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 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605500N *I Multi-Mission Maritime Aircraft (MMA) (P-8A)*

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	104.730	43.910	36.027	39.096	-	39.096	43.648	44.682	49.615	57.304	Continuing	Continuing
3368: *P-8 Improvements*	104.730	43.910	36.027	39.096	-	39.096	43.648	44.682	49.615	57.304	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 334

A. Mission Description and Budget Item Justification

The P-8A Multi-mission Maritime Aircraft (MMA) program was initiated in response to the Joint Requirements Oversight Council (JROC) validated Mission Needs Statement, "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance" and the requirements for the program are defined in the P-8A Capability Production Document #791-88-09, validated and approved on 22 June 2009. A successful Critical Design Review was completed in June 2007. In August 2007 the Design Readiness Review was conducted and resulted in approval to obligate funding for the fabrication of the Stage II flight test aircraft. The first flight of P-8A occurred on 25 Apr 2009. Milestone C was successfully completed on 11 August 2010. The program completed Initial Operational Test and Evaluation (IOT&E) in March 2013 and achieved Initial Operational Capability (IOC) in November 2013. The Acquisition Decision Memorandum approved entry into Full Rate Production on January 3, 2014.

During the initial Systems Development and Demonstration (SDD) phase (PE 0605500N PU 2696), which completed in 2020, the program performed the system detailed design, developed and produced Systems Integration Labs, developed and built ground and flight test articles, and conducted ground and flight tests to successfully achieve program milestones. Ground testing included the conduct of static testing, fatigue testing and Live Fire Test and Evaluation. Additionally, six (6) flight test aircraft were built, and grouped into two stages based on which phase of the test program the aircraft supported. SDD Stage I flight test aircraft (FY06/Qty-3) supported Integrated Test and Evaluation (IT&E). SDD Stage II flight test aircraft (FY09/Qty-3) supported the completion of IT&E and IOT&E after being updated to the production configuration. The SDD contract also included the development and initial building of training devices to support IOT&E, all activities necessary to facilitate an efficient transition of the fleet to achieve the P-8A IOC in CY13, and the engineering and verification of corrected deficiencies identified in testing and Fleet operational use. P-8A entered Production and Deployment phase in the 4th quarter of FY10 and entered Full Rate Production in 2nd quarter of FY14.

P-8A MMA program follow-on SDD activities (PU 3368) include Assured Maritime Dominance Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASuW), and Intelligence, Surveillance, and Reconnaissance (ISR) activities implemented as a sequence of Rapid Capability Insertions (RCI) and rapid development efforts to respond to evolving threats and adversary capabilities, which will retain cost effectiveness for winning major combat operations. In order to pace the threat, these efforts will incorporate incremental software and/or hardware improvements that increase/exceed the current performance envelope, to include reliability/maintainability improvements, obsolescence, periodic technology insertion, urgent operational needs, correction of deficiencies and flight safety issues, to existing sensor capabilities, communications systems, mission systems, airframe and engine component systems, weapons capabilities, training systems and Tactical Operations Center (TOC) / Tacmobile support to build on the initial P-8A SDD (PU 2696) capability baseline. These planned and emergent requirements will be prioritized through either the Navy Integration and interoperability (I&I) aligned Capability Prioritization Process (CPP), P-8A Tier 3 Capability Roadmap and/or through Fleet identification of an Urgent Operational Need. The CPP process is supported by detailed analysis and the maturations of developing technologies.

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 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605500N *I Multi-Mission Maritime Aircraft (MMA) (P-8A)*

Budget Activity 5.
JUSTIFICATION FOR BUDGET ACTIVITY: 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.

