar - 2022	AN/ALQ-214 IDECM configuration change memo was approved by ASN(RD&A) on March 04, 2022. This change is the result of USMC removing the requirement for the integration of Adaptive Radar Countermeasures (ARC) on USMC F/A-18C/Ds.

Sep - 2021	A revised APB, approved on September 24, 2021, adjusted total program quantity to 425 (APN-1 and APN-5 USN and USMC systems) as previously approved in the IDECM Gate 6 review conducted July 13, 2020. The requirement was documented in the Gate 6/CSB minutes, approved by N98 and ASN(RD&A) PMD on September 4, 2020 and OPNAV Ser N98/20U144718 dated August 4, 2020. This is the first APB that includes all USN and USMC IDECM systems.
May - 2021	IDECM SWIP fielding decision occurred May 2021. System stability and architectural enhancements required to support ARC were demonstrated. SWIP Fleet Release (USN) planned March 2022.
Jul - 2020	An IDECM Gate 6 review was conducted on July 13, 2020. During this review, the USN quantity was reduced from 389 to 350 (APN-1 and APN-5 systems) and the USMC quantity was reduced from 100 to 75 for a total of 425 systems. An updated APB is in routing to update total program quantity to reflect that change, which was documented in the Gate 6/CSB minutes, approved by N98 and ASN(RD&A) PMD on September 4, 2020.
Jun - 2018	Adaptive Radar Countermeasures (ARC) is an upgrade to the on-board component of the IDECM suite. The RDT&E associated with ARC, funded in PB 2019, was significant enough to cause an RDT&E deviation for IDECM Block 4. The Program Office documented this deviation in a Program Deviation Report (PDR). The RDT&E associated with ARC was incorporated into the APB approved on June 29, 2018.
Jun - 2018	IDECM Block 2/3 reported a critical Nunn-McCurdy in the December 2017 SAR. The root cause analysis determined the Nunn-McCurdy to be quantity based and unrelated to the execution of the program. On May 10, 2018, the SAE approved a program restructure to include only the quantity required to reach IOC within the APB. Moving forward, the ALE-55 will be managed solely through the Naval Munitions Requirements Process (NMRP) in accordance with OPNAVINST 8011.9B. On May 28, 2018 the Nunn-McCurdy program certification was submitted to Congress. A new APB was approved June 29, 2018. Based on the program restructure, IDECM Block 2/3 is considered 100% delivered/expended.
Aug - 2017	IDECM Block 2/3 reported deviations in the December 2015 and 2016 Selected Acquisition Report (SARs) for procurement costs as a result of funding/budget reductions, which stretched out the program duration. In the December 2016 SAR, the IDECM program office recommended managing the expendable requirements through the Naval Munitions Requirements Process (which aligns with Department of Defense Instruction (DoDI) 3000.04) along with all other countermeasure expendables in the Department of Navy (DoN) Inventory. In August 2017, the Navy supported the recommendation, via an Acquisition Decision Memorandum, which directed PMA-272 to manage the ALE-55 expendable Fiber Optic Towed Decoy solely through the NMRP. The 2019 President's Budget includes the requirement for a Dual Band Decoy (DBD) to counter future threats and is funded (RDT&E in FY2019 and Procurement (PANMC) in FY2022). DBD will not be part of IDECM Block 2/3 or Block 4 subprograms. In the process of aligning/planning the FYDP funding, DBD is planning for production readiness in FY2022 resulting in no future requirements for ALE-55 beyond FY2021. As a result of DBD planning/funding, the quantity projections for ALE-55 are drastically reduced and create a critical Nunn-McCurdy breach against both the original and current baseline of IDECM Block 2/3. This breach is due solely to reducing the quantity of ALE-55 by 69%.
Aug - 2017	On August 18, 2017, via ADM, PMA-272 was authorized to route a revised APB to reflect IDECM Block 4 changes to Procurement and O&S parameters due to an increase in quantities, from 190 units to 324 units. A revised APB, which reflects the current cost estimates, was signed February 12, 2018.
Sep - 2015	The Navy completed an IDECM SWIP operational assessment (OA) on September 30, 2015.
May - 2015	IB-4 Hardware ECP Initial Operational Capability (IOC) achieved May 2015.



