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 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603382N *I Advanced Combat Systems Tech*							
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	58.061	83.251	6.216	2.051	-	2.051	2.088	2.038	2.080	2.124	Continuing	Continuing
0324: *Adv Combat System Technology*	12.077	2.406	2.216	2.051	-	2.051	2.088	2.038	2.080	2.124	Continuing	Continuing
2480: *SSL-TM*	32.932	12.264	4.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	49.196
3423: *LOCUST*	10.156	38.583	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	48.739
3438: *Innovative Naval Prototype (INP) Transition (6.4)*	0.000	11.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.000
9999: *Congressional Adds*	2.896	18.998	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	21.894

A. Mission Description and Budget Item Justification

Open architecture sets standards for technology fields to promote interoperability. For defense systems, standards enable interconnectivity across services and in coalition operations at machine-to-machine speeds. Reducing barriers associated with proprietary software speeds development and delivery of warfighting advantage. The Advanced Combat System Technology line is to evolve the technical and business practices for programs to change to an open architecture construct. The program was constructed to mature both technical and business model integration for C5I systems programs of record in an open architecture environment. The priority was incorporating the principles of modular design and design disclosure, reusable application software, interoperability and secure information exchange, lifecycle affordability and encouraging competition and collaboration.

Project Unit 0324: Funding is to implement the Naval Open Systems Architecture (OSA) strategy. The implementation of this strategy provides the tools and leadership for assisting programs and the Naval Research and Development Establishment (NR&DE) through the technical, business, and cultural transition to OSA. The primary tools and assistance will be established through the implementation of an enterprise reference architecture that transforms and standardizes the Navy technical and interoperability baseline and through related enterprise engineering technologies with consistent contract language guidance, Intellectual Property strategies and improvements in transparency of design disclosure and information exchange on past and current investments; support portfolio management and cross-program reuse. Applicable technologies will also be leveraged to facilitate the Navy's implementation of OSA. The OSA transformation effort will be applied to programs of record. Those elements include ensuring that naval systems, families of systems, programs, and prototypes move to modular OSA in accordance with DoD Instruction 5000.01 of 7 Jan 2015 which mandates that all DoD programs utilize Modular OSA to field affordable and interoperable systems. This project facilitates a strategic shift in the technical and business methods to establish cooperation and cross-domain/community of interest (COI) business relationships. This improves innovation and economies of scale throughout the Navy and Marine Corps. This project includes identification of business cases and return on investment for moving the Navy towards an open systems approach, supported by the development of open systems technologies and integrated best business and technical practices for open systems development within Naval acquisition. This project utilizes model based systems engineering and acquisition services to deliver capabilities through acquisition, development, integration, production, test, deployment and sustainment of interoperable command, control, communication, computers, intelligence, surveillance reconnaissance, cyber, microelectronics, and information technology capabilities enabling Information Warfare, unmanned systems, and other functions. Naval OSA ensures Navy-wide

system architectures become extensible and scalable in function, capacity, and workload to meet Joint warfighting requirements. This also includes the identification and development of common software components, functions, reuse methodologies, and extensible product lines.

Project Unit 2480: The efforts described in this mission area address the advanced component development and prototype demonstration associated with the Navy's Solid State Laser Technology Maturation (SSL-TM) Innovative Naval Prototypes (INP) Program and the Leap Ahead Technology (LA-Tech) investments. The SSL-TM program is developing an integrated Laser Weapons System Demonstrator (LWSD). SSL-TM will provide a new capability to the Fleet to address known capability gaps against asymmetric threats (UAS, small boats, and ISR sensors) and will inform future acquisition strategies, system designs, integration architectures, and fielding plans for laser weapon systems.

Project Unit 3422: The SHARC Surface Platforms demonstration project is part of the Department of Defense Third Offset Strategy as one element in the Sensor Grid category for 24/7 autonomy infused Situational Awareness (SA). This project will purchase Commercial-off-the-Shelf SHARC Platforms (wave gliders) and integrate four (4) unique Government-owned classified mission payloads focused on the detection of threats. These capabilities will enable CONOPS development in an operationally relevant environment to demonstrate how these technologies can improve the SA to the battlespace Commanders.