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	37.939	36.027	42.032	-	42.032
Current President's Budget	43.910	36.027	39.096	-	39.096
Total Adjustments	5.971	0.000	-2.936	-	-2.936
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	6.589	0.000			
• SBIR/STTR Transfer	-0.618	0.000			
• Program Adjustments	0.000	0.000	-2.842	-	-2.842
• Rate/Misc Adjustments	0.000	0.000	-0.094	-	-0.094

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 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*				Project (Number/Name) 3368 / *P-8 Improvements*			
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**
3368: *P-8 Improvements*	104.730	43.910	36.027	39.096	-	39.096	43.648	44.682	49.615	57.304	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 334

A. Mission Description and Budget Item Justification

The P-8A MMA program's Assured Maritime Dominance Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASuW), and Intelligence, Surveillance, and Reconnaissance (ISR) activities include a sequence of Rapid Capability Insertions (RCI) and rapid development efforts to respond to evolving threats and adversary capabilities, which will retain cost effectiveness for winning major combat operations. In order to pace the threat, these efforts will incorporate incremental software and/or hardware improvements that increase/exceed the current performance envelope, to include reliability/maintainability improvements, obsolescence, periodic technology insertion, urgent operational needs, correction of deficiencies and flight safety issues, to existing sensor capabilities, communications systems, mission systems, airframe and engine component systems, weapons capabilities, training systems and Tactical Operations Center (TOC) /Tacmobile support to build on the P-8A capability baseline. These planned and emergent requirements will be prioritized through either the Navy Integration and interoperability (I&I) aligned Capability Prioritization Process (CPP), P-8A Tier 3 Capability Roadmap and/or through Fleet identification of an Urgent Operational Need. The CPP process is supported by detailed analysis and the maturations of developing technologies.

Assured Maritime Dominance activities include principal mission lethality, survivability against kinetic and non-kinetic threats, and capability persistence in high-level threat environments. Rapid Development efforts increase lethality through optimization of kill-chain software systems, employment of LRASM, and other weapon systems and Airborne Weapon Simulator capabilities. RCI4 capabilities include kill-chain/gap analysis, ASW Enhancements, common weapons synchronization, and Airborne Weapon Simulator continuation. RCI5 capabilities increase P-8A survivability through Radio Frequency Counter Measure (RFCM) Self Protection Pod/ Advanced Survivability Pod (ASP) Certification, P-8A Survivability Assurance and distributed sensor network improvements.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**
Title: Perform technology demonstrations and analyses of proposed new capabilities	39.447	31.429	38.362	0.000	38.362
Articles:	-	-	-	-	-
FY 2024 Plans: Continue to develop RCI packages and rapid/urgent development efforts to incrementally incorporate software and hardware capability improvements, building on the P-8A Baseline to ensure ongoing relevance of the P-8A capability. Continue LRASM efforts to include analysis of airworthiness data to support fleet flight clearance, software development and platform integration efforts, continue flight test for integrated LRASM capabilities, and complete test planning for LRASM OT&E. Continue RCI-4 efforts for ASW enhancements. Complete RCI-5					

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 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
analysis for survivability improvements (RFCM)/kill chain gap analysis. Continue RCI-5 development efforts for analysis and hardware/software integration of preferred survivability solution onto the P-8A weapons system. ***FY 2025 Base Plans:*** Continue to develop RCI packages and rapid/urgent development efforts to incrementally incorporate software and hardware capability improvements, building on the P-8A Baseline to ensure ongoing relevance of the P-8A capability. Continue LRASM efforts to include flight test for integrated LRASM capabilities and completing test planning for LRASM OT&E. Complete RCI-4 efforts for ASW enhancements. Initiate RCI-5 analysis for survivability improvements (RFCM) Self Protection Pod/Advance Survivability Pod (ASP) certification. Continue RCI-5 development efforts for analysis and hardware/software integration of preferred survivability solution onto the P-8A weapons system. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** Increase of $6.933 Million from FY2024 to FY2025 is due to Advance Survivability Pod (ASP) development and certification.					
Title: Conduct technical, cost, risk, test, and logistics analysis of proposed technologies	4.463	4.598	0.734	0.000	0.734
Articles:	-	-	-	-	-
FY 2024 Plans: Conduct technical, cost, risk and logistics analysis of proposed technologies. Evaluate system requirements through cost/performance trade-off analysis. Continue technical execution of LRASM government-led flight test and post-test analysis. Continue technical execution of RCI-4 and continue execution of RCI-5. ***FY 2025 Base Plans:*** Conduct technical, cost, risk and logistics analysis of proposed technologies. Evaluate system requirements through cost/performance trade-off analysis. Complete technical execution of RCI-4 and continue execution of RCI-5. ***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 / 5	**R-1 Program Element (Number/Name)** PE 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Decrease of $3.864 Million from FY2024 to FY2025 is due to completion of LRASM integration.					
Accomplishments/Planned Programs Subtotals	43.910	36.027	39.096	0.000	39.096

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
• APN/0586: *P-8 Series*	241.884	316.168	307.202	-	307.202	319.108	396.678	448.073	462.641	2,541.267	5,464.859

Remarks

Procurement dollars reflected in Other Program Funding Summary reflects the total of that BLI. Only a portion of the funds are associated with PU 3368.

