Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy	Date: April 2022
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604373N *I Airborne Mine Countermeasures*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	76.878	10.436	10.881	10.882	-	10.882	11.154	11.126	11.337	11.472	Continuing	Continuing
4026: *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*	66.788	9.524	9.924	9.924	-	9.924	10.171	10.142	10.336	10.457	Continuing	Continuing
9179: *Surf Navy Integ Undersea Tactical Tech*	10.090	0.912	0.957	0.958	-	0.958	0.983	0.984	1.001	1.015	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Airborne Mine Countermeasures (AMCM) Program Element (PE) provides resources to develop an advanced Mine Countermeasures (MCM) system to counter known and projected mine threats, as well as to develop post mission analysis software, integrated tactics and tactics training for mine warfare operations, and post mission analysis proficiency training.

The MCM systems provide mobile, quick reaction forces capable of land or sea-based minehunting and mines countermeasures operations worldwide. Resources are for developing and deploying advanced mine-sweeping systems and the intelligence and oceanographic capabilities that will enable mine warfare superiority. Tactics and techniques used vary across a diversity of environments and threats, including both asymmetric and emerging.

Resources provide for systems and support of mine warfare systems and expeditionary systems to allow for continuous operations of the Navy's warships and support vessels, other military vessels, and commercial vessels. Core capabilities include forward presence, deterrence, sea control, power projection, maritime security, humanitarian assistance and disaster response to maintain freedom of the seas. Capability improvements include reducing post-mission analysis time; reducing detect, classify, and identify decision time; improving neutralization time; improving network communications; automatic target recognition; and achieving in-stride detect-to-engage capability. Concept-of-operations include development of cooperative, modular systems with a common post mission analysis system providing advanced tools to automate the complex problem of contact management for the thousands of recorded detections, the establishment of capable networked command and control systems, and standing up an accurate and interactive environmental system with the ability to form and disseminate a Common Environmental Picture. Efforts benefit the MCM force by transforming the Navy from the platform-centered legacy set of systems to a capability-centered force that is distributed, networked, and able to provide unique maritime influence and access across the entire maritime domain. The Airborne Mine Countermeasures (AMCM) programs will provide detection, classification, localization, identification, neutralization, influence sweep, and post mission analysis capabilities. This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA).

Project 4026 Strat Into Medal, Tactics & Trng Organic Force has been renamed Net-Centric Sensor Analysis for Mine Warfare (NSAM). This project element also includes the Integrated Tactics project.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy	Date: April 2022
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604373N *I Airborne Mine Countermeasures*

NSAM is the next generation post mission analysis (PMA) system which will replace the Organic Post Mission Analysis (OPMA) system. NSAM will be the single tactical and environmental PMA system for all Mine Warfare (MIW) sensor data and will provide integrated contact management capabilities. NSAM creates a collaborative, multi-data set, multi-user environment with the goal of reducing the mission timeline and increasing the mission effectiveness. NSAM is designed with an extensible architecture, to ease integration of additional sensors and advanced algorithms. Additionally, NSAM includes embedded contact recognition training.

The Integrated Tactics project develops MIW tactics across multiple MCM communities. The project develops new tactics theory for emerging systems and operations and Fleet tactics training. Theory and tactics are documented and published into doctrine for Fleet users.

Project 9179, Surface Navy Integrated Undersea Tactical Technology (SNIUTT) is a software tool which provides contact recognition training modules for Mine Countermeasures (MCM) sensor systems and runs on existing PMA and training systems.

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	10.861	10.881	0.000	-	0.000
Current President's Budget	10.436	10.881	10.882	-	10.882
Total Adjustments	-0.425	0.000	10.882	-	10.882
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.425	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000
• Adjustments to Budget Year	-	-	10.882	-	10.882

Change Summary Explanation

Program Adjustments:
FY 2021 reduced by $425K for SBIR assessments.
FY 2022 no adjustments
FY 2023 no adjustments

FY 2023 funding increase reflects the fact that the FY 2022 President’s Budget request did not include out-year funding.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604373N / *Airborne Mine Countermeasures*	Project (Number/Name) 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
4026: *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*	66.788	9.524	9.924	9.924	-	9.924	10.171	10.142	10.336	10.457	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project 4026: Net-centric Sensor Analysis for Mine Warfare (NSAM) includes both NSAM and the Integrated Tactics project.

