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**Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	1,474.619	124.149	171.384	189.750	-	189.750	138.367	130.247	117.796	145.569	Continuing	Continuing
0556: <i>EW Counter Response</i>	622.243	21.876	22.168	20.358	-	20.358	46.636	47.294	48.159	76.120	Continuing	Continuing
1742: <i>EW Technical Development and T&amp;E</i>	11.926	1.674	1.777	1.773	-	1.773	1.817	1.845	1.878	1.917	Continuing	Continuing
2175: <i>Tactical Air Electronic Warfare</i>	691.940	26.528	50.911	45.623	-	45.623	1.303	0.258	0.265	0.270	0.000	817.098
3308: <i>Technology Development</i>	30.197	12.622	20.399	26.755	-	26.755	19.333	21.228	21.688	22.136	Continuing	Continuing
3309: <i>Assault Survivability Optimization</i>	36.870	36.744	61.548	80.308	-	80.308	54.027	43.868	29.404	28.378	Continuing	Continuing
3327: <i>MAGTF EW Aviation Development</i>	81.443	15.052	14.581	14.933	-	14.933	15.251	15.754	16.402	16.748	Continuing	Continuing
9999: <i>Congressional Adds</i>	0.000	9.653	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.653

**Program MDAP/MAIS Code:**  
**Project MDAP/MAIS Code(s):** 418

**A. Mission Description and Budget Item Justification**

This program element includes development of Electronic Warfare (EW) systems for the United States Navy (USN), United States Marine Corps (USMC), and United States Army tactical aircraft, USMC helicopters, surface combatants, data link vulnerability assessments, precision targeting, USN and USMC radio frequency jammers, and development and testing of electronic warfare devices for emerging threats and emergency contingencies. This element also includes: development of hardware/software solutions that link on-board integrated Aircraft Survivability Equipment (iASE) that are compatible with mission planning information and systems; studies, analysis and evaluations of current and future aircraft threats and Advanced EW Suite capabilities; modeling and simulation for improved countermeasure capabilities, and development and testing to address new and emerging threats. The projects in this element improve the ability of the Joint Force to strike diverse targets inside adversary air and missile defense networks to destroy mobile power-projection platforms and enhance close combat lethality in complex terrain. This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Previous President's Budget	144.471	171.384	152.044	-	152.044
Current President's Budget	124.149	171.384	189.750	-	189.750
Total Adjustments	-20.322	0.000	37.706	-	37.706
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-17.852	0.000			
• SBIR/STTR Transfer	-2.470	0.000			
• Program Adjustments	0.000	0.000	23.407	-	23.407
• Rate/Misc Adjustments	0.000	0.000	14.299	-	14.299

**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 9999: *Congressional Adds*

Congressional Add: *Filter technology for electronic warfare mitigation*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	<b>FY 2023</b>	<b>FY 2024</b>
	9.653	0.000
	9.653	0.000
	9.653	0.000

**Change Summary Explanation**

The FY25 funding request was increased by \$23.407M for continued development of Electronic Warfare (EW) systems.

Project Unit 0556 / EW Counter Response: N/A

Project Unit 1742 / EW Technical Development and T&E: FY25 funding request was decreased by \$.028M to meet POM25 requirements.

Project Unit 2175: FY2025 funding request was increased by \$12.000M for USN Adaptive Countermeasures. This funding enhances F/A-18 Platform survivability and supports future capability improvements and sustainment efforts.

Project Unit 3308: N/A

Project Unit 3309 / Assault Survivability Optimization: FY2025 funding request was increased by \$9.718M to incorporate Common Carriage into CH-53K and MV-22 aircraft and develop Joint Airborne Mission Survivability (JAMS)/Next Generation Air Survivability (NGAS) multi-spectral threat agnostic countermeasure

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<p>solutions. Common Carriage is required to standardize countermeasures across services and increase capability/lethality/survivability. JAMS/NGAS is a process whereby the advanced threat technologies are defeated using threat agnostic countermeasures. The advanced threats are represented by surrogate models that are based on actionable intelligence provided from intel agencies and from open source literature expediting fielding of advanced countermeasure solutions.</p> <p>Project Unit 3327 / MAGTF EW Aviation Development: N/A</p> <p>Schedule:</p> <p>Project Unit 2175 / Tactical Air Electronic Warfare: Acquisition Milestones: Dual Band Decoy (DBD) EMD contract award moved from 2nd Qtr. FY2023 to 4th Qtr. FY2023. DBD IOC moved from 4th Qtr. FY2026 to 4th Qtr. FY2027 due to delayed EMD contract award and ongoing COFC activity. ALQ-214 Adaptive Radar Countermeasures (ARC) FOC renamed to IOC to better align with program schedule. Systems Development: IDECM ARC Support for Development, Integration and Test continues through 3rd Qtr. FY2025. ARC Mainline Build 2 moved from 4th Qtr. FY2023 to 2nd Qtr. FY2024. ARC Mainline Build 3 moved from 1st Qtr. FY2024 to 2nd Qtr. FY2025. DBD EMD shifted from 2nd Qtr. FY2023 - 2nd Qtr. FY2026 to 2nd Qtr. FY2024 - 4th Qtr. FY2027. EMD Design Review 1 and 2 shifted one year to the right respectively. DBD Developmental Testing and Integrated Testing also shifted one year to the right to align with updated EMD dates. Production Milestones: ALQ-214 SRA Retrofit contract awards and deliveries updated to align with procurement budget. DBD contract awards and deliveries updated to align with EMD contract delay and ongoing COFC activity.</p> <p>Project Unit 3308 / Technology Development: Program Milestones: ARC Release Builds shifted 2 &amp; 3 to align with program schedule. Integration (DEV/INT) Contract Award milestone 1 updated from 2Q FY23 to 4Q FY23 to account for actual planned award. Software/Firmware (SW/FW) Development Contract Award milestone 7 added in FY29. EW Suite OFP and OFP milestones were also added in FY29. System Development: System Development Reviews, System Development Analysis and Optimization milestones were added in FY29. SW/FW Development and Integration 6 Contract was added for FY29. Test and Evaluation: Suite Level Electronic Countermeasures (ECM) and Integrated Evaluation effort added for FY29. SW/FW Increment 6 DT/IT/OT added beginning 4Q FY29.</p> <p>Project Unit 3309 / Assault Survivability Optimization: Schedule updated to incorporate CH-53K and MV-22 Common Carriage events, update baseline Common Carriage events and JAMS/NGAS development, qualification and testing.</p> <p>The following Common Carriage milestones were change due to additional time required to address F/A-18 dispenser vibrations concerns: Preliminary Design Review (PDR) from 2QFY23 to 4QFY23; Critical Design Review (CDR) from 3QFY23 to 3QFY24; Logistic Support Analysis (LSA)/ Maintenance Plan 4QFY23 to 4QFY24; Vendor Qual start 4QFY23 to 4QFY24; EMD Test Asset Delivery 4QFY23 to 3QFY24; Developmental Test (DT)/Test</p>		

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<p>Readiness Review (TRR) 4QFY24 to 4QFY25; Milestone (MS) C 4QFY25 to 2QFY26; Initial Operational Capability (IOC) 4QFY26 to 2QFY27; Low Rate Initial Production (LRIP) 1 4QFY25 to 2QFY26; Avionics/Airframe Change Release 1QFY26 to 4QFY26; F/A-18/MH-60 Op MDF 4QFY25 to 2QFY26; F/A-18 &amp; MH-60R/S Interim Summary Report 4QFY25 to 2QFY26; F/A-18/MH-60R/S MDEWSSA/SIL Start 4QFY24 to 3QFY25; LRIP 2 2QFY26 to 3QFY27; FRP RFP 2QFY26 to 3QFY27; FRP Lot-1 2QFY27 to 3QFY28; FRP Lot-2 1QFY28 to 3QFY29 and FRP production start 2QFY28 to 1QFY29. Added P-8/CMV-22 Multi-Spectral Defense Electronic Warfare System Support, Development Test and Maintenance Demo events in FY26.</p> <p>The following iASE MOB/Hub milestone were changed due to additional design time required to mitigate thermal risk with the ALE-47 programmer: System Requirement Review 2 (SRR) 1QFY23 to 3QFY23; PDR 3QFY23 to 1QFY24; Life Cycle Sustainment Plan (LCSP) 3QFY23 to 1QFY24; Test and Evaluation Master Plan (TEMP) 3QFY23 to 1QFY24; CDR 1QFY24 to 3QFY24; Test Asset Delivery 2QFY24 to 2QFY25; Unit Qualification start 1QFY24 to 2QFY25; F/A-18 Aircraft Weapons Integration Lab (AWIL) start 4QFY24 to 1QFY26; MS C 4QFY25 to 3QFY26; Software (SW) TRR 1QFY25 to 3QFY25; Fielding Decision 1QFY26 to 3QFY26; F/A-18 DT/OT start 2QFY25 to 1QFY26 and OT report 1QFY26 to 4QFY26. Added Maintenance Demo event in FY26.</p> <p>The following Advanced Radio Frequency Countermeasure milestone was changed due to additional time required to compile flight test data: RR-203 Fielding Decision 3QFY23 to 1QFY24; RR-203 RFP 1QFY24 to 4QFY24; AED CDR 2QFY27 to 1QFY26 and AED DT/TRR 4QFY26 to AED Program Readiness Review (PPR) 1QFY27. Added AED Development contract award 2QFY25.</p> <p>Project Unit 3327 / MAGTF EW Aviation Development: AN/ALQ-231(V)4 MV-22 Developmental Test (DT) start shifted from 1QTR 2022 to 3QTR 2023 and completion shifted from 3QTR 2023 to 2QTR 2024; AN/ALQ-231(V)4 OT&amp;E start shifted from 4QTR 2023 to 3QTR 2024 and completion shifted from 1QTR 2024 to 4QTR 2024; AN/ALQ-231(V)1 BLK X KC-130J Developmental Test start shifted from 4QTR 2023 to 3QTR 2024 and completion shifted from 2QTR 2025 to 1QTR 2026; AN/ALQ-231(V)1 BLK X KC-130J OT&amp;E start shifted from 4QTR 2025 to 2QTR 2026 and completion shifted from 4QTR 2025 to 3QTR 2026; BLK X Follow-On Test and Evaluation 2QTR 2025 to 1QTR 2026.</p> <p>Technical: Project Unit 3309 / Assault Survivability Optimization: Updated test asset quantities for Common Carriage, iASE and Advanced Radio Frequency Countermeasures.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>				<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
0556: <i>EW Counter Response</i>	622.243	21.876	22.168	20.358	-	20.358	46.636	47.294	48.159	76.120	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The Jammer Techniques Optimization (JATO) organization produces the jamming techniques and Electronic Attack (EA) optimization algorithms that are critical for current and future Airborne Electronic Attack (AEA) systems of the United States Navy (USN) and United States Marine Corps (USMC) to execute the evolving AEA mission. Through Modeling & Simulation (M&S), laboratory testing, and field testing, JATO optimizes parameters for existing EA systems (such as AN/ALQ-99 Tactical Jamming System (TJS) and the AN/ALQ-231(V) Intrepid Tiger II Family of Systems) to best counter existing threats, and applies that knowledge to define the requirements for follow-on AEA systems such as the Next Generation Jammer Mid-Band (NGJ-MB) and Next Generation Jammer Low Band (NGJ-LB) programs. As commercial and military Radio Frequency (RF) threats evolve and proliferate, the JATO organization provides updated tactics, techniques, and procedures to maximize the potency of USN and USMC AEA in meeting the Combatant Command (COCOM) Commanders' Non Kinetic Effects (NKE) priorities, to include highly contested environments, Force Protection, Information Operations, and enhanced communications jamming. (Classified discussion available upon request).

JATO's Advanced Techniques Group (ATG) focuses specifically on electronic countermeasures to advanced threat weapon systems and Command, Control, and Communications (C3) networks that are challenging existing EA approaches, and how to best apply advances in geolocation and unknown threat characterization to EA responses. Additional efforts include risk reduction activities to evaluate and minimize EA interference with US weapons systems, and research/technology studies in support of upgrades to existing AEA systems such as the AN/ALQ-99 TJS.

The AEA Advanced Development project focuses on increasing the Department of the Navy's understanding and utilization of rapidly-evolving technologies that operate in the Electromagnetic spectrum. As commercial and military Radio Frequency (RF) threats evolve and proliferate, this project tracks the relevant technology, intelligence, and tactics to maximize the potency of USN and USMC AEA through the rapid insertion of emergent technologies (hardware and software) into existing AEA weapon systems and aircraft platforms.

The Next Generation Jammer (NGJ) follow-on effort will develop and incorporate incremental capability upgrades to ensure NGJ continues to address Airborne Electronic Attack (AEA) capability gaps against increasingly advanced and rapidly evolving enemy threats throughout the electromagnetic spectrum. NGJ follow-on efforts include, but are not limited to, hardware and software development, integration and testing of the NGJ capability on the EA-18G, as well as any potential future aircraft.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<b>Title:</b> Jammer Techniques Optimization (JATO)	17.505	17.864	18.001	0.000	18.001
<b>Articles:</b>	-	-	-	-	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<p><b><i>FY 2024 Plans:</i></b> The JATO organization will continue engineering development and test support of existing and emerging systems such as, but not limited to, the EA-18G, NGJ-MB, and NGJ-LB to address potential NKE on current and evolving radar/communications threats. JATO will continue to generate tactics, techniques, and procedures to optimize the capabilities of systems such as, but not limited to, the AN/ALQ-99, AN/ALQ-249 (NGJ-MB), ALQ-218, ALQ-227, AN/ALQ-231(V), SCP, JSF and UAS payloads. JATO continues to meet COCOM Commanders' NKE priorities including support for Overseas Contingency Operations and Force Protection. (Classified discussion available upon request).</p> <p><b><i>FY 2025 Base Plans:</i></b> The JATO organization will continue engineering development and test support of existing and emerging systems such as, but not limited to, the EA-18G, NGJ-MB, and NGJ-LB to address potential NKE on current and evolving radar/communications threats. JATO will continue to generate tactics, techniques, and procedures to optimize the capabilities of systems such as, but not limited to, the AN/ALQ-99, AN/ALQ-249 (NGJ-MB), NGJ-LB, ALQ-218, ALQ-227, AN/ALQ-231(V), SCP, JSF, UAS payloads and other various systems. JATO continues to meet COCOM Commanders' NKE priorities including support for Overseas Contingency Operations and Force Protection. (Classified discussion available upon request).</p> <p><b><i>FY 2025 OCO Plans:</i></b> N/A</p> <p><b><i>FY 2024 to FY 2025 Increase/Decrease Statement:</i></b> Increase from FY 2024 to FY 2025 due to inflation.</p>					
<p><b><i>Title:</i></b> Electronic Warfare (EW) Advanced Development</p> <p align="right"><b><i>Articles:</i></b></p>	4.371 -	4.304 -	2.357 -	0.000 -	2.357 -
<p><b><i>FY 2024 Plans:</i></b> Efforts in FY 2024 includes continued hardware and software prototyping, engineering, and multi-system effects characterization for integrating capabilities into systems including, but not limited to, the AN/ALQ-99, AN/ALQ-231, AN/ALQ-249, NGJ-LB, Intrepid Tiger II, and Special Capability/SPIN Pods payloads to address existing capability gaps on COCOM Integrated Priority Lists. FY 2024 funding supports research, development, integration and test and evaluation of advanced technologies into current, and future, AEA weapons systems in laboratory and operational environments. (Classified discussion available upon request).</p> <p><b><i>FY 2025 Base Plans:</i></b></p>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Efforts in FY 2025 includes continued hardware and software prototyping, engineering, and multi-system effects characterization for integrating capabilities into systems including, but not limited to, the AN/ALQ-99, AN/ALQ-231, AN/ALQ-249, NGJ-LB, Intrepid Tiger II, and Special Capability/SPIN Pods payloads to address existing capability gaps on COCOM Integrated Priority Lists. FY 2025 funding supports research, development, integration and test and evaluation of advanced technologies into current, and future, AEA weapons systems in laboratory and operational environments. (Classified discussion available upon request).					
<b><i>FY 2025 OCO Plans:</i></b> N/A					
<b><i>FY 2024 to FY 2025 Increase/Decrease Statement:</i></b> Decrease from FY 2024 to FY 2025 due to decrease in overall Advanced Development support.					
<b>Accomplishments/Planned Programs Subtotals</b>	21.876	22.168	20.358	0.000	20.358

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN/0513: <i>AEA Systems</i>	25.058	24.110	17.460	-	17.460	19.893	19.802	19.385	19.797	87.548	717.511

**Remarks**

**D. Acquisition Strategy**

The JATO organization, comprised of a partnership between the Government and several University Affiliated Research Centers (UARC), continues to research EW tactics and techniques.