D. Acquisition Strategy

The P-8A acquisition strategy is designed to deliver the required capabilities while introducing additional competition throughout the program. Government Lead Capability Integrator (LCI) control over the designs and information promote cost-effectiveness, rapid capability fielding, and reduced acquisition and life-cycle costs. Additionally, technologies for P-8 modernization improvements are compartmentalized and delivered independently of one another as a series of ECPs, without risk to the overall program schedule or procurement cost. This tailoring approach is effective in accommodating an emergent Fleet requirement and serve as an example that the flexibility inherent in this ECP-based Acquisition Strategy is responsive to Fleet customer concerns.

The P-8A Acquisition Strategy (AS), first approved by the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) at Milestone B in 2004, establishes the strategy to deliver full P-8A capability via three increments (then Block 1, Spiral 1 and Spiral 2 and now called Increments 1, 2, and 3). Increment 1 (Block 1) provided persistent ASW, ASuW, and ISR. Increment 2 (Spiral 1) provided improved ASW capabilities via multiple ECPs. On 4 April 2016, the MDA (USD AT&L) approved the incorporation of Increment 3 (Spiral 2 - under PE 0605504N) communications, Combat Systems Architecture, ASW Signals Intelligence, ASuW Net Enabled Weapon, Wideband SATCOM, Higher than Secret security enclave and Enhanced Multi-static Active Coherent (MAC-E) as ECPs (ECP 4-7) within the existing P-8A program as defined in the approved AS. RCI, rapid development, and future emergent capabilities will continue to be developed in an evolutionary manner similar to Increments 1-3 ECPs. Work is not initiated under this incremental acquisition process until the capabilities are first approved in P-8A Joint Capabilities Integration and Development System (JCIDS) documentation or the Navy's I&I CPP, approval obtained through an OPNAV Configuration Steering Board (CSB) and the phase of work approved by the Milestone Decision Authority (MDA). On 10 May 2016, P-8A was redesignated an ACAT 1C program and the MDA assigned to the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN (RDA)).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*	

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 HW/SW Dev - P-8 Improvements/Increased Capability	Various	Various : Various	5.517	9.760	Feb 2023	0.000		0.000		-		0.000	0.000	15.277	-
Primary HW/SW Dev - ASW Enhancements	Various	Various : Various	7.340	1.301	Feb 2023	0.591	Feb 2024	0.000		-		0.000	0.000	9.232	-
Primary SW Dev - LRASM	Various	Boeing : Seattle, WA	30.264	9.822	Dec 2022	15.199	Dec 2023	1.770	Dec 2024	-		1.770	30.923	87.978	-
Primary HW/SW Dev - RCI	Various	Various : Various	8.451	16.011	Dec 2022	13.236	Dec 2023	31.592	Dec 2024	-		31.592	Continuing	Continuing	Continuing
Sys Eng - Gov	WR	NAWCAD : Pax River, MD	10.091	2.553	Nov 2022	2.403	Nov 2023	5.000	Nov 2024	-		5.000	Continuing	Continuing	Continuing
Prior Year Prd Dev costs no longer funded in the FYDP	Various	Various : Various	31.742	0.000		0.000		0.000		-		0.000	0.000	31.742	-
		Subtotal	93.405	39.447		31.429		38.362		-		38.362	Continuing	Continuing	N/A

Remarks

Increases in FY2025 for RCI HW/SW Development and Systems Engineering is for the initiation of (RFCM) Self Protection Pod/Advanced Survivability Pod (ASP) flight test and certification.