NSAM will be the replacement for the Organic Post Mission Analysis (OPMA) system, which provides post mission analysis (PMA) capabilities for the Airborne Laser Mine Detection System (ALMDS), the Airborne Mine Neutralization System (AMNS), and a separate module for contact management. NSAM will be the single tactical and environmental PMA system for all Mine Warfare (MIW) sensor data and will provide integrated contact management capabilities. NSAM creates a collaborative, multi-data set, multi-user environment with the goal of reducing the mission timeline and increasing the mission effectiveness. NSAM is designed with an extensible architecture, to ease integration of additional sensors and advanced algorithms. Additionally, NSAM includes embedded contact recognition training.

The Integrated Tactics project develops tactics at the MIW Staff and MCM Scenario level. Project provides new MIW tactics theory and Fleet tactics training for MIW Staffs. Theory and tactics are documented and published into doctrine for Fleet users.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: NSAM Product Development	6.711	7.090	7.442	0.000	7.442
Articles:	-	-	-	-	-
FY 2022 Plans: - Continue NSAM Agile software development for B1.3 AN/AQS-20C PMA. - Complete software development for B1.2 UISS contact management. - Develop initial workflows for new tactics, such as Attrition MCM Objective, and cross-hatching tactic, for future incorporation into MEDAL. - Continue developing MIW Staff scenarios and executing MIW Staff wargames. - Continue research into new tactics and theory, such as tactics to reduce false classification, and investigation of impact of mines undetected on system performance.					
FY 2023 Base Plans: -Continue NSAM Agile software development for B1.3 AN/AQS-20C PMA.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
-Support tactics training needs for MIW Staffs by developing wargame scenarios and conducting wargames. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY2022 to FY2023 increase reflects additional software development capacity applied to B1.3, AN/AQS-20C PMA.					
Title: Engineering Services/ILS: ***Articles:*** ***FY 2022 Plans:*** - Continue requirements analysis of new draft NSAM Information-Systems Capability Development Document and begin developing systems engineering approach to meet CDD initial minimum requirements. - Perform systems engineering tasks including configuration management of system requirements, managing trouble observation report (TORs), ticket backlogs, and cybersecurity tasks to support B1.2 UISS contact management and B1.3 AN/AQS-20C PMA development. - Continue applying RMF guidelines and implement continuous monitoring strategy adhering to the ATO requirements. - Continue developing documentation required for Milestone B decision. ***FY 2023 Base Plans:*** - Begin executing systems engineering plan and developing documentation to meet IS-CDD initial minimum requirements. - Continue performing systems engineering tasks including configuration management of system requirements, managing test observation report (TORs), ticket backlogs, and cybersecurity tasks to support B1.3 AN/AQS-20C PMA development. - Continue applying RMF guidelines and implement continuous monitoring strategy adhering to the ATO requirements. - Prepare NSAM training curriculum updates for B1.2. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:***	1.952 -	1.947 -	1.949 -	0.000 -	1.949 -

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
No significant scope changes from FY 2022 to FY 2023.					
Title: Test and Evaluation	0.519	0.526	0.172	0.000	0.172
Articles:	-	-	-	-	-
FY 2022 Plans: - Develop NSAM B1.2 UISS contact handling pass test procedures, execute NSAM B1.2 developmental test, document test observation reports, and deliver final test report. Correct issues and conduct regression test to verify correction of issues. Support quarterly engineering deliveries to the LCS mission package application software lab. ***FY 2023 Base Plans:*** -Conduct quarterly incremental tests of engineering builds. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** FY 2022 to FY 2023 decrease due to accomplishing B1.2 DT in FY 2022 vice FY2023.					
Title: Management Support	0.342	0.361	0.361	0.000	0.361
Articles:	-	-	-	-	-
FY 2022 Plans: - Continue to plan, track, follow-up and report on cost, schedule and performance status. - Develop cross-functional plans, to meet draft IS-CDD requirements. - Conduct oversight of project technical processes. - Plan, track, and follow-up on development of Milestone B documentation. ***FY 2023 Base Plans:*** - Continue to plan, track, follow-up and report on cost, schedule and performance status. - Conduct oversight of project technical processes. -Conduct NSAM Milestone B, as an acquisition category IV-monitor program and close-out actions following the Milestone B review. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:***					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A					
Accomplishments/Planned Programs Subtotals	9.524	9.924	9.924	0.000	9.924