Mar - 2015	On March 10, 2015, PMA 272 submitted a PDR for the ECP portion of the IB-4 program due to a flight test schedule breach. OT had been delayed due to a lack of aircraft and threat simulator availability at the test range. The previous electronically conducted IPR 5, documented stability of the IB-4 ECP hardware and software configuration and the OTRR granted start to OT. 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. A revised APB which reflects the current schedule estimates was signed February 17, 2016.
Jan - 2014	An In-Process Review was conducted electronically with ASN(RD&A) from January 10, 2014 to January 24, 2014. The purpose of this IPR was to provide status of IB-4; gain concurrence to exercise the FY 2014 production award; and provide an assessment of the IDECM Configuration Steering Board (CSB) annual requirement. All input criteria were satisfied. The program was directed to return for IPR 6 following completion of OT to support the FY 2015 and planned subsequent annual procurements of the ALQ-214.
Apr - 2013	An In-Process Review was conducted with ASN(RD&A) on April 9, 2013. System software demonstrated a lack of maturity requiring additional time, which resulted in an APB schedule breach of the Operational Test (OT) Start. ASN(RD&A) approved revision of the APB objectives to reflect current estimates for OT Start, IPR 5, IPR 6 and IOC. There was no impact to cost or performance. The IPR resulted in direction to update the IDECM Acquisition Strategy to reflect award of the existing Firm Fixed Price (FFP) production option in FY 2014 following IPR 5 in early FY 2014 and conduct of the final IPR (IPR 6) after completion of Operational Test.
Jun - 2011	As a result of PB12, IB-4 required a cost re-baseline to address an increase of funds over the Future Years Defense Program (FYDP). The RDT&E breach was due to an increase of funds for ALQ-214 SWIP for Deny-Delay jamming functionality. The procurement breach was due to an increase of funds to procure additional IB-4 systems. A Program Deviation Report (PDR) was routed and the IDECM APB Change 3 was approved on June 07, 2011.
May - 2010	An IDECM Block 4 ECP Critical Design Review (CDR) was successfully completed in May 2010. As a result of CDR, AIR-4.2 updated the cost estimate and identified an Operations & Support (O&S) cost deviation to the APB. The O&S cost estimate increased due to use of an incorrectly calculated Mean Time Between Failure (MTBF), which resulted in an artificially low estimate of the number of failures and associated repair costs. A Program Deviation Report was routed and the IDECM APB Change 2 was approved on October 18, 2010.
Nov - 2009	An IDECM Block 4 ECP Preliminary Design Review (PDR) was successfully completed in November 2009.
Jul - 2009	The IDECM ACAT IC APB was approved and includes the increments for IB 2/3 and the increment for IB-4.
Mar - 2009	An IDECM Block 3 Program Decision Review was conducted with ASN (RD&A) in March 2009. The purpose of the review was to evaluate Program Office recommendations to deviate from APB schedules and to include additional IB-3 LRIP awards, allowing for the correction of deficiencies identified during IB-3 IOT&E Report (OT-IIB), prior to FRP. ASN (RD&A) supported the IB-3 acquisition strategy change to include additional LRIP lots specifically LRIP 5 in FY 2009 and LRIP 6 in FY 2010. ASN (RD&A) support for the IB-3 strategy was documented by an Acquisition Decision Memorandum (ADM), dated April 13, 2009. IB-2/3 cost, schedule and performance requirements were contained in the IDECM APB Change 1, approved July 10, 2009.

<p>Mar - 2009</p>	<p>An IDECM Block 4 Program Decision Review was conducted with ASN (RD&amp;A) in March 2009. The IB-4 acquisition and contract strategy, which supported development of a Common OBJ for the F/A-18 C/D/E/F aircraft through sole source contract awards to Harris (formerly Exelis) for modifications to the ALQ-214, was presented to ASN (RD&amp;A). An IB-4 APB schedule deviation was recommended to replace IB-4 Milestone B and C events with In -Process Reviews (IPRs) to provide more appropriate oversight of an ECP modification to a system already in FRP. ASN (RD&amp;A) support for the IB-4 strategy was documented by an ADM, dated May 4, 2009. IB-4 cost, schedule and performance requirements were contained in the IDECM APB Change 1, approved July 10, 2009.</p>
<p>Jan - 2008</p>	<p>In January 2008, corrective actions (hardware and software) for all anomalies required for IB - 3 to return to OT were incorporated and demonstrated to be effective through DT laboratory and flight testing. IB-3 returned to Initial Operational Test and Evaluation (IOT&amp;E) in February 2008. IB-3 IOT&amp;E completed in September 2008. The OT Report was received on December 19, 2008 with a finding of operationally effective but not operationally suitable.</p>
<p>Sep - 2007</p>	<p>In September 2007, PMA272 requested re-designation of IDECM from Acquisition Category (ACAT) II to ACAT IC. The requirement to re-designate was identified as part of a cost estimate performed by the AIR 4.2 Cost Department in support of the re-baseline effort and in preparation for the IB-3 FRP decision. The analysis identified that continued RDT&amp;E investments over the course of the IBs 1-3 development program resulted in cumulative RDT&amp;E funding, which is above the demarcation line between ACAT II and ACAT I (\$365M total in FY 2000\$). The request to re-designate as ACAT IC was approved by ASN (RD&amp;A) in March 2008.</p>

