Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy	Date: March 2024
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305220N *I MQ-4C Triton*

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	3,539.572	13.893	12.094	14.402	-	14.402	14.672	14.624	14.382	14.677	30.682	3,668.998
4020: *MQ-4C TRITON*	3,539.572	13.893	12.094	14.402	-	14.402	14.672	14.624	14.382	14.677	30.682	3,668.998

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 373

Note

MQ-4C Triton RDT&E efforts are segregated into two distinct Program Elements. PE 0305220N, PU 4020 Baseline, supported developmental efforts from the inception of the program and continues to fund FSFT testing, and other efforts that improve the air vehicle reliability, availability, maintainability, and performance. PE 0305421N, PU 2939 Modernization, supported developmental efforts to incorporate Multi-INT capabilities into MQ-4C and continues to support incremental development of Multi-INT enhancements associated with sensor, network, communications, command and control, airspace integration, and cybersecurity upgrades.

A. Mission Description and Budget Item Justification

The MQ-4C Triton Unmanned Air System (UAS) is a high altitude-long endurance UAS designed to provide Fleet and combatant commanders with persistent maritime Intelligence, Surveillance Reconnaissance and Targeting (ISR&T) of nearly all the world's high-density sea-lanes, littorals, and areas of national interest. The Triton air vehicle, mission control system, specialized sensors, and communications suite play a significant role in achieving the Navy's strategic vision for the 21st century. Triton provides persistent ISR&T and unparalleled situational awareness of the maritime battle space to the supported combatant commander and fleet commander. Triton provides the Warfighter with unprecedented levels of battlespace awareness to synchronize actions necessary to maintain maritime Full Spectrum Superiority. Teamed with its manned-capability counterpart, the P-8A Poseidon, Triton is a key component of the Navy's maritime domain awareness family of systems. MQ-4C Triton leverages Maritime Patrol and Reconnaissance Force manpower, training and maintenance efficiencies.

Triton Early Operational Capability (EOC) was successfully deployed in 2020 to provide early fleet integration risk reduction. It successfully prepared the fleet for fielding Initial Operational Capability (IOC) and concluded in 2022. In August of 2023 Triton fielded the Increment 1 Multi-Intelligence (Multi-INT) IOC on schedule, successfully meeting the 2011 National Defense Authorization (NDAA) requirements. This enabled the Navy's Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR-T) transition plan and initiated EP-3 Aries sundown. The Increment 1 Multi-INT capability provides Signals Intelligence (SIGINT), Counter Electronic Attack (CEA) upgrades, and data dissemination across multiple classification domains.

Triton initiated Increment 2 development in FY 2023. Increment 2 will provide advanced radar modes inclusive of Ground Moving Target Indicator (GMTI), enhanced Electro-Optic/Infrared (EO/IR) detection in support of Geographic Intelligence (GEOINT) for increased maritime domain awareness, High Gain Aperture (HGA) for improved SIGINT, communications, navigation, and networks resiliency in denied environments, Multi-UA Command and Control (C2) for increase on station time, and Sense and Avoid (SAA) traffic and weather capability for increased mission availability and airspace integration. Increment 2 development is also addressing required Diminishing Manufacturing Source (DMS) and cyber security updates.

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy	Date: March 2024
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305220N *I MQ-4C Triton*

Project Unit 4020: MQ-4C Triton Baseline funding supported developmental efforts from the inception of the program and continues to fund air vehicle Full Scale Fatigue Testing (FSFT), Effects of Defects (EoD) test efforts and incorporation of stress analysis to fully verify and validate fatigue and damage tolerance requirements of the Performance Based System Specification (PBSS). Fatigue testing results are required to certify the airframe to its current estimated designed service life of 51,000 flight hours/2,029 landings. The duration of fatigue testing is paced by the cycling rate limit of the test fixture for the main wing/fuselage/tail test article, as well as time to perform teardown activities and inspect for cracks. Baseline funding also includes developmental efforts that improve the air vehicle reliability, availability, maintainability, and performance.