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The NSAM project is executed by government-led teams at Naval Surface Warfare Center (NSWC) Panama City Division (PCD) and Naval Research Laboratory - Stennis Space Center (NRL-SSC), with additional services provided by contractor support labor. NSAM is currently a pre-acquisition category IV-monitor program and plans to enter the acquisition process at Milestone B. NSAM will follow the DoD acquisition model for incrementally deployed software-intensive systems.

The Integrated Tactics project is executed by a government team at NSWC PCD.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development	WR	NSWC PCD : Panama City FL	36.314	4.171	Oct 2020	4.281	Oct 2021	4.277	Oct 2022	-		4.277	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NRL-SSC : Bay St. Louis, MS	6.516	2.175	Oct 2020	2.444	Oct 2021	2.445	Oct 2022	-		2.445	Continuing	Continuing	Continuing
Hardware/Software Development	C/CPFF	Various: NSWC PC : Panama City, FL	0.365	0.365	Oct 2020	0.365	Oct 2021	0.365	Oct 2022	-		0.365	0.000	1.460	-
		Subtotal	43.195	6.711		7.090		7.087		-		7.087	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering and Logistics Support	C/CPFF	NSWC PCD : Various	0.480	0.440	Oct 2020	0.440	Oct 2021	0.440	Oct 2022	-		0.440	0.000	1.800	-
Engineering and Logistics Support	WR	NSWC PCD : Not Specified	16.721	1.512	Oct 2020	1.507	Oct 2021	1.509	Oct 2022	-		1.509	Continuing	Continuing	Continuing
		Subtotal	17.201	1.952		1.947		1.949		-		1.949	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
NSAM Test and Evaluation	WR	NSWC PC : Panama City, FL	3.106	0.421	Oct 2020	0.260	Oct 2021	0.263	Oct 2022	-		0.263	0.000	4.050	-
NSAM Test and Evaluation	WR	JHU-APL : Laurel, MD	0.258	0.098	Oct 2020	0.102	Oct 2021	0.100	Oct 2022	-		0.100	0.000	0.558	-
NSAM Test and Evaluation	C/CPFF	NSWC PC : Various	0.164	0.000		0.164	Oct 2021	0.164	Oct 2022	-		0.164	0.000	0.492	-
		Subtotal	3.528	0.519		0.526		0.527		-		0.527	0.000	5.100	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Support	WR	NSWC PC : Panama City FL	2.821	0.342	Oct 2020	0.361	Oct 2021	0.361	Oct 2022	-		0.361	Continuing	Continuing	Continuing
Acquisition Workforce Fund	Various	Various : Various	0.043	0.000		0.000		0.000		-		0.000	0.000	0.043	-
		Subtotal	2.864	0.342		0.361		0.361		-		0.361	Continuing	Continuing	N/A

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	66.788	9.524		9.924		9.924		-		9.924	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

