Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604261N *I Acoustic Search Sensors*

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	685.039	47.534	50.231	51.531	-	51.531	55.262	56.218	54.488	54.487	Continuing	Continuing
0480: *ASW Sensors & Proc*	552.454	38.956	46.001	43.874	-	43.874	44.284	44.981	45.882	46.794	Continuing	Continuing
3224: *High Altitude ASW*	132.585	3.751	4.230	7.657	-	7.657	10.978	11.237	8.606	7.693	Continuing	Continuing
9999: *Congressional Adds*	0.000	4.827	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	4.827

A. Mission Description and Budget Item Justification

U.S. Navy Air Anti-Submarine Warfare (ASW) mission is critical to achieve maritime supremacy against peer threats. RDT&E funds for engineering development and operational test and evaluation of acoustic search sensors/systems and complementary equipment for ASW aircraft.

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 requirements prior to full-rate production decision.

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	49.057	50.231	49.322	-	49.322
Current President's Budget	47.534	50.231	51.531	-	51.531
Total Adjustments	-1.523	0.000	2.209	-	2.209
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.523	0.000			
• Program Adjustments	0.000	0.000	2.080	-	2.080
• Rate/Misc Adjustments	0.000	0.000	0.129	-	0.129

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2022	FY 2023
Project: 9999: *Congressional Adds*		
Congressional Add: *Sonobuoy capabilities research*	4.827	0.000
Congressional Add Subtotals for Project: 9999	4.827	0.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604261N *I Acoustic Search Sensors*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2022	FY 2023
Congressional Add Totals for all Projects	4.827	0.000

Change Summary Explanation

FY22: -$1.523M SBIR adjustments
FY24: +$0.129M Rate adjustments
FY24: +$2.080M increase to fund Sonobuoy Acoustic Communications Development.

Technical: N/A

Schedule:

H0480 (MAC): Revised to capture naming convention change from Next Generation Multistatic Active Coherent (NGMAC) to UnderSea Advantage (USA). USA Acoustic Operational Flight Program (AOFP) SW development updated to reflect start in 1Q/26. Updated 2Q/24 USA contract award title to Subsystem Software Development contract award for better definition. Added AOFP contract award to 1Q/26. Extended MAC-E DT/OT to properly align with PMA-290's P-8A INC 3 DT period.

H0480 (APB): Revised to include refresher training prior to fleet training.

H3224: Updated to include FY22-FY28 key enhancements and sonobuoy enablers: the Automated Extended Life Sonobuoy (AELS), sonobuoy encryption, and P-8A Acoustic Communications (ACOMMS).

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 0480 / *ASW Sensors & Proc*	

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
0480: *ASW Sensors & Proc*	552.454	38.956	46.001	43.874	-	43.874	44.284	44.981	45.882	46.794	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Anti-Submarine Warfare (ASW) Sensors and Processing project provides tools and methods necessary to maintain maritime superiority by preventing near-peer threat submarines from completing their hostile missions or disrupting the U.S. Navy's ability to control sea lanes of communication. Project 0480 provides funding for Engineering & Manufacturing Development and follow-on Production and Deployment of new and/or improved passive and active air ASW family of systems that enable cuing, search, detection, localization, track, and attack of subsurface targets. Smaller and quieter threat submarines drive requirements for continued advancement in ASW sensor capabilities for both open-ocean and littoral environments in order to overcome challenges associated with reduced target acoustic signatures and increased background clutter caused by the water depth, high volume of shipping, and commercial radio frequency interference.

MAC-E: PE 0604261N funds the incorporation of the capability into the P-8A AOFP, integration of the AOFP into the P-8A Mission suite and associated training system and Post Flight Analysis (PFA) tool updates. The remainder of the integration into the P-8A platform is accomplished via PE 0605504N.

UnderSea Advantage (USA): USA is the next generation of multistatics. USA incorporates an incremental improvement upon the existing system and will be accomplished via three blocks. The first block will be funded in the following manner: Early development and technology maturation efforts are funded under PE 0603254N, and PE 0604261N funds the incorporation of the capability into the P-8A AOFP and integration of the AOFP into the P-8A Mission suite. 0604261N also funds the associated training system and Post Flight Analysis (PFA) tool updates. The remainder of the integration into the P-8A platform is accomplished via PE 0605504N.