**IDECM Blocks 2/3**

**Program Highlights Since Last Report**

**History of Significant Developments Since Program Initiation**

History of Significant Developments Since Program Initiation	
Date	Significant Development Description

**Schedule**

**IDECM**

Events	Milestone Baseline Objective	Current Baseline Objective/Threshold	Current Estimate/Actual	Deviation

**Notes**

**Deviation Explanation**

## IDECM Block 4

Events	Milestone Baseline Objective	Current Baseline Objective/Threshold		Current Estimate/Actual	Deviation
Preliminary Design Review-ALQ-214 (IB4) IPR (Post-PDR Assessment) (Start)		Jan 2010	Jul 2020	Mar 2010	
Critical Design Review-ALQ-214 (IB4) IPR (Post-CDR Assessment) (Start)		Jul 2010	Jan 2011	Jul 2010	
Full-Rate Production Decision-ALQ-214 (IB4) IPR (Production Cut-in Review 1) (Start)		Dec 2011	Jun 2011	Mar 2012	
Full-Rate Production Decision-ALQ-214 (IB4) IPR (Production Cut-in Review 2) (Start)		Feb 2013	Aug 2013	Apr 2013	
Full-Rate Production Decision-ALQ-214 (IB4) IPR (Production Cut-in Review 3) (Start)	Jan 2014	Jan 2014	Jul 2014	Feb 2014	
Initial Operational Test and Evaluation-ALQ-214 (IB4) OT (Start)	Dec 2013	Dec 2013	Jun 2014	Jun 2014	
Initial Operational Capability-ALQ-214 (IB4) IOC (Start)	Nov 2014	Nov 2014	May 2015	May 2015	

**Notes**

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

**Deviation Explanation**



**IDECM Blocks 2/3**

Events	Milestone Baseline Objective	Current Baseline Objective/Threshold	Current Estimate/Actual	Deviation
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**Notes**

**Deviation Explanation**

# Performance

## IDECM

Performance Characteristics				
Milestone Baseline	Current Baseline Objective/Threshold	Demonstrated Performance	Current Estimate/Actual	Deviation
0 -				

### Requirement Reference

### Deviation Explanation

No deviations for this program/subprogram

### Notes

None

**IDECM Block 4**

Performance Characteristics					
Milestone Baseline	Current Baseline Objective/Threshold		Demonstrated Performance	Current Estimate/Actual	Deviation
<b>(KPP) - ALQ-214 (IB2) Operating Envelope</b>					
	LBA	LBA	LBA	LBA	
<b>(KPP) - ALQ-214 (IB2/3/4 On-Board Jammer) Ao</b>					
	0.95	0.9	0.92	0.9	

**Requirement Reference**

Sponsor(s): United States Navy

1.SOF, Statement of Functionality (SOF)

Validated by: N98, October 12, 2010

2.ORD, ORD (Bock 4)

Validated by: JROC, November 24, 2003

**Deviation Explanation**

No deviations for this program/subprogram

**Notes**

None

**IDECM Blocks 2/3**

<b>Performance Characteristics</b>				
<b>Milestone Baseline</b>	<b>Current Baseline Objective/Threshold</b>	<b>Demonstrated Performance</b>	<b>Current Estimate/Actual</b>	<b>Deviation</b>
0 -				

**Requirement Reference**

Validated:

ORD (Block 2) dated November 2003 and CPD (Block 3) dated November 13, 2007

**Deviation Explanation**

No deviations for this program/subprogram

**Notes**

None



## Acquisition Budget Estimate

IDECM

### Total Acquisition Cost

		Milestone APB	Current Baseline		Budget Estimate PB 2024		
Category	Base Year	Objective (BY\$M)	Objective (BY\$M)	Threshold (BY\$M)	BY\$M	TY\$M	Deviation
RDT&E							
Procurement							
MILCON							
Acq. O&M							
Total		.0	.0				
PAUC		.000	.000	.000			
APUC		.000	.000	.000			

### Appropriation Category Deviation Explanations

### PAUC Deviation Explanation

### APUC Deviation Explanation

### Budget Notes

### *Total End Item Quantity*

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development		
Procurement		
O&M-Acquired		