Project Unit 3423: The LOCUST demonstration is part of the Department of Defense Third Offset Strategy as one element in the Effector Grid category for small autonomous systems. LOCUST leverages the BA-3 Innovative Naval Prototype program developing and demonstrating swarming technology. The BA-3 effort is developing both the air vehicle, UAS swarming behaviors, and miniaturized sensor systems. ONR has demonstrated an autonomous system capable of launching 33 UASs in 40 seconds and flying them in a coordinated swarm. This BA-4 effort is trailing the BA-3 demonstration of technologies by a fiscal quarter and then demonstrating the technology in operationally relevant environments with military mission applications.

Project 3437: The EMW/SEWIP/SSEE Accelerator is part of the Department of Defense Third Offset Strategy to improve real time Electro-Magnetic Maneuver Warfare operations. This effort will develop integrated cross platform active and passive sensing solutions, next generation network and real time spectrum operations.

Project 3438: This activity addresses the advanced component development and prototype demonstration associated with ONR's Innovative Naval Prototypes (INP) Program and the Leap Ahead Technology (LA-Tech) investments. INP and LA-Tech investments represent game changing technologies with the potential to revolutionize operational concepts. They are disruptive in nature as they would dramatically change the way naval forces fight. INPs and LA-Techs push the imagination of our nation's technical talent to deliver transformational warfighting capabilities. Investments may include such mission areas as Unmanned and Autonomous Systems, Directed Energy / Electric Weapons, Electromagnetic Maneuver Warfare, Cyber Warfare, and Undersea Warfare.

Advanced Component Development and Prototypes (ACD&P) efforts necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment are funded in this PE. Most of the work in this PE can be classified between Technology Readiness Level (TRL) 6 (system/subsystem model or prototype demonstration in a relevant environment) and TRL 7 (system prototype demonstration in an operational environment).

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603382N *I Advanced Combat Systems Tech*

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	73.128	6.216	2.051	-	2.051
Current President's Budget	83.251	6.216	2.051	-	2.051
Total Adjustments	10.123	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	12.600	0.000			
• SBIR/STTR Transfer	-2.477	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2023	FY 2024
Project: 9999: *Congressional Adds*		
Congressional Add: *Minotaur data dissemination and interoperability*	6.275	0.000
Congressional Add: *Force-level dynamic interoperable C2*	7.723	0.000
Congressional Add: *Modernized Personnel Transfer Systems*	5.000	0.000
Congressional Add Subtotals for Project: 9999	18.998	0.000
Congressional Add Totals for all Projects	18.998	0.000

Change Summary Explanation

Funding: The decrease in funding from FY 2024 to FY 2025 is primarily due to the completion of 1 INP.

Technical: No significant change

Schedule: No significant change

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603382N / *Advanced Combat Systems Tech*	Project (Number/Name) 0324 / *Adv Combat System Technology*	

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
0324: *Adv Combat System Technology*	12.077	2.406	2.216	2.051	-	2.051	2.088	2.038	2.080	2.124	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding is to implement of the Naval Open Systems Architecture (OSA) strategy. The implementation of this strategy provides the tools and leadership for assisting programs and the Naval Research and Development Establishment (NR&DE) through the technical, business and cultural transition to OSA. The primary tools and assistance will be established through an enterprise reference architecture that transforms and standardizes the Navy technical and interoperability baseline and through related enterprise engineering technologies with consistent contract language guidance, Intellectual Property strategies and improvements in transparency of design disclosure and information exchange on past and current investments to support portfolio management and cross-program reuse. Applicable technologies such as will also be leveraged to facilitate the Navy's implementation of OSA.

The OSA transformation effort will be applied to CNO priority capability deliveries. Those elements include ensuring that naval systems, families of systems, microelectronics, modeling and simulation, Enterprise Digital Battlespace, Digital Systsem Engineering Transformation programs, efforts, and prototypes to collectively move to modular OSA in accordance with DoD Instruction 5000.01 of 7 Jan 2015 which mandates that all DoD programs utilize Modular OSA to field affordable and interoperable systems. This project supports the Naval strategic shift in the technical and business methods to establish cooperation and cross-domain/community of interest business relationships. This improves innovation and economies of scale throughout the Navy and Marine Corps.