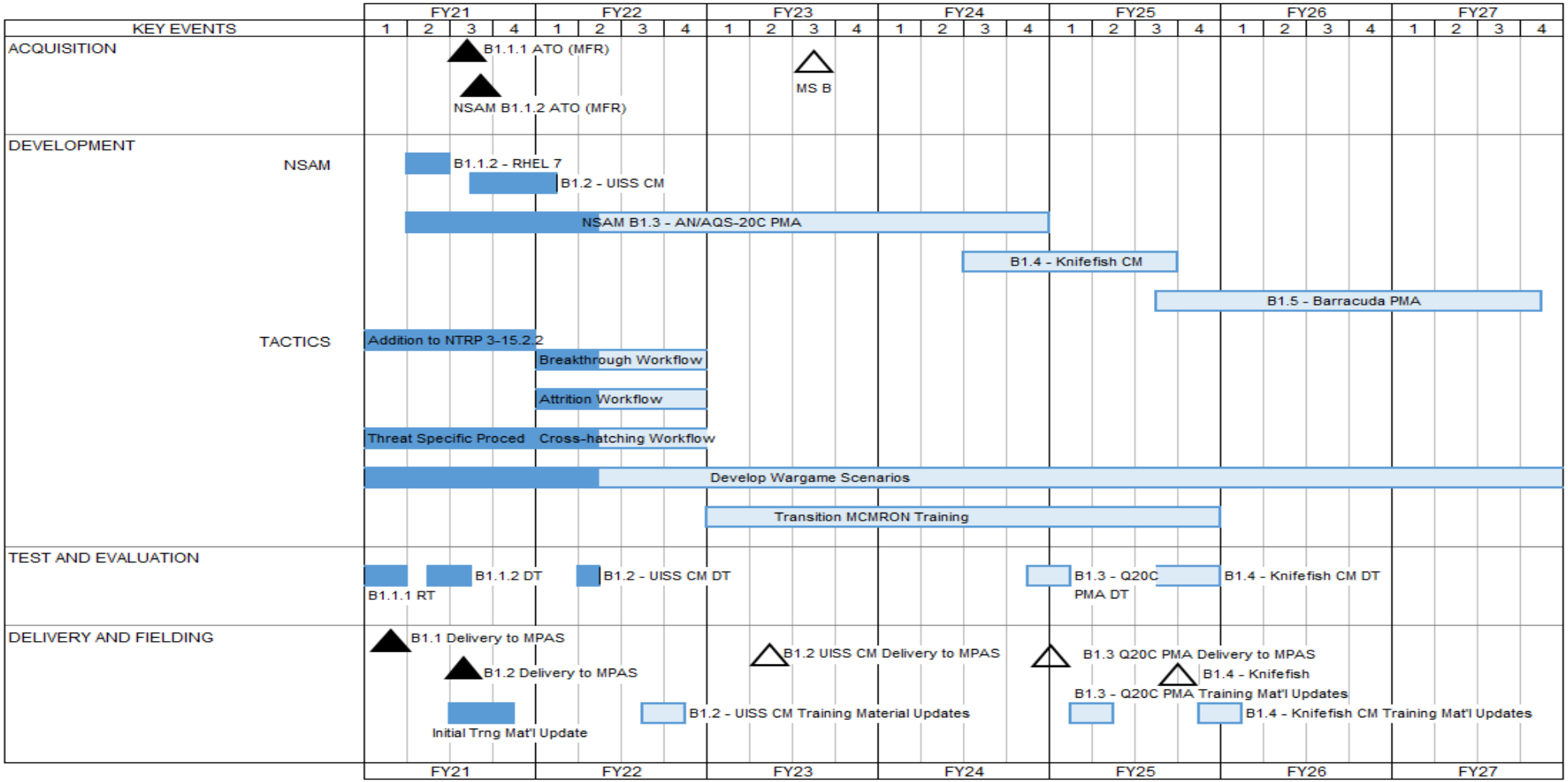

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 4026				
Acquisition Milestones: NSAM: Milestone B	3	2022	3	2022
Acquisition Milestones: NSAM: S/W Development Build 1.1.2 RHEL 7	2	2021	2	2021
Acquisition Milestones: NSAM: S/W Development Build 1.2 UISS Contact Management	3	2021	4	2022
Acquisition Milestones: NSAM: S/W Development Build 1.3 AN/AQS-20C PMA	2	2021	2	2025
Acquisition Milestones: NSAM: S/W Development Build 1.4 Knifefish Contact Management	1	2025	1	2026
Acquisition Milestones: NSAM: S/W Development Build 1.5 Barracuda	1	2026	4	2027
Acquisition Milestones: Tactics: New chapters with vulnerability data for additional mines for NTRP 3-15.2.2 susceptibility of Ships to Threat mines	1	2021	4	2021
Acquisition Milestones: Tactics: Threat specific Tactics and Procedures against specific mine types with existing functionality in MINEnet Tactical	1	2021	4	2021
Acquisition Milestones: Tactics: Develop wargame scenarios and conduct wargames for LCS MCM Mission Package and MIW staffs	1	2021	4	2027
Acquisition Milestones: Tactics: Transition wargame functionality into official MCMRON Training	1	2023	4	2025
Test & Evaluation: NSAM: Developmental Testing Build 1.1.1 - Additional AN/AQS-20C Contact Management functionality	1	2021	1	2021
Test & Evaluation: NSAM: Developmental Testing Build 1.1.2 RHEL 7	2	2021	3	2021
Test & Evaluation: NSAM: Developmental Testing Build 1.2 UISS Contact Management	1	2023	1	2023
Test & Evaluation: NSAM: Developmental Testing Build 1.3 AN/AQS-20C PMA	3	2025	3	2025

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 4026 / *Net-Centric Sensor Analysis for Mine Warfare (NSAM)*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Test & Evaluation: NSAM: Developmental Testing Build 1.4 Knifefish Contact Management	2	2026	2	2026
Test & Evaluation: NSAM Deliveries: v1.1 - Delivery to MPAS	1	2021	1	2021
Test & Evaluation: NSAM Deliveries: v1.2 - Delivery to MPAS	3	2021	3	2021
Test & Evaluation: NSAM Deliveries: Build 1.2 UISS Contact Management	2	2023	2	2023
Test & Evaluation: NSAM Deliveries: Build 1.3 AN/AQS-20C PMA	4	2025	4	2025
Test & Evaluation: NSAM Deliveries: Build 1.4 Knifefish Contact Management	3	2026	3	2026
Training: NSAM: Initial Training material update	3	2021	4	2021
Training: NSAM: Build 1.2 UISS CM Training Material Update	1	2023	2	2023
Training: NSAM: Build 1.3 AN/AQS-20C PMA Training Material Update	3	2025	4	2025
Training: NSAM: Build 1.4 Knifefish CM Training Material Update	2	2026	3	2026

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604373N / *Airborne Mine Countermeasures*	Project (Number/Name) 9179 / *Surf Navy Integ Undersea Tactical Tech*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