### Quantity Notes

## IDECM Block 4

*Total Acquisition Cost*

		Milestone APB	Current Baseline		Budget Estimate PB 2024		
Category	Base Year	Objective (BY\$M)	Objective (BY\$M)	Threshold (BY\$M)	BY\$M	TY\$M	Deviation
RDT&E	2018	409.7	420.4	462.4	411.2	418.6	
Procurement	2018	895.5	1,181.7	1,299.8	1,162.8	1,195.3	
MILCON	2018	0	0	0	0	0	
Acq. O&M	2018	0	0	0	0	0	
<b>Total</b>		<b>1,305.2</b>	<b>1,602.1</b>		<b>1,574.0</b>	<b>1,613.9</b>	
PAUC	2018	4.028	3.770	4.147	3.703	3.797	
APUC	2018	2.764	2.780	3.058	2.736	2.812	

### Appropriation Category Deviation Explanations

### PAUC Deviation Explanation

### APUC Deviation Explanation

### Budget Notes

Cost includes APN-1, APN-5 and APN-6. Excludes FMS.

### *Total End Item Quantity*

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development	0	
Procurement	425	425
O&M-Acquired		0

### Quantity Notes

Quantity includes APN-1 and APN-5 USN and USMC systems. Excludes FMS and APN-6.

## IDECM Blocks 2/3

*Total Acquisition Cost*

		Milestone APB	Current Baseline		Budget Estimate PB 2024		
Category	Base Year	Objective (BY\$M)	Objective (BY\$M)	Threshold (BY\$M)	BY\$M	TY\$M	Deviation
RDT&E							
Procurement							
MILCON							
Acq. O&M							
Total							
PAUC							
APUC							

**Appropriation Category Deviation Explanations**

**PAUC Deviation Explanation**

**APUC Deviation Explanation**

**Budget Notes**

***Total End Item Quantity***

<b>Quantity Category</b>	<b>Current APB Quantity</b>	<b>Current Estimate Quantity</b>
Development		
Procurement		
O&M-Acquired		

**Quantity Notes**

# Unit Cost

## IDECM

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Category (\$M) Base Year:	Current UCR Baseline	Current Estimate	% Change

**Program Acquisition Unit Cost**

Cost			
Quantity		0	
Unit Cost			

**Average Procurement Unit Cost**

Cost
Quantity
Unit Cost

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Category (\$M) Base Year:	Original UCR Baseline	Current Estimate	% Change

**Program Acquisition Unit Cost**

Cost			
Quantity		0	
Unit Cost			

**Average Procurement Unit Cost**

Cost
Quantity
Unit Cost

**Cost Growth Details**

**Current Baseline PAUC Breach Explanation**

**Current Baseline APUC Breach Explanation**

**Original Baseline PAUC Breach Explanation**

**Original Baseline APUC Breach Explanation**

**Impacts of Schedule Changes on Unit Cost**

**Impacts of Performance Changes on Unit Cost**

**Actions Taken or Proposed to Control Future Cost Growth**

## IDECM Block 4

**Current UCR Baseline and Current Estimate (Base-Year Dollars)**

<b>Category (\$M) Base Year:2018</b>	<b>Current UCR Baseline</b>	<b>Current Estimate</b>	<b>% Change</b>
<b>Program Acquisition Unit Cost</b>			
Cost	1,602.1	1,574.0	
Quantity	425	425	
Unit Cost	3.770	3.703	-1.76%
<b>Average Procurement Unit Cost</b>			
Cost	1,181.7	1,162.8	
Quantity	425	425	
Unit Cost	2.780	2.736	-1.60%

**Original UCR Baseline and Current Estimate (Base-Year Dollars)**

<b>Category (\$M) Base Year:2018</b>	<b>Original UCR Baseline</b>	<b>Current Estimate</b>	<b>% Change</b>
<b>Program Acquisition Unit Cost</b>			
Cost	1,305.2	1,574.0	
Quantity	324	425	
Unit Cost	4.028	3.703	-8.06%
<b>Average Procurement Unit Cost</b>			
Cost	895.5	1,162.8	
Quantity	324	425	
Unit Cost	2.764	2.736	-1.01%

**Cost Growth Details****Current Baseline PAUC Breach Explanation****Current Baseline APUC Breach Explanation****Original Baseline PAUC Breach Explanation****Original Baseline APUC Breach Explanation****Impacts of Schedule Changes on Unit Cost**

No impacts of schedule changes. All schedule events on the APB have been achieved.

**Impacts of Performance Changes on Unit Cost**

No impacts of performance changes. All performance characteristics have been achieved.