This project includes identification of business cases and return on investment for moving the Navy towards an open systems approach, supported by the development of open systems technologies and integrated best business and technical practices for open systems development within Naval acquisition.

This project also supports Systems engineering and acquisition services to deliver capabilities through acquisition, development, integration, production, test, deployment and sustainment of interoperable command, control, communication, computers, intelligence, surveillance reconnaissance, cyber, and information technology capabilities enabling Information Warfare and other functions. Naval OSA ensures Navy-wide system architectures become extensible and scalable in function, capacity, and workload to meet Joint warfighting requirements. This also includes the identification and development of common software components, functions, reuse methodologies, and extensible product lines.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: OSA Prototyping and Demonstration	0.740	0.674	0.621	0.000	0.621
Articles:	-	-	-	-	-
FY 2024 Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
- Continue to coordinate the prototyping and demonstration of supporting OSA technologies and enablers that may include Modeling and Simulation, Live-Virtual-Constructive and related enterprise digital battlespace and sandbox technologies, cybersecurity and information assurance technologies, cloud technologies, network technologies, artificial intelligence/machine learning, automated test technologies, and microelectronics. Continue development of associated open standards and policy that enable application development conforming to open software development kits and application programming interfaces. - Continue to coordinate the prototyping, demonstration, and transition of OSA technologies to validate performance metrics, models, design, and system-of system requirements for crewed and un-crewed platforms, systems, and operational, simulated and developmental environments. ***FY 2025 Base Plans:*** - Continue to provide systems engineering support and analysis to coordinate the prototyping, demonstration, scaling, and integration of supporting OSA capabilities and standards into the Navy's enterprise digital engineering technologies and digital warfighting systems, with associated software development practices, policy changes, and standards development that enable improved test and evaluation, validation, verification, and certification of naval systems. - Continue to develop prototypes to enable system/program modeling/architecture work/transition to engineering enterprise environments ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** No significant changes					
Title: OSA Scaling and Integration	1.360	1.234	1.140	0.000	1.140
Articles:	-	-	-	-	-
FY 2024 Plans: - Continue to scale and integrate Modular Open Systems Architecture capabilities and standards into the Navy's enterprise digital battlespace and sandbox technologies and digital warfighting systems, with associated software development practices, policy changes, and standards development that enable improved test and evaluation, validation, verification, and certification of naval systems.					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
- Leverage OSA, the digital battlespace and the sandbox, as supported by systems engineering and microelectronic subject matter expert support and enabling technologies such as Automated Test/Re-Test (ATRT) to further scale the integration, implementation and adoption of OSA for various enterprise developmental and operational environments and crewed/un-crewed systems which may include various Battle Management Aids (BMAs) / Mission Planning Aids (MPs), Artificial Intelligence / Machine Learning (AI/ML), Networking capabilities, C2, data, track management tools and other common services, enterprise digital battlespace and sandbox and/or Modeling and Simulation / Live-Virtual-Constructive environments, related supporting hardware compute infrastructure solutions and microelectronics, related cloud technologies, and related enterprise sandbox technologies.					
FY 2025 Base Plans: - Continue to provide systems engineering support and analysis to coordinate the prototyping, demonstration, scaling, and integration of supporting OSA capabilities and standards into the Navy's enterprise digital engineering technologies and digital warfighting systems, with associated software development practices, policy changes, and standards development that enable improved test and evaluation, validation, verification, and certification of naval systems. - Continue to develop modeling and architecture guidelines to support scaling and integration - Continue to develop advanced security schemas and cyber security testing capabilities. - Complete Automated Test/Re-Test (ATRT) to sunset all activities related to scale the integration, implementation and adoption of OSA for various enterprise developmental and operational environments and crewed/un-crewed systems which may include various Battle Management Aids (BMAs) / Mission Planning Aids (MPs), Artificial Intelligence / Machine Learning (AI/ML), Networking capabilities, C2, data, track management tools and other common services, enterprise digital battlespace and sandbox and/or Modeling and Simulation / Live-Virtual-Constructive environments, related supporting hardware compute infrastructure solutions and microelectronics, related cloud technologies, and related enterprise sandbox technologies.					
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 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
No significant changes					
Title: OSA Systems Engineering and Analysis	0.306	0.308	0.290	0.000	0.290
Articles:	-	-	-	-	-
FY 2024 Plans: - Continue to provide systems engineering support and analysis to coordinate the prototyping, demonstration, scaling, and integration of supporting OSA technologies and enablers that may include Modeling and Simulation, Live-Virtual-Constructive and related enterprise digital battlespace and sandbox technologies, cybersecurity and information assurance technologies, cloud technologies, network technologies, artificial intelligence/machine learning, automated test technologies, and microelectronics. - Continue development of associated open standards and policy that enable application development conforming to open software development kits and application programming interfaces. - Continue to provide systems engineering support and analysis to coordinate the prototyping, demonstration, scaling, integration, and transition of OSA technologies to validate performance metrics, models, design, and system-of system requirements for crewed and un-crewed platforms, systems, and operational, simulated, and developmental environments.					
FY 2025 Base Plans: - Continue to provide systems engineering support and analysis to coordinate the prototyping, demonstration, scaling, and integration of supporting OSA capabilities and standards into the Navy's enterprise digital engineering technologies and digital warfighting systems, with associated software development practices, policy changes, and standards development that enable improved test and evaluation, validation, verification, and certification of naval systems. - Continue the use of MBSE in conjunction with additional modeling environments to accurately capture design changes required for SoS integration and employ existing capabilities in new advanced combat system kill chains, evaluate mission impacts of design changes or operational failures to improve prioritization of solutions, and reduce the time to field new capability.					
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 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
No significant changes					
Accomplishments/Planned Programs Subtotals	2.406	2.216	2.051	0.000	2.051