9179: *Surf Navy Integ Undersea Tactical Tech*	10.090	0.912	0.957	0.958	-	0.958	0.983	0.984	1.001	1.015	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) is a software tool which provides contact recognition training modules for Mine Countermeasures (MCM) sensor systems. SNIUTT training modules include skills and refresher/proficiency training; the contact recognition training focuses on detection, classification, and identification of mine-like contacts. The modules run on existing PMA and training systems; this implementation reinforces PMA procedures for Fleet operators. Modules are customized based on Fleet-user needs for a specific weapons system and are used both in the classroom and at the squadrons, as contact recognition is a perishable skill. SNIUTT training modules are available for the following systems: 1) Common Post Mission Analysis (CPMA) for AN/AQS-24B; 2) Coastal Battlefield Reconnaissance and Analysis (COBRA) PMA for COBRA sensors; 3) Organic Post Mission Analysis (OPMA) for ALMDS and the Contact Management Tool; and 4) Net-centric Sensor Analysis for Mine Warfare (NSAM) PMA system for ALMDS.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Engineering and Logistics Support	0.311	0.336	0.336	0.000	0.336
Articles:	-	-	-	-	-
FY 2022 Plans: - Perform systems engineering tasks such as developing high-level and derived requirements for SNIUTT v1.3.5 and v1.3.6 software products, configuration management of system requirements, engineering change proposals, managing ticket backlogs, and continue applying risk management framework guidelines and implement continuous monitoring strategy, adhering to the authority to operate requirements. - Continue to maintain and update the current online source code repository and SNIUTT requirements and documents. - Develop test cases and follow a test-fix-test process on beta builds for SNIUTT v1.3.4; provide updated beta build to tactics teams for validation. - Provide test results and generate test reports					
FY 2023 Base Plans: - Perform systems engineering tasks such as developing high-level and derived requirements for SNIUTT v1.3.5 and v1.3.6 software products, configuration management of system requirements, engineering change proposals, managing ticket backlogs, and continue applying risk management framework guidelines and implement continuous monitoring strategy, adhering to the authority to operate requirements.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 9179 / *Surf Navy Integ Undersea Tactical Tech*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
- Continue to maintain and update the current online source code repository and SNIUTT requirements and documents. - Develop test cases and follow a test-fix-test process on beta builds for v1.3.5; provide updated beta build to tactics teams for validation. - Provide test results and generate test reports. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** No significant scope changes from FY 2022 to FY 2023.					
Title: Product Development ***Articles:***	0.601 -	0.621 -	0.622 -	0.000 -	0.622 -
FY 2022 Plans: - Conduct SNIUTT v1.3.4 software development, which includes COBRA and re-alignment of SNIUTT/NSAM functions, and new AN/AQS-24 components. ***FY 2023 Base Plans:*** - Conduct SNIUTT v1.3.5 software development, which will include initial components for NSAM AN/AQS-20C and COBRA training updates. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** No significant scope changes from FY 2022 to FY 2023.					
Accomplishments/Planned Programs Subtotals	0.912	0.957	0.958	0.000	0.958