**Actions Taken or Proposed to Control Future Cost Growth**



**IDECM Blocks 2/3**

**Current UCR Baseline and Current Estimate (Base-Year Dollars)**

Category (\$M) Base Year:2018	Current UCR Baseline	Current Estimate	% Change
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**Program Acquisition Unit Cost**

Cost	951.3		
Quantity	193	0	
Unit Cost	4.929		

**Average Procurement Unit Cost**

Cost	423.4		
Quantity	193		
Unit Cost	2.194		

**Original UCR Baseline and Current Estimate (Base-Year Dollars)**

Category (\$M) Base Year:	Original UCR Baseline	Current Estimate	% Change
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**Program Acquisition Unit Cost**

Cost	951.3		
Quantity	193	0	
Unit Cost	4.929		

**Average Procurement Unit Cost**

Cost	423.4		
Quantity	193		
Unit Cost	2.194		

**Cost Growth Details**

**Current Baseline PAUC Breach Explanation**

**Current Baseline APUC Breach Explanation**

**Original Baseline PAUC Breach Explanation**

**Original Baseline APUC Breach Explanation**

**Impacts of Schedule Changes on Unit Cost**

**Impacts of Performance Changes on Unit Cost**

**Actions Taken or Proposed to Control Future Cost Growth**

*Risk and Sensitivity Analysis*

**IDECM**

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Risk and Sensitivity Analysis
Current Procurement Cost()
Original Baseline Estimate ()
Current Baseline Estimate ()

Schedule Risk		
Technical Risks		

**IDECM Block 4**

**Risk and Sensitivity Analysis**

**Current Procurement Cost(December - 2019)**

The current procurement cost estimate reflects the NAVAIR Cost and Scheduling Department estimate used as the basis of the IDECM President's 2024 Budget. The current baseline estimate remains current and unchanged. The current procurement cost estimate is based upon a cost risk adjusted model that reflects costs at the 50% Confidence level to account for schedule uncertainty, production uncertainty and other risks and uncertainties.

**Revised Original Estimate (June - 2018)**

The current baseline estimate reflects the AIR 4.2 Cost Department estimate used as the basis of the IDECM President's 2019 Budget. The current baseline is based upon a cost risk adjusted model that reflects costs at the 50% Confidence level to account for schedule uncertainty, production uncertainty and other risks and uncertainties.

**Current Baseline Estimate (September - 2021)**

Schedule Risk		
Current	2021-12-31	Availability of adequate threat test assets
Current	2021-12-31	Budget Reductions and Congressional Actions
Current	2021-12-31	Diminishing Manufacturing Sources and Material Shortages
Technical Risks		
Current	December 20, 2021	Availability of adequate threat test assets
Current	December 20, 2021	Diminishing Manufacturing Sources and Material Shortages

**IDECM Blocks 2/3**

Risk and Sensitivity Analysis	
Current Procurement Cost()	
Revised Original Estimate (June - 2018)	
Current Baseline Estimate (June - 2018)	

<b>Schedule Risk</b>		
<b>Technical Risks</b>		

### Low Rate Initial Production

IDECM

<b>Item</b>	<b>Initial LRIP Decision</b>	<b>Current Total LRIP</b>
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Approval Date

Approved Quantity

Reference

Start Year

End Year

Rationale if quantity exceeds 10% of the total number of articles to be procured:

Notes

**IDECM Block 4**

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Item	Initial LRIP Decision	Current Total LRIP
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**Approval Date**

**Approved Quantity**

**Reference**

**Start Year**

**End Year**

**Rationale if quantity exceeds 10% of the total number of articles to be procured:**

**Notes**

**IDECM Blocks 2/3**

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Item	Initial LRIP Decision	Current Total LRIP
------	-----------------------	--------------------

**Approval Date**

**Approved Quantity**

**Reference**

**Start Year**

**End Year**

**Rationale if quantity exceeds 10% of the total number of articles to be procured:**

**Notes**

**Contracts & Efforts**

Contract Data	
Contract Number	N00019-17-C-0090
Effort Number	
Modification Number	P00028
Award Date	09/27/2017
Definitization Date	09/27/2017
Order Number	
CAGE Code/CAGE Legal Name	28572/
Contract Title	IDECM Block IV (ALQ-214) FRP 14-16
Contract Address	Clifton, NJ
Contracting Office	N00019
Supported Phase	Production
Contract Strategy	FAR 15 (Negotiated)
Contract Type	Firm-Fixed-Price
Modification Date	January 30, 2023
Work Start Date	
Technical Data Rights	Limited Rights to Technical Data--Non-Commercial Items Only
Work Completed	

