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

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</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	15.545	96.337	108.225	99.940	-	99.940	52.690	31.796	25.344	25.876	Continuing	Continuing
3448: <i>Marine Group 5 UAS Development</i>	15.545	94.406	108.225	99.940	-	99.940	52.690	31.796	25.344	25.876	Continuing	Continuing
9999: <i>Congressional Adds</i>	0.000	1.931	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.931

Note

The FY 2025 MALE program funding addresses Tier 1 capability gaps identified in the October 2016 MUX ICD and April 2020 MUX Requirements Clarification document.

A. Mission Description and Budget Item Justification

Project 3448 - The first Marine Air Ground Task Force (MAGTF) Unmanned Aircraft System (UAS) Expeditionary (MUX) Family of Systems (FoS) element is Medium-Altitude, Long-Endurance (MALE), a land-based Group 5 UAS based on the MQ-9A weapon system.

MALE provides Intelligence, Surveillance and Reconnaissance (ISR) in support of Expeditionary Advanced Base Operations (EABO), Littoral Operations in Contested Environments (LOCE), and Distributed Maritime Operations (DMO) and an advanced, unmanned, multi-mission capability for the MAGTF and Marine Littoral Regiment (MLR).

MALE will award contracts for initial MQ-9A mission capabilities (payloads/sensors) design, development and integration with payloads supporting Tier 1 mission capabilities. Payload/sensor capabilities consists of Common Operating and Intelligence Picture (COP/CIP) development and integration, Detect And Avoid System (DAAS), Airborne Network Extension (ANE)/ SkyTower II, Electronic Warfare (EW), Maritime Domain Awareness (MDA), and Proliferated Low Earth Orbit (PLEO).

The USMC MALE program will be supported by UX-24 as the primary test activity/squadron for capability development as well as system modification validation efforts. UX-24 will provide direct support of testing associated with payloads/sensors in support of USMC requirements. The payloads/sensors which undergo testing may require or drive hardware and software modifications during testing to satisfy system, subsystem and component level test parameters.

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

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>
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B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	98.883	108.225	111.698	-	111.698
Current President's Budget	96.337	108.225	99.940	-	99.940
Total Adjustments	-2.546	0.000	-11.758	-	-11.758
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.546	0.000			
• Program Adjustments	0.000	0.000	-11.779	-	-11.779
• Rate/Misc Adjustments	0.000	0.000	0.021	-	0.021

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

Project: 9999: *Congressional Adds*

Congressional Add: *Autonomous maritime patrol aircraft*

	FY 2023	FY 2024
Congressional Add Subtotals for Project: 9999	1.931	0.000
Congressional Add Totals for all Projects	1.931	0.000

Change Summary Explanation

FY 2025 decrease of \$11.758M is a net result of program phasing adjustments in support of hardware development efforts and reductions to support higher USMC priorities.

Schedule: DAAS development timeline extended from quarter one (Q1) FY 2025 to quarter one (Q1) FY 2026 due to additional time associated with airworthiness and certification. SkyTower II extended to from quarter one (Q1) FY 2025 to quarter three (Q3) FY 2025 due to increased scope to develop two additional SkyTower II developmental pods to help meet objectives in INDOPACOM on required timeline. MDA development timeline extended from quarter two (Q2) to quarter one (Q1) FY 2026 due to schedule refinement with OEM. Payload modernization capability improvement is required to improve capabilities to match the pacing threat and realized full capability of MUX/MALE. Production quantities updated for all capabilities per current procurement plan.

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>				Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>			
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
3448: <i>Marine Group 5 UAS Development</i>	15.545	94.406	108.225	99.940	-	99.940	52.690	31.796	25.344	25.876	Continuing	Continuing
Quantity of RDT&E Articles		7	3	2	-	2	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY 2025 MALE program funding, PE 0603128N, addresses Tier 1 capability gaps identified in the October 2016 MUX ICD and April 2020 MUX Requirements Clarification document.

Project 3448 - The first Marine Air Ground Task Force (MAGTF) Unmanned Aircraft System (UAS) Expeditionary (MUX) Family of Systems (FoS) element is Medium-Altitude, Long-Endurance (MALE), a land-based Group 5 UAS based on the MQ-9A weapon system.