JUSTIFICATION FOR BUDGET ACTIVITY: The FY 2025 funding is provided for System Demonstration Test Article (SDTA) vehicles and Fatigue Testing to support post-test teardown, inspections and reporting for portions of the full-scale test efforts. Additionally, the funding supports the execution of the Effects of Defects testing to retire limitations imposed by non-blueprint product, and various air vehicle reliability, availability, maintainability, and performance improvements.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate funding in the current or subsequent fiscal year.

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	13.893	12.094	15.747	-	15.747
Current President's Budget	13.893	12.094	14.402	-	14.402
Total Adjustments	0.000	0.000	-1.345	-	-1.345
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	-1.344	-	-1.344
• Rate/Misc Adjustments	0.000	0.000	-0.001	-	-0.001

Change Summary Explanation

CHANGES:
Funding: Reduction attributable to funding re-phase based on requirements assessments.
Technical: N/A.
Schedule: Full Scale Fatigue Study

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305220N / *MQ-4C Triton*				Project (Number/Name) 4020 / *MQ-4C TRITON*			
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**
4020: *MQ-4C TRITON*	3,539.572	13.893	12.094	14.402	-	14.402	14.672	14.624	14.382	14.677	30.682	3,668.998
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 373												

A. Mission Description and Budget Item Justification

The MQ-4C Triton Unmanned Air System (UAS) is a high altitude-long endurance UAS designed to provide Fleet and combatant commanders with persistent maritime Intelligence, Surveillance Reconnaissance and Targeting (ISR&T) of nearly all the world's high-density sea-lanes, littorals, and areas of national interest. The Triton air vehicle, mission control system, specialized sensors, and communications suite play a significant role in achieving the Navy's strategic vision for the 21st century. Triton provides persistent ISR&T and unparalleled situational awareness of the maritime battle space to the supported combatant commander and fleet commander. Triton provides the Warfighter with unprecedented levels of battlespace awareness to synchronize actions necessary to maintain maritime full spectrum superiority. Teamed with its manned-capability counterpart, the P-8A Poseidon, Triton is a key component of the Navy's maritime domain awareness family of systems. MQ-4C Triton leverages Maritime Patrol and Reconnaissance Force manpower, training and maintenance efficiencies.

Triton Early Operational Capability (EOC) was successfully deployed in 2020 to provide early fleet integration risk reduction. It successfully prepared the fleet for fielding Initial Operational Capability (IOC) and concluded in 2022. In August of 2023 Triton fielded the Increment 1 Multi-Intelligence (Multi-INT) IOC on schedule, successfully meeting the 2011 National Defense Authorization (NDAA) requirements. This enabled the Navy's Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR-T) transition plan and initiated EP-3 Aries sundown. The Increment 1 Multi-INT capability provides Signals Intelligence (SIGINT), Counter Electronic Attack (CEA) upgrades, and data dissemination across multiple classification domains.