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• RDTEN/0307577N: *Intelligence Mission Data (IMD)*	0.851	0.788	0.793	-	0.793	0.807	0.821	0.837	0.855	Continuing	Continuing
• RDTEN/0308601N/2222: *Modeling & Simulation*	9.154	10.994	10.924	-	10.924	10.772	10.957	11.180	11.415	Continuing	Continuing

Remarks

This effort synergizes with and leverages/supports other funded efforts including Intelligence Mission Data (IMD) (RDTEN/PE 0307577N) and Modeling & Simulation Support (RDTEN/PE 0308601N, OMN/4B3N) to support development of the Naval Operational Architecture, warfighting digital transformation efforts, and enterprise digital battlespace and sandbox technologies and environments.

D. Acquisition Strategy

This is a non-ACAT program. This project has been a Navy Acquisition Executive directed effort to fundamentally alter the business, technical and policy environment for warfare systems acquisition to result in improved affordability, increased access to innovation, a reduction in time to field, improved operational availability, agility, and promote cultural environment change. The Navy's OSA Enterprise effort is built off of past successes such as the Acoustic Rapid Commercial-off-the-Shelf Insertion (ARCI) program policy statement dated 5 August 2004, the Deputy Chief of Naval Operations (DCNO) requirement dated 23 December 2005, and the Naval OSA Strategy of 2011) and is now being extended and scaled for applicability across the Department of the Navy to enable open, affordable and rapid integrated capability development. This effort continues to expand into and enable related strategic support for Rapid Prototyping, Experimentation and Demonstration and the leveraging of large and small business capabilities, the defense industrial base, government laboratories, and academia partnered with agile contracting approaches to support the evolution of the business, technical and policy landscape for warfare systems acquisition.

This effort synergizes with and supports other funded efforts including Intelligence Mission Data (IMD) (RDTEN/PE 0307577N) and Modeling & Simulation Support (RDTEN/PE 0308601N, OMN/4B3N) to support development of the Naval Operational Architecture, warfighting digital transformation efforts, and enterprise digital engineering technologies and environments.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

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
OSA Prototyping and Demonstration (1)	Various	WFCs : Various	4.366	0.599	Mar 2023	0.607	Mar 2024	0.650	Nov 2024	-		0.650	Continuing	Continuing	Continuing
OSA Scaling and Integration (1)	Various	NSWC, NRL, NUWC, NAWC WD; NAWC AD, VARIOUS : Various	3.726	1.230	Apr 2023	1.106	Mar 2024	1.141	Nov 2024	-		1.141	Continuing	Continuing	Continuing
OSA Systems Engineering and Analysis	Various	Various : Various	0.000	0.335	Apr 2023	0.277	Mar 2024	0.260	Nov 2024	-		0.260	Continuing	Continuing	Continuing
		Subtotal	8.092	2.164		1.990		2.051		-		2.051	Continuing	Continuing	N/A

Remarks

(1) Funding changes from FY23 to FY24 are due to various program phasing plan adjustments to maintain alignment with supported programs and systems.