MALE provides Intelligence, Surveillance and Reconnaissance (ISR) in support of Expeditionary Advanced Base Operations (EABO), Littoral Operations in Contested Environments (LOCE), and Distributed Maritime Operations (DMO) and an advanced, unmanned, multi-mission capability for the MAGTF and Marine Littoral Regiment.

MALE will award contracts for initial MQ-9A mission capabilities (payloads/sensors) design, development and integration with payloads supporting Tier 1 mission capabilities. Payload/sensor capabilities consists of Common Operating and Intelligence Picture (COP/CIP) development and integration, Detect And Avoid System (DAAS), Airborne Network Extension (ANE)/ SkyTower II, Electronic Warfare (EW), Maritime Domain Awareness (MDA), Proliferated Low Earth Orbit (PLEO).

The USMC MALE program will be supported by UX-24 as the primary test activity/squadron for capability development as well as system modification validation efforts. UX-24 will provide direct support of testing associated with payloads/sensors in support of USMC requirements. The payloads/sensors which undergo testing may require or drive hardware and software modifications during testing to satisfy system, subsystem and component level test parameters.

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

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: MALE Primary Hardware/Software Development/Integration	65.712	72.419	71.058	0.000	71.058
Articles:	7	3	2	-	2
Description: Funding supports the development and integration of mission system payloads supporting medium altitude long endurance concept identified within the MUX Initial Capabilities Document (ICD).					
FY 2024 Plans: MALE will support MQ-9A capability and payloads/sensors primary hardware development, Non-Recurring Engineering (NRE), capability integration studies, design work and Air Vehicle and Ground Control Station					

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Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>integration. MALE will also support programmatic, engineering, logistics, technical requirements generation, development test and full integration of payloads/sensors into the system.</p> <p>FY 2025 Base Plans: MALE will support MQ-9A capability and payloads/sensors primary hardware development, Non-Recurring Engineering (NRE), capability integration studies, design work and Air Vehicle and Ground Control Station integration. MALE will also support programmatic, engineering, logistics, technical requirements generation, development test and full integration of payloads/sensors into the system. The program will perform payload development and capability improvements, to include platform and payload software development and test, required to pace evolving threats.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY 2025 decreased by \$1.361 due to transitioning from IOC development to production/FOC for EW and the completion of development for SkyTower II.</p>					
<p>Title: MALE Program Support</p> <p align="right">Articles:</p> <p>Description: Funding provided for support costs associated with mission system payloads supporting medium altitude long endurance concept identified within the MUX Initial Capabilities Document (ICD).</p> <p>FY 2024 Plans: Program, engineering and logistics support for contract award for MQ-9A capability and payload development, capability integration studies, design work, technical requirements generation and full integration of sensors into the system.</p> <p>FY 2025 Base Plans: Program, engineering and logistics support for contract award for MQ-9A capability and payload development, capability integration studies, design work, technical requirements generation and full integration of sensors into the system.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement:</p>	12.497	20.414	18.560	0.000	18.560
	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
FY 2025 decreased by \$1.854 to transition of EW and SkyTower II from development to procurement activities.					
Title: MALE Developmental and Operational Test	16.197	15.392	10.322	0.000	10.322
Articles:	-	-	-	-	-
Description: Funding supports the development and operational testing of mission system payloads supporting medium altitude long endurance concept identified within the MUX Initial Capabilities Document (ICD).					
FY 2024 Plans: FY 2024 Test plan consists of Environmental Electronic Effects, Electro Magnetic Interference, P-Static (Precipitation Static) Condition, Electromagnetic Radiation Hazards Testing, Emitter verification Direct Inject ID and Geolocation, Sensitivity testing of DAAS pod, EW, MDA sensor, and ANE/SkyTower II pod.					
FY 2025 Base Plans: FY 2025 Test plan consists of Environmental Electronic Effects, Electro Magnetic Interference, P-Static (Precipitation Static) Condition, Electromagnetic Radiation Hazards Testing, Emitter verification Direct Inject ID and Geolocation, Sensitivity testing of DAAS pod, EW, MDA sensor, and Airborne Network Extension (ANE)/ SkyTower II pod.					
FY 2025 OCO Plans: N/A					
FY 2024 to FY 2025 Increase/Decrease Statement: FY 2025 decreased by \$5.070 due to completion of the initial EW and SkyTower II Developmental Test.					
Accomplishments/Planned Programs Subtotals	94.406	108.225	99.940	0.000	99.940