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	NAWCAD : Pax River, MD	5.359	3.817	Dec 2022	4.008	Dec 2023	0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	5.359	3.817		4.008		0.000		-		0.000	Continuing	Continuing	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
Eng Tech Serv (NON-FFRDC)	Various	Various : Various	1.498	0.000		0.000		0.000		-		0.000	0.984	2.482	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*

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
Mgmt Support Serv	C/CPFF	RBC : Alexandria, VA	2.151	0.416	Nov 2022	0.380	Nov 2023	0.239	Nov 2024	-		0.239	Continuing	Continuing	Continuing
Program Mgmt Support	WR	NAWCAD : Pax River, MD	2.317	0.230	Nov 2022	0.210	Nov 2023	0.495	Nov 2024	-		0.495	Continuing	Continuing	Continuing
		Subtotal	5.966	0.646		0.590		0.734		-		0.734	Continuing	Continuing	N/A

Remarks

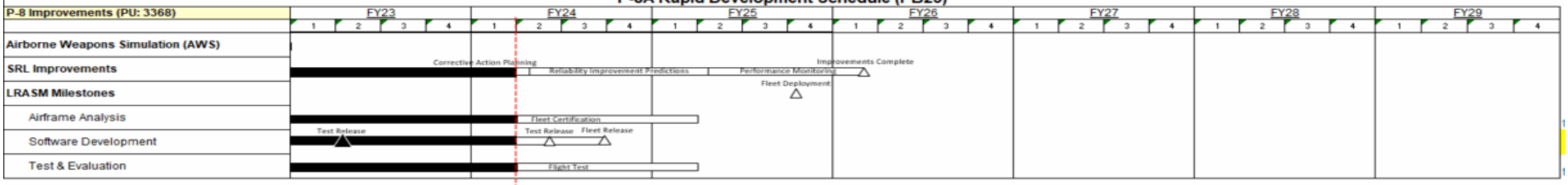
Increase in FY2025 for Program Mgmt Support is for the initiation of (RFCM) Self Protection Pod/Advanced Survivability Pod (ASP) flight test and certification.

	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	104.730	43.910		36.027		39.096		-		39.096	Continuing	Continuing	N/A

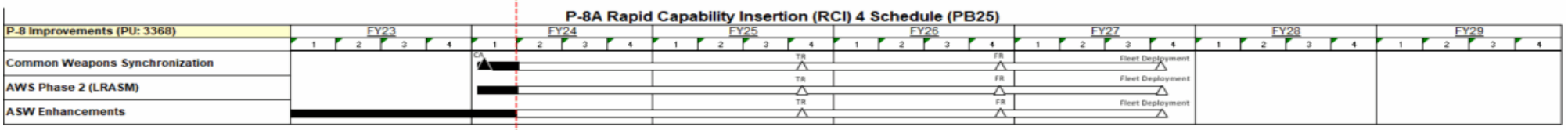
Remarks

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 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*

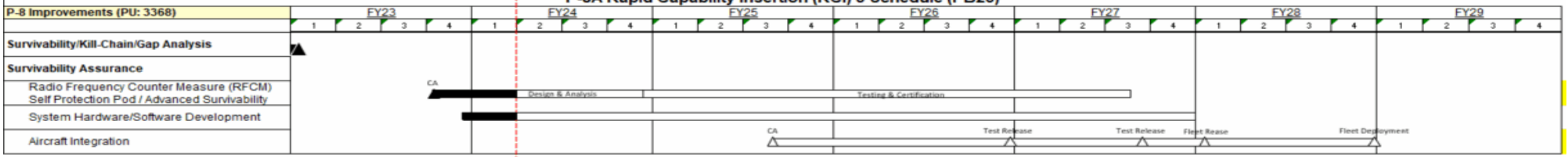
P-8A Rapid Development Schedule (PB25)



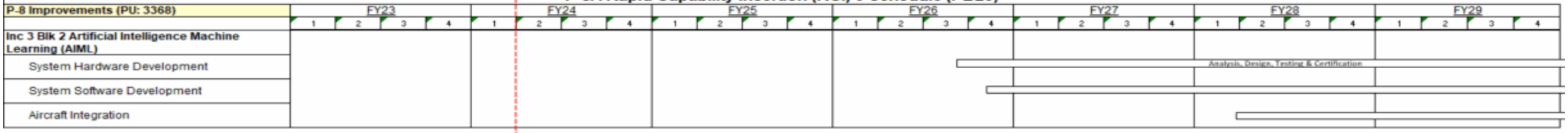
P-8A Rapid Capability Insertion (RCI) 4 Schedule (PB25)