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
Program Management Support	C/CPAF	Miscellaneous : VARIOUS	3.985	0.242	Mar 2023	0.226	Mar 2024	0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	3.985	0.242		0.226		0.000		-		0.000	Continuing	Continuing	N/A

Remarks

Phasing out paying PM costs from this PE. PM Costs will be paid from Modeling & Simulation Support RDTEN/PE 0308601N.

	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	12.077	2.406		2.216		2.051		-		2.051	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

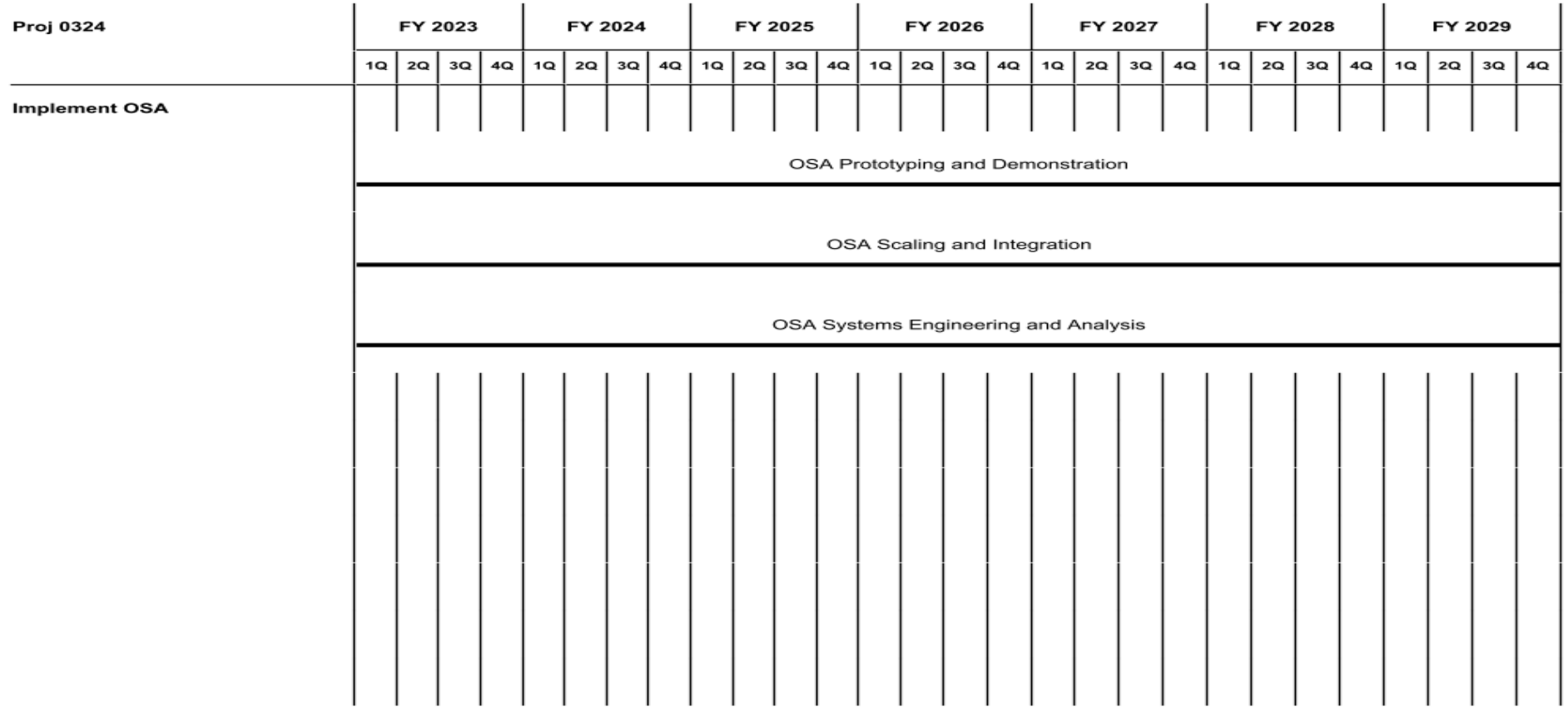

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 0324 / *Adv Combat System Technology*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0324				
Implement OSA: OSA Prototyping and Demonstration	1	2023	4	2029
Implement OSA: OSA Scaling and Integration	1	2023	4	2029
Implement OSA: OSA Systems Engineering and Analysis	1	2023	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603382N / *Advanced Combat Systems Tech*				Project (Number/Name) 2480 / *SSL-TM*			
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**
2480: *SSL-TM*	32.932	12.264	4.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	49.196
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

This PU 2480 includes Solid State Laser Technology Maturation (SSL-TM) resources and associated plans intended to provide advanced component development and prototyping for selected SSL-TM technologies maturing out of ONR's supporting Innovative Naval Prototype (INP) BA3 portfolio.

A. Mission Description and Budget Item Justification

The efforts described in this mission area address the advanced component development and prototype demonstration associated with the Navy's Solid State Laser Technology Maturation (SSL-TM) Innovative Naval Prototypes (INP) Program investments. The SSL-TM program is developing an integrated Laser Weapons System Demonstrator (LWSD). SSL-TM will provide a new capability to the Fleet to address known capability gaps against asymmetric threats (UAS, small boats, and ISR sensors) and will inform future acquisition strategies, system designs, integration architectures, and fielding plans for laser weapon systems. Based on ship's schedule, SSL-TM is planned to start de-installation, ship restoration, and hardware disposition activities during FY23.

INP and LA-Tech investments represent game changing technologies with the potential to revolutionize operational concepts. They are disruptive in nature as they would dramatically change the way naval forces fight. INPs and LA-Techs push the imagination of our nation's technical talent to deliver transformational warfighting capabilities. Successful demonstrations are intended to present the Department of the Navy with a programmatic challenge as these new capabilities can lead to the obsolescence of existing capabilities and significant decisions as to the path forward for integrating the new technological capabilities into the warfighting systems of the future.