C. Other Program Funding Summary (\$ in Millions)	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
Line Item											
• APN/0452: <i>Marine Group 5 UAS (MALE)</i>	103.882	89.563	19.081	-	19.081	16.216	18.503	9.991	10.022	0.000	539.924
• APN/0507: <i>Marine Group 5 UAS (MALE) Mods</i>	86.109	98.063	112.672	-	112.672	216.056	168.477	64.204	65.569	0.000	813.132

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>

D. Acquisition Strategy

The MALE sensor acquisition strategy leverages existing developmental programs with mature technology readiness level (TRL) Airborne Network Extension (ANE)/ SkyTower II, Maritime Domain Awareness (MDA), Electronic Warfare (EW), and Detect And Avoid System (DAAS) capabilities for transition and integration on the MQ-9A UAS. The MALE capabilities (payloads/sensor) acquisition strategy uses organic government resources, competitive and sole-source contract awards, and assisted acquisition approaches, Middle Tier Acquisition and Other Transaction Agreements to develop, integrate, and acquire the discrete capabilities.

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>
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Product Development (\$ in Millions)				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			
Primary Development (Hardware/Software) Detect and Avoid System (DAAS)	C/CPIF	General Atomics : Poway, CA	0.357	0.000		5.371	Feb 2024	6.875	Feb 2025	-		6.875	3.800	16.403	16.403
Primary Development (Hardware/Software) Airborne Network Extension (ANE)/ SkyTower II pod	C/FFP	Global Air Logistics and Training Inc : San Deigo, CA	6.514	35.267	Sep 2023	14.600	Feb 2024	0.000		-		0.000	0.000	56.381	56.466
Primary Development (Hardware/Software) Electronic Warfare (EW)	C/CPIF	General Atomics/L3 : Various	0.850	10.340	Jan 2024	13.400	Feb 2024	5.600	Dec 2024	-		5.600	0.000	30.190	30.250
Primary Development (Hardware/Software) Maritime Domain Awareness (MDA)	C/BA	TBD : TBD	0.000	8.000	Aug 2023	30.318	Feb 2024	35.601	Dec 2024	-		35.601	24.046	97.965	98.965
DAAS Sensor Integration	C/CPIF	General Atomics : Poway, CA	0.000	0.000		1.704	Feb 2024	2.875	Feb 2025	-		2.875	0.000	4.579	4.579
Electronic Warfare (EW) Integration	C/CPIF	General Atomics/L3 : Various	0.000	16.226	Jul 2023	4.700	Jan 2024	8.800	Dec 2024	-		8.800	19.800	49.526	45.260
Maritime Domain Awareness (MDA) Integration	Various	TBD : TBD	0.000	0.000		2.338	Feb 2024	3.888	Dec 2024	-		3.888	15.085	21.311	21.311
Primary Development / Integration Tactical Common Operating Picture / Talon Thresher	C/CPIF	General Atomics : Poway, CA	0.856	0.000		0.000		0.000		-		0.000	0.000	0.856	0.856
Primary Development (Hardware/Software) PLEO	C/CPFF	General Atomics : Poway, CA	0.000	1.101	Dec 2023	5.400	Feb 2024	9.000	Jun 2025	-		9.000	9.100	24.601	25.500
Subtotal			8.577	70.934		77.831		72.639		-		72.639	71.831	301.812	N/A

Remarks

FY 2025 decrease of \$5.192 is due to completion of IOC development for EW and completion of development efforts for SkyTower II.

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>
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Support (\$ in Millions)				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	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Engineering Support	Various	Various : Various	1.756	3.226	Apr 2023	5.039	Apr 2024	1.000	Apr 2025	-		1.000	Continuing	Continuing	Continuing
Integrated Logistics Support	Various	Various : Various	0.123	0.933	Apr 2023	3.060	Apr 2024	1.000	Apr 2025	-		1.000	Continuing	Continuing	Continuing
Subtotal			1.879	4.159		8.099		2.000		-		2.000	Continuing	Continuing	N/A

Remarks
FY 2025 decrease of \$6.099 is due to transitioning SkyTower II and EW for Engineering Support and Integrated Logistics Support (ILS) to procurement activities.