Project 0480 also provides funding for the Advanced Product Build (APB) program which integrates Office of Naval Research (ONR) Future Naval Capabilities (FNCs), Small Business Innovation Research (SBIR), and University Affiliated Research Center (UARC) products and mature technologies into the processing baseline. Efforts incorporate clutter reduction techniques, automation, improved displays and controls, and improved communication links to enable reduced operator workload, increased target detection opportunities, and improved classification techniques. Sonobuoy test articles in FY22-FY28 support software and hardware integration flights tests, data collection, and analysis for the MAC program in order to develop updated fleet release software. APB also includes an Air ASW Engineering Measurement Program (AAEMP) that collects ASW operational performance data to identify areas where improvements can be incorporated across Air ASW platforms. Finally, project funding provides initial and interim training of new capabilities to test and fleet aircrew.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Multistatic Active Coherent (MAC)	34.300	37.229	37.496	0.000	37.496
Articles:	130	130	130	-	130
FY 2023 Plans:					

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 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 0480 / *ASW Sensors & Proc*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Conduct data gathering events, data collection, and analysis for MAC-E and UnderSea Advantage (USA). Execute MAC-E Developmental Testing concurrent with P-8A testing. Begin correction of deficiencies in MAC-E System-of-Systems and AOFP Software discovered during integration and testing for P-8A AOFP software. Fund software improvements for incorporation into the P-8A Training systems associated with MAC-E capabilities. ***FY 2024 Base Plans:*** Conduct data gathering events, data collection, and analysis for MAC-E and USA. Start software engineering and development for USA System-of-Systems capabilities. Execute MAC-E Development Testing and begin testing concurrent with P-8A DT/OT. Complete correction of deficiencies (COD) in MAC-E System-of-Systems and AOFP Software discovered during integration and testing for P-8A AOFP software for initial fleet release. Fund software improvements for incorporation into the P-8A Training systems associated with MAC-E capabilities in the Weapons Tactics Trainer (WTT) and Mission Systems Desktop Trainer (MSDT). ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY23 to FY24 increase is due to costs associated with MAC-E integration into P-8A training systems.					
Title: APB System Qualification Test/Fleet Release. Rapid Capability Insertion (RCI)/Fleet Release for P-8A ***Articles:*** ***FY 2023 Plans:*** System development and AAEMP for P-8A. Develop and conduct MAC/MAC-E CONOPS, tactics, techniques, and procedure training for P-8A test and operational squadrons. ***FY 2024 Base Plans:*** System development and AAEMP for P-8A. Complete MAC refresher trainer to operational squadrons and continue MAC-E CONOPS, tactics, techniques, and procedure training for P-8A test. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY23 to FY24 decrease to align with P-8A platform schedule and MAC FIT opportunities.	4.656 -	8.772 -	6.378 -	0.000 -	6.378 -
Accomplishments/Planned Programs Subtotals	38.956	46.001	43.874	0.000	43.874

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 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 0480 / *ASW Sensors & Proc*

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN/4048: *Sonobuoys - AN/SSQ-125 (Multistatic Coherent Source)*	32.221	20.949	88.997	-	88.997	97.873	91.205	84.067	89.281	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Multistatic Active Coherent (MAC) ASW system and associated sonobuoys are fully integrated on the P-8A ASW platform. MAC Enhancements (MAC-E) is a development program associated with P-8A Increment 3 that will significantly increase the wide area search capability through Engineering Change Proposals (ECPs) to the sonobuoys, aircraft software modifications to reduce clutter and improve processing, and Operator Machine Interface (OMI) improvements to reduce operator workload. UnderSea Advantage begins to address threat submarine advancements through the introduction of a series of sensor system capability enhancements. S&T and early R&D ASW improvement programs are monitored through the APB process for maturity and then integrated into the AOFP for periodic Fleet software releases.

