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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605504N / <i>Multi-Mission Maritime (MMA) Inc III</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	781.864	157.793	161.697	132.449	-	132.449	113.278	88.165	58.534	24.806	0.000	1,518.586
3218: <i>P-8A Spiral 2 Development</i>	781.864	157.793	161.697	132.449	-	132.449	113.278	88.165	58.534	24.806	0.000	1,518.586

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

A. Mission Description and Budget Item Justification

The P-8A Increment 3 program consists of incremental enhancement Engineering Change Proposals (ECPs) to system capabilities that will retain cost-wise effectiveness for major combat operations. Increment 3 will incorporate improvements to aircraft systems including significant war-altering Anti-Submarine Warfare (ASW) capabilities of Enhanced Multi-Static Active Coherent (MAC-E) and ASW Signal Intelligence (SIGINT) which are enabled by the incorporation of Combat System hardware and architecture improvements, ASW and Anti-Surface Warfare (ASuW) sensor improvements, communication capability upgrades, ASuW Net Enabled Weapon (NEW), Higher-Than-Secret (HTS) security capability, and associated pre/post-flight ground system development to support Increment 3 aircraft and Increment 3 ground system requirements.

These capabilities will be developed as a series of ECPs for the P-8A and are as follows:

- ECP 6 - ASW SIGINT, Anti-Submarine Warfare (ASW) capability, Wide Band SATCOM, Higher Than Secret (HTS) processing, Enhanced track management (Minotaur), Applications Based Architecture (ABA) and Combat System.
- ECP 7 - Enhanced Multi-Static Active Coherent (MAC-E).
- Pre/Post-Flight Ground System Development - System upgrades to the associated ground support system and Operations Center (TOC)/Aircraft Media Gateway (AMG) systems.

To expedite fielding of the ASW critical capability to the P-8A Fleet, ECP 6 and ECP 7 software are being integrated concurrently on to the platform. ECP 7 is reliant on ECP 6's Combat System hardware and architecture to operate on the P-8A. ECP 6 integration activities began in FY 2019 with initiation of the Government Lead Capability Integrator (LCI) integration and award of the Platform Integration (PI) contract to Boeing. ECP 7 integration activities began in FY 2021. ECP 6/7 Integrated Flight Test & Evaluation began 3Q FY 2022. Enhanced MAC-E (ECP 7) is developed within Program Element (PE) 0604261N and integrated via the Platform Integration contract within this PE.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes requirements identified under the baseline P-8 program between Milestone B and the Full Rate Production Decision (FRPD). Subsequent to the P-8 FRPD, the DoD Acquisition Authority directed in 2016 these Increment 3 requirements be satisfied as Engineering Change Proposals (ECPs) under the existing P-8 program vice under a separate acquisition program.

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Note: ECP 6/7 fielding in 1Q FY 2026 includes 7 aircraft (1 squadron) modified, trained and ready to deploy to include pre/post-flight ground systems.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	162.884	161.697	133.497	-	133.497
Current President's Budget	157.793	161.697	132.449	-	132.449
Total Adjustments	-5.091	0.000	-1.048	-	-1.048
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-5.091	0.000			
• Program Adjustments	0.000	0.000	-1.350	-	-1.350
• Rate/Misc Adjustments	0.000	0.000	0.302	-	0.302

Change Summary Explanation

FY 2024 funding decrease to due to progression from development into Integrated Flight Test & Evaluation and for working capital fund rate adjustments.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy										Date: March 2023		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605504N / <i>Multi-Mission Maritime (MM A) Inc III</i>				Project (Number/Name) 3218 / <i>P-8A Spiral 2 Development</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
3218: <i>P-8A Spiral 2 Development</i>	781.864	157.793	161.697	132.449	-	132.449	113.278	88.165	58.534	24.806	0.000	1,518.586
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 334												

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Note: ECP 6/7 fielding in 1Q FY 2026 includes 7 aircraft (1 squadron) modified, trained and ready to deploy to include pre/post-flight ground systems.