The AEA Advanced Development project will investigate developmental and existing technologies from commercial and governmental sources for integration into current and emerging USN and USMC EW weapon systems and aircraft. These technologies, once demonstrated to have sufficient maturity, will transition into the applicable acquisition programs. Additionally, the project will pursue technology development and demonstration through rapid acquisition or Speed to Fleet (S2F) initiatives to the greatest extent possible.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Navy</b>											<b>Date: March 2024</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v					<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>				

<b>Product Development (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Systems Engineering	WR	Naval Research Lab : Maryland	23.455	2.034	Nov 2022	2.014	Nov 2023	2.039	Nov 2024	-		2.039	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCAD : Patuxent River, MD	44.073	0.820	Nov 2022	0.735	Nov 2023	0.635	Nov 2024	-		0.635	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCWD : Point Mugu, CA	115.823	5.880	Nov 2022	6.330	Nov 2023	5.981	Nov 2024	-		5.981	Continuing	Continuing	Continuing
Systems Engineering	WR	NSWC Det : Crane, IN	16.271	2.118	Nov 2022	1.251	Nov 2023	1.008	Nov 2024	-		1.008	Continuing	Continuing	Continuing
Systems Engineering	Various	Various : Various	17.035	0.134	Nov 2022	0.122	Nov 2023	0.124	Nov 2024	-		0.124	Continuing	Continuing	Continuing
Prior Year Development cost no longer Funded in the FYDP	Various	Various : Various	277.147	0.000		0.000		0.000		-		0.000	0.000	277.147	-
<b>Subtotal</b>			493.804	10.986		10.452		9.787		-		9.787	Continuing	Continuing	N/A

**Remarks**  
Decrease from FY 2024 to FY 2025 due to decrease in overall Advanced Development efforts.

<b>Support (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Development Support - Jammer Techniques Optimization (JATO)	SS/CPFF	Johns Hopkins Univ : Maryland	64.707	3.922	Dec 2022	4.058	Dec 2023	4.139	Dec 2024	-		4.139	Continuing	Continuing	Continuing
Development Support - EW Advanced Development	SS/CPFF	Johns Hopkins Univ : Maryland	1.107	0.364	Dec 2022	0.371	Dec 2023	0.242	Dec 2024	-		0.242	Continuing	Continuing	Continuing
Development Support - EW Advanced Development	SS/CPFF	GTRI : Atlanta, GA	3.941	0.980	Dec 2022	0.952	Dec 2023	0.705	Dec 2024	-		0.705	Continuing	Continuing	Continuing
Eng & Tech Svc (Non FFRDC)	Various	Various : Various	28.810	2.866	Dec 2022	2.875	Dec 2023	2.521	Dec 2024	-		2.521	Continuing	Continuing	Continuing

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Navy</b>											<b>Date: March 2024</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v				<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>							

<b>Support (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Eng & Tech Svc (FFRDC)	Various	Various : Various	2.594	0.072	Dec 2022	0.628	Dec 2023	0.075	Dec 2024	-		0.075	Continuing	Continuing	Continuing
Prior year Support costs no longer funded in the FYDP	Various	Various : Various	3.630	0.000		0.000		0.000		-		0.000	0.000	3.630	-
<b>Subtotal</b>			104.789	8.204		8.884		7.682		-		7.682	Continuing	Continuing	N/A

**Remarks**  
Decrease from FY 2024 to FY 2025 due to decrease in overall Advanced Development related support.

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : Point Mugu, CA	16.482	2.611	Nov 2022	2.801	Nov 2023	2.857	Nov 2024	-		2.857	Continuing	Continuing	Continuing
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	5.238	0.000		0.000		0.000		-		0.000	0.000	5.238	-
<b>Subtotal</b>			21.720	2.611		2.801		2.857		-		2.857	Continuing	Continuing	N/A

**Remarks**  
Funding increases from FY 2024 to FY 2025 due to inflation.

<b>Management Services (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Management Support	WR	Various : Various	1.348	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Travel	WR	Various : Various	0.582	0.075	Oct 2022	0.031	Oct 2023	0.032	Oct 2024	-		0.032	Continuing	Continuing	Continuing
<b>Subtotal</b>			1.930	0.075		0.031		0.032		-		0.032	Continuing	Continuing	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

**Remarks**  
Funding increases from FY 2024 to FY 2025 due to inflation.

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
	<b>Project Cost Totals</b>	622.243	21.876	22.168	20.358	-	20.358	Continuing	Continuing

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>
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EW Counter Response	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Acquisition Milestones</b>																												
Milestones																												
<b>Systems Development</b>																												
Hardware Development	Electronic Warfare (EW) Advanced Development																											
Software Development													NGJ Follow-on Development															
Reviews			JATO ESC ■				JATO ESC ■				JATO ESC ■				JATO ESC ■				JATO ESC ■				JATO ESC ■				JATO ESC ■	
<b>Test &amp; Evaluation</b>																												
Developmental Test													JATO DT															
	Advanced Development Test																											
Operational Evaluation													NGJ Follow-on Test															
<b>Production Milestones</b>																												
Contract Awards																												
<b>Deliveries</b>																												

2025OSD - 0604270N - 0556

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 0556 / <i>EW Counter Response</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>EW Counter Response</i></b>				
Systems Development: Hardware Development: Electronic Warfare (EW) Advanced Development	1	2023	4	2029
Systems Development: Software Development: Next Generation Jammer Follow-On Development	1	2026	4	2029
Systems Development: Reviews: JATO Executive Steering Committee 2023	3	2023	3	2023
Systems Development: Reviews: JATO Executive Steering Committee 2024	3	2024	3	2024
Systems Development: Reviews: JATO Executive Steering Committee 2025	3	2025	3	2025
Systems Development: Reviews: JATO Executive Steering Committee 2026	3	2026	3	2026
Systems Development: Reviews: JATO Executive Steering Committee 2027	3	2027	3	2027
Systems Development: Reviews: JATO Executive Steering Committee 2028	3	2028	3	2028
Systems Development: Reviews: JATO Executive Steering Committee 2029	3	2029	3	2029
Test & Evaluation: Developmental Test: JATO Developmental Test	1	2023	4	2029
Test & Evaluation: Developmental Test: Advanced Development Test	1	2023	4	2029
Test & Evaluation: Developmental Test: Next Generation Jammer Follow-on Test	1	2026	4	2029

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Navy **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 1742 / <i>EW Technical Development and T&amp;E</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
1742: <i>EW Technical Development and T&amp;E</i>	11.926	1.674	1.777	1.773	-	1.773	1.817	1.845	1.878	1.917	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

Provide for quick reaction prototyping of tactical information and electronic warfare systems to counter adversary platforms and Command and Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting (C5ISR). Systems address various requirements across multiple platforms (air, surface, and subsurface), airborne and surface cryptologic operational requirements, and joint missions to research, assess, and develop information warfare and electronic warfare systems and capabilities. (Details held at a higher classification).

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<b>Title:</b> Electronic Warfare Technical Development and Test & Evaluation Naval Information Forces (NAVIFOR)	1.674	1.777	1.773	0.000	1.773
<b>Articles:</b>	-	-	-	-	-
<b>FY 2024 Plans:</b> *Perform technology maturation and risk reduction on Cyber and Electronic Warfare countermeasures. *Develop increased understanding of new and emerging technology to improve countermeasure development and capability readiness.					
<b>FY 2025 Base Plans:</b> *Perform technology maturation and risk reduction on Cyber and Electronic Warfare countermeasures. *Develop increased understanding of new and emerging technology to improve countermeasure development and capability					
<b>FY 2025 OCO Plans:</b> N/A					
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Decrease of \$0.004M reduces development of emerging technology to improve countermeasure development and capability readiness.					
<b>Accomplishments/Planned Programs Subtotals</b>	1.674	1.777	1.773	0.000	1.773

**C. Other Program Funding Summary (\$ in Millions)**

N/A

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 1742 / <i>EW Technical Development and T&amp;E</i>

**C. Other Program Funding Summary (\$ in Millions)**

**Remarks**

**D. Acquisition Strategy**

Development of classified prototypes and special capabilities. The Navy is granted streamlined acquisition authority for the development of classified prototypes and special capabilities under the Deputy Assistant Secretary of the Navy (DASN) Information Warfare.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 1742 / <i>EW Technical Development and T&amp;E</i>
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<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Development(1)	C/FP	Classified : Classified	9.716	1.674	Nov 2022	1.777	Nov 2023	1.773	Nov 2024	-		1.773	Continuing	Continuing	Continuing
<b>Subtotal</b>			9.716	1.674		1.777		1.773		-		1.773	Continuing	Continuing	N/A

**Remarks**  
1-Due to classification category, may not be on Defense Message System General Service (GENSER) classified exhibits.

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Development Support	WR	NAVSEA : Maryland	0.600	0.000		0.000		0.000		-		0.000	0.000	0.600	-
Studies & Analysis(1)	C/CPFF	Classified : Classified	0.653	0.000		0.000		0.000		-		0.000	0.000	0.653	-
<b>Subtotal</b>			1.253	0.000		0.000		0.000		-		0.000	0.000	1.253	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation (DT&E)	C/CPFF	Classified : Classified	0.957	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.957	0.000		0.000		0.000		-		0.000	Continuing	Continuing	N/A

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract	
	<b>Project Cost Totals</b>		11.926	1.674	1.777	1.773	-	1.773	Continuing	Continuing

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Navy</b>		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 1742 / <i>EW Technical Development and T&amp;E</i>

FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

<b>Proj 1742.L60</b>	
Development Work: Operational Development	

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 1742 / <i>EW Technical Development and T&amp;E</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 1742.L60</b>				
Development Work: Operational Development	1	2023	4	2029

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>				<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
2175: <i>Tactical Air Electronic Warfare</i>	691.940	26.528	50.911	45.623	-	45.623	1.303	0.258	0.265	0.270	0.000	817.098
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**Project MDAP/MAIS Code:** 418

**A. Mission Description and Budget Item Justification**

Integrated Defensive Electronic Countermeasures (IDECM) Block 4 (IB-4) is an Engineering Change Proposal (ECP) to the ALQ-214 to render it suitable for operation on F/A-18C/D aircraft (replacing the ALQ-126B and significantly improving F/A-18C/D survivability) while retaining all IDECM suite functionality when installed on F/A-18E/F aircraft. The IB-4 acquisition and contract strategy includes development of the Common On-Board Jammer for the F/A-18 C/D/E/F aircraft through sole source contract awards for modifications to the ALQ-214. IB-4, ALQ-214 ECP efforts include hardware and software design, development, integration and testing on the host aircraft. The F/A-18 EW suite includes the ALR-67 Radar Warning Receiver (RWR), the ALE-47 Countermeasures Dispensing Set (CMDS), the mission computer and other avionics.

ALQ-214 software improvement program (SWIP) will provide the ALQ-214 with Digital Radio Frequency Memory (DRFM) technique capability significantly improving F/A18C/D/E/F survivability. Acquisition and contract strategy includes development, integration and test of the ALQ-214 software improvements through sole-source contract award. Modifications to other F/A-18E/F Block II and Block III aircraft avionics may be required in order to develop and integrate this capability. These other avionics may include, but are not limited to, the ALR-67(V)2, ALR-67(V)3, ALE-47, ALE-50 Advanced Airborne Expendable Decoy (AAED), ALE-55 Fiber Optic Towed Decoy (FOTD), mission computer and fire control radar.

F/A-18 E/F ALQ-214 Adaptive Radar Countermeasures (ARC) will provide the ALQ-214A(V)4 with improved Radio Frequency (RF) threat detection algorithms and jamming against modern threat radars. Modifications to F/A-18E/F Block II and Block III aircraft avionics may be required in order to develop and integrate this capability. These other avionics may include, but are not limited to, the ALR-67(V)3, ALE-47, ALE-50 AAED, ALE-55 FOTD, mission computer and fire control radar. ARC capabilities may be integrated into other DoD platforms with radar warning receivers or countermeasures systems.