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 0480 / *ASW Sensors & Proc*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Development	SS/CPIF	ERAPSCO : FT. WAYNE IN	26.847	0.000		0.000		0.000		-		0.000	17.500	44.347	44.347
Prior year Prod Dev no longer funded in the FYDP	Various	VARIOUS : VARIOUS	19.905	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Software Development	C/CPIF	Boeing : Huntington Beach, CA	36.981	11.336	Dec 2021	13.158	Dec 2022	12.450	Dec 2023	-		12.450	0.000	73.925	73.925
Software Development	WR	NAWCAD : PATUXENT RIVER, MD	53.722	5.280	Dec 2021	6.399	Dec 2022	5.821	Dec 2023	-		5.821	Continuing	Continuing	Continuing
Software Development	SS/CPIF	LOCKHEED MARTIN : MANASSAS VA	19.990	3.520	Dec 2021	3.515	Dec 2022	0.000		-		0.000	0.000	27.025	27.025
Software Development	Various	VARIOUS : VARIOUS	51.996	8.734	Dec 2021	9.449	Dec 2022	12.857	Dec 2023	-		12.857	Continuing	Continuing	Continuing
		Subtotal	209.441	28.870		32.521		31.128		-		31.128	Continuing	Continuing	N/A

Remarks

Lockheed Martin software development efforts are complete and we are migrating efforts into the various software development line.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Studies & Analysis	Various	VARIOUS : VARIOUS	28.291	0.319	Dec 2021	2.762	Dec 2022	2.524	Dec 2023	-		2.524	Continuing	Continuing	Continuing
Technical Data	WR	NAWCAD : PATUXENT RIVER, MD	17.843	0.352	Dec 2021	0.446	Dec 2022	0.378	Dec 2023	-		0.378	Continuing	Continuing	Continuing
Training	WR	NAWCAD : PATUXENT RIVER, MD	14.258	2.404	Dec 2021	3.071	Dec 2022	2.970	Dec 2023	-		2.970	Continuing	Continuing	Continuing
		Subtotal	60.392	3.075		6.279		5.872		-		5.872	Continuing	Continuing	N/A

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 0480 / *ASW Sensors & Proc*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	Various	VARIOUS : VARIOUS	46.121	3.520	Dec 2021	3.568	Dec 2022	3.520	Dec 2023	-		3.520	Continuing	Continuing	Continuing
		Subtotal	46.121	3.520		3.568		3.520		-		3.520	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Eng Spt	Various	VARIOUS : VARIOUS	50.101	1.012	Dec 2021	0.992	Dec 2022	0.982	Dec 2023	-		0.982	Continuing	Continuing	Continuing
Contractor Eng Spt	C/CPFF	NAVMAR APPLIED SCIENCES CORP : WARMINSTER, PA	11.966	1.032	Dec 2021	0.950	Dec 2022	0.952	Dec 2023	-		0.952	2.810	17.710	17.710
Government Eng Spt	WR	NAWCAD : PATUXENT RIVER, MD	99.892	0.303	Dec 2021	0.353	Dec 2022	0.310	Dec 2023	-		0.310	Continuing	Continuing	Continuing
Eng & Tech Spt Srvc (NON-FFRDC)	Various	VARIOUS : VARIOUS	63.655	1.144	Dec 2021	1.338	Dec 2022	1.110	Dec 2023	-		1.110	Continuing	Continuing	Continuing
Mgt & Prof SptT Srvc (FFRDC)	Various	VARIOUS : VARIOUS	10.018	0.000		0.000		0.000		-		0.000	0.000	10.018	10.018
Prior Years Mgmt Svcs no longer funded in the FYDP	Various	VARIOUS : VARIOUS	0.868	0.000		0.000		0.000		-		0.000	0.000	0.868	0.868
		Subtotal	236.500	3.491		3.633		3.354		-		3.354	Continuing	Continuing	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	552.454	38.956		46.001		43.874		-		43.874	Continuing	Continuing	N/A

Remarks

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 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 0480 / *ASW Sensors & Proc*