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) is executed by a government-led team at NSWC PCD.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy			Date: April 2022
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604373N / *Airborne Mine Countermeasures*	Project (Number/Name) 9179 / *Surf Navy Integ Undersea Tactical Tech*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development	WR	NSWC PC : Panama City FL	8.450	0.601	Oct 2020	0.621	Oct 2021	0.623	Oct 2022	-		0.623	Continuing	Continuing	Continuing
		Subtotal	8.450	0.601		0.621		0.623		-		0.623	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ISEA	WR	NSWC, PC : Panama City FL	1.640	0.311	Oct 2020	0.336	Oct 2021	0.335	Oct 2022	-		0.335	Continuing	Continuing	Continuing
		Subtotal	1.640	0.311		0.336		0.335		-		0.335	Continuing	Continuing	N/A

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	10.090	0.912		0.957		0.958		-		0.958	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 9179 / *Surf Navy Integ Undersea Tactical Tech*

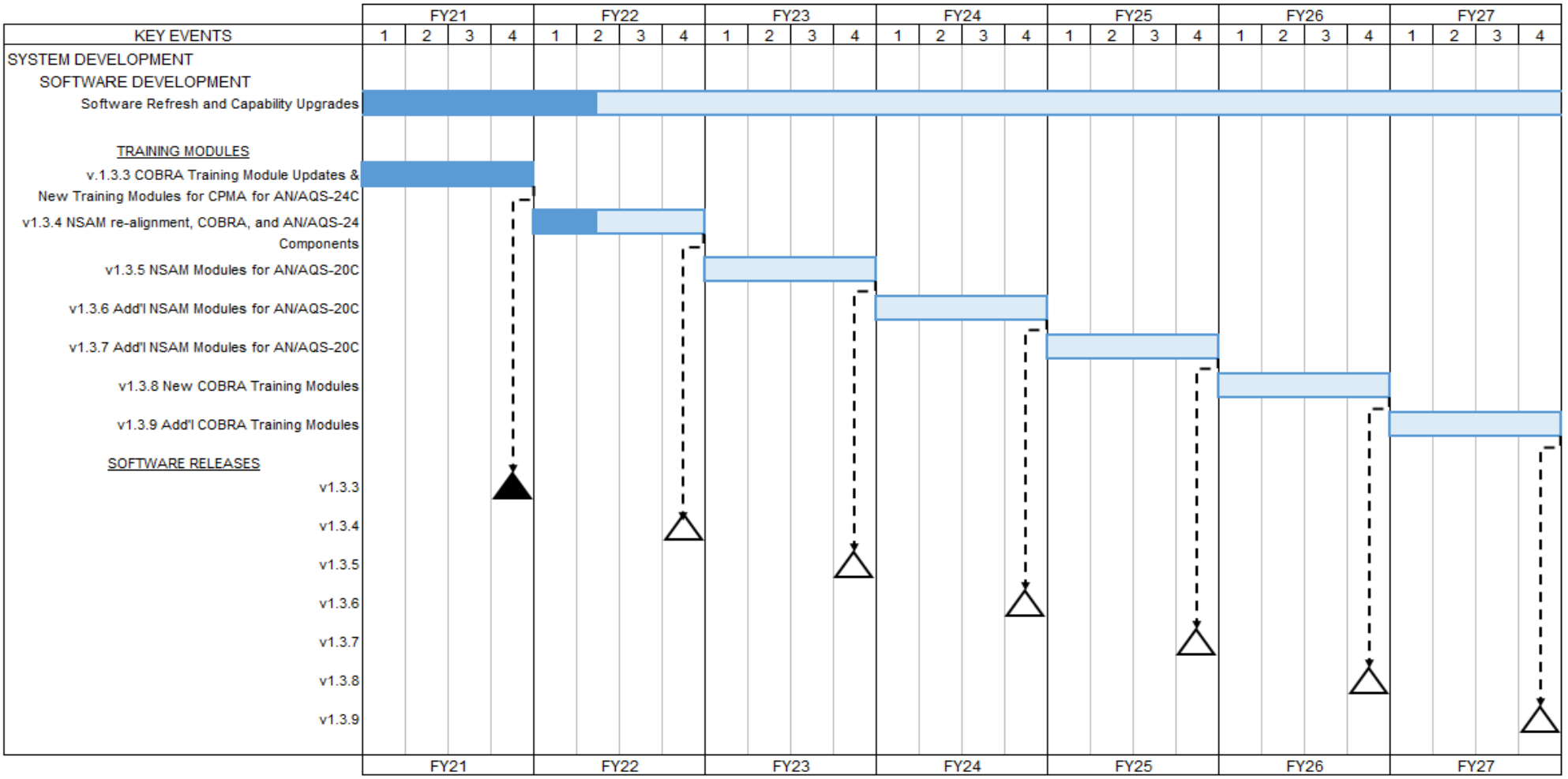

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 9179 / *Surf Navy Integ Undersea Tactical Tech*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SNIUTT				
System Development: SNIUTT Software Development: SNIUTT Software Refresh and Capability Upgrades	1	2021	4	2027
System Development: SNIUTT Software Development: v1.3.3 COBRA training module updates and new training modules for CPMA for AN/AQS-24C	1	2021	4	2021
System Development: SNIUTT Software Development: v1.3.3 software release	4	2021	4	2021