The Dual Band Decoy (DBD) will provide expanded RF capability against current and emerging modern RF threat radars, significantly improving the survivability of the F/A-18 E/F and may be further developed and integrated into other Naval platforms. DBD will leverage Science and Technology (S&T) advancements through the Dual Band Intelligent RF Expendable (DIRE) program to accelerate DBD capability development. DBD will replace the current ALE-55 FOTD beginning with fielding of an Initial Operational Capability in FY 2026. Modifications to other F/A-18E/F Block II and Block III aircraft avionics may be required in order to develop and integrate this capability. These other avionics may include, but are not limited to, the ALR-67(V)2, ALR-67(V)3, ALE-47, ALE-50 AAED, ALE-55 FOTD, mission computer and fire control radar.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Navy **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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This Project also includes/enables integrated Aircraft Survivability Equipment (iASE) which improves situational awareness for own-ship, wingman, and distributed command and control.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<b>Title:</b> Tactical Air EW	26.528	50.911	45.623	0.000	45.623
<b>Articles:</b>	-	-	-	-	-
<b>FY 2024 Plans:</b>					
FY24 - IDECM ARC Development, Integration and Test is planned to conclude in FY 2024. A release Build 3 deliverable from the development effort will be provided by the OEM and assessed by the USG/OPTEVFOR for fleet introduction. DBD Developmental Test (DT) will continue in FY2024. DBD Integration Test (IT) will begin in FY2024 continuing through FY2025.					
<b>FY 2025 Base Plans:</b>					
FY25 - IDECM ARC Development, Integration is planned to conclude in FY2025. Build 3 release will be provided by the OEM for USG DT and OPTEVFOR assessment for fleet introduction. DBD Developmental Test (DT) continuing through FY2025 in support of EMD. ALQ-214 IDECM Modernization will start Q2FY25.					
<b>FY 2025 OCO Plans:</b>					
N/A					
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b>					
The decrease of \$5.288M between FY 2024 and FY 2025 is due to the completion of ARC Development and Integration efforts in FY 2025.					
<b>Accomplishments/Planned Programs Subtotals</b>	26.528	50.911	45.623	0.000	45.623

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN/0576 004-12: <i>Common On-Board Jammer</i>	22.770	30.564	15.898	-	15.898	11.250	3.566	3.172	3.204	0.000	761.039
• PANMC/0182: <i>Air Expendable CM</i>	20.153	21.990	22.026	-	22.026	48.102	49.093	50.087	51.098	Continuing	Continuing

**Remarks**

PANMC 0182 Air Countermeasures (CM) funding represents only a portion of the total PANMC 0182 Air Expendable CM Budget. Dual Band Decoy (DBD) initial procurements begins in FY2025 utilizing combined FY2023 and FY2024 funding on the first Production Contract to replace the ALE-55 Fiber Optic Towed Decoy (FOTD) whose last procurement was in FY2020.

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604270N / <i>Electronic Warfare (EW) De</i> v	Project (Number/Name) 2175 / <i>Tactical Air Electronic Warfare</i>

**D. Acquisition Strategy**

The mainline ARC Integration contract is a sole source contract awarded to Leidos 4th Qtr. FY 2020 and continuing through FY 2025. The ARC program software development is modeled after an agile methodology producing three release builds, which are individually supported by development sprints. DBD development is planned as an evolutionary development approach with competitive prototyping phase which started in FY 2019 continuing through FY 2021, followed by a competitively awarded EMD phase starting in FY 2024 continuing through FY 2027.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Adaptive Radar Countermeasures (ARC) Development	SS/CPFF	Leidos : Arlington, VA	74.052	6.000	Jun 2023	12.381	Dec 2023	1.999	Dec 2024	-		1.999	0.000	94.432	97.253
Dual Band Decoy (DBD) Development EMD	C/CPIF	BAE : Nashua, NH	5.542	5.354	Sep 2023	13.119	Apr 2024	21.839	May 2025	-		21.839	8.260	54.114	54.114
DBD Development EMD Other Software	C/CPFF	TBD : TBD	0.000	0.000		6.200	Apr 2024	0.000		-		0.000	0.000	6.200	-
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various : Various	379.616	0.000		0.000		0.000		-		0.000	0.000	379.616	-
ALQ-214 IDECM Modernization	SS/CPFF	L3/Harris : Clifton, NJ	0.000	0.000		0.000		12.000	Jan 2025	-		12.000	0.000	12.000	-
<b>Subtotal</b>			459.210	11.354		31.700		35.838		-		35.838	8.260	546.362	N/A

**Remarks**  
 IDECM ARC Support for Development, Integration and Test continues through FY2025. Decrease in FY2025 (\$10.382M) in ARC development is due to the completion of the ARC Development contract. Increase in FY2025 (\$8.720M) on DBD EMD line is due to development of test assets ramping up. Increase in FY2025 (\$12.000M) for ALQ-214 IDECM Modernization is to support future capability improvements.

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Integrated Log Supt ARC	WR	NAWCAD : Pax River, MD	0.355	0.310	Nov 2022	0.117	Nov 2023	0.120	Nov 2024	-		0.120	0.000	0.902	-
Engineering Support ARC	WR	Various : Various	6.815	1.216	Nov 2022	0.447	Nov 2023	0.449	Nov 2024	-		0.449	0.000	8.927	-
Engineering Support ARC	WR	NAWCWD : Point Mugu, CA	0.000	1.322	Nov 2022	1.247	Nov 2023	0.510	Nov 2024	-		0.510	0.000	3.079	-
Engineering Support ARC	WR	NAWCWD : China Lake, CA	0.000	0.713	Nov 2022	1.134	Nov 2023	0.506	Nov 2024	-		0.506	0.000	2.353	-
Program Management Support ARC	WR	NAWCAD : Pax River, MD	0.900	0.000		0.000		0.000		-		0.000	0.000	0.900	-
Engineering Support DBD	WR	Various : Various	7.802	1.304	Nov 2022	1.442	Nov 2023	0.246	Nov 2024	-		0.246	0.000	10.794	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Software Dev-ALQ - 214 SW Dev	C/CPFF	GTRI : Atlanta GA	0.810	0.237	Dec 2022	0.188	Nov 2023	0.192	Nov 2024	-		0.192	0.000	1.427	1.182
Software Dev Engineering Support ARC	C/IDDQ	Carnegie Mellon University : Pittsburgh. PA	0.907	0.900	Jun 2023	0.000		0.000		-		0.000	0.000	1.807	0.907
Management Support Services DBD	C/CPFF	Various : Various	0.228	0.000		0.000		0.000		-		0.000	0.000	0.228	0.228
Prior Year Support costs no longer funded in FYDP	Various	Various : Various	55.281	0.000		0.000		0.000		-		0.000	0.000	55.281	-
<b>Subtotal</b>			73.098	6.002		4.575		2.023		-		2.023	0.000	85.698	N/A

**Remarks**  
 IDECM ARC Support for Development, Integration and Test continues through FY2025. Increase in FY2025 (\$.005M) ARC Engineering and Logistics support is due to inflation. Decrease in FY2025 (\$1.365M) ARC Engineering efforts at NAWCWD is due to the completion of ARC Development contract efforts.  
 Dual Band Decoy (DBD) Support for Development, Integration and Test continues through FY 2025. Decrease in FY 2025 (\$1.196M) DBD Engineering support due to the beginning of the program's transition into production. Increase in FY 2025 (\$.004M) Software Dev-ALQ-214 SW Dev CSS support is due to escalation.

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : China Lake, CA	8.781	1.152	Nov 2022	2.500	Nov 2023	2.738	Nov 2024	-		2.738	2.753	17.924	-
Operational Test & Evaluation (OT&E)	SS/CPFF	Various : Various	2.908	0.705	Dec 2022	2.488	Mar 2024	0.000		-		0.000	4.504	10.605	4.038
Operational Test & Evaluation (OT&E)	WR	NAWCAD : Pax River, MD	1.508	0.253	Nov 2022	0.582	Nov 2023	1.374	Nov 2024	-		1.374	0.593	4.310	-
Developmental Test & Evaluation (DT&E)	SS/CPFF	Various : Various	0.315	0.479	Dec 2022	0.319	Mar 2024	0.325	Nov 2024	-		0.325	0.000	1.438	0.634
Operational Test & Evaluation (OT&E)	WR	NAWCWD : Point Mugu, CA	1.497	2.470	Nov 2022	2.648	Nov 2023	1.865	Nov 2024	-		1.865	0.000	8.480	-
Operational Test & Evaluation (OT&E)	WR	NAWCWD : China Lake, CA	2.435	0.720	Nov 2022	3.157	Nov 2023	0.000	Nov 2024	-		0.000	0.000	6.312	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : Pax River, MD	0.000	1.220	Nov 2022	1.400	Nov 2023	0.000		-		0.000	1.500	4.120	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	52.220	0.000		0.000		0.000		-		0.000	0.000	52.220	-
<b>Subtotal</b>			69.664	6.999		13.094		6.302		-		6.302	9.350	105.409	N/A

**Remarks**  
 IDECM Developmental Test and Evaluation continues through FY2025. Decrease in Developmental Test and Evaluation efforts at Pax River (\$1.400M) in FY2025 is due to ARC Test and Evaluation efforts ending in FY2025. Decrease in Operational Test and Evaluation efforts at various locations (\$2.488M) in FY2025 is a result of shifting of support to NAWCWD to assist with the additional test requirements for the DBD EMD program. Increased Developmental Test and Evaluation efforts at NAWCWD China Lake (\$0.238M) is a result of the additional test requirements for DBD.  
 Increase in Developmental Test and Evaluation efforts at various field activities in FY2025 (\$0.006M) is due to escalation. Decrease in Operational Test and Evaluation efforts in FY2025 at NAWCWD (\$0.783M) and (\$3.157M) is due to shifting of test efforts in support of the DBD EMD program. Increased Operational and Developmental Test and Evaluation efforts at Pax River (\$0.792M) is due to increased testing efforts in support of DBD EMD program.

<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Travel	Allot	NAWCAD : Pax River, MD	1.033	0.109	Oct 2022	0.056	Oct 2023	0.051	Oct 2024	-		0.051	0.058	1.307	-
Program Management Support ARC	WR	NAWCAD : Pax River, MD	0.000	1.019	Nov 2022	0.917	Nov 2023	0.598	Nov 2024	-		0.598	0.000	2.534	-
Program Management Support DBD	WR	NAWCAD : Pax River, MD	0.000	0.356	Nov 2022	0.269	Nov 2023	0.314	Nov 2024	-		0.314	0.000	0.939	-
Management Support Services DBD	C/CPFF	Various : Various	0.000	0.689	May 2023	0.300	Nov 2023	0.497	Nov 2024	-		0.497	0.000	1.486	-
Prior Year Mgmt costs no longer funded in FYDP	Various	Various : Various	88.935	0.000		0.000		0.000		-		0.000	0.000	88.935	-
<b>Subtotal</b>			89.968	2.173		1.542		1.460		-		1.460	0.058	95.201	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

**Remarks**  
Decrease in Program Management Support for ARC in FY2025 (\$0.319M) and Travel (\$0.005M) is due to MISC rate adjustments. Increase in DBD Program Management (\$0.045M) and Management Support Services (\$0.197M) is due to DBD technical analysis.

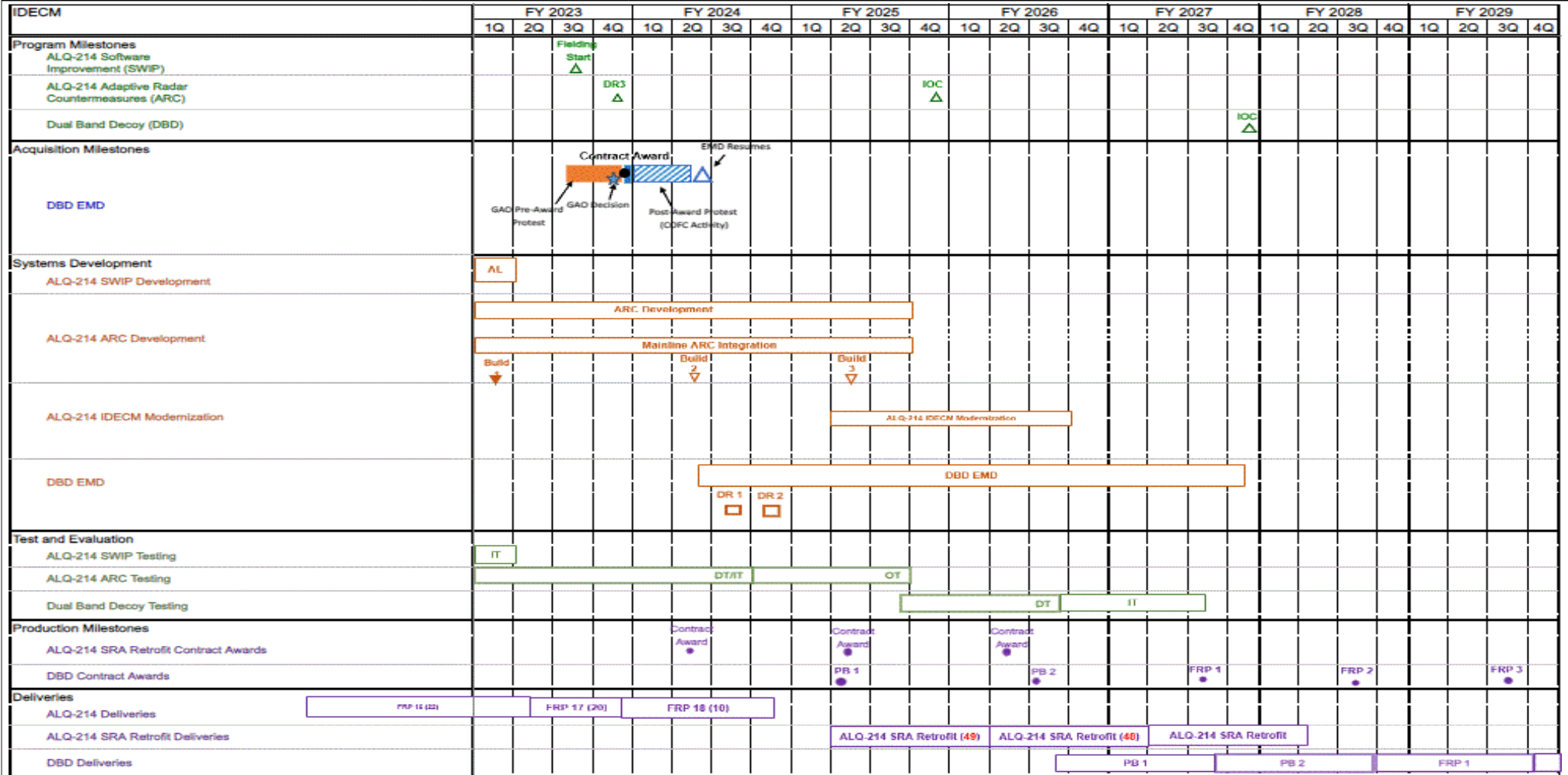
	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	691.940	26.528	50.911	45.623	-	45.623	17.668	832.670	N/A

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2025 Navy</b>		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>IDECM</b>				
Acquisition Milestones: ALQ-214 Adaptive Radar Countermeasures (ARC): Design Review 3	4	2023	4	2023
Acquisition Milestones: ALQ-214 Adaptive Radar Countermeasures (ARC): ALQ-214 ARC IOC	4	2025	4	2025
Acquisition Milestones: DBD: Initial Operational Capability (IOC)	4	2027	4	2027
Acquisition Milestones: DBD EMD: GAO Pre-Award Protest	3	2023	4	2023
Acquisition Milestones: DBD EMD: GAO Decision	4	2023	4	2023
Acquisition Milestones: DBD EMD: Contract Award	4	2023	4	2023
Acquisition Milestones: DBD EMD: Post-Award Protest (COFC Activity)	4	2023	2	2024
Acquisition Milestones: DBD EMD: EMD Resumes	2	2024	2	2024
Systems Development: ALQ-214 SW Improvement Development: ALQ-214 SW Improvement Development	1	2023	1	2023
Systems Development: ALQ-214 ARC Development: ARC Development	1	2023	3	2025
Systems Development: ALQ-214 ARC Development: ALQ-214 ARC Mainline (ML) Integration	1	2023	3	2025
Systems Development: ALQ-214 ARC Development: ALQ-214 ARC ML Build 1	1	2023	1	2023
Systems Development: ALQ-214 ARC Development: ALQ-214 ARC ML Build 2	2	2024	2	2024
Systems Development: ALQ-214 ARC Development: ALQ-214 ARC ML Build 3	2	2025	2	2025
Systems Development: Dual Band Decoy EMD: DBD EMD	2	2024	4	2027
Systems Development: Dual Band Decoy EMD: Design Review 1	3	2024	3	2024
Systems Development: Dual Band Decoy EMD: Design Review 2	4	2024	4	2024