ONR manages a continuum of INP and LA-Tech development from BA2 to BA3 to BA4. The goal of these BA4 investments is to further mature development and expend efforts necessary to evaluate integrated technologies, representative modes or prototype systems in high fidelity and realistic operating environments. This BA4 investment includes system specific efforts that help expedite technology transition from the laboratory to operational use. Emphasis is on proving component and subsystem maturity prior to integration in major and complex systems and may involve risk reduction initiatives. Projects in this category involve efforts prior to Milestone B and are referred to as advanced component development activities and include technology demonstrations. It is the goal of these projects to achieve Technology Readiness Levels 6 or 7. Successful experimentation and demonstration highlights the viability of new technological capabilities that could be implemented if an acquisition program were to be established to support further development. The portfolio is periodically refreshed through the selection of new INPs and LA-Tech investments as existing ones are completed.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Solid State Laser Technology Maturation (SSL-TM)	12.264	4.000	0.000	0.000	0.000
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 2480 / *SSL-TM*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Description: The Solid State Laser Technology Maturation (SSL-TM) Program is developing an integrated Laser Weapons System Demonstrator (LWSD) that will be installed on USS Portland (LPD-27) during FY 2019 with investments funded in the BA3 Innovative Naval Prototypes Program Element 0603801N. The investment programmed in Program Element 0603382N, Advanced Combat Systems Technology, funds costs for extended at-sea experimentation, operations, and support of the installed system on LPD-27 in the Pacific operating areas. SSL-TM will provide a new capability to the Fleet to address known capability gaps against asymmetric threats (UAS, small boats, and ISR sensors) and will inform future acquisition strategies, system designs, integration architectures, and fielding plans for laser weapon systems. ***FY 2024 Plans:*** Complete Laser Weapons System Demonstrator de-installation. Complete delayed final report, lessons learned and program closeout for SSL-TM program. ***FY 2025 Base Plans:*** N/A ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The decrease in funding from FY 2024 to FY 2025 in Proj 2480 Solid State Laser Technology Maturation (SSL-TM) is due to program completion.					
Accomplishments/Planned Programs Subtotals	12.264	4.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The projects identified for execution are non-acquisition programs. The Office of Naval Research will provide Government oversight to the projects. Each project will develop a project plan to support execution. Project plans will include a schedule and the necessary technical requirements and objectives to measure and evaluate performance. Additionally, each project will be subjected to experimentation then demonstrated in operationally relevant environments to assess their ability to meet warfighter requirements. Project deliverables will include the actual integrated hardware/software prototype systems, test reports, and technical data, necessary to