Test and Evaluation (\$ in Millions)				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)	Various	Various : Various	0.000	6.506	Jan 2023	11.477	Jan 2024	15.966	Jan 2025	-		15.966	31.967	65.916	-
Subtotal			0.000	6.506		11.477		15.966		-		15.966	31.967	65.916	N/A

Remarks
FY 2025 increase of \$4.489 to begin software support with the USAF for the Hardware Integration Lab (HIL) and Systems Integration Lab (SIL) related to payload capability improvement starting in FY 2025.

Management Services (\$ in Millions)				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			
Gov Engineering	C/BA	NAWCAD : Patuxent River, MD	1.788	8.151	Dec 2022	6.324	Nov 2023	5.950	Nov 2024	-		5.950	Continuing	Continuing	Continuing
Program Management Support	C/BA	NAWCAD : Patuxent River, MD	3.301	4.528	Dec 2022	4.111	Nov 2023	3.035	Nov 2024	-		3.035	Continuing	Continuing	Continuing
Travel	C/BA	NAWCAD : Patuxent River, MD	0.000	0.128	Dec 2022	0.383	Nov 2023	0.350	Nov 2024	-		0.350	Continuing	Continuing	Continuing
Subtotal			5.089	12.807		10.818		9.335		-		9.335	Continuing	Continuing	N/A

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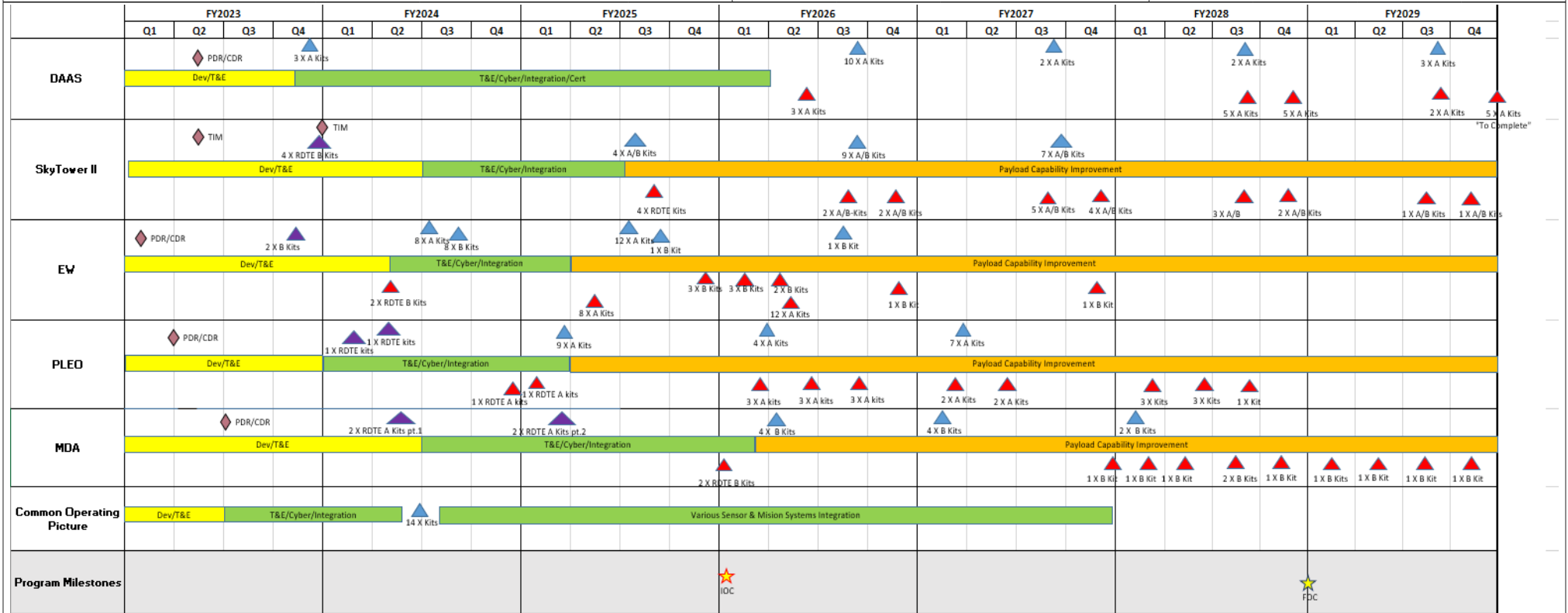
Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy