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**Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Test and Evaluation: ALQ-214 SW Improvement Testing: ALQ-214 SW Improvement Integrated Testing (IT) on C/D Aircraft	1	2023	1	2023
Test and Evaluation: ALQ-214 ARC Testing: ALQ-214 ARC Developmental and Integrated Testing	1	2023	3	2024
Test and Evaluation: ALQ-214 ARC Testing: ALQ-214 ARC Operational Testing	4	2024	3	2025
Test and Evaluation: Dual Band Decoy Testing: DBD Developmental Testing	3	2025	3	2026
Test and Evaluation: Dual Band Decoy Testing: DBD Integrated Testing/Operational Testing	3	2026	3	2027
Production Milestones: Dual Band Decoy Contract Awards: DBD Production Build (PB 1)	2	2025	2	2025
Production Milestones: Dual Band Decoy Contract Awards: DBD Production Build (PB 2)	3	2026	3	2026
Production Milestones: Dual Band Decoy Contract Awards: DBD Full Rate Production (FRP1)	3	2027	3	2027
Production Milestones: Dual Band Decoy Contract Awards: DBD Full Rate Production (FRP2)	3	2028	3	2028
Production Milestones: Dual Band Decoy Contract Awards: DBD Full Rate Production (FRP3)	3	2029	3	2029
Deliveries: IDECM Block 4: IDECM Block 4 FRP 16 Deliveries (22)	1	2023	2	2023
Deliveries: IDECM Block 4: IDECM Block 4 FRP 17 Deliveries (20)	2	2023	4	2023
Deliveries: IDECM Block 4: IDECM Block 4 FRP 18 Deliveries (10)	4	2023	4	2024
Deliveries: Shop Replaceable Assembly: Shop Replaceable Assembly Deliveries (49)	2	2025	1	2026
Deliveries: Shop Replaceable Assembly: Shop Replaceable Assembly Deliveries (42)	2	2026	1	2027
Deliveries: Shop Replaceable Assembly: Shop Replaceable Assembly Deliveries (30)	2	2027	1	2028
Deliveries: DBD: DBD PB 1 Deliveries	3	2026	3	2027
Deliveries: DBD: DBD PB 2 Deliveries	3	2027	3	2028
Deliveries: DBD: DBD FRP 1 Deliveries	3	2028	3	2029

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2025 Navy</b>		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 2175 / <i>Tactical Air Electronic Warfare</i>

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Deliveries: DBD: DBD FRP 2 Deliveries	4	2029	4	2029

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v				<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3308: <i>Technology Development</i>	30.197	12.622	20.399	26.755	-	26.755	19.333	21.228	21.688	22.136	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**Note**

PE 0604279N consolidated to PE 0604270N beginning in FY 2017.

**A. Mission Description and Budget Item Justification**

Project Unit 3308 / Technology Development funds efforts that focus on the quick reaction prototyping and fielding of Tactical Electronic Warfare (EW)/countermeasures solutions for increased resilience and survivability, by improving the active electronic self-defense of tactical aircraft. This self-protection provides friendly forces the ability to deploy, survive, operate, maneuver, and regenerate in all domains while under attack as well as strike diverse targets inside adversary air and missile defense networks to destroy mobile power-projection platforms. This Project also includes/enables integrated Aircraft Survivability Equipment (iASE) which improves situational awareness for own-ship, wingman, and distributed command and control. Significant investments have been made in the modular hardware and reprogrammable software resident in ASE capability which is fielded today. Technology Development makes specific investments towards: countermeasure/jammer/receiver algorithm development, Advanced EW Suite capability studies/investigation/analysis, threat data file and model updates as modern threats continue to evolve. These updated data files and algorithms are required to be deployed within hours of release by squadron maintenance personnel to aircraft while still on the ramp or flight deck. This program directly addresses the operational requirement of Strike Tactical Air platforms for optimization of EW/countermeasure solutions across the Department of Navy.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<b>Title:</b> Technology Development	12.622	20.399	26.755	0.000	26.755
<b>Articles:</b>	-	-	-	-	-
<b>FY 2024 Plans:</b> Continued EW product development and initiation of tests in support of the ALQ-214 system on the F/A-18 E/F for Navy aircraft. Develop, model and test advanced electronic countermeasure algorithms for Navy aircraft to defend against modern threats both inside and outside the currently protected RF spectrum. Provide investments for the continuation and development of emerging Radio Frequency (RF) Threat, Electronic Countermeasures (ECM) and T&E Capability Enhancements, addresses current and future threats on the roadmap that are not in the threat library (new threats not in MDFs). Develops advanced hardware-in-the-loop Modeling and Simulation flight test surrogates to keep pace with modern advanced threats in support of currently fielded systems.					
<b>FY 2025 Base Plans:</b>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i> v	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Continued EW product development and initiation of tests in support of the ALQ-214 system on the F/A-18 E/F for Navy aircraft. Develop, model and test advanced electronic countermeasure algorithms for Navy aircraft to defend against modern threats both inside and outside the currently protected RF spectrum. Provide investments for the continuation and development of emerging Radio Frequency (RF) Threat, Electronic Countermeasures (ECM) and T&E Capability Enhancements, addresses current and future threats on the roadmap that are not in the threat library (new threats not in MDFs). Develops advanced hardware-in-the-loop Modeling and Simulation flight test surrogates to keep pace with modern advanced threats in support of currently fielded systems.  <b>FY 2025 OCO Plans:</b> N/A  <b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> The increase of \$6.356M between FY 2024 and FY 2025 is due to increased development efforts in support of ALQ-214 Software/Firmware modernization.					
<b>Accomplishments/Planned Programs Subtotals</b>	12.622	20.399	26.755	0.000	26.755

**C. Other Program Funding Summary (\$ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

Electronic Warfare/vulnerability studies/analysis, product development and test conducted for strike aircraft across the Future Years Defense Program (FYDP).

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Navy</b>											<b>Date: March 2024</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>					<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>				

<b>Product Development (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Software Dev - ALQ-214 SW Dev	SS/CPFF	NSMA : Washington, DC	0.840	10.622	Aug 2023	14.733	Mar 2024	14.280	May 2025	-		14.280	Continuing	Continuing	Continuing
Software Dev - ALQ-214 SW Dev	C/BA	Leidos : Arlington, VA	6.473	2.000	Jun 2023	2.006	Dec 2023	3.200	Mar 2025	-		3.200	Continuing	Continuing	Continuing
Software Dev - ALQ-214 SW Dev	C/CPFF	Amentum : Crane, IN	1.400	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Software Dev - ALQ-214 SW Dev	WR	TOYON Research : Goleta, CA	1.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Prior Year Production Costs no longer funded in FYDP	Various	Various : Various	12.526	0.000		0.000		0.000		-		0.000	0.000	12.526	-
Software Dev - ALQ-214 SW/FW Modernization	SS/CPFF	L3/Harris : Clifton, NJ	0.000	0.000		0.000		4.881	Dec 2024	-		4.881	0.000	4.881	-
<b>Subtotal</b>			22.239	12.622		16.739		22.361		-		22.361	Continuing	Continuing	N/A

**Remarks**  
 Contractor SWIP and ARC modeling, simulation, and technique optimization development will continue through FY2025. Product Development includes Threat Characterization efforts continuing into FY2025. Increase in FY2025 (\$0.453M) to NSMA is in support of a Software/Firmware Development Effort to enhance Aircraft Survivability. Increase in FY2025 (\$1.194M) to Leidos is in support of Adaptive Radar Countermeasures (ARC) Mainline Integration and implementation of optimized ARC Threat Techniques effort. Increase in FY2025 (\$4.881M) L3/Harris is in support of ALQ-214 Software/Firmware Modernization effort.

<b>Support (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Software Dev - ALQ-214 SW Dev	WR	NAWCWD : Point Mugu, CA	2.056	0.000		0.674	Nov 2023	0.687	Nov 2024	-		0.687	Continuing	Continuing	Continuing
Software Dev - ALQ-214 SW Dev	C/CPFF	Johns Hopkins : Baltimore, MD	0.959	0.000		0.481	Nov 2023	0.491	Nov 2024	-		0.491	Continuing	Continuing	Continuing
Software Dev - ALQ-214 SW Dev	C/CPFF	GTRI : Atlanta, GA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Prior Year Support Costs no longer funded in FYDP	Various	Various : Various	1.075	0.000		0.000		0.000		-		0.000	0.000	1.075	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>
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<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			4.090	0.000		1.155		1.178		-		1.178	Continuing	Continuing	N/A

**Remarks**  
Contractor and Organic SWIP and ARC modeling, simulation, and technique optimization development will continue into FY2025. Increase in FY2025 (\$0.013M) at Point Mugu and (\$0.010M) at John Hopkins is due to inflation.

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : Point Mugu, CA	0.617	0.000		1.500	Nov 2023	1.608	Nov 2024	-		1.608	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.760	Nov 2023	1.186	Nov 2024	-		1.186	0.000	1.946	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	3.251	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
<b>Subtotal</b>			3.868	0.000		2.260		2.794		-		2.794	Continuing	Continuing	N/A

**Remarks**  
Organic SWIP and ARC modeling, simulation, and technique optimization development will continue through FY2025. Increase in Development Test and Evaluation efforts at NAWCWD Point Mugu (\$0.108M) and (\$0.426M) is due to increased technique optimization development in FY2025.

<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Support	WR	NAWCAD : Pax River, MD	0.000	0.000		0.245	Nov 2023	0.422	Nov 2024	-		0.422	0.000	0.667	-
<b>Subtotal</b>			0.000	0.000		0.245		0.422		-		0.422	0.000	0.667	N/A

**Remarks**  
FY2025 (\$0.177M) increase in Program Management Support cost category for additional oversight of technique optimization.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Navy</b>							<b>Date: March 2024</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5			<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i> v				<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>				
	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>		
<b>Project Cost Totals</b>	30.197	12.622	20.399	26.755	-	26.755	Continuing	Continuing	N/A		

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>
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ASE Self Protection Optimization	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Program Milestones</b>		FY23 OFF ▲			FY24 OFF ▲				FY25 OFF ▲				FY26 OFF ▲				FY27 OFF ▲				FY28 OFF ▲				FY29 OFF ▲			
Operational Flight Program (OFF)		▲			▲				▲				▲				▲				▲				▲			
EW Suite OFF Release		EW22 ▲			EW23 ▲				EW24 ▲				EW25 ▲				EW26 ▲				EW27 ▲				EW28 ▲			
ARC Mainline OFF Release		ARC Build 1 ▲			ARC Build 2 ▲				ARC Build 3 ▲																			
SW/FW DEV&INT Contract Award			NSMA DEV/INT Award ▲		SW/FW INC 2 Mod ▲				SW/FW INC 3 Mod ▲				SW/FW INC 4 Mod ▲				SW/FW INC 5 Mod ▲				SW/FW INC 6 Mod ▲				SW/FW INC 7 Mod ▲			
<b>Systems Development</b>																												
SW Threat Analysis, Technique Development and Optimization		FY23 Review ▼			FY24 Review ▼				FY25 Review ▼				FY26 Review ▼				FY27 Review ▼				FY28 Review ▼				FY29 Review ▼			
		FY23 Analysis			FY24 Analysis				FY25 Analysis				FY26 Analysis				FY27 Analysis				FY28				FY29			
		Development			Development				Development				Development				Development				Development				Development			
		Optimization			Optimization				Optimization				Optimization				Optimization				Optimization				Optimization			
SW/FW Systems Requirements Review Contract		NSMA System																										
SW/FW Development and Integration Contract					SW/FW DEV/INT Inc 1				SW/FW DEV/INT Inc 2				SW/FW DEV/INT Inc 3				SW/FW DEV/INT Inc 4				SW/FW DEV/INT Inc 5				SW/FW DEV/INT Inc 6			
<b>Test and Evaluation</b>																												
Suite Level ECM and Integrated Eval			ECM/IE			ECM/IE				ECM/IE				ECM/IE				ECM/IE				ECM/IE				ECM/IE		
SW/FW Development and Integration DT/IT/OT									SW/FW Inc 1 DT/IT/OT				SW/FW Inc 2 DT/IT/OT				SW/FW Inc 3 DT/IT/OT				SW/FW Inc 4 DT/IT/OT				SW/FW Inc 5 DT/IT/OT			

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2025 Navy</b>		<b>Date: March 2024</b>
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>(U) ASE Self Protection Optimization (ASPO)</b>				
Milestones: Program Milestones: FY-23 Operational Flight Program	2	2023	2	2023
Milestones: Program Milestones: FY-24 Operational Flight Program	2	2024	2	2024
Milestones: Program Milestones: FY-25 Operational Flight Program	2	2025	2	2025
Milestones: Program Milestones: FY-26 Operational Flight Program	2	2026	2	2026
Milestones: Program Milestones: FY-27 Operational Flight Program	2	2027	2	2027
Milestones: Program Milestones: FY-28 Operational Flight Program	2	2028	2	2028
Milestones: Program Milestones: FY-29 Operational Flight Program	2	2029	2	2029
Milestones: EW Suite OFP Release: Release-22	2	2023	2	2023
Milestones: EW Suite OFP Release: Release-23	2	2024	2	2024
Milestones: EW Suite OFP Release: Release-24	2	2025	2	2025
Milestones: EW Suite OFP Release: Release-25	2	2026	2	2026
Milestones: EW Suite OFP Release: Release-26	2	2027	2	2027
Milestones: EW Suite OFP Release: Release-27	2	2028	2	2028
Milestones: EW Suite OFP Release: Release-28	2	2029	2	2029
Milestones: ARC Mainline OFP Release: ARC Build 1	1	2023	1	2023
Milestones: ARC Mainline OFP Release: ARC Build 2	2	2024	2	2024
Milestones: ARC Mainline OFP Release: ARC Build 3	2	2025	2	2025
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 1	4	2023	4	2023
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 2	2	2024	2	2024