Contracts/Effort Price, Quantity, and Performance (TY\$M)		
Initial Target Price	Current Target Price	
\$133.2	\$542.2	
Initial Ceiling Price	Current Ceiling Price	
Contractor EAC	PM EAC	
\$542.2	\$542.2	
Initial Quantity	Current Quantity	Delivered Quantity
50	252	199
BAC	BCWP	ACWP



BCWS	Cost Variance	Schedule Variance

**Contract Notes:**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the award of FRP 15 and 16.

**Factors Contributing to Cost Variance and Projected Effects on Program Costs**

**Factors Contributing to Schedule Variance and Projected Effects on Program Schedule**

Contract Data	
Contract Number	N00019-20-C-0002
Effort Number	
Modification Number	P00010
Award Date	07/31/2020
Definitization Date	07/31/2020
Order Number	
CAGE Code/CAGE Legal Name	28572/
Contract Title	IDECM BLOCK IV (ALQ-214) FRP 17/18
Contract Address	Clifton, NJ
Contracting Office	N00019
Supported Phase	Production
Contract Strategy	FAR 15 (Negotiated)
Contract Type	Firm-Fixed-Price
Modification Date	December 30, 2022
Work Start Date	
Technical Data Rights	Limited Rights to Technical Data--Non-Commercial Items Only
Work Completed	

Contracts/Effort Price, Quantity, and Performance (TYSM)		
Initial Target Price	Current Target Price	
\$104	\$179.2	
Initial Ceiling Price	Current Ceiling Price	
Contractor EAC	PM EAC	
\$179.2	\$179.2	
Initial Quantity	Current Quantity	Delivered Quantity
35	54	0
BAC	BCWP	ACWP
BCWS	Cost Variance	Schedule Variance

**Contract Notes:**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the award of FRP 18 and the exercise of field support CLINs. FRP18 is the final production lot of the AN/ALQ-214.

**Factors Contributing to Cost Variance and Projected Effects on Program Costs****Factors Contributing to Schedule Variance and Projected Effects on Program Schedule**

Contract Data	
Contract Number	N00019-19-C-0051
Effort Number	
Modification Number	P00011
Award Date	02/25/2019
Definitization Date	02/25/2019
Order Number	
CAGE Code/CAGE Legal Name	5UTE0/
Contract Title	ALQ-214 Adaptive Radar Countermeasures (ARC)
Contract Address	Reston, VA
Contracting Office	N00019
Supported Phase	Production
Contract Strategy	FAR 15 (Negotiated)
Contract Type	Other
Modification Date	December 19, 2022
Work Start Date	
Technical Data Rights	Limited Rights to Technical Data--Non-Commercial Items Only
Work Completed	77.12%

Contracts/Effort Price, Quantity, and Performance (TYSM)		
Initial Target Price	Current Target Price	
\$11.6	\$77.7	
Initial Ceiling Price	Current Ceiling Price	
\$11.6	\$77.1	
Contractor EAC	PM EAC	
\$90.7	\$90.7	
Initial Quantity	Current Quantity	Delivered Quantity
		0
BAC	BCWP	ACWP
\$70.2	\$54.1	\$59.4
BCWS	Cost Variance	Schedule Variance

\$54.4	-\$5.3	-\$0.3
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**Contract Notes:**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to incremental funding modifications. The Program Office acknowledges the proposed cost/schedule overrun on the ARC program. The Government Team is reviewing actuals to date and incorporating updated assumptions from the Contractor to revise the Government EAC. Until the over-run is negotiated, the PM EAC is equal to the Contractor EAC.

**Factors Contributing to Cost Variance and Projected Effects on Program Costs**

Cost Variance is driven heavily by challenges experienced in early ARC SW/FW development, which will be re-baselined upon contract award of the projected over-run.

**Factors Contributing to Schedule Variance and Projected Effects on Program Schedule**

No significant schedule variance; however, delays experienced during development of Build 1 have impacted the programs critical path and caused delays in the overall programs completion. The USG is in receipt of updated projections for completion of the ARC Mainline Integration contract from Leidos and is assessing contractual periods of performance.