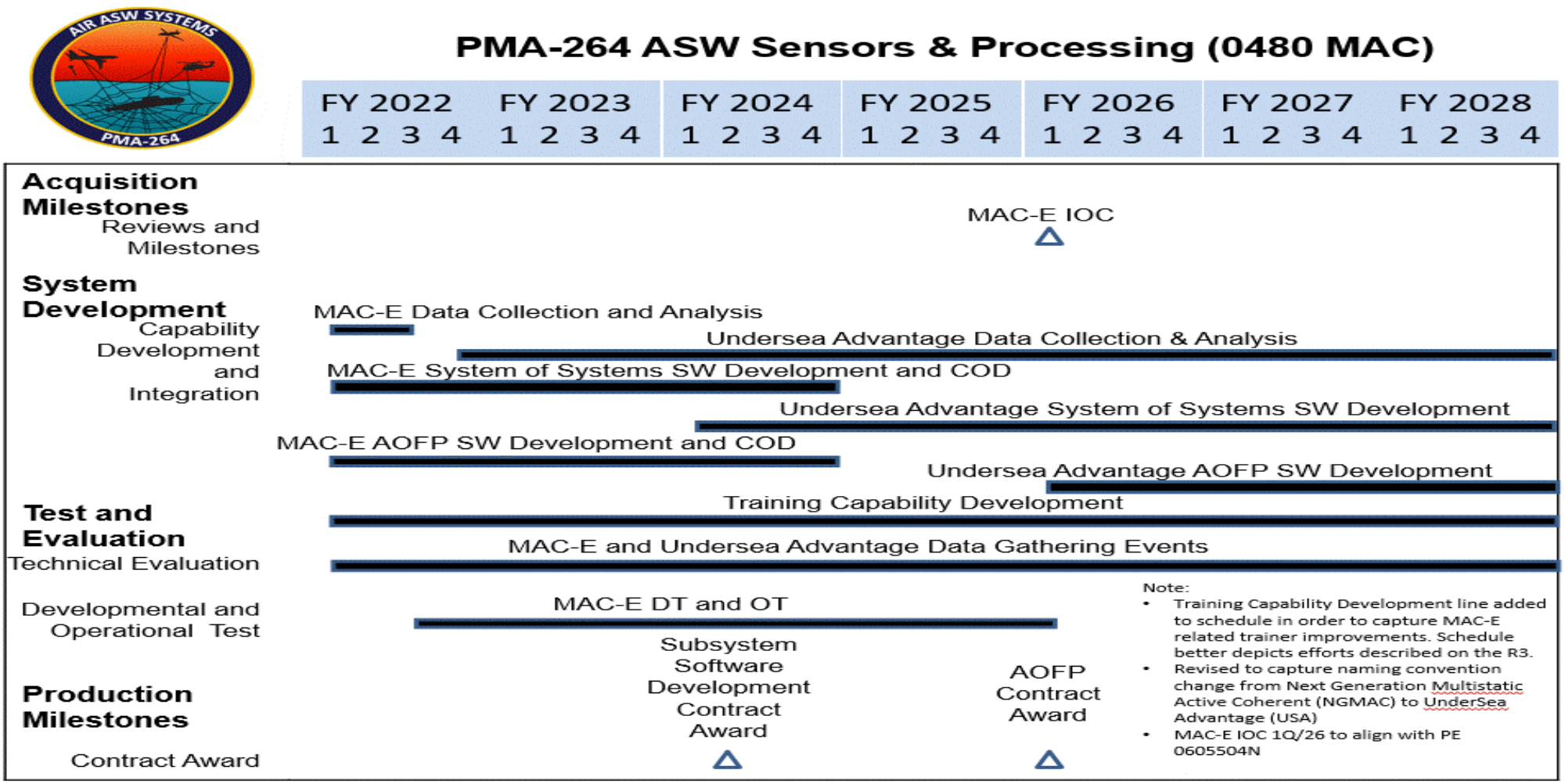

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 0480 / *ASW Sensors & Proc*

PMA-264 ASW Sensors & Processing (0480 APB)