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Project Unit 4020: MQ-4C Triton Baseline funding supported developmental efforts from the inception of the program and continues to fund air vehicle Full Scale Fatigue Testing (FSFT), Effects of Defects (EoD) test efforts and incorporation of stress analysis to fully verify and validate fatigue and damage tolerance requirements of the Performance Based System Specification (PBSS). Fatigue testing results are required to certify the airframe to its current estimated designed service life of 51,000 flight hours/2,029 landings. The duration of fatigue testing is paced by the cycling rate limit of the test fixture for the main wing/fuselage/tail test article, as well as time to perform teardown activities and inspect for cracks. Baseline funding also includes developmental efforts that improve the air vehicle reliability, availability, maintainability, and performance.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305220N / *MQ-4C Triton*	**Project (Number/Name)** 4020 / *MQ-4C TRITON*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Product Development	13.546	11.747	14.044	0.000	14.044
Articles:	-	-	-	-	-
Description: The Prime Contractor is responsible for overall system development and performance, as well as associated management, engineering and logistics activities. ***FY 2024 Plans:*** Efforts within this PE continue on airframe fatigue testing and analysis and initiates performance improvement efforts for other aircraft components including, but not limited to, the engine and avionics systems. ***FY 2025 Base Plans:*** Efforts within this PE continue on airframe fatigue testing and analysis and initiates reliability, availability, maintainability, and performance improvement efforts for other aircraft components including, but not limited to, the engine and avionics systems. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase from FY 2024 reflects airframe fatigue and analysis as well as reliability, availability, maintainability, and performance improvements for other aircraft components.					
Title: ILS, Support, Studies & Analysis	0.305	0.305	0.312	0.000	0.312
Articles:	-	-	-	-	-
Description: Integrated Logistics Support, Studies and Analysis. ***FY 2024 Plans:*** Continue integrated logistics support, logistics supportability analyses and environmental planning, and development of technical data to support fielding of the MQ-4C Triton UAS capabilities. ***FY 2025 Base Plans:*** Continue integrated logistics support, logistics supportability analyses and environmental planning, and development of technical data to support fielding of the MQ-4C Triton UAS capabilities. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:***					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305220N / *MQ-4C Triton*	Project (Number/Name) 4020 / *MQ-4C TRITON*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Increase from FY 2024 reflects integrated logistics support, logistics supportability analyses and environmental planning, and development of technical data to support fielding of the MQ-4C Triton UAS capabilities.					
Title: Test & Evaluation (T&E) ***Articles:*** ***Description:*** T&E efforts. ***FY 2024 Plans:*** Continue Developmental Test support of MQ-4C Triton fatigue testing. ***FY 2025 Base Plans:*** Continue Developmental Test support of MQ-4C Triton fatigue testing. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase from FY 2024 to continue Developmental Test support of MQ-4C Triton fatigue testing.	0.024 -	0.024 -	0.026 -	0.000 -	0.026 -
Title: Program Management (PM) ***Articles:*** ***Description:*** PM support and travel. ***FY 2024 Plans:*** Continue the following: PM support and travel, development of milestone and acquisition-related documentation, capability refinement and open systems architecture development, resource justification, affordability assessments and cost analyses, risk reduction and risk management, system integration and interoperability planning, technology maturity reviews, program protection planning, corrosion prevention planning, and joint and international cooperation efforts. ***FY 2025 Base Plans:*** Continue the following: PM support and travel, development of milestone and acquisition-related documentation, capability refinement and open systems architecture development, resource justification, affordability	0.018 -	0.018 -	0.020 -	0.000 -	0.020 -

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305220N / *MQ-4C Triton*	**Project (Number/Name)** 4020 / *MQ-4C TRITON*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
assessments and cost analyses, risk reduction and risk management, system integration and interoperability planning, technology maturity reviews, program protection planning, corrosion prevention planning, and joint and international cooperation efforts. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase from FY 2024 reflects PM, travel, and development support.					
Accomplishments/Planned Programs Subtotals	13.893	12.094	14.402	0.000	14.402

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• RDTEN/0305421N: *RQ-4 Modernization*	150.093	300.378	444.042	-	444.042	377.629	167.963	138.222	140.913	Continuing	Continuing
• APN/0442: *MQ-4 Triton*	584.192	476.345	159.226	-	159.226	175.717	131.016	135.402	138.272	37.437	5,251.751
• APN/0605/J0442: *Spares and Repair Parts*	6.406	10.974	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	601.144
• APN/0596: *MQ-4 Series*	91.930	93.951	122.044	-	122.044	149.692	149.415	156.471	159.651	928.448	1,956.765
• OMN/1D4D: *Weapons Maintenance*	118.549	129.148	138.698	-	138.698	165.728	182.145	185.794	0.000	Continuing	Continuing

Remarks

D. Acquisition Strategy

The MQ-4C Triton acquisition approach supports the Navy's Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR-T) Transition Plan by providing a stable and effective baseline Early Operational Capability (EOC) in 2020 to facilitate Fleet introduction and learning while continuing development engineering and integrated test on Signals Intelligence (SIGINT), and other upgrades delivered in Increment 1 IOC. Following the completion of Increment 1 development in FY2023 and achievement of IOC, Increment 2 capability development initiated without a gap in development. Air vehicle fatigue testing and other reliability, availability, maintainability, and performance improvements continue throughout the FYDP.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305220N / *MQ-4C Triton*	**Project (Number/Name)** 4020 / *MQ-4C TRITON*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPIF	Northrop Grumman : Rancho Bernardo, CA	2,885.103	12.851	Nov 2022	11.054	Nov 2023	13.428	Nov 2024	-		13.428	83.265	3,005.701	3,005.701
Systems Engineering	WR	NAWC-AD : Patuxent River, MD	248.199	0.695	Nov 2022	0.693	Nov 2023	0.616	Nov 2024	-		0.616	4.478	254.681	-
Prior Year Prod Dev no longer in the FYDP	Various	Various : Various	62.656	0.000		0.000		0.000		-		0.000	0.000	62.656	-
		Subtotal	3,195.958	13.546		11.747		14.044		-		14.044	87.743	3,323.038	N/A