Date: March 2024

Appropriation/Budget Activity
1319 / 4

R-1 Program Element (Number/Name)
PE 0603128N / Unmanned Aerial System

Project (Number/Name)
3448 / Marine Group 5 UAS Development



- ▲ Pod/Kit Contract award
- ▲ RDTE Contract award
- ◆ Engineering Event
- ▲ Pod/Kit Deliveries

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 3448				
System Development Activites: Detect and Avoid System (DAAS)	1	2023	4	2023
System Development Activites: Airborne Network Extension (ANE) / SkyTower II	1	2023	2	2024
System Development Activites: Proliferated Low Earth Orbit (PLEO)	1	2023	4	2023
System Development Activites: Electronic Warfare (EW) sensor production	1	2023	2	2024
System Development Activites: Maritime Domain Awareness (MDA) Sensor integration	1	2023	2	2024
System Development Activites: Common Operating Picture	1	2023	2	2023
Test and Evaluation Activities: Detect and Avoid System (DAAS)	4	2023	1	2026
Test and Evaluation Activities: Airborne Network Extension (ANE) / SkyTower II	3	2024	2	2025
Test and Evaluation Activities: Airborne Network Extension (ANE) / SkyTower II RDT&E Award Pods	4	2023	4	2023
Test and Evaluation Activities: Airborne Network Extension (ANE) / SkyTower II RDT&E Delivery Pods	3	2025	3	2025
Test and Evaluation Activities: Proliferated Low Earth Orbit (PLEO)	1	2024	1	2025
Test and Evaluation Activities: Proliferated Low Earth Orbit (PLEO) RDTE Award FY23 Kits	1	2024	1	2024
Test and Evaluation Activities: Proliferated Low Earth Orbit (PLEO) RDTE Award FY24 Kits	2	2024	2	2024
Test and Evaluation Activities: Proliferated Low Earth Orbit (PLEO) RDTE Delivery FY23 Kits	4	2024	4	2024
Test and Evaluation Activities: Proliferated Low Earth Orbit (PLEO) RDTE Delivery FY24 Kits	1	2025	1	2025
Test and Evaluation Activities: Electronic Warfare (EW)	2	2024	1	2025
Test and Evaluation Activities: Electronic Warfare (EW) sensor production RDT&E Award Pods	4	2023	4	2023

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Test and Evaluation Activities: Electronic Warfare (EW) sensor production RDT&E Delivery Pods	2	2024	2	2024
Test and Evaluation Activities: Maritime Domain Awareness (MDA) Sensor integration	3	2024	1	2026
Test and Evaluation Activities: Maritime Domain Awareness (MDA) RDTE Award Pods Part 1	2	2024	2	2024
Test and Evaluation Activities: Maritime Domain Awareness (MDA) RDTE Award Pods Part 2	1	2025	1	2025
Test and Evaluation Activities: Maritime Domain Awareness (MDA) RDTE Delivery Kits	1	2026	1	2026
Test and Evaluation Activities: Common Operating Picture	3	2023	4	2027
Production Milestones: Detect and Avoid System (DAAS) Lot 1 Award A Kits	4	2023	4	2023
Production Milestones: Detect and Avoid System (DAAS) Lot 2 Award A Kits	3	2026	3	2026
Production Milestones: Detect and Avoid System (DAAS) Lot 3 Award A Kits	3	2027	3	2027
Production Milestones: Detect and Avoid System (DAAS) Lot 4 Award A Kits	3	2028	3	2028
Production Milestones: Detect and Avoid System (DAAS) Lot 5 Award A Kits	3	2029	3	2029
Production Milestones: Detect and Avoid System (DAAS) Lot 1 Delivery A Kits	2	2026	2	2026
Production Milestones: Detect and Avoid System (DAAS) Lot 2 Delivery A Kits	3	2028	3	2028
Production Milestones: Detect and Avoid System (DAAS) Lot 3 Delivery A Kits	4	2028	4	2028
Production Milestones: Detect and Avoid System (DAAS) Lot 4 Delivery A Kits	3	2029	3	2029
Production Milestones: Detect and Avoid System (DAAS) Lot 5 Delivery A Kits	4	2029	4	2029
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 1 Award A/B Kits	3	2025	3	2025
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 2 Award A/B Kits	3	2026	3	2026
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 3 Award A/B Kits	3	2027	3	2027
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 1 Delivery A/B Kits	3	2026	3	2026