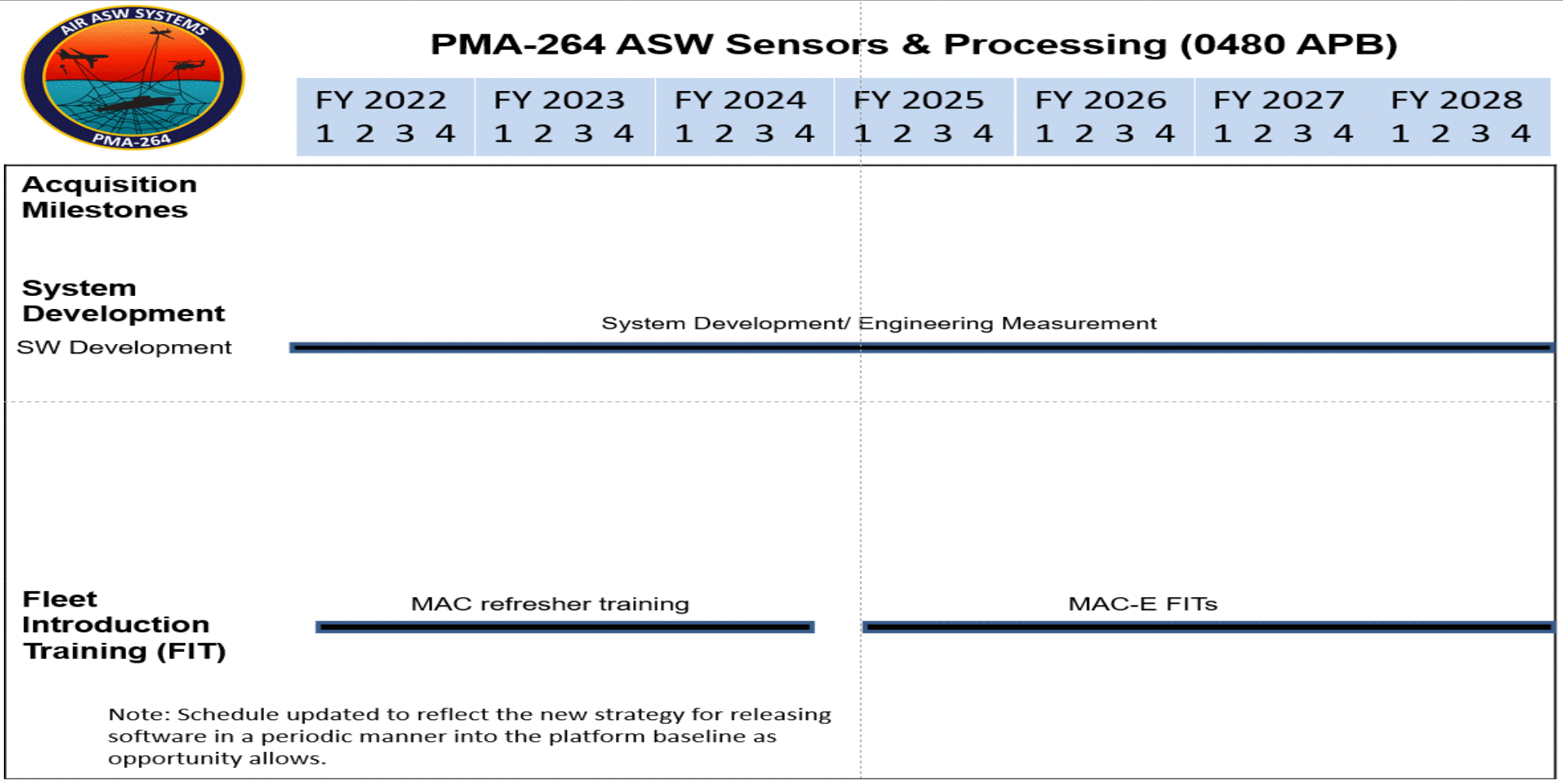

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 0480 / *ASW Sensors & Proc*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj: 0480 ASW Sensors & Processors - Multistatic Active Coherent				
Acquistion Milestones: Reviews and Milestones: Initial Operational Capability	1	2026	1	2026
System Development: Capability Development and Integration: MAC-E Data Collection & Analysis	1	2022	3	2022
System Development: UnderSea Advantage Data Collection & Analysis	4	2022	4	2028
System Development: MAC-E System of Systems Software Development and COD	1	2022	4	2024
System Development: UnderSea Advantage System of Systems Software Development	1	2024	4	2028
System Development: MAC-E AOFP S/W Development and COD	1	2022	4	2024
System Development: UnderSea Advantage AOFP S/W Development	1	2026	4	2028
Test & Evaluation: Technical Evaluation: Training Capability Development	1	2022	4	2028
Test & Evaluation: Technical Evaluation: MAC-E & UnderSea Advantage Data Gathering Events	1	2022	4	2028
Test & Evaluation: Developmental and Operational Test: MAC-E Operational Test	3	2022	1	2026
Production Milestones: Contract Awards: Subsystem Software Development Award	2	2024	2	2024
Production Milestones: Contract Awards: AOFP Contract Award	1	2026	1	2026
Proj: 0480 ASW Sensors & Processors - Advanced Product Builds (APB)				
System Development: Software Development: System Development/Engineering Measurement	1	2022	4	2028
Fleet Introduction Training: MAC refresher training	1	2022	4	2024
Fleet Introduction Training: MAC-E FITs	1	2025	4	2028