System Development: SNIUTT Software Development: v1.3.3.2 ALMDS module compatibility with NSAM	4	2021	2	2022
System Development: SNIUTT Software Development: v1.3.3.2 software release	2	2021	2	2021
System Development: SNIUTT Software Development: v1.3.4 NSAM re-alignment and AN/AQS-24 components	2	2022	4	2022
System Development: SNIUTT Software Development: v1.3.4 software release	4	2022	4	2022
System Development: SNIUTT Software Development: v1.3.5 initial NSAM modules for AN/AQS-20C	1	2023	4	2023
System Development: SNIUTT Software Development: v1.3.5 software release	4	2023	4	2023
System Development: SNIUTT Software Development: v1.3.6 additional NSAM modules for AN/AQS-20C	1	2024	4	2024
System Development: SNIUTT Software Development: v1.3.6 software release	4	2024	4	2024
System Development: SNIUTT Software Development: v1.3.7 additional NSAM modules for AN/AQS-20C	1	2025	4	2025
System Development: SNIUTT Software Development: v1.3.7 software release	4	2025	4	2025
System Development: SNIUTT Software Development: v1.3.8 new COBRA training modules	1	2026	4	2026
System Development: SNIUTT Software Development: v1.3.8 software release	4	2026	4	2026

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604373N / *Airborne Mine Countermeasures*	**Project (Number/Name)** 9179 / *Surf Navy Integ Undersea Tactical Tech*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
System Development: SNIUTT Software Development: v1.3.9 additional COBRA training modules	1	2027	4	2027
System Development: SNIUTT Software Development: v1.3.9 software release	4	2027	4	2027