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 2 Delivery A/B Kits	4	2026	4	2026
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 3 Delivery A/B Kits	3	2027	3	2027
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 4 Delivery A/B Kits	4	2027	4	2027
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 5 Delivery A/B Kits	3	2028	3	2028
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 6 Delivery A/B Kits	4	2028	4	2028
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 7 Delivery A/B Kits	3	2029	3	2029
Production Milestones: Airborne Network Extension (ANE) / SkyTower II Lot 8 Delivery A/B Kits	4	2029	4	2029
Production Milestones: Electronic Warfare (EW) sensor production Lot 1 Award B Kit	3	2024	3	2024
Production Milestones: Electronic Warfare (EW) sensor production Lot 2 Award B Kit	3	2025	3	2025
Production Milestones: Electronic Warfare (EW) sensor production Lot 3 Award B Kit	3	2026	3	2026
Production Milestones: Electronic Warfare (EW) sensor production Lot 1 Award A Kit	3	2024	3	2024
Production Milestones: Electronic Warfare (EW) sensor production Lot 2 Award A Kit	3	2025	3	2025
Production Milestones: Electronic Warfare (EW) sensor production Lot 1 Delivery B Kit	4	2025	4	2025
Production Milestones: Electronic Warfare (EW) sensor production Lot 2 Delivery B Kit	1	2026	1	2026
Production Milestones: Electronic Warfare (EW) sensor production Lot 3 Delivery B Kit	2	2026	2	2026
Production Milestones: Electronic Warfare (EW) sensor production Lot 4 Delivery B Kit	4	2026	4	2026
Production Milestones: Electronic Warfare (EW) sensor production Lot 5 Delivery B Kit	4	2027	4	2027
Production Milestones: Electronic Warfare (EW) sensor production Lot 1 Delivery A Kit	2	2025	2	2025
Production Milestones: Electronic Warfare (EW) sensor production Lot 2 Delivery A Kit	2	2026	2	2026
Production Milestones: PLEO Lot 1 Award A Kits	2	2025	2	2025
Production Milestones: PLEO Lot 2 Award A Kits	2	2026	2	2026

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: PLEO Lot 3 Award A Kits	2	2027	2	2027
Production Milestones: PLEO Lot 1 Delivery A Kits	1	2026	1	2026
Production Milestones: PLEO Lot 2 Delivery A Kits	2	2026	2	2026
Production Milestones: PLEO Lot 3 Delivery A Kits	3	2026	3	2026
Production Milestones: PLEO Lot 4 Delivery A Kits	1	2027	1	2027
Production Milestones: PLEO Lot 5 Delivery A Kits	2	2027	2	2027
Production Milestones: PLEO Lot 6 Delivery A Kits	1	2028	1	2028
Production Milestones: PLEO Lot 7 Delivery A Kits	2	2028	2	2028
Production Milestones: PLEO Lot 8 Delivery A Kits	3	2028	3	2028
Production Milestones: Maritime Domain Awareness (MDA) Lot 1 Award B Kit	2	2026	2	2026
Production Milestones: Maritime Domain Awareness (MDA) Lot 2 Award B Kit	1	2027	1	2027
Production Milestones: Maritime Domain Awareness (MDA) Lot 3 Award B Kit	1	2028	1	2028
Production Milestones: Maritime Domain Awareness (MDA) Lot 1 Delivery B Kit	4	2027	4	2027
Production Milestones: Maritime Domain Awareness (MDA) Lot 2 Delivery B Kit	1	2028	1	2028
Production Milestones: Maritime Domain Awareness (MDA) Lot 3 Delivery B Kit	2	2028	2	2028
Production Milestones: Maritime Domain Awareness (MDA) Lot 4 Delivery B Kit	3	2028	3	2028
Production Milestones: Maritime Domain Awareness (MDA) Lot 5 Delivery B Kit	4	2028	4	2028
Production Milestones: Maritime Domain Awareness (MDA) Lot 6 Delivery B Kit	1	2029	1	2029
Production Milestones: Maritime Domain Awareness (MDA) Lot 7 Delivery B Kit	2	2029	2	2029
Production Milestones: Maritime Domain Awareness (MDA) Lot 8 Delivery B Kit	3	2029	3	2029
Production Milestones: Maritime Domain Awareness (MDA) Lot 9 Delivery B Kit	4	2029	4	2029
Production Milestones: Common Operating Picture Lot 1 Kit	2	2024	2	2024
MALE Program Milestones: Initial Operational Capability (IOC)	1	2026	1	2026
MALE Program Milestones: Full Operational Capability (FOC)	4	2028	4	2028
MALE Program Milestones: Detect and Avoid System (DAAS) PDR/CDR	2	2023	2	2023
MALE Program Milestones: Airborne Network Extension (ANE) / SkyTower II TIM1	2	2023	2	2023