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 3224 / *High Altitude ASW*	

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
3224: *High Altitude ASW*	132.585	3.751	4.230	7.657	-	7.657	10.978	11.237	8.606	7.693	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

High Altitude ASW project provides Key Enablers/Sonobuoy Enhancements (KESE) that increase P-8A operational flexibility and effectiveness throughout the kill chain. Funding addresses key enablers such as, uplink/downlink sonobuoy communications, AELS/over-the-horizon (OTH) communications, acoustic communications (ACOMMS) and sonobuoy enhancements that include: digitization, cyber protection and the integration into the AOFP software.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Key Enablers and Sonobuoy Enhancements	3.751	4.230	7.657	0.000	7.657
Articles:	-	-	-	-	-
FY 2023 Plans: Advance sonobuoy communications improvements. Establish a North Atlantic Treaty Organization (NATO) digital telemetry standard across the sonobuoy portfolio. Continue sonobuoy encryption proof of concept. Demonstrate sonobuoy OTH communications. Conduct risk reduction efforts on the P-8A to subsurface submarine acoustic communications (ACOMMS) capability.					
FY 2024 Base Plans: Continue to advance sonobuoy communications improvements including NATO digital telemetry across the sonobuoy portfolio and the sonobuoy encryption proof of concept. Demonstrate sonobuoy OTH communications. Begin the development of the P-8A ACOMMS capability.					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: FY23 to FY24 increase is for Sonobuoy Acoustic Communications development to improve ASW coordination between air and subsurface platforms.					
Accomplishments/Planned Programs Subtotals	3.751	4.230	7.657	0.000	7.657

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN/4048: *Sonobuoys - All Types*	296.871	303.520	311.177	-	311.177	296.267	304.427	289.022	306.543	Continuing	Continuing

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 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 3224 / *High Altitude ASW*

C. Other Program Funding Summary ($ in Millions)

Line Item	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

Remarks

D. Acquisition Strategy

The acquisition approach is to rapidly prototype Key Enablers and Sonobuoy Enhancements that improve maritime supremacy and integrate into multiple ASW platforms. A 15 March 12 Acquisition Decision Memorandum (ADM) from PEO(A) (Milestone Decision Authority) approved the transition from a planned Acquisition Category (ACAT) Program to a series of Engineering Change Proposal (ECP) modifications to the AN/SSQ-36, AN/SSQ-53, AN/SSQ-62, AN/SSQ-101 and SSQ-125 sonobuoys.

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 3224 / *High Altitude ASW*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Development	C/CPFF	VARIOUS : VARIOUS	5.581	2.078	Nov 2021	1.451	Nov 2022	0.450	Nov 2023	-		0.450	2.600	12.160	14.662
Prior year Prod Dev no longer funded in the FYDP	Various	VARIOUS : VARIOUS	44.280	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Primary Hdw Development	C/CPFF	FLIGHTLINE : VICTOR NY	1.000	1.127	Nov 2021	1.267	Nov 2022	0.750	Nov 2023	-		0.750	0.000	4.144	-
INC 3 A/C Software Integration	C/CPFF	BOEING : SEATTLE WA	4.983	0.000		0.000		0.250	Nov 2023	-		0.250	0.000	5.233	4.983
P-8A ACOMMS Software Development	C/CPFF	VARIOUS : VARIOUS	0.000	0.000		0.899	Nov 2022	3.947	Nov 2023	-		3.947	0.000	4.846	-
		Subtotal	55.844	3.205		3.617		5.397		-		5.397	Continuing	Continuing	N/A