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

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Product Development	143.449	134.712	111.964	0.000	111.964
Articles:	-	-	-	-	-

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Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605504N / <i>Multi-Mission Maritime (MM A) Inc III</i>	Project (Number/Name) 3218 / <i>P-8A Spiral 2 Development</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>FY 2023 Plans: Continue ECP 6 and ECP 7 integration on the PI contract. Continue Government-led LCI efforts, associated ground support system development, test planning, TOC/AMG systems, training systems upgrades, and Integrated Flight Test and Evaluation efforts.</p> <p>FY 2024 Base Plans: Continue ECP 6 and ECP 7 integration on the PI contract. Continue Government-led LCI efforts, associated ground support system development, test planning, TOC/AMG systems, training systems upgrades, and Integrated Flight Test and Evaluation efforts.</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: FY 2024 decrease of \$22.748 Million due to progression from development into Integrated Flight Test & Evaluation.</p>					
<p>Title: Support/Test & Evaluation/Management Services</p> <p align="right">Articles:</p>	14.344	26.985	20.485	0.000	20.485
<p>FY 2023 Plans: Continue associated in-house government LCI/T&E/management activities. Continue associated ground support system development, training systems upgrades, operational testing, and Integrated Flight Test and Evaluation efforts.</p> <p>FY 2024 Base Plans: Continue associated in-house government LCI/T&E/management activities. Continue associated ground support system development, training systems upgrades, operational testing, and Integrated Flight Test and Evaluation efforts.</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: FY 2024 decrease of \$6.50 Million due to progression from development into Integrated Flight Test & Evaluation.</p>	-	-	-	-	-
Accomplishments/Planned Programs Subtotals	157.793	161.697	132.449	0.000	132.449

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

Line Item	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cost To	
			Base	OCO	Total					Complete	Total Cost
• APN/0586: <i>P-8 Series</i>	115.940	241.987	316.168	-	316.168	373.473	320.378	378.212	439.534	2,891.385	5,392.973
• OPN/2906: <i>Tactical/Mobile C4I Systems</i>	18.790	27.434	52.026	-	52.026	65.664	71.364	61.095	62.492	Continuing	Continuing

Remarks

Procurement dollars reflected in Other Program Funding Summary reflects the total of each of those BLIs. Only a portion of the funds are associated with PU 3218.

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 under PE 0605500N) provided persistent ASW, ASuW, and ISR. Increment 2 (Spiral 1 under PE 0605500N) provided improved ASW capabilities via multiple ECPs. On 4 April 2016, the MDA (USD AT&L) approved the incorporation of Increment 3 (Spiral 2) 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605504N / <i>Multi-Mission Maritime (MM A) Inc III</i>	Project (Number/Name) 3218 / <i>P-8A Spiral 2 Development</i>
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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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 HW Dev - Trainer Dev & Integration	Various	Boeing : St. Louis, MO	17.089	15.000	Feb 2022	20.000	Feb 2023	37.000	Feb 2024	-		37.000	86.000	175.089	-
Primary HW Dev - Combat Systems Hardware Effort	Various	NSWC : Crane, IN	119.309	3.748	Nov 2022	0.000		0.000		-		0.000	0.000	123.057	-
Primary HW Dev - Platform Integration	Various	Boeing : Seattle, WA	157.691	57.760	Oct 2021	52.095	Oct 2022	35.060	Oct 2023	-		35.060	60.500	363.106	-
ECP6/7 Pre/Post Flight Ground System Development Activities	Various	Various : Various	7.900	10.300	Feb 2022	12.500	Feb 2023	9.400	Feb 2024	-		9.400	1.500	41.600	-
LCI Development & Integration/Correction of Deficiencies	Various	Various : Various	142.203	47.596	Oct 2021	39.338	Oct 2022	21.172	Oct 2023	-		21.172	55.644	305.953	-
Sys Eng (gov)	WR	NAWC AD : Pax River, MD	76.809	9.045	Nov 2021	10.780	Nov 2022	9.332	Nov 2023	-		9.332	21.983	127.949	-
Prior Year Prd Dev costs no longer funded in the FYDP	Various	Various : Various	221.059	0.000		0.000		0.000		-		0.000	0.000	221.059	-
Subtotal			742.060	143.449		134.713		111.964		-		111.964	225.627	1,357.813	N/A

Remarks
Trainer Development & Integration increased from \$20.0 million in FY 2023 to \$37.0 million in FY 2024 due to increased planned development and integration activities in support of Fleet ECP 6/7 transition and training requirements necessary to achieve IOC.

Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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 Logistics Sup	Various	Various : Various	2.950	0.918	Nov 2021	0.918	Nov 2022	0.000		-		0.000	0.000	4.786	-
Studies & Analysis	Various	JHU : Pax River, MD	11.946	0.000		0.000		0.000		-		0.000	0.000	11.946	-
Subtotal			14.896	0.918		0.918		0.000		-		0.000	0.000	16.732	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy **Date:** March 2023

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Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	NAWC AD : Pax River, MD	17.947	11.809	Nov 2021	22.106	Nov 2022	15.735	Nov 2023	-		15.735	45.906	113.503	-
Operational Test & Evaluation (OT&E)	WR	NAWC AD : Pax River, MD	0.000	0.540	Nov 2021	2.283	Nov 2022	3.750	Nov 2023	-		3.750	10.250	16.823	-
Subtotal			17.947	12.349		24.389		19.485		-		19.485	56.156	130.326	N/A

Remarks
Four cost categories have been realigned to two categories to align with OSD guidance.

Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Eng Tech Serv (NON-FFRDC)	Various	Various : Various	1.109	0.000		0.000		0.000		-		0.000	0.000	1.109	-
Mgmt Suppt Serv (NON-FFRDC)	Various	RBC : Alexandria, VA	3.856	0.977	Nov 2021	1.377	Nov 2022	0.700	Nov 2023	-		0.700	2.100	9.010	-
Program Mgmt Support	WR	NAWC AD : Pax River, MD	1.906	0.000		0.200	Nov 2022	0.200	Nov 2023	-		0.200	0.600	2.906	-
Travel	Allot	NAWC AD : Pax River, MD	0.090	0.100	Nov 2021	0.100	Nov 2022	0.100	Nov 2023	-		0.100	0.300	0.690	-
Subtotal			6.961	1.077		1.677		1.000		-		1.000	3.000	13.715	N/A

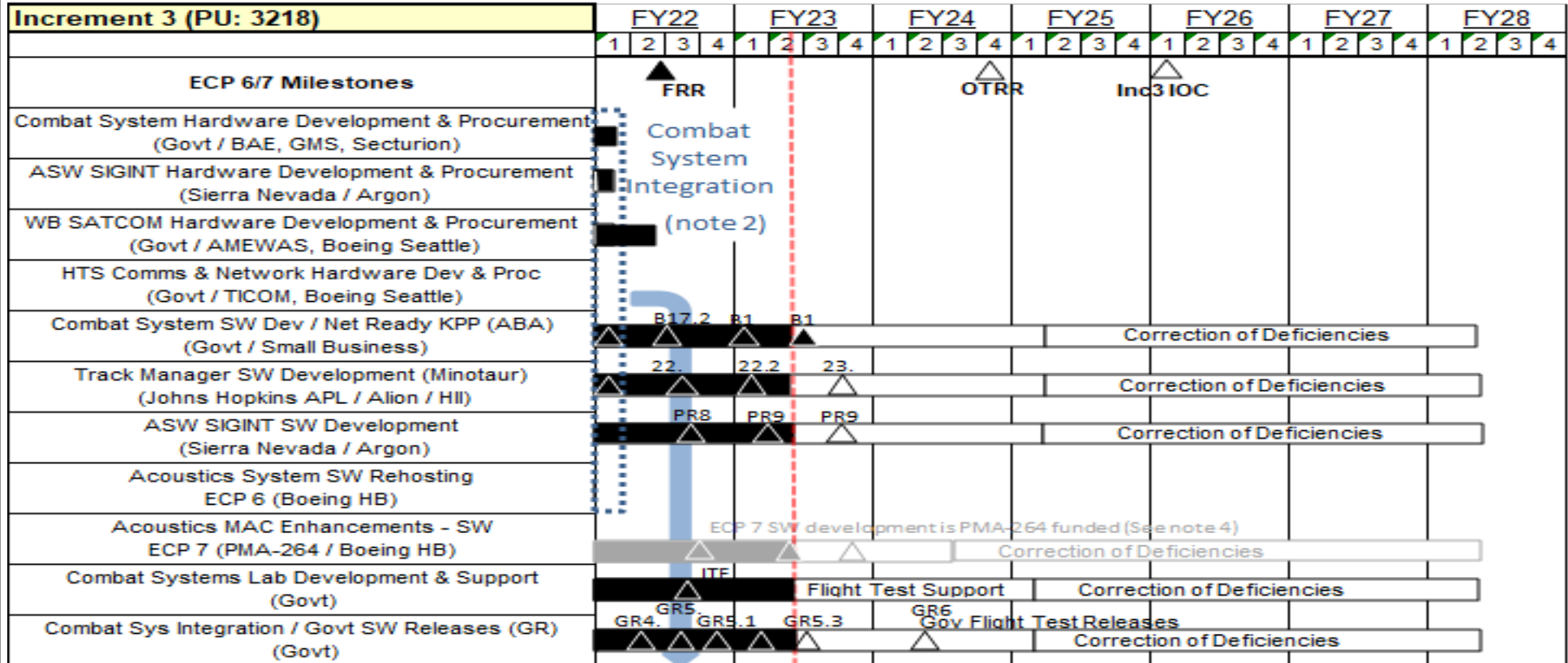
	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		781.864	157.793	161.697	132.449	-	132.449	284.783	1,518.586	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605504N / Multi-Mission Maritime (MM A) Inc III	Project (Number/Name) 3218 / P-8A Spiral 2 Development