Remarks

The Primary Hardware Development line resources Northrop Grumman for prime contractor activities, which include System Demonstration Test Article (SDTA) vehicles and Fatigue Testing. Increase funding from FY 2024 to FY 2025 reflects the resources required to continue airframe fatigue testing and analysis as well as to support efforts to transition into post-test teardown, inspections and reporting for portions of the full-scale test effort, namely the outboard ruddervator and nose landing gear. Additionally, the funding supports the execution of the Effects of Defects testing to retire limitations imposed by non-blueprint product, and various aircraft reliability, availability, maintainability, and performance improvements.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	Various	Various : Various	21.385	0.025	Nov 2022	0.025	Nov 2023	0.026	Nov 2024	-		0.026	0.171	21.632	-
Integrated Logistics Support	WR	NAWC-AD : Patuxent River, MD	55.819	0.280	Nov 2022	0.280	Nov 2023	0.286	Nov 2024	-		0.286	1.812	58.477	-
Prior year cost no longer funded in the FYDP	Various	Various : Various	32.336	0.000		0.000		0.000		-		0.000	0.000	32.336	-
		Subtotal	109.540	0.305		0.305		0.312		-		0.312	1.983	112.445	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305220N / *MQ-4C Triton*	Project (Number/Name) 4020 / *MQ-4C TRITON*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	NAWC-AD : Patuxent River, MD	161.684	0.024	Nov 2022	0.024	Nov 2023	0.026	Nov 2024	-		0.026	0.144	161.902	-
Developmental Test & Evaluation (DT&E)	C/BA	Various : Various	35.687	0.000		0.000		0.000		-		0.000	0.000	35.687	-
		Subtotal	197.371	0.024		0.024		0.026		-		0.026	0.144	197.589	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Allot	Various : Various	1.864	0.018	Nov 2022	0.018	Nov 2023	0.020	Nov 2024	-		0.020	0.108	2.028	-
Prior year cost no longer funded in the FYDP	Various	Various : Various	34.839	0.000		0.000		0.000		-		0.000	0.000	34.839	-
		Subtotal	36.703	0.018		0.018		0.020		-		0.020	0.108	36.867	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
Project Cost Totals	3,539.572	13.893		12.094		14.402		-		14.402	89.978	3,669.939	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305220N / *MQ-4C Triton*	**Project (Number/Name)** 4020 / *MQ-4C TRITON*