Remarks

FY24 updated to reflect current execution plan to support the addition of ACOMMS.
FY24 funding increase established for P-8A to Subsurface Submarine Acoustic Communications (ACOMMS) Development Project to improve ASW coordination between air and subsurface platforms.
Various vendors based on competitive nature of contracts.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior year Support cost no longer funded in the FYDP	Various	VARIOUS : VARIOUS	35.380	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ACOMMS support	C/CPFF	VARIOUS : VARIOUS	0.000	0.000		0.000		1.408	Nov 2023	-		1.408	0.000	1.408	-
		Subtotal	35.380	0.000		0.000		1.408		-		1.408	Continuing	Continuing	N/A

Remarks

FY24 updated to reflect current execution plan to support the addition of ACOMMS.

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 3224 / *High Altitude ASW*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	Various	VARIOUS : VARIOUS	8.200	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	8.200	0.000		0.000		0.000		-		0.000	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Eng Spt	Various	VARIOUS : VARIOUS	4.021	0.145	Nov 2021	0.163	Nov 2022	0.300	Nov 2023	-		0.300	Continuing	Continuing	Continuing
Government Eng Spt	WR	NAWCAD : PATUXENT RIVER, MD	25.551	0.401	Nov 2021	0.450	Nov 2022	0.552	Nov 2023	-		0.552	Continuing	Continuing	Continuing
Prior Year Mngmt Svcs no longer funded in the FYDP	Various	VARIOUS : VARIOUS	3.589	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	33.161	0.546		0.613		0.852		-		0.852	Continuing	Continuing	N/A

Remarks

Funding increase as of FY24 for Sonobuoy Acoustic Communications Development Project to improve ASW coordination between air and subsurface platforms.

	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	132.585	3.751		4.230		7.657		-		7.657	Continuing	Continuing	N/A

Remarks

Funding increase as of FY24 for Sonobuoy Acoustic Communications Development Project to improve ASW coordination between air and subsurface platforms.

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 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 3224 / *High Altitude ASW*