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2025 Navy **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 3	2	2025	2	2025
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 4	2	2026	2	2026
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 5	2	2027	2	2027
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 6	2	2028	2	2028
Milestones: Software/Firmware (SW/FW) Developmental & Integration Contract Award: SW/FW DEV/INT Award 7	2	2029	2	2029
Systems Development: Systems Development Reviews: FY-23 Review	1	2023	1	2023
Systems Development: Systems Development Reviews: FY-24 Review	1	2024	1	2024
Systems Development: Systems Development Reviews: FY-25 Review	1	2025	1	2025
Systems Development: Systems Development Reviews: FY-26 Review	1	2026	1	2026
Systems Development: Systems Development Reviews: FY-27 Review	1	2027	1	2027
Systems Development: Systems Development Reviews: FY-28 Review	1	2028	1	2028
Systems Development: Systems Development Reviews: FY-29 Review	1	2029	1	2029
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-23 Analysis	3	2023	1	2024
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-24 Analysis	3	2024	1	2025
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-25 Analysis	3	2025	1	2026
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-26 Analysis	3	2026	1	2027
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-27 Analysis	3	2027	1	2028

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2025 Navy **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-28 Analysis	3	2028	4	2028
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-29 Analysis	3	2029	4	2029
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-23 Development	2	2023	4	2023
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-24 Development	2	2024	4	2024
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-25 Development	2	2025	4	2025
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-26 Development	2	2026	4	2026
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-27 Development	2	2027	4	2027
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-28 Development	2	2028	4	2028
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-29 Development	2	2029	4	2029
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-23 Optimization	2	2023	4	2023
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-24 Optimization	2	2024	4	2024
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-25 Optimization	2	2025	4	2025
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-26 Optimization	2	2026	4	2026
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-27 Optimization	2	2027	4	2027

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**Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Development</i>	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-28 Optimization	2	2028	4	2028
Systems Development: SW Threat Analysis, Technique Development and Optimization: FY-29 Optimization	2	2029	4	2029
Systems Development: SW/FW Systems Requirements Review Contract: SW/FW Systems Requirements	1	2023	3	2023
Systems Development: SW/FW Development and Integration Contract: SW/FW DEV/INT Inc 1	4	2023	3	2024
Systems Development: SW/FW Development and Integration Contract: SW/FW DEV/INT Inc 2	4	2024	3	2025
Systems Development: SW/FW Development and Integration Contract: SW/FW DEV/INT Inc 3	4	2025	3	2026
Systems Development: SW/FW Development and Integration Contract: SW/FW DEV/INT Inc 4	4	2026	3	2027
Systems Development: SW/FW Development and Integration Contract: SW/FW DEV/INT Inc 5	4	2027	3	2028
Systems Development: SW/FW Development and Integration Contract: SW/FW DEV/INT Inc 6	4	2028	4	2029
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-23 ECM/IE	1	2023	4	2023
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-24 ECM/IE	1	2024	4	2024
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-25 ECM/IE	1	2025	4	2025
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-26 ECM/IE	1	2026	4	2026
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-27 ECM/IE	1	2027	4	2027
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-28 ECM/IE	1	2028	4	2028
Test and Evaluation: Suite Level ECM and Integrated Evaluation: FY-29 ECM/IE	1	2029	4	2029
Test and Evaluation: SW/FW Developmental/Integrated/Operational Testing: SW/FW Inc 1 DT/IT/OT	4	2024	3	2025

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3308 / <i>Technology Development</i>

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Test and Evaluation: SW/FW Developmental/Integrated/Operational Testing: SW/FW Inc 2 DT/IT/OT	4	2025	3	2026
Test and Evaluation: SW/FW Developmental/Integrated/Operational Testing: SW/FW Inc 3 DT/IT/OT	4	2026	3	2027
Test and Evaluation: SW/FW Developmental/Integrated/Operational Testing: SW/FW Inc 4 DT/IT/OT	4	2027	3	2028
Test and Evaluation: SW/FW Developmental/Integrated/Operational Testing: SW/FW Inc 5 DT/IT/OT	4	2028	3	2029

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>				<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3309: <i>Assault Survivability Optimization</i>	36.870	36.744	61.548	80.308	-	80.308	54.027	43.868	29.404	28.378	Continuing	Continuing
Quantity of RDT&E Articles	4,800	25	82	100	-	100	-	-	-	-		

**A. Mission Description and Budget Item Justification**

FY 2025 includes funding required to implement Common Carriage for CH-53K and MV-22 aircraft and develop, qualify and test Joint Airborne Mission Survivability (JAMS)/Next Generation Air Survivability (NGAS) multi-spectral countermeasures solutions. The CH-53K and MV-22 Common Carriage transition aligns additional platforms with F/A-18E/F, MH-60R/S, P-8 and CMV-22 to reduce expendable countermeasures logistics footprints, reduce future development and procurement costs, and improves industrial base performance through DOD wide common expendable square form factor. Project continues Common Carriage funding for aforementioned aircraft. Project continues funding required to implement Multi-Layered Obstructed Brokered Hub (MOB Hub) and integrated Aircraft Survivability Equipment (iASE) capability for F/A-18 aircraft. MOB Hub iASE funding is for hardware/software design and qualification of the ALE-47 iASE Programmer. MOB Hub iASE replaces obsolete ALE-47 operational flight program and programmer hardware, providing data to the gateway necessary for survivability in the current and future threat scenarios facing USN operational missions. This MOB Hub iASE upgraded programmer enables advanced expendable countermeasures to enhance countermeasure response, and provide additional battlespace awareness for own-ship, wingman and other mission participants. Project continues funding for Advanced Radio Frequency (RF) Countermeasure development, testing and modeling and simulation capability to reduce future flight test cost. Active RF Expendable Device (AED) replaces existing GEN-X AED which is obsolete against modern RF threats. Passive RF Expendable Decoys (RR-203) leveraged advanced chaff technology used on the F-35 to provide improved Radar-Cross-Section (RCS) performance capability to DoN platforms. Advanced Active and Passive RF expendable solutions offer standalone devices necessary for global naval operations for all DoN aircraft deployments for use against networked Integrated Air Defense Systems (IADS) with coherent radars and provide aircrew with tailored response options of integrated on-board and off-board RF expendable solutions in a dense threat environment.

Resources will be applied to the following areas: 1) Studies and evaluations to optimize employment of current countermeasures and iASE capabilities. 2) Development and demonstration of advanced expendable countermeasures and countermeasure techniques. 3) Testing and evaluation of infrared (IRCM) and RF advanced countermeasures. 4) Development of system software enhancements and integration for the testing and deployment of advanced countermeasure techniques. 5) Development of and upgrades to modeling tools and specialized equipment required to conduct evaluation of advanced countermeasures against proliferating threats.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<b>Title:</b> Assault Survivability Optimization	36.744	61.548	80.308	0.000	80.308
<b>Articles:</b>	25	82	100	-	100
<b>FY 2024 Plans:</b> Incremental funding for ALE-47 Common Carriage Engineering, Manufacturing Development (EMD) effort. Continue contractor and governments efforts for hardware, software and support equipment design and					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<p>development for Common Carriage. Begin Common Carriage implementation for P-8 and CMV-22. Support the development and integration of the advanced AN/ALE-47 iASE capability to improve countermeasure techniques developed for improved survivability and aircrew situational awareness. Develop advanced RF decoys to include awarding EMD contract for Active Expendable Device (AED) and government efforts for development of AED and RR-203 (passive) decoy. Perform modeling and simulation to support effectiveness testing of new 1x1x8 advanced countermeasures for MH-60R/S. Continue development and testing of advanced countermeasure techniques.</p> <p>Breakdown of test assets follows:                      ALE-47 Common Carriage Systems 12ea                      ALE-47 Common Carriage O-Level Test Set 7ea                      ALE-47 MOB/iASE programmers 13ea.                      Active Expendable Device 50ea</p> <p><b>FY 2025 Base Plans:</b>                      Incremental funding for ALE-47 Common Carriage Engineering, Manufacturing Development (EMD) effort. Continue contractor and governments efforts for hardware, software and support equipment design, development and test for Common Carriage. Begin Common Carriage implementation for CH-53K and MV-22. Support the development and integration of the advanced AN/ALE-47 iASE capability to improve countermeasure techniques developed for improved survivability and aircrew situational awareness. Develop advanced RF decoys to include awarding EMD contract for Active Expendable Device (AED) and government efforts for development of AED and RR-203 (passive) decoy. Perform modeling and simulation to support infrared (IRCM) and radio frequency (RFCM) effectiveness testing of advanced Common Carriage countermeasures and advanced countermeasure techniques for P-8 and CMV-22. Continue Modeling and Simulation (M&amp;S) efforts for Advanced RFCM to support: 1) Hardware-in-the-Loop test and evaluation of Active Expendable Devices (AED) for F/A-18E/F; 2) Analysis of RF effectiveness test results on MH/60R/S. Perform safe separation and effectiveness tests on Advanced RFCM devices as installed on DoN air platforms. Begin development, qualification and testing for Joint Airborne Mission Survival (JAMS)/Next Generation Air Survivability (NGAS). Breakdown of test assets follows:                      Active Expendable Device 100ea</p> <p><b>FY 2025 OCO Plans:</b>                      N/A</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b></p>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Increase from FY 2024 to FY 2025 includes \$18.760 million to incorporate Common Carriage into CH-53K and MV-22 aircraft, provide additional iASE framework to rapidly incorporate advanced expendable countermeasures and software applications and Joint Airborne Mission Survival (JAMS)/Next Generation Air Survivability (NGAS).					
<b>Accomplishments/Planned Programs Subtotals</b>	36.744	61.548	80.308	0.000	80.308

**C. Other Program Funding Summary (\$ in Millions)**

<b>Line Item</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PANMC/0182: <i>Air Expendable Countermeasures</i>	5.400	9.752	13.294	-	13.294	8.099	21.037	24.247	24.306	Continuing	Continuing
• 0204161N/0576: <i>Common ECM Equipment/Common Carriage (OSIP 006-00)</i>	0.000	0.000	0.000	-	0.000	48.931	88.370	87.390	101.157	612.068	937.916

**Remarks**

PANMC 0182 Air Expendables Countermeasures (CM) Common Carriage and advanced radio frequency decoys funding represents only a portion of the total PANMC 0182 Baseline Air Expendables CM Budget.  
 APN-5/0576 Common Carriage begins and MOB Hub iASE budget begins in FY2026. APN-5 Total Cost Computed represents only those funds for Common Carriage and iASE.

**D. Acquisition Strategy**

Acquisition strategy is to leverage improvements in air expendable countermeasures technology and integration of existing iASE sensor and platform data to enhance platform survivability on USN and USMC platforms through more effective dispense techniques, investing in enhancements in modeling and simulation tools to better evaluate countermeasure effectiveness against advancing threat systems, upgrading test and evaluation equipment to incorporate current and future threats for effectiveness tests, and developing and demonstrating advanced concept countermeasures for future threats. New advanced countermeasures are then transitioned to the Procurement of Ammunition Navy and Marine Corps appropriation for procurement and fielding. New optimized and advanced countermeasure techniques are delivered via operational Mission Data Files (MDF) to increase aircraft/aircrew survivability. F-35 brings square countermeasures to Fleet operations and provides the opportunity to drastically improve interoperability across USN/USMC, DoD and Coalition warfare operations by employing a Common Carriage solution that entered Engineering and Manufacturing Development in FY 2022 with IOC in FY 2027. Common Carriage will standardize countermeasures across Services to increase capability/lethality/survivability and countermeasure load-out to support operations in contested environments. FY 2025 continues implementation of ALE-47 MOB Hub iASE to fully leverage the opportunities of the Common Carriage upgrade. ALE-47 MOB Hub iASE strategy is to utilize government facility for hardware/software design, qualification and production of the ALE-47 Programmer for F/A-18 platform integration/test. The Active and Passive RF Countermeasure Solutions strategy is to leverage from existing Joint Science & Technology (S&T) and development efforts focused on passive and active RF expendable technology. The Passive RF solution

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i> v	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>

(RR-203/AL) will complete qualification and effectiveness test in FY24 and is expected to proceed to LRIP Contract Award. The Active RF solution (AED) development starts in FY24 with procurement of test assets, software, and required equipment to perform Modeling & Simulation (M&S) and hardware-in-the-loop tests. AED safe separation and qualification tests scheduled in FY25, effectiveness tests scheduled in FY26-FY27 and Operational tests scheduled in FY28.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
1319 / 5				PE 0604270N / <i>Electronic Warfare (EW) De</i>				3309 / <i>Assault Survivability Optimization</i>							
Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ALE-47 Common Carriage Expendable Countermeasure Technique Modeling and Simulation	WR	NSWC Crane : Crane, IN	2.862	0.558	Oct 2022	0.440	Oct 2023	0.335	Oct 2024	-		0.335	Continuing	Continuing	Continuing
Advanced RFCM Decoy Modeling and Simulation	WR	NSWC Crane : Crane, IN	0.000	0.500	Aug 2023	0.618	Oct 2023	1.080	Oct 2024	-		1.080	Continuing	Continuing	Continuing
ALE-47 Common Carriage Radio Frequency Countermeasures Modeling and Simulation	C/CPFF	Booz Allen Hamilton : McClean, VA	0.350	0.000		0.258	Dec 2023	0.263	Dec 2024	-		0.263	Continuing	Continuing	Continuing
Active RF Decoy Development Contract	C/CPFF	TBD : TBD	0.000	0.000		3.001	Apr 2024	4.603	Mar 2025	-		4.603	Continuing	Continuing	Continuing
ALE-47 Common Carriage Sys Upgrade Dev Contract	C/FFP	BAE : Austin, TX	6.683	2.471	Mar 2023	2.510	Mar 2024	3.500	Mar 2025	-		3.500	0.000	15.164	15.164
ALE-47 Common Carriage Vibration and Analysis Contract	SS/IDIQ	Boeing : Saint Louis, MO	0.000	0.145	Jul 2023	0.000		2.100	Mar 2025	-		2.100	Continuing	Continuing	Continuing
ALE-47 Common Carriage Integration Qualification Development	TBD	TBD : TBD	0.000	0.000		0.000		2.285	Oct 2024	-		2.285	Continuing	Continuing	Continuing
ALE-47 Common Carriage Software Upgrades	WR	FRCSE : Jacksonville, FL	1.061	1.150	Nov 2022	2.621	Oct 2023	1.118	Oct 2024	-		1.118	Continuing	Continuing	Continuing
ALE-47 Common Carriage System Upgrade Development	WR	Various : Various	2.172	0.971	Nov 2022	2.571	Oct 2023	0.200	Oct 2024	-		0.200	Continuing	Continuing	Continuing
ALE-47 Common Carriage System Upgrade Development	WR	FRC : Various	1.947	1.213	Oct 2022	5.084	Oct 2023	1.200	Oct 2024	-		1.200	Continuing	Continuing	Continuing
ALE-47 Common Carriage System Upgrade Development	WR	NSWC Crane : Crane, IN	0.000	2.032	Oct 2022	0.000		1.252	Oct 2024	-		1.252	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy												Date: March 2024				
Appropriation/Budget Activity						R-1 Program Element (Number/Name)				Project (Number/Name)						
1319 / 5						PE 0604270N / <i>Electronic Warfare (EW) De</i>				3309 / <i>Assault Survivability Optimization</i>						
Product Development (\$ in Millions)						FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total		
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
ALE-47 Common Carriage System Upgrade Development	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.250	Oct 2024	-		0.250	Continuing	Continuing	Continuing	
ALE-47 Common Carriage A-Kit Design	WR	FRC : Various	0.374	0.000	Mar 2023	1.251	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing	
ALE-47 Common Carriage Depot Update Planning	MIPR	TBD : TBD	0.000	0.000	Dec 2022	0.625	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing	
ALE-47 F/A-18 iASE Development	WR	NAWCWD : China Lake, CA	2.815	7.170	Oct 2022	15.586	Oct 2023	13.879	Oct 2024	-		13.879	Continuing	Continuing	Continuing	
ALE-47 F/A-18 iASE Software App Dev	WR	NAWCWD : China Lake, CA	0.000	0.000		1.686	Oct 2023	3.337	Oct 2024	-		3.337	Continuing	Continuing	Continuing	
ALE-47 iASE Development Contract	C/CPFF	Integrated Consultants, Inc. : San Diego, CA	0.000	7.148	Jan 2023	0.000		3.850	Mar 2025	-		3.850	Continuing	Continuing	Continuing	
ALE-47 iASE Development Contract	C/CPFF	RTL Networks, Inc : Denver, CO	0.000	1.334	Jan 2023	0.000		1.989	Jan 2025	-		1.989	Continuing	Continuing	Continuing	
ALE-47 iASE Development Contract	C/CPFF	DCS Corporation : Alexandria, VA	0.000	0.350	Mar 2023	0.000		0.510	Jan 2025	-		0.510	Continuing	Continuing	Continuing	
ALE-47 iASE Software Upgrade	WR	FRCSE : Jacksonville, FL	0.000	0.630	Oct 2022	3.120	Oct 2023	1.256	Oct 2024	-		1.256	Continuing	Continuing	Continuing	
ALE-47 iASE A-Kit Design/ Drawing	WR	NAWCWD : China Lake, CA	0.000	0.710	Oct 2022	0.394	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing	
ALE-47 iASE User Training Package/Source Data Update	WR	Various : Various	0.000	0.000	Jan 2023	0.486	Oct 2023	0.375	Oct 2024	-		0.375	Continuing	Continuing	Continuing	
ALE-47 iASE Development	WR	FRC : Various	0.000	0.000		3.513	Oct 2023	0.750	Oct 2024	-		0.750	Continuing	Continuing	Continuing	
iASE Software Development	WR	Warner Robins AFB : Warner Robins, GA	0.000	0.113	Feb 2023	0.000		1.340	Oct 2024	-		1.340	Continuing	Continuing	Continuing	
iASE Software Development	WR	NAWCWD : Pt Mugu, CA	0.000	0.000		0.000		0.600	Oct 2024	-		0.600	Continuing	Continuing	Continuing	
ALE-47 iASE Depot Assessment/Standup Planning	MIPR	Various : Various	0.000	0.000		0.689	Oct 2023	0.702	Oct 2024	-		0.702	Continuing	Continuing	Continuing	