## External Government Activities

Activity Title		Government Entity	Supported Phase
CAGE		Work Start Date	
City		State/Province:	
Notes			

Activity Title		Government Entity		Supported Phase
CAGE		Work Start Date		
City		State/Province:		
Notes				

Activity Title		Government Entity		Supported Phase
CAGE		Work Start Date		
City		State/Province:		
Notes				



## Deliveries and Expenditures

### IDECM

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered

Development

Production

Total Program Quantity Delivered     0                                     0

Expended and Appropriated (TY \$M)
------------------------------------

Years Appropriated to date:

Total Years Appropriated Funding (Current Baseline):

Percent Years Appropriated:

Then-Year Funding Appropriated as Percentage of Total Acquisition Estimate:

Then-Year Funding Expended as Percentage of Total Acquisition Estimate:

Total Acquisition Cost:

Deliveries & Expenditures Notes:

**IDECM Block 4**

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development				
Production	384	321	425	75.53%
<hr/>				
Total Program Quantity Delivered	384	321	425	75.53%
Expended and Appropriated (TY \$M)				

Years Appropriated to date: 18

Total Years Appropriated Funding (Current Baseline): 18

Percent Years Appropriated: 100.00%

Then-Year Funding Appropriated as Percentage of Total Acquisition Estimate: 100.00%

Then-Year Funding Expended as Percentage of Total Acquisition Estimate: 87.12%

Total Acquisition Cost: 1,613.9

Deliveries & Expenditures Notes:

IDECIM Blocks 2/3

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered

Development

Production

Total Program Quantity Delivered     0     0

Expended and Appropriated (TY \$M)

Years Appropriated to date:

Total Years Appropriated Funding (Current Baseline):

Percent Years Appropriated:

Then-Year Funding Appropriated as Percentage of Total Acquisition Estimate:

Then-Year Funding Expended as Percentage of Total Acquisition Estimate:

Total Acquisition Cost:

Deliveries & Expenditures Notes:

## Operating and Support Costs

IDECM

### *O&S Cost Breakdown:*

<b>Category (BY\$ Million)</b>	
<b>Unit-Level Manpower</b>	
<b>Unit Operations</b>	
<b>Maintenance</b>	
<b>Sustaining Support</b>	
<b>Continued System Improvements</b>	
<b>Other</b>	
<b>Total</b>	.0

Cost Estimate Source: dated

O&S Cost Notes:

<b>Total Program O&amp;S Cost Compared with Baseline</b>					
	<b>Current Baseline</b>				
	<b>Objective (BY\$M)</b>	<b>Threshold (BY\$M)</b>	<b>Current Estimate (BY\$M)</b>	<b>Current Estimate (TY\$M)</b>	<b>Deviation</b>
<b>Total O&amp;S</b>	0	0			

Note:

None

### **O&S Cost Deviation Explanation**

## IDECM Block 4

***O&S Cost Breakdown:***

Category (BY\$ Million)	IDECM Block 4
Unit-Level Manpower	
Unit Operations	
Maintenance	323.6
Sustaining Support	15.3
Continued System Improvements	129.7
Other	
<b>Total</b>	<b>468.6</b>

Cost Estimate Source: POE dated December 27, 2019

O&S Cost Notes:

Total Program O&S Cost Compared with Baseline					
	Current Baseline				
	Objective (BY\$M)	Threshold (BY\$M)	Current Estimate (BY\$M)	Current Estimate (TY\$M)	Deviation
<b>Total O&amp;S</b>	483.2	531.5	468.6	589.4	

Note:

O&S Cost Deviation Explanation
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**IDECM Blocks 2/3**

***O&S Cost Breakdown:***

Category (BY\$ Million)	IDECM Block 2/3
Unit-Level Manpower	
Unit Operations	
Maintenance	
Sustaining Support	
Continued System Improvements	
Other	
<b>Total</b>	.0

Cost Estimate Source: dated

O&S Cost Notes:

Total Program O&S Cost Compared with Baseline					
	Current Baseline				
	Objective (BY\$M)	Threshold (BY\$M)	Current Estimate (BY\$M)	Current Estimate (TY\$M)	Deviation
<b>Total O&amp;S</b>	273.9	301.3			

Note:  
None

**O&S Cost Deviation Explanation**

***Operating and Support Costs - Disposal and Unitized Costs***

**IDECM**

**Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost:**

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Sustainment Factors	System Name:	Antecedent System Name:
Quantity to Sustain		
Unit of Measure		
Unit Expected Service Life		

**Base Year:**

	System Name:	Antecedent System Name:
Unit-Level Manpower		
Unit Operations		
Maintenance		
Sustaining Support		
Continued System Improvements		
Other		
<b>Total O&amp;S</b>	<b>0.0</b>	<b>0.0</b>

**Disposal/Demilitarization Cost Estimate**

(Base Year \$Millions)	System Name:	Antecedent System Name:
Total Disposal		

Cost Estimate Source - Disposal	
Type:	
Approval Authority and Date:	
Note:	
Disposal Cost Notes:	
Antecedent Estimate Assumptions:	
Sustainment Strategy:	

Antecedent Estimate Assumptions:

#### IDECM Block 4

#### Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost:

Operating & Support cost is calculated by totaling the specific cost elements from the OSD CAPE O&S Cost Estimating Structure across the entire lifecycle for the defined system. The current baseline was updated in February 2021 followed by the approval of the revised IDECM APB in September 2021. The prior estimate was completed in support of the December 2019 SAR. The current O&S estimate increased from the prior due to incorporation of ECP 16-214(V)4-01 and a fact-of-life quantity change.