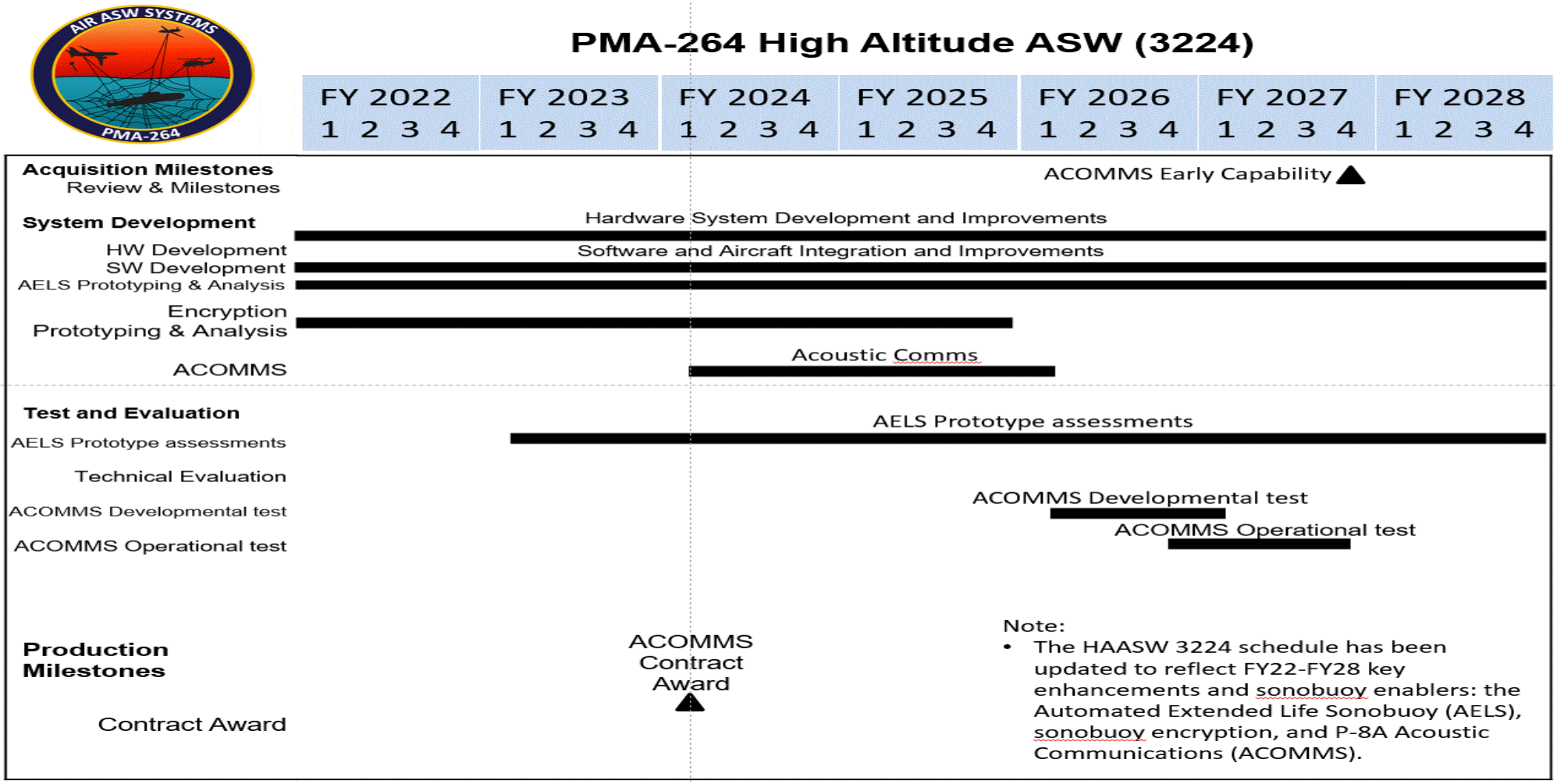

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 3224 / *High Altitude ASW*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj: 3224 High Altitude ASW				
Acquisition Milestones: Review & Milestones	4	2027	4	2027
System Development: Hardware Development: Hardware System Development	1	2022	4	2028
System Development: Software Development: Software System Development	1	2022	4	2028
System Development: AELS Prototyping & Analysis: AELS Prototyping & Analysis	1	2022	4	2028
System Development: Encryption Prototyping & Analysis: Encryption Prototyping & Analysis	1	2022	4	2025
System Development: Acoustic Comms: ACOMMS	1	2024	1	2026
Test & Evaluation: AELS Prototype evaluations: AELS Prototype assessments	1	2023	4	2028
Test & Evaluation: ACOMMS Developmental test: ACOMMS Developmental test	1	2026	1	2027
Test & Evaluation: ACOMMS Operational test: ACOMMS Operational test	4	2026	4	2027
Production Milestones: Contract Award: ACOMMS Contract Award	1	2024	1	2024

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 9999 / *Congressional Adds*	

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
9999: *Congressional Adds*	0.000	4.827	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	4.827
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Congressional Add. Implement sonobuoy modernization and specialized sonobuoy development in support of passive detection range, data bandwidth, bearing accuracy and depth selection improvements, encrypted sonobuoy communications links, and non-electrical automatic scuttle features.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023
Congressional Add: Sonobuoy capabilities research	4.827	0.000
FY 2022 Accomplishments: Support Congressional Add efforts.		
FY 2023 Plans: N/A		
Congressional Adds Subtotals	4.827	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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 0604261N / *Acoustic Search Sensors*	Project (Number/Name) 9999 / *Congressional Adds*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Studies and Analysis	Various	Various : Various	0.000	4.607	Jun 2022	0.000		0.000		-		0.000	0.000	4.607	-
		Subtotal	0.000	4.607		0.000		0.000		-		0.000	0.000	4.607	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering Spt	WR	NAWCAD : PATUXENT RIVER, MD	0.000	0.220	Jun 2022	0.000		0.000		-		0.000	0.000	0.220	-
		Subtotal	0.000	0.220		0.000		0.000		-		0.000	0.000	0.220	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	0.000	4.827		0.000		0.000		-		0.000	0.000	4.827	N/A

Remarks

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 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 9999 / *Congressional Adds*

PMA-264 Congressional Add (9999)

FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Congressional Add				Sonobuoy Capabilities research [redacted]																							

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604261N / *Acoustic Search Sensors*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9999				
Congressional Add: Sonobuoy Capabilities Research	2	2022	4	2023