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
ALE-47 iASE CASS OTPS	WR	FRCSE : Jacksonville, FL	0.000	0.000		0.889	Oct 2023	0.525	Oct 2024	-		0.525	Continuing	Continuing	Continuing
JAMS Development	WR	NSWC Crane : Crane, IN	0.000	0.000		0.000		1.755	Oct 2024	-		1.755	Continuing	Continuing	Continuing
JAMS Development Contract	C/CPFF	DTIC : Various	0.000	0.000		0.000		7.020	Jan 2025	-		7.020	Continuing	Continuing	Continuing
Archive Product Development Efforts	Various	Various : Various	2.029	0.000		0.000		0.000		-		0.000	0.000	2.029	-
<b>Subtotal</b>			20.293	26.495		45.342		56.074		-		56.074	Continuing	Continuing	N/A

**Remarks**

FY 2025 \$56.074 million for organic government effort for F/A-18 Multi-Layered Obstructed Brokered Hub (MOB Hub) and integrated Aircraft Survivability Equipment (iASE) implementation and continue Engineering, Manufacturing and Development (EMD) contract to design and develop hardware and software solutions for Countermeasure Dispensing Systems and perform modeling and simulation to optimize Common Carriage countermeasures dispense techniques on aircraft platforms incorporating CH-53K and MV-22. Procure Active RF Expendable Device (AED) test assets for test, hardware/software for Modeling & Simulation Lab and hardware-in-the-loop test. Product development funding added for organic and contract events to support modeling and simulation for Joint Airborne Mission Survival (JAMS)/Next Generation Air Survivability (NGAS).

Common Carriage decrease \$2.862 million from FY 2024 to FY 2025 due to leveraging previous ALE-47 Common Carriage non-recurring engineering. Funding level supports continued Common Carriage ALE-47 system development and modeling and simulation for effectiveness flight testing in FY 2026. Updated EMD target cost based on additional test assets and cyber assessment.

F/A-18 MOB Hub iASE increase of \$2.750 million from FY 2024 to FY 2025 for continued development efforts for MOB Hub iASE programmer and aircrew interface software applications development.

Advanced RF Decoy increase of \$2.069 million from FY 2024 to FY 2025 includes \$4.603 million for AED development contract and increase of Advanced RFCM Decoy Modeling & Simulation to support increased scope of AED development and lab hardware integration.

JAMS/NGAS \$8.775M added to design, develop and test the next generation of advanced countermeasure.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ALE-47 Common Carriage Test Mission Data File Software Development	WR	FRCSE : Jacksonville, FL	0.681	0.078	Jan 2023	0.466	Oct 2023	0.243	Oct 2024	-		0.243	Continuing	Continuing	Continuing
ALE-47 Advanced RFCM Test Mission Data File Software Development	C/BA	FRCSE : Jacksonville, FL	0.000	0.000		0.104	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Active and Passive RF Decoy Development Support	WR	Various : Various	0.000	0.000		0.648	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing
ALE-47 Common Carriage Technical Support	WR	FRC : Various	0.418	0.000		0.899	Oct 2023	0.481	Oct 2024	-		0.481	Continuing	Continuing	Continuing
ALE-47 Common Carriage Technical Support	WR	NAWCAD : Patuxent River, MD	0.000	2.520	Oct 2022	0.503	Oct 2023	1.050	Oct 2024	-		1.050	Continuing	Continuing	Continuing
ALE-47 iASE Cyber/COMSEC/CPI Assessment	WR	NAWCAD : Patuxent River, MD	0.000	0.316	Jan 2023	0.885	Oct 2023	2.657	Oct 2024	-		2.657	Continuing	Continuing	Continuing
ALE-47 iASE Development and Logistics Supportability Assessment	WR	FRCSE : Jacksonville, FL	0.000	0.515	Jan 2023	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ALE-47 iASE Platform Integration Support	WR	FRCSW : San Diego, CA	0.000	0.299	Jan 2023	0.541	Oct 2023	0.551	Oct 2024	-		0.551	Continuing	Continuing	Continuing
ALE-47 iASE Development Support	Various	NAWCAD : Patuxent River, MD	0.000	0.267	Jan 2023	0.947	Oct 2023	0.965	Oct 2024	-		0.965	Continuing	Continuing	Continuing
Archive Support Efforts	Various	Various : Various	0.144	0.000		0.000		0.000		-		0.000	0.000	0.144	-
<b>Subtotal</b>			1.243	3.995		4.993		5.947		-		5.947	Continuing	Continuing	N/A

**Remarks**  
 FY 2025 \$5.947 million for support for ALE-47 Countermeasure Dispensing Systems software design and development for F/A-18 MOB Hub iASE, incorporate and dispense square form factor countermeasures on USN and USMC aircraft platforms, and develop advanced RF decoys.  
  
 F/A-18 MOB Hub iASE increase of \$1.800 million from FY2024 to FY 2025 required for increased cyber security requirements.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
1319 / 5				PE 0604270N / <i>Electronic Warfare (EW) Dev</i>				3309 / <i>Assault Survivability Optimization</i>							
Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	FRCSE - AECM Common Carriage : Jacksonville, FL	1.406	0.384	Oct 2022	2.231	Oct 2023	0.479	Oct 2024	-		0.479	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCAD - Common Carriage : Patuxent River, MD	0.159	0.872	Nov 2022	1.125	Oct 2023	1.500	Oct 2024	-		1.500	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NSWC Crane - Advanced RFCM : Crane, IN	1.416	0.081	Oct 2022	1.357	Oct 2023	2.491	Oct 2024	-		2.491	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCAD Pax - Advanced RFCM : Patuxent River, MD	0.000	0.000		0.000		0.244	Oct 2024	-		0.244	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCWD - Common Carriage : China Lake, CA	0.000	3.028	Jan 2023	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCWD - Common Carriage : Pt Mugu, CA	0.000	0.000		0.000		2.500	Oct 2024	-		2.500	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	MH-60R/S Squadron - Common Carriage : TBD	1.264	0.000		2.066	Jan 2024	0.000		-		0.000	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	P-8/CMV-22 - AECM Common Carriage NAWCAD : Patuxent River, MD	0.000	0.000		0.000		3.047	Dec 2024	-		3.047	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCWD - iASE : China Lake, CA	0.000	0.000		0.549	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCAD - iASE : Patuxent River, MD	0.000	0.000	Mar 2023	0.138	Mar 2024	0.105	Oct 2024	-		0.105	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWWD - iASE : Pt Mugu, CA	0.000	0.000		0.000		2.700	Oct 2024	-		2.700	Continuing	Continuing	Continuing
Operational Test & Evaluation (OT&E)	WR	COTF - iASE : Norfolk, VA	0.000	0.145	Mar 2023	0.249	Dec 2023	0.500	Dec 2024	-		0.500	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	Robins AFB - iASE : Warner Robins, GA	0.000	0.000		0.000		0.552	Oct 2024	-		0.552	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	FRCSE- iASE : Jacksonville, FL	0.000	0.000		0.541	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCAD- iASE : Patuxent River, MD	0.000	0.000		0.358	Oct 2023	0.657	Oct 2024	-		0.657	Continuing	Continuing	Continuing
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	9.057	0.000		0.000		0.000		-		0.000	0.000	9.057	-
<b>Subtotal</b>			13.302	4.510		8.614		14.775		-		14.775	Continuing	Continuing	N/A

**Remarks**  
 FY 2025 \$14.775 million for Test and Evaluation (T&E) for F/A-18 MOB Hub iASE, Advanced RF decoy engineering, qualification and testing and advanced Common Carriage countermeasure dispense technique optimization flight test events: P-8 and CMV-22 infrared ground to air.  
 Common Carriage increase of \$2.104 million from FY 2024 to FY 2025 due to increased test range and aircraft cost.  
 F/A-18 MOB HUB iASE increase of \$2.679 million from FY 2024 to FY 2025 for T&E efforts for iASE implementation to increase ALE-47 programmer capability for F/A-18 aircraft. FY 2025 incorporates test/integration efforts for F/A-18 ALE-47 MOB Hub iASE.  
 Advanced RF decoy increase \$1.378 million for Active Expendable Device (AED) and RR-203 engineering, evaluation, qualification and testing of active and passive decoys.

<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Common Carriage Project Management	WR	FRCSE : Jacksonville, FL	1.531	0.404	Oct 2022	2.068	Oct 2023	0.835	Oct 2024	-		0.835	Continuing	Continuing	Continuing
Common Carriage Project Management Support Services	WR	NAWCAD : Patuxent River, MD	0.000	0.567	May 2023	0.000		0.425	Oct 2024	-		0.425	Continuing	Continuing	Continuing
Common Carriage Project Management Support Services	C/CPFF	KBR : Jacksonville, FL	0.000	0.596	Dec 2022	0.531	Dec 2023	0.271	Jan 2025	-		0.271	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
iASE Project Management	WR	FRCSE : Jacksonville, FL	0.000	0.000		0.000		1.232	Oct 2024	-		1.232	Continuing	Continuing	Continuing
iASE Project Management	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.213	Oct 2024	-		0.213	Continuing	Continuing	Continuing
iASE Project Management Support Services	C/CPFF	KBR : Jacksonville, FL	0.000	0.000		0.000		0.271	Oct 2024	-		0.271	Continuing	Continuing	Continuing
Advanced RFCM Project Management	WR	FRCSE : Jacksonville, FL	0.000	0.000		0.000		0.265	Oct 2024	-		0.265	Continuing	Continuing	Continuing
Advanced Countermeasure Dispense Technique Development Project Management	C/CPFF	Georgia Tech Applied Research Corporation : Atlanta, GA	0.162	0.177	Dec 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Archive Management Services Efforts	Various	Various : Various	0.339	0.000		0.000		0.000		-		0.000	0.000	0.339	-
<b>Subtotal</b>			2.032	1.744		2.599		3.512		-		3.512	Continuing	Continuing	N/A

**Remarks**  
FY 2024 \$3.512 million for Common Carriage, iASE and Advanced RFCM project management for MOB Hub iASE, Common Carriage System design, advanced RF decoys and countermeasure technique optimization flight test events.

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	36.870	36.744	61.548	80.308	-	80.308	Continuing	Continuing	N/A

**Remarks**  
FY 2025 \$80.308 million required for Common Carriage, Integrated Aircraft Survivability Equipment (iASE), advanced radio frequency (RF) decoys and Joint Airborne Mission Survival (JAMS)/Next Generation Air Survivability (NGAS). Funding includes CH-53K and MV-22 Common Carriage to expand DON expendable carriage capacity and enable near term employment of advanced expendables.