P-8A Rapid Capability Insertion (RCI) 5 Schedule (PB25)



P-8A Rapid Capability Insertion (RCI) 6 Schedule (PB25)



P-8A Rapid Capability Insertion (RCI) 7 Schedule (PB25)

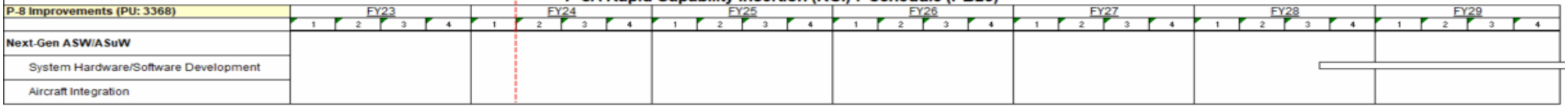


Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
P-8 Improvements				
Rapid Development: SRL Improvements: Development	1	2023	2	2025
Rapid Development: SRL Improvements: Improvements Complete	1	2026	1	2026
Rapid Development: LRASM: Fleet Certification	1	2023	2	2025
Rapid Development: LRASM: Software Development	1	2023	3	2024
Rapid Development: LRASM: Test Release.1	2	2023	2	2023
Rapid Development: LRASM: Test Release.2	2	2024	2	2024
Rapid Development: LRASM: Fleet Release	3	2024	3	2024
Rapid Development: LRASM: Flight Test	1	2023	2	2025
Rapid Development: LRASM: Fleet Deployment	4	2025	4	2025
RCI4: Common Weapons Synchronization: Contract Award	1	2024	1	2024
RCI4: Common Weapons Synchronization: Development	1	2024	4	2027
RCI4: Common Weapons Synchronization: Test Release	4	2025	4	2025
RCI4: Common Weapons Synchronization: Fleet Release	4	2026	4	2026
RCI4: Common Weapons Synchronization: Fleet Deployment	4	2027	4	2027
RCI4: ASW Phase 2: Development	1	2024	4	2027
RCI4: ASW Phase 2: Test Release	4	2025	4	2025
RCI4: ASW Phase 2: Fleet Release	4	2026	4	2026
RCI4: ASW Phase 2: Fleet Deployment	4	2027	4	2027
RCI4: ASW Enhancements: Development	1	2023	4	2027
RCI4: ASW Enhancements: Test Release	4	2025	4	2025
RCI4: ASW Enhancements: Fleet Release	4	2026	4	2026

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0605500N / *Multi-Mission Maritime Aircraft (MMA) (P-8A)*	**Project (Number/Name)** 3368 / *P-8 Improvements*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
RCI4: ASW Enhancements: Fleet Deployment	4	2027	4	2027
RCI5: Radio Frequency Counter Measure (RFCM)/Advanced Survivability Pod (ASP) Certification: Analysis	1	2023	1	2023
RCI5: Survivability Assurance: Contract Award	4	2023	4	2023
RCI5: Survivability Assurance: Design & Analysis	4	2023	4	2024
RCI5: Survivability Assurance: Testing & Certification	4	2024	3	2027
RCI5: Survivability Assurance: Hardware & Software Development	4	2023	4	2027
RCI5: Survivability Assurance: Aircraft Integration Contract Award	3	2025	3	2025
RCI5: Survivability Assurance: Aircraft Integration	3	2025	4	2028
RCI5: Survivability Assurance: Test Release 1	4	2026	4	2026
RCI5: Survivability Assurance: Test Release 2	3	2027	3	2027
RCI5: Survivability Assurance: Fleet Release	4	2027	4	2027
RCI5: Survivability Assurance: Fleet Deployment	4	2028	4	2028
RCI6: Artificial Intelligence Machine Learning (AIML): Hardware Development	3	2026	4	2029
RCI6: Artificial Intelligence Machine Learning (AIML): Software Development	4	2026	4	2029
RCI6: Artificial Intelligence Machine Learning (AIML): Aircraft Integration	2	2028	4	2029
RCI7: Next-Gen ASW/ASuW: System Hardware/Software Development	3	2028	4	2029