P-8A Increment 3 (Spiral 2) ECP-6/7 Program Schedule 1 of 2 (PB24)



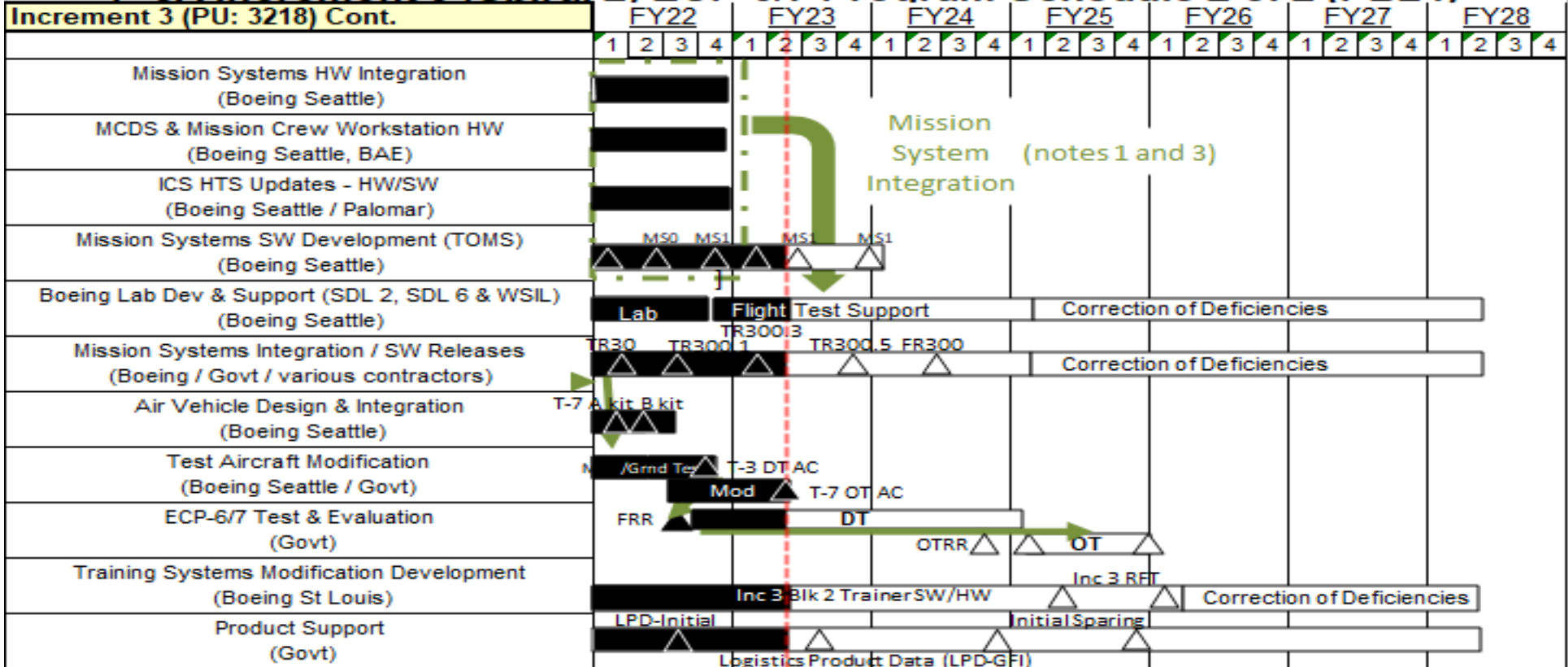
Notes: (1) Subsystem efforts continue to support integration and test through deficiency correction
 (2) Combat sys integration includes Govt-led efforts for software, hardware, aircraft integration, deficiency correction
 (3) Mission system integration includes Boeing efforts for software, hardware, aircraft integration, deficiency correction
 (4) PMA-264 Acoustic Sensor PE (0604216N) funds ECP 7 dev/test costs unique to ECP 7 (grayed out above)

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy Date: March 2023

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605504N / Multi-Mission Maritime (MM A) Inc III	Project (Number/Name) 3218 / P-8A Spiral 2 Development
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P-8A Increment 3 (Spiral 2) ECP-6/7 Program Schedule 2 of 2 (PB24)