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Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 3448 / <i>Marine Group 5 UAS Development</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
MALE Program Milestones: Airborne Network Extension (ANE) / SkyTower II TIM 2	4	2023	4	2023
MALE Program Milestones: Proliferated Low Earth Orbit (PLEO) PDR/CDR	2	2023	2	2023
MALE Program Milestones: Electronic Warfare (EW) sensor PDR/CDR	1	2023	1	2023
MALE Program Milestones: Maritime Domain Awareness (MDA) Sensor PDR/CDR	3	2023	3	2023
Payload Capability Improvement: Airborne Network Extension (ANE) / SkyTower II	3	2025	4	2029
Payload Capability Improvement: Proliferated Low Earth Orbit (PLEO)	2	2025	4	2029
Payload Capability Improvement: Electronic Warfare (EW) sensor	2	2025	4	2029
Payload Capability Improvement: Maritime Domain Awareness (MDA) Sensor	1	2026	4	2029

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>				Project (Number/Name) 9999 / <i>Congressional Adds</i>			
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	1.931	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	1.931
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Autonomous Maritime Patrol Aircraft (AMPA) project provides funding to address capability gaps identified in the 2025 Fleet and COCOM Integrated Priority Lists (IPLs), including a need for persistent Command, Control, and Communications (C3) and Intelligence, Surveillance, and Reconnaissance (ISR) capabilities. This ultra-long endurance (ULE) solar-powered unmanned aerial system (UAS) is executing Phase 1 of a Joint Capability Technology Demonstration (JCTD). At the culmination of the JCTD, the AMPA demonstration variant of the aircraft is intended to have a 90+ day endurance, up to an 800-pound payload capacity, and enough electrical power available (target goal is 2kW) to simultaneously operate a suite of C3 and ISR payloads.

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

	FY 2023	FY 2024
Congressional Add: Autonomous maritime patrol aircraft	1.931	0.000
FY 2023 Accomplishments: Planned efforts include conducting design refinement activities, systems engineering, architecture studies, sustainment analysis, and fleet experimentation to inform future integration approaches and decisions for platform, payload, autonomous mission control capabilities, ground control stations, networking and communications infrastructure development.		
FY 2024 Plans: N/A		
Congressional Adds Subtotals	1.931	0.000

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

N/A

Remarks

D. Acquisition Strategy

The AMPA acquisition strategy leverages completion of the ongoing JCTD and experimentation to inform future Fleet capability delivery model. Initial delivery models under analysis include Contractor Owned/Contractor Operated (COCO) or Government Owned/ Contractor Operated (GOCO) operations; or appropriate milestone insertion into a traditional program of record. Additionally, future AMPA Mission System Payloads will leverage other services and government agencies with current technologies in development and will be available at a relatively mature technology.

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
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Proj 9999	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
System Development Activities			Fleet Payload Dev & Integration																									
Test and Evaluation Activities		JCTD Ph1																										
			JCTD Ph2				FLEX/ Op Demos																					

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603128N / <i>Unmanned Aerial System</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 9999</i>				
System Development Activities: Fleet Payload Dev & Integration	3	2023	4	2024
Test and Evaluation Activities: JCTD Ph1	2	2023	2	2023
Test and Evaluation Activities: JCTD Ph2	2	2023	4	2023
Test and Evaluation Activities: FLEX/ Op Demos	1	2024	4	2024