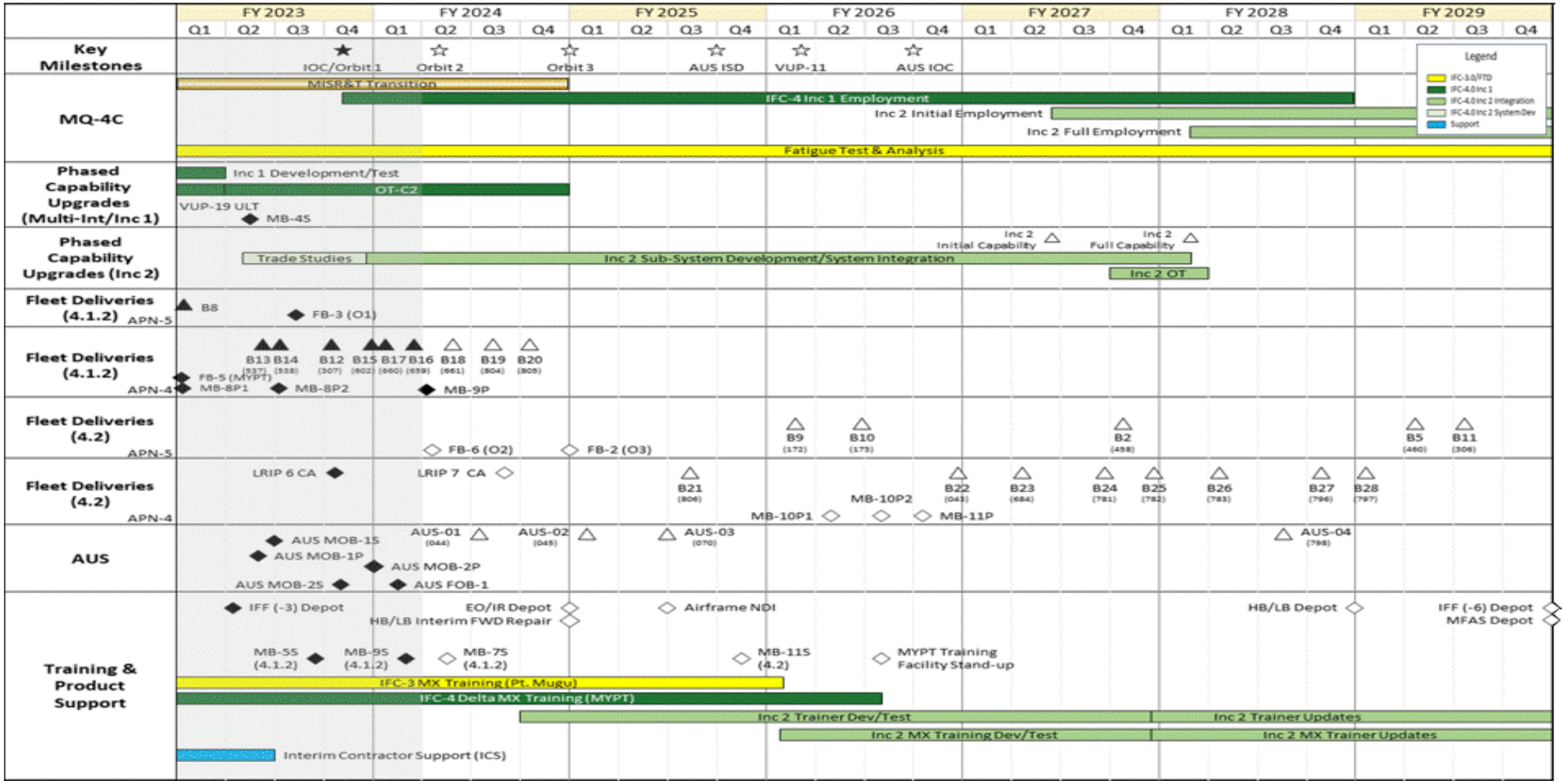

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305220N / *MQ-4C Triton*	**Project (Number/Name)** 4020 / *MQ-4C TRITON*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 4020				
Acquisition Milestones: Initial Operational Capability	4	2023	4	2023
System Development: Airframe Fatigue Testing and Analysis	1	2023	4	2029
System Development: Phased Capability Upgrades - Increment 2 Development / Test	2	2023	1	2028
Test & Evaluation Activities: Increment 1 Integrated Test (Combined/Developmental/ Operational)	1	2023	1	2023
Test & Evaluation Activities: Increment 1 Operational Test	1	2023	4	2024
Test & Evaluation Activities: Increment 2 Integrated Test (Combined/Developmental/ Operational)	2	2023	1	2028
Test & Evaluation Activities: Increment 2 Operational Test	3	2027	1	2028
Production Milestones: Contracts: Low Rate Initial Production Lot 6 Contract Award	4	2023	4	2023
Production Milestones: Contracts: Low Rate Initial Production Lot 7 Contract Award	3	2024	3	2024
Production Milestones: Deliveries: Low Rate Initial Production Lot 4 Delivery	1	2024	2	2024
Production Milestones: Deliveries: Low Rate Initial Production Lot 5 Delivery	3	2024	2	2027
Production Milestones: Deliveries: Low Rate Initial Production Lot 6 Delivery	3	2027	2	2028
Production Milestones: Deliveries: Low Rate Initial Production Lot 7 Delivery	4	2028	1	2029