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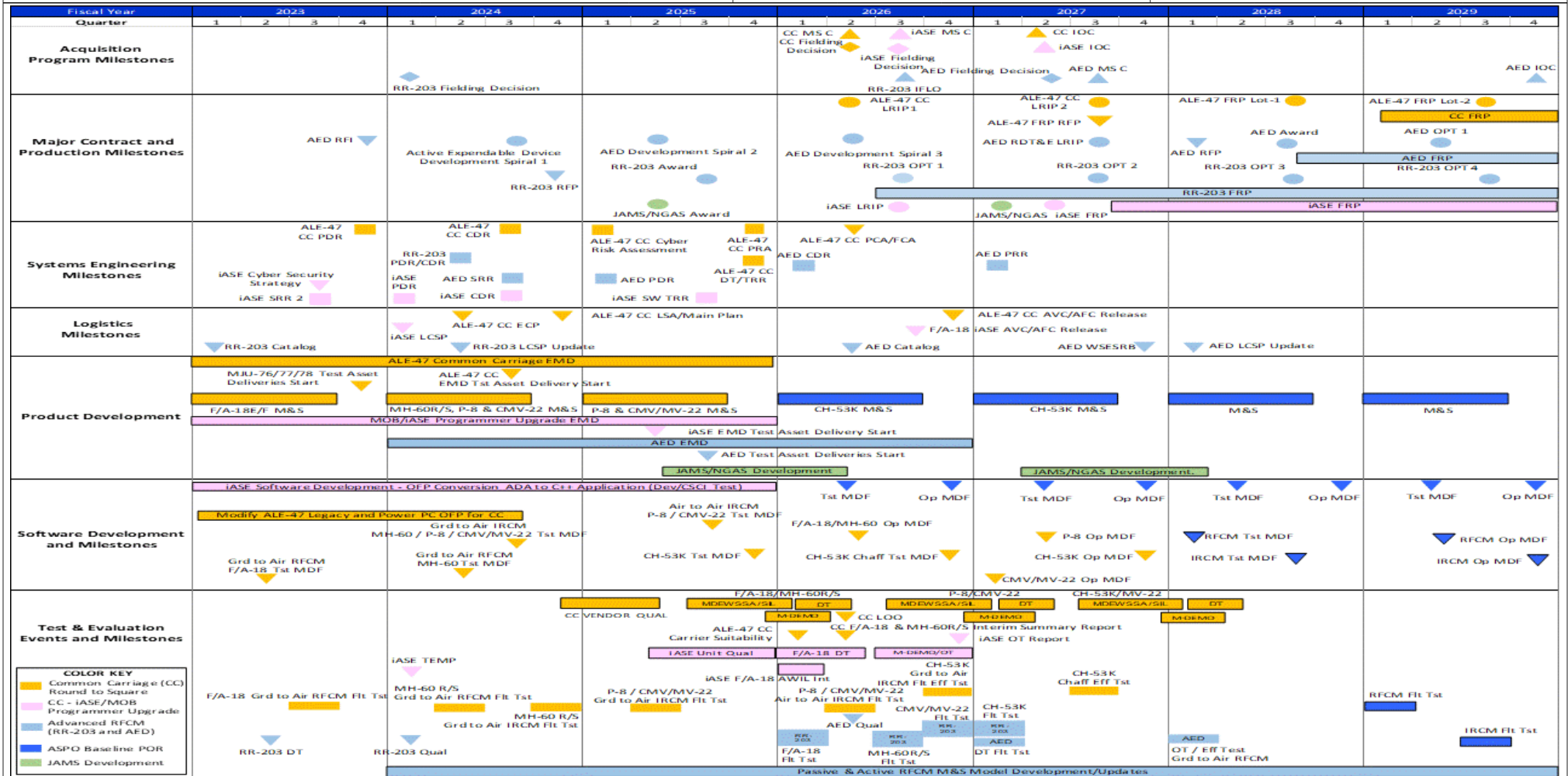
Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy

Date: March 2024

Appropriation/Budget Activity  
1319 / 5

R-1 Program Element (Number/Name)  
PE 0604270N / Electronic Warfare (EW) De  
v

Project (Number/Name)  
3309 / Assault Survivability Optimization



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Assault Survivability Optimization</b>				
Acquisition Program and Major Contract Milestones: RR-203 Fielding Decision	1	2024	1	2024
Acquisition Program and Major Contract Milestones: Active Expended Device (AED) Development Contact Spiral 1	3	2024	3	2024
Acquisition Program and Major Contract Milestones: RR-203 Request For Proposal (RFP)	4	2024	4	2024
Acquisition Program and Major Contract Milestones: Joint Airborne Mission Survivability (JAMS)/Next Generation Air Survivability (NGAS) Contract Award	2	2025	2	2025
Acquisition Program and Major Contract Milestones: AEM Development Spiral 2	2	2025	2	2025
Acquisition Program and Major Contract Milestones: RR-203 Full Rate Production (FRP)	3	2025	3	2025
Acquisition Program and Major Contract Milestones: CC Milestone (MS) C	2	2026	2	2026
Acquisition Program and Major Contract Milestones: ALE-47 CC Low Rate Initial Production (LRIP) 1	2	2026	2	2026
Acquisition Program and Major Contract Milestones: CC Fielding Decision	2	2026	2	2026
Acquisition Program and Major Contract Milestones: AED Development Spiral 3	2	2026	2	2026
Acquisition Program and Major Contract Milestones: RR-203 Initial Fleet Load Out (IFLO)	3	2026	3	2026
Acquisition Program and Major Contract Milestones: RR-203 OPT 1	3	2026	3	2026
Acquisition Program and Major Contract Milestones: iASE Milestone (MS) C	3	2026	3	2026
Acquisition Program and Major Contract Milestones: iASE Fielding Decision	3	2026	3	2026
Acquisition Program and Major Contract Milestones: iASE LRIP	3	2026	3	2026
Acquisition Program and Major Contract Milestones: JAMS/NGAS Contract Award FY27	1	2027	1	2027

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**Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Acquisition Program and Major Contract Milestones: CC Initial Operational Capability (IOC)	2	2027	2	2027
Acquisition Program and Major Contract Milestones: iASE IOC	2	2027	2	2027
Acquisition Program and Major Contract Milestones: AED Fielding Decision	2	2027	2	2027
Acquisition Program and Major Contract Milestones: iASE FRP	2	2027	2	2027
Acquisition Program and Major Contract Milestones: ALE-47 CC LRIP 2	3	2027	3	2027
Acquisition Program and Major Contract Milestones: ALE-47 CC FRP RFP	3	2027	3	2027
Acquisition Program and Major Contract Milestones: AED MS C	3	2027	3	2027
Acquisition Program and Major Contract Milestones: AED RDT&E LRIP	3	2027	3	2027
Acquisition Program and Major Contract Milestones: RR-203 OPT 2	3	2027	3	2027
Acquisition Program and Major Contract Milestones: AED RFP	1	2028	1	2028
Acquisition Program and Major Contract Milestones: AED FRP Award	3	2028	3	2028
Acquisition Program and Major Contract Milestones: ALE-47 CC FRP Lot 1	3	2028	3	2028
Acquisition Program and Major Contract Milestones: RR-203 OPT 3	3	2028	3	2028
Acquisition Program and Major Contract Milestones: AED OPT 1	2	2029	2	2029
Acquisition Program and Major Contract Milestones: RR-203 OPT 4	3	2029	3	2029
Acquisition Program and Major Contract Milestones: ALE-47 CC RFP Lot 2	3	2029	3	2029
Acquisition Program and Major Contract Milestones: AED IOC	4	2029	4	2029
Systems Engineering Milestones: iASE System Requirement Review (SRR) 2	3	2023	3	2023
Systems Engineering Milestones: iASE Cyber Security Strategy	3	2023	3	2023
Systems Engineering Milestones: ALE-47 CC Preliminary Design Review (PDR)	4	2023	4	2023
Systems Engineering Milestones: iASE PDR	1	2024	1	2024
Systems Engineering Milestones: RR-203 PDR/CDR	2	2024	2	2024
Systems Engineering Milestones: ALE-47 CC Critical Design Review (CDR)	3	2024	3	2024
Systems Engineering Milestones: iASE CDR	3	2024	3	2024
Systems Engineering Milestones: AED SRR	3	2024	3	2024

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**Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Systems Engineering Milestones: ALE-47 CC Cyber Risk Assessment	1	2025	1	2025
Systems Engineering Milestones: AED PDR	1	2025	1	2025
Systems Engineering Milestones: iASE Software (SW) Test Readiness Review (TRR)	3	2025	3	2025
Systems Engineering Milestones: ALE-47 CC Program Readiness Assessment (PRA)	4	2025	4	2025
Systems Engineering Milestones: ALE-47 CC Developmental Test (DT)/Test Readiness Review (TRR)	4	2025	4	2025
Systems Engineering Milestones: AED CDR	1	2026	1	2026
Systems Engineering Milestones: ALE-47 CC Physical Configuration Audit (PCA)/ Functional Configuration Audit (FCA)	2	2026	2	2026
Systems Engineering Milestones: AED Program Readiness Review (PRR)	1	2027	1	2027
Logistics Milestones: RR-203 Catalog	1	2023	1	2023
Logistics Milestones: iASE Life Cycle Sustainment Plan (LCSP)	1	2024	1	2024
Logistics Milestones: ALE-47 Engineering Change Proposal (ECP)	2	2024	2	2024
Logistics Milestones: RR-203 LCSP Update	2	2024	2	2024
Logistics Milestones: ALE-47 CC Logistic Support Analysis (LSA)/Maintenance Plan	4	2024	4	2024
Logistics Milestones: AED Catalog	2	2026	2	2026
Logistics Milestones: F/A-18 iASE AVC/AFC Release	3	2026	3	2026
Logistics Milestones: ALE-47 CC Avionics/Airframe Change Release	4	2026	4	2026
Logistics Milestones: AED Weapon Systems Explosive Safety Review Board (WSERB)	4	2027	4	2027
Logistics Milestones: AED LCSP Update	1	2028	1	2028
Product Development and Platform Qualification: MJU-76/77/78 CC Test Assets Delivery Start	4	2023	4	2023
Product Development and Platform Qualification: ALE-47 CC Test Assets Delivery Start	3	2024	3	2024
Product Development and Platform Qualification: iASE EMD Test Assets Delivery Start	2	2025	2	2025
Product Development and Platform Qualification: AED Test Assets Delivery Start	3	2025	3	2025

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**Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Software Development And Milestones: FY23 F/A-18 Test Mission Data Files	2	2023	2	2023
Software Development And Milestones: FY24 MH-60R/S Test Mission Data Files RFCM	2	2024	2	2024
Software Development And Milestones: FY24 P-8/CMV-22/MH-60/MV-22 Test Mission Data Files IRCM	3	2024	3	2024
Software Development And Milestones: FY25 P-8/CMV-22 Test Mission Data Files	3	2025	3	2025
Software Development And Milestones: FY-25 CH-53K Test Mission Data File	4	2025	4	2025
Software Development And Milestones: FY26 F/A-18 Operational MDF	2	2026	2	2026
Software Development And Milestones: FY26 MH-60 Operational MDF	2	2026	2	2026
Software Development And Milestones: FY26 Test MDF	2	2026	2	2026
Software Development And Milestones: FY26 Operational MDF	4	2026	4	2026
Software Development And Milestones: FY26 CH-53K Test MDF RFCM	4	2026	4	2026
Software Development And Milestones: FY27 CMV-22/MV-22 Operational MDF	1	2027	1	2027
Software Development And Milestones: FY27 Test MDF	2	2027	2	2027
Software Development And Milestones: FY26 P-8 Operational MDF	2	2027	2	2027
Software Development And Milestones: FY27 Operational MDF	4	2027	4	2027
Software Development And Milestones: FY27 CH-53K Operational MDF	4	2027	4	2027
Software Development And Milestones: FY28 RFCM Test MDF	1	2028	1	2028
Software Development And Milestones: FY28 Test MDF	2	2028	2	2028
Software Development And Milestones: FY28 IRCM Test MDF	3	2028	3	2028
Software Development And Milestones: FY28 Operational MDF	4	2028	4	2028
Software Development And Milestones: FY29 RFCM Operational MDF	2	2029	2	2029
Software Development And Milestones: FY29 Test MDF	2	2029	2	2029
Software Development And Milestones: FY29 IRCM Operational MDF	4	2029	4	2029
Software Development And Milestones: FY29 Operational MDF	4	2029	4	2029
Test and Evaluation Events and Milestones: RR-203 DT	2	2023	2	2023

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**Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 3309 / <i>Assault Survivability Optimization</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Test and Evaluation Events and Milestones: Flight Test F/A-18 Grd-to-Air RFCM	3	2023	3	2023
Test and Evaluation Events and Milestones: iASE Test and Evaluation Master Plan (TEMP)	1	2024	1	2024
Test and Evaluation Events and Milestones: RR-203 Qualification	1	2024	1	2024
Test and Evaluation Events and Milestones: Flight Test MH-60R/S Grd-to-Air RFCM	2	2024	2	2024
Test and Evaluation Events and Milestones: Flight Test MH-60R/S Grd-to-Air IRCM	4	2024	4	2024
Test and Evaluation Events and Milestones: Flight Test P-8/CMV-22/MV-22 Grd-to-Air IRCM	2	2025	2	2025
Test and Evaluation Events and Milestones: ALE-47 CC Carrier Suitability	1	2026	1	2026
Test and Evaluation Events and Milestones: F/A-18 RR-203 Flight Test	1	2026	1	2026
Test and Evaluation Events and Milestones: ALE-47 CC Letter of Observation (LOO)	2	2026	2	2026
Test and Evaluation Events and Milestones: AED Qualification	2	2026	2	2026
Test and Evaluation Events and Milestones: ALE-47 CC F/A-18 & MH-60 Interim Summary Report	2	2026	2	2026
Test and Evaluation Events and Milestones: Flight Test P-8/CMV-22/MV-22 Air-to-Air IRCM	2	2026	2	2026
Test and Evaluation Events and Milestones: MH-60 RR-203 Flight Test	3	2026	3	2026
Test and Evaluation Events and Milestones: iASE Operational Test (OT) Report	4	2026	4	2026
Test and Evaluation Events and Milestones: CH-53K Grd-to-Air IRCM Flight Test	4	2026	4	2026
Test and Evaluation Events and Milestones: CMV-22/MV-22 RR-203 Flight Test	4	2026	4	2026
Test and Evaluation Events and Milestones: CH-53K RR-203 Flight Test	1	2027	1	2027
Test and Evaluation Events and Milestones: AED DT RFCM Flight Test	1	2027	1	2027
Test and Evaluation Events and Milestones: CH-53K RFCM Flight Test	3	2027	3	2027
Test and Evaluation Events and Milestones: AED OT Grd-to-Air Flight Test	1	2028	1	2028
Test and Evaluation Events and Milestones: RFCM Flight Test	1	2029	1	2029
Test and Evaluation Events and Milestones: IRCM Flight Test	3	2029	3	2029

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Development</i>				<b>Project (Number/Name)</b> 3327 / <i>MAGTF EW Aviation Development</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3327: <i>MAGTF EW Aviation Development</i>	81.443	15.052	14.581	14.933	-	14.933	15.251	15.754	16.402	16.748	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

This project unit supports the United States Marine Corps (USMC) development of Marine Air Ground Task Force (MAGTF) Electronic Warfare (EW) and the various elements of its distributed System of Systems (SoS). The SoS addresses MAGTF EW sufficiency gaps in the areas of Electronic Attack (EA) and Electronic Warfare Support (ES) with a multitude of payloads designed for carriage on a variety of organic MAGTF air assets. Payload development plans follow an adaptable, modular and open architecture philosophy to combat the increasing capability gap and enable future growth at a reduced operational and sustainment cost. A key element to this capability is the AN/ALQ-231(V) Intrepid Tiger II program.