Sustainment Factors	System Name: IDECM Blk-4	Antecedent System Name: ASPJ
Quantity to Sustain	425	
Unit of Measure	Systems	
Unit Expected Service Life	20	

#### Base Year:

Annual Unitized O&S Cost by Category Base Year \$ Unit:(\$M)	System Name: IDECM Blk-4	Antecedent System Name: ASPJ
Unit-Level Manpower	0.0	0.0
Unit Operations	0.0	0.0
Maintenance	0.0	0.1
Sustaining Support	0.0	0.0
Continued System Improvements	0.0	0.0
Other	0.0	0.0
Total O&S	0.1	0.1

#### Disposal/Demilitarization Cost Estimate

(Base Year \$Millions)	System Name: IDECM Blk-4	Antecedent System Name: ASPJ
Total Disposal		

#### Cost Estimate Source - Disposal

Type:	Program Office Estimate
Approval Authority and Date:	PM 03/06/2023
Note:	
As a result of PB24 adjustments, the O&S estimate has been revised to account for removal of the USMC requirement for the integration of Adaptive Radar Countermeasures (ARC) on USMC F/A-18C/Ds.	



<b>Disposal Cost Notes:</b>
While these costs are not part of the O&S 2020 CAPE Cost Element Structure and hence are not included in the totals above, their Life Cycle Cost impact has been estimated at 3.400 BY 2018 \$M and 5.327 TY \$M.
<b>Additional O&amp;S Estimate Assumptions:</b>
<b>Sustainment Strategy:</b>
<p>The IDECM Block 4 (IB-4), ALQ-214(V)4/5, is an Engineering Change Proposal to the ALQ_214(V)2/3 and as such will follow the same sustainment strategy and infrastructure established for the fielded ALQ-214(V)2/3. 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 Replaceable Assemblies (WRAs) identified by Built-In Test (BIT)/Maintenance Service Panel (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 Government support equipment (GSE) as required; corrosion control and phase inspections. Maintenance Support for the IB-4 is performed by fleet personnel. There are presently no Contractor Engineering &amp; Technical Services or Navy Engineering &amp; 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 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 Organizational Support Equipment (OSE) and BIT as required. A Maintenance Plan (MaPl) for IB-4 is currently available to support the logistics program. The MaPls are 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. The IB-4 MaPl is managed by the FST at Fleet Readiness Center Southeast, In Service Support Center, Jacksonville, Florida.</p> <p>For Each Acquired System or System Variant:</p> <ul style="list-style-type: none"> <li>i. Quantity to Sustain: 425</li> <li>ii. First Operational Fiscal Year: 2014</li> <li>iii. Final Operational Fiscal Year: 2042</li> <li>iv. Unit Expected Service Life: 20 years</li> </ul>
<b>Antecedent Estimate Assumptions:</b>
Antecedent program: ASPJ: # of Aircraft Operating Years: 6,480 (Not actual, but used in order to provide a comparison between the ALQ-214(V)4/5 Suite and its antecedent system). The Antecedent Average Annual Cost per System is derived from total cost from Naval VAMOSOC database NAMSAR divided by the total number of systems in NAMSAR. This value is then multiplied by the total number of operating system years associated with ALQ-214(V)4/5 Suite to provide a point of comparison.

**IDECM Blocks 2/3**

**Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost:**

Sustainment Factors	System Name:	Antecedent System Name:
Quantity to Sustain		
Unit of Measure		
Unit Expected Service Life		

**Base Year:**

	System Name:	Antecedent System Name:
Unit-Level Manpower		
Unit Operations		
Maintenance		
Sustaining Support		
Continued System Improvements		
Other		
<b>Total O&amp;S</b>	<b>0.0</b>	<b>0.0</b>

**Disposal/Demilitarization Cost Estimate**

(Base Year \$Millions)	System Name:	Antecedent System Name:
<b>Total Disposal</b>		

Cost Estimate Source - Disposal	
Type:	
Approval Authority and Date:	
Note:	
Disposal Cost Notes:	
Additional O&S Estimate Assumptions:	
Sustainment Strategy:	
Antecedent Estimate Assumptions:	