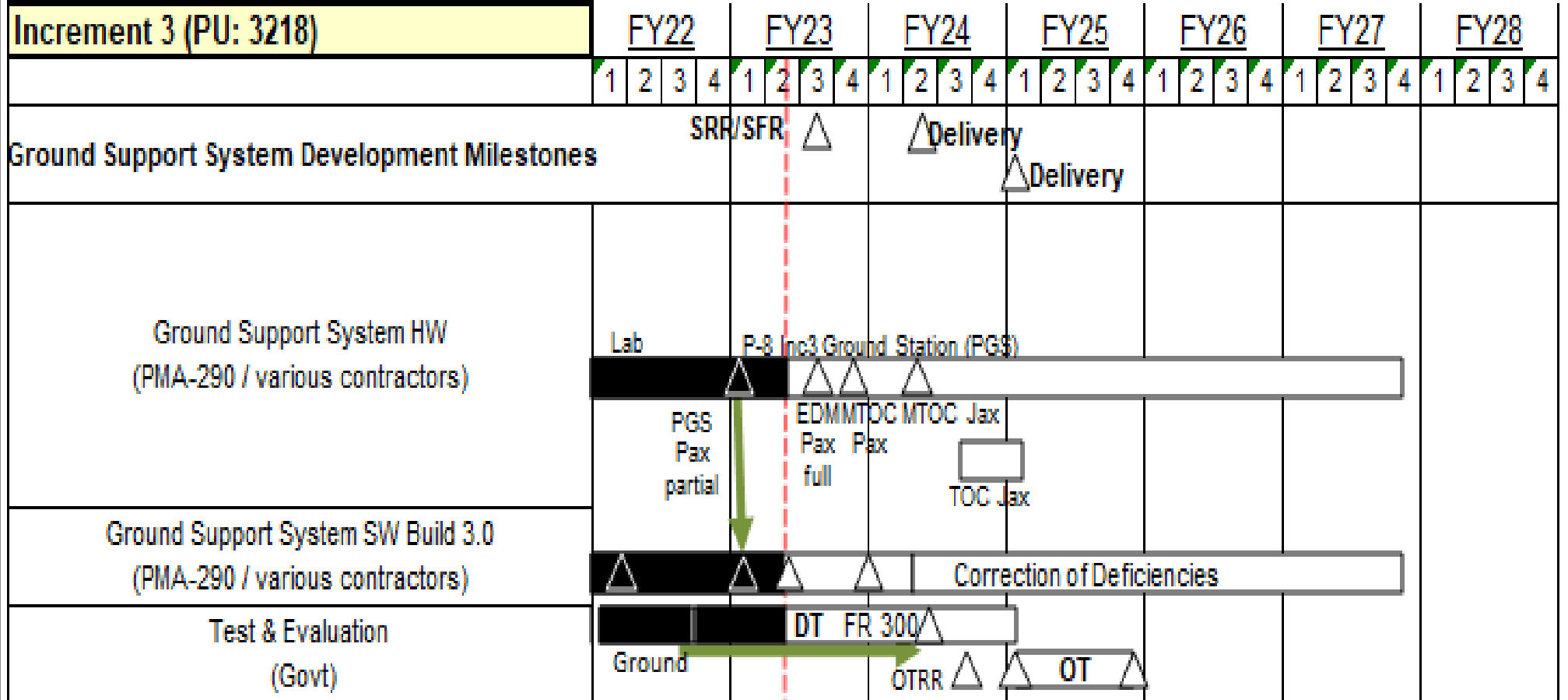


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P-8A Pre/postflight Ground Support System Development Schedule (PB24)



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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>ECP-6/7</i>				
ECP-6/7: Milestones: FRR	2	2022	2	2022
ECP-6/7: Milestones: OTRR	4	2024	4	2024
ECP-6/7: Milestones: INC3 IOC	1	2026	1	2026
ECP-6/7: Combat System / Mission System Integration: ECP-6/7 Integration	1	2022	2	2025
ECP-6/7: Integrated Flight Test & Evaluation: ECP-6/7 T&E	3	2022	4	2025
ECP-6/7: Correction of Deficiencies: Correction of Deficiencies	2	2025	2	2028
<i>Pre/Post-Flight Ground Support System Development</i>				
Ground Support System Development: Milestones: Ground Support System Hardware Development	1	2022	4	2027
Ground Support System Development: Milestones: Ground Support System Development DT	4	2022	1	2025
Ground Support System Development: Milestones: Ground Support System Development OT	4	2024	4	2025
Ground Support System Development: Correction of Deficiencies: Correction of Deficiencies	2	2024	4	2027