The AN/ALQ-231(V)1 pod is the variant of the Intrepid Tiger II pod flown on the AV-8B, F/A-18A-D, and KC-130J platforms. The AN/ALQ-231(V)3 is the variant of the Intrepid Tiger II pod flown on the UH-1Y platform, with plans for future integration on AH-1Z platforms. Plans include future integration of AN/ALQ-231(V) Block X advanced capability and counter-radar upgrades on USMC tilt rotor, fixed wing, rotary wing and unmanned aircraft. The AN/ALQ-231(V)4 is the first implementation of Block X upgrades on MV-22B aircraft and future BLK X integration is planned to include payloads for KC-130J, MQ-9, CH-53K, and AH-1Z platforms. All payload variants are capable of conducting, supporting, and coordinating Electro-Magnetic Spectrum (EMS) operations in the form of EA and ES against Irregular Warfare threats. Additionally, all payloads are scalable and adaptable for emerging threats and are interoperable with the USMC's Electronic Warfare Services Architecture (EWSA). The Intrepid Tiger II capability is designed to be integrated for MAGTF tactical coordination of cyberspace and EW operations via the Cyber Electronic Warfare Coordination Cell (CEWCC).

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<b>Title:</b> Intrepid Tiger II (AN/ALQ-231)	15.052	14.581	14.933	0.000	14.933
<b>Articles:</b>	-	-	-	-	-
<b>Description:</b> The program will develop, mature, and test Intrepid Tiger II based solutions to radar threats in support of the penetrating jammer mission with plans to release variants of the AN/ALQ-231(V) BLK X Radar Jammer for use on the MV-22 and KC-130J, as well as for future use on other USMC fixed wing, rotary wing, and unmanned aircraft.					
<b>FY 2024 Plans:</b> FY 2024 efforts will include the continuation of KC-130J BLK X hardware and software development, fabrication of prototypes, and continued test and evaluation of counter-radar technique performance of BLK X on KC-130J					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3327 / <i>MAGTF EW Aviation Development</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
<p>during lab and ground Developmental Test (DT), the correction of DT deficiencies, and reporting in preparation for the commencement of Operational Testing (OT). Complete test of V(4) MV-22 variant. Development of EWSA in support of evolving Intrepid Tiger II target sets and missions will continue in FY 2024.</p> <p><b>FY 2025 Base Plans:</b> FY 2025 efforts include the completion of KC-130J BLK X hardware and software development with the fabrication of Engineering Development Models to support test and evaluation of counter-radar technique performance of BLK X on KC-130J during airborne Developmental Test (DT) flights, the correction of DT deficiencies, and reporting in preparation for Operational Testing (OT). Development of EWSA in support of evolving Intrepid Tiger II target sets and missions will continue in FY 2025. Development, integration and testing of advanced capabilities into IT-II variants. Development of follow-on platform BLK X hardware and software integration will commence in FY 2025.</p> <p><b>FY 2025 OCO Plans:</b> N/A</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding increase from FY 2024 to FY 2025 due to start of Block X Follow-on Hardware and Software Development &amp; Platform Integration.</p>					
<b>Accomplishments/Planned Programs Subtotals</b>	15.052	14.581	14.933	0.000	14.933

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APN/0587: <i>MAGTF EW For Aviation</i>	24.684	24.901	25.597	-	25.597	26.114	26.656	27.758	28.345	143.960	552.676

**Remarks**

**D. Acquisition Strategy**  
This project unit is part of USMC led efforts to ensure Marine Corps requirements are included in the budget process for the Future Year Defense Program and beyond. These efforts include AN/ALQ-231(V) Intrepid Tiger II Family of Systems, Collaborative Electronic Warfare (EW)/EW Battle Management, and EW Service Architecture (EWSA). These programs are the Marine Corps' initial steps to create systems to distribute EW capability across the battlespace.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Navy</b>											<b>Date: March 2024</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v					<b>Project (Number/Name)</b> 3327 / <i>MAGTF EW Aviation Development</i>				

<b>Product Development (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Intrepid Tiger BLK X Hardware Development	WR	NAWCWD : Point Mugu, CA	19.597	4.311	Nov 2022	3.554	Nov 2023	3.693	Nov 2024	-		3.693	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCAD : Patuxent River, MD	5.149	1.294	Nov 2022	1.320	Nov 2023	1.348	Nov 2024	-		1.348	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCWD : Point Mugu, CA	40.772	5.734	Nov 2022	6.527	Nov 2023	6.646	Nov 2024	-		6.646	Continuing	Continuing	Continuing
Systems Engineering	WR	Various : Various	0.270	0.535	Nov 2022	0.564	Nov 2023	0.575	Nov 2024	-		0.575	Continuing	Continuing	Continuing
Prior Year Prod Dev no longer funded in FYDP	Various	Various : Various	0.007	0.000		0.000		0.000		-		0.000	0.000	0.007	-
<b>Subtotal</b>			65.795	11.874		11.965		12.262		-		12.262	Continuing	Continuing	N/A

**Remarks**  
Funding increase from FY 2024 to FY 2025 due to start of Block X Follow-on Hardware and Software Development & Platform Integration.

<b>Support (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Eng & Tech Services	Various	Various : Various	2.088	0.559	Nov 2022	0.533	Nov 2023	0.544	Nov 2024	-		0.544	Continuing	Continuing	Continuing
Prior year Support no longer funded in FYDP	Various	Various : Various	0.516	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
<b>Subtotal</b>			2.604	0.559		0.533		0.544		-		0.544	Continuing	Continuing	N/A

**Remarks**  
Funding increases from FY 2024 to FY 2025 due to inflation.

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : Patuxent River, MD	3.098	0.884	Nov 2022	1.122	Nov 2023	1.146	Nov 2024	-		1.146	Continuing	Continuing	Continuing

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2025 Navy</b>											<b>Date: March 2024</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v					<b>Project (Number/Name)</b> 3327 / <i>MAGTF EW Aviation Development</i>				

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : Point Mugu, CA	9.280	1.677	Nov 2022	0.902	Nov 2023	0.921	Nov 2024	-		0.921	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	Various	Various : Various	0.608	0.050	Nov 2022	0.051	Nov 2023	0.052	Nov 2024	-		0.052	Continuing	Continuing	Continuing
<b>Subtotal</b>			12.986	2.611		2.075		2.119		-		2.119	Continuing	Continuing	N/A

**Remarks**  
Funding increases from FY 2024 to FY 2025 due to inflation.

<b>Management Services (\$ in Millions)</b>				<b>FY 2023</b>		<b>FY 2024</b>		<b>FY 2025 Base</b>		<b>FY 2025 OCO</b>		<b>FY 2025 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Travel	Various	Various : Various	0.058	0.008	Nov 2022	0.008	Nov 2023	0.008	Nov 2024	-		0.008	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.058	0.008		0.008		0.008		-		0.008	Continuing	Continuing	N/A

<b>Project Cost Totals</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
	81.443	15.052	14.581	14.933	-	14.933	Continuing	Continuing	N/A

**Remarks**

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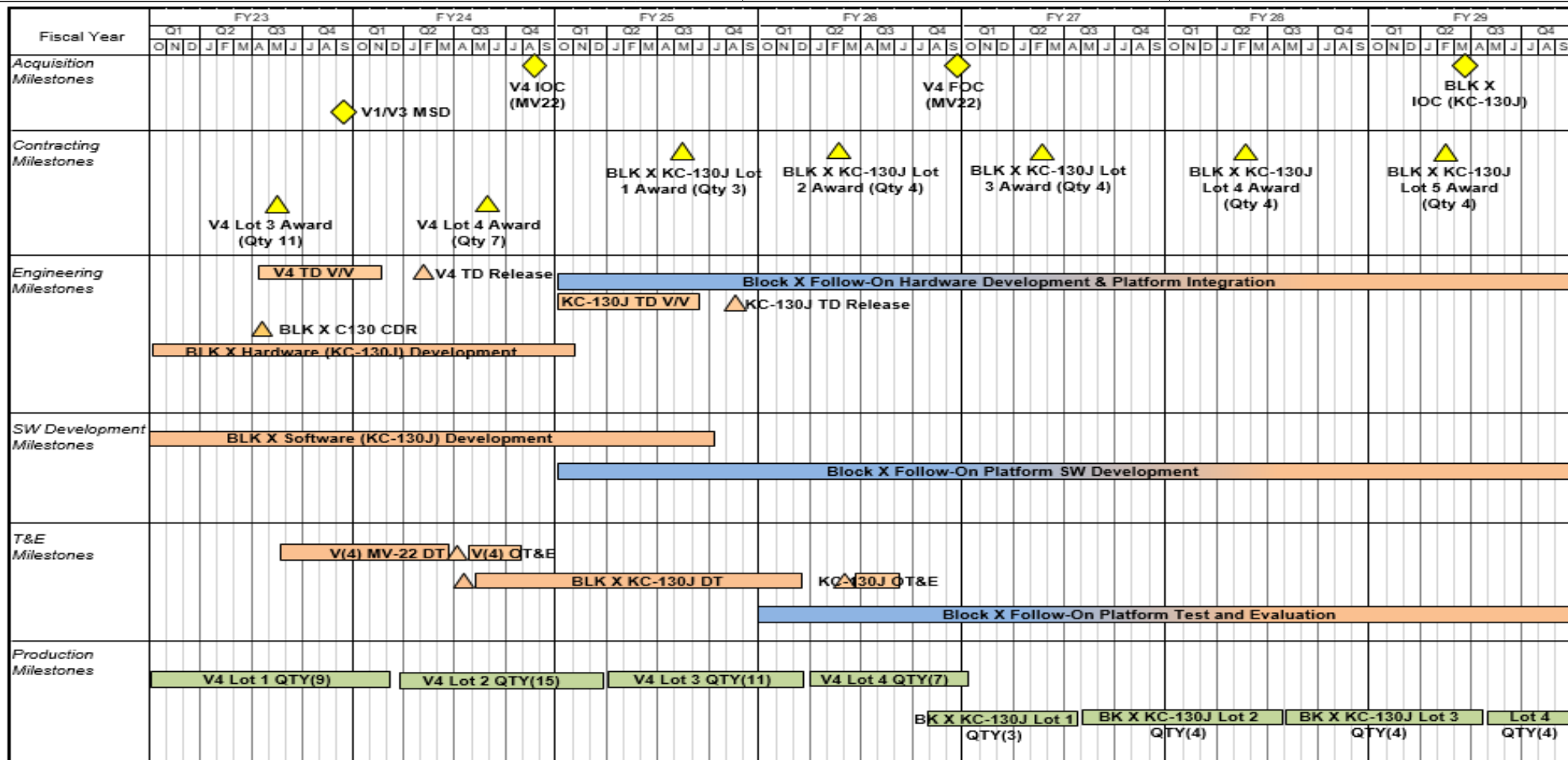
Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy

Date: March 2024

Appropriation/Budget Activity  
1319 / 5

R-1 Program Element (Number/Name)  
PE 0604270N / *Electronic Warfare (EW) De*  
v

Project (Number/Name)  
3327 / *MAGTF EW Aviation Development*



▲ Technology Development Activities    ▲ Engineering & Manufacturing Dev Activities    ▲ Production & Deployment Activities

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3327 / <i>MAGTF EW Aviation Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Intrepid Tiger II (AN/ALQ-231)</i></b>				
Engineering Milestones: AN/ALQ-231(V)4 TD Fleet Release	2	2024	2	2024
Engineering Milestones: AN/ALQ-231(V)1 BLK X KC-130J TD Fleet Release	4	2025	4	2025
Systems Development: AN/ALQ-231(V)1 BLK X KC-130J Hardware Development	1	2023	1	2025
Systems Development: AN/ALQ-231(V)1 BLK X Software Development	1	2023	3	2025
Systems Development: BLK X Follow-On Hardware Development & Platform Integration	1	2025	4	2029
Systems Development: BLK X Follow-On Software Development	1	2025	4	2029
Test & Evaluation: AN/ALQ-231(V)4 MV-22 Developmental Test (DT)	3	2023	2	2024
Test & Evaluation: AN/ALQ-231(V)4 OT&E	3	2024	4	2024
Test & Evaluation: AN/ALQ-231(V)1 BLK X KC-130J Developmental Test	3	2024	1	2026
Test & Evaluation: AN/ALQ-231(V)1 BLK X KC-130J OT&E	2	2026	3	2026
Test & Evaluation: BLK X Follow-On Test and Evaluation	1	2026	4	2029
<b><i>Production Milestones</i></b>				
AN/ALQ-231(V)4 Production Lot 3 (Qty 11)	3	2023	3	2023
AN/ALQ-231(V)4 Production Lot 4 (Qty 7)	3	2024	3	2024
AN/ALQ-231(V)1 BLK X KC-130J Production Lot 1 (Qty 3)	3	2025	3	2025
AN/ALQ-231(V)1 BLK X KC-130J Production Lot 2 (Qty 4)	2	2026	2	2026
AN/ALQ-231(V)1 BLK X KC-130J Production Lot 3 (Qty 4)	2	2027	2	2027
AN/ALQ-231(V)1 BLK X KC-130J Production Lot 4 (Qty 4)	2	2028	2	2028
AN/ALQ-231(V)1 BLK X KC-130J Production Lot 5 (Qty 4)	2	2029	2	2029
Deliveries: AN/ALQ-231(V)4 Lot 1 Deliveries (Qty 9)	1	2023	1	2024

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 3327 / <i>MAGTF EW Aviation Development</i>

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Deliveries: AN/ALQ-231(V)4 Lot 2 Deliveries (Qty 15)	1	2024	1	2025
Deliveries: AN/ALQ-231(V)4 Lot 3 Deliveries (Qty 11)	2	2025	1	2026
Deliveries: AN/ALQ-231(V)4 Lot 4 Deliveries (Qty 7)	1	2026	1	2027
Deliveries: AN/ALQ-231(V)1 BLK X KC-130J Production Lot 1 (Qty 3)	4	2026	3	2027
Deliveries: AN/ALQ-231(V)1 BLK X KC-130J Production Lot 2 (Qty 4)	3	2027	3	2028
Deliveries: AN/ALQ-231(V)1 BLK X KC-130J Production Lot 3 (Qty 4)	3	2028	3	2029
Deliveries: AN/ALQ-231(V)1 BLK X KC-130J Production Lot 4 (Qty 4)	3	2029	4	2029

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Navy **Date:** March 2024

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) Dev</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.000	9.653	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.653
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

FY 2023 Congressional Add: Filter Technology for Electronic Warfare Mitigation.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2023	FY 2024
<b>Congressional Add:</b> Filter technology for electronic warfare mitigation	9.653	0.000
<b>FY 2023 Accomplishments:</b> Funding will support Congressional Add efforts for filter technology for electronic warfare mitigation.		
<b>FY 2024 Plans:</b> N/A		
<b>Congressional Adds Subtotals</b>	9.653	0.000

**C. Other Program Funding Summary (\$ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

FY 2023 Congressional Add for Filter Technology for Electronic Warfare Mitigation.



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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>

FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

<b>Proj 9999</b>	
Filter Technology for Electronic Warfare Mitigation: Filter Technology for Electronic Warfare Mitigation	

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Navy		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604270N / <i>Electronic Warfare (EW) De</i> v	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 9999</b>				
Filter Technology for Electronic Warfare Mitigation: Filter Technology for Electronic Warfare Mitigation	3	2023	4	2024