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 2480 / *SSL-TM*

support decision making. These decisions include the transition of technologies to acquisition, further refinement of the technology, or termination and reinvestment of remaining funds to other technologies that add military value.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603382N / *Advanced Combat Systems Tech*	Project (Number/Name) 2480 / *SSL-TM*	

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
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	WR	Naval Surface Warfare Center Dahlgren Division : Dahlgren, VA	3.785	0.900	Oct 2022	0.000		0.000		-		0.000	0.000	4.685	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	WR	Naval Surface Warfare Center, Port Hueneme Divisio : Port Hueneme, CA	15.738	0.400	Oct 2022	0.000		0.000		-		0.000	0.000	16.138	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	C/CPFF	Northrup Grumman : Redondo Beach, CA	5.462	0.700	Oct 2022	0.000		0.000		-		0.000	0.000	6.162	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	WR	Naval Surface Warfare Center Crane Division : Crane, IN	0.150	0.150	Oct 2022	0.000		0.000		-		0.000	0.000	0.300	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	MIPR	MITRE : Aberdeen Proving Ground, MD	0.050	0.050	Oct 2022	0.000		0.000		-		0.000	0.000	0.100	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	C/CPFF	RCT Systems Inc : Baltimore, MD	0.462	0.203	Oct 2022	0.000		0.000		-		0.000	0.000	0.665	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	C/CPFF	Gryphon Technologies : Washington, DC	0.250	0.145	Oct 2022	0.000		0.000		-		0.000	0.000	0.395	-
Developmental Test & Evaluation (DT&E)	C/CPFF	Naval Surface Warfare Center, Port Hueneme Divisio : Port Hueneme, CA	0.335	0.300	Oct 2022	0.750	Dec 2023	0.000		-		0.000	0.000	1.385	-
Developmental Test & Evaluation (DT&E)	WR	Naval Surface Warfare Center Dahlgren Division : Dahlgren, VA	0.000	0.750	Oct 2022	1.250	Dec 2023	0.000		-		0.000	0.000	2.000	-
Developmental Test & Evaluation (DT&E)	WR	Naval Surface Warfare Center	0.000	1.550	Oct 2022	0.500	Dec 2023	0.000		-		0.000	0.000	2.050	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 2480 / *SSL-TM*

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
		Crane Division : Cran : Crane, IN													
Developmental Test & Evaluation (DT&E)	C/CPFF	Huntington Ingalls : Not Specified	0.000	0.500	Oct 2022	0.250	Dec 2023	0.000		-		0.000	0.000	0.750	-
Developmental Test & Evaluation (DT&E)	SS/IDIQ	CACI : Chantilly, VA	6.700	5.116	Oct 2022	0.250	Dec 2023	0.000		-		0.000	0.000	12.066	-
Developmental Test & Evaluation (DT&E)	TBD	TBD1 : Not Specified	0.000	0.750	Oct 2022	0.250	Dec 2023	0.000		-		0.000	0.000	1.000	-
Developmental Test & Evaluation (DT&E)	TBD	TBD2 : Not Specified	0.000	0.750	Oct 2022	0.750	Dec 2023	0.000		-		0.000	0.000	1.500	-
		Subtotal	32.932	12.264		4.000		0.000		-		0.000	0.000	49.196	N/A

Remarks

Increase funding to CACI and various subcontractors for de-installation, disposal, and final reporting costs.

	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	32.932	12.264		4.000		0.000		-		0.000	0.000	49.196	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 2480 / *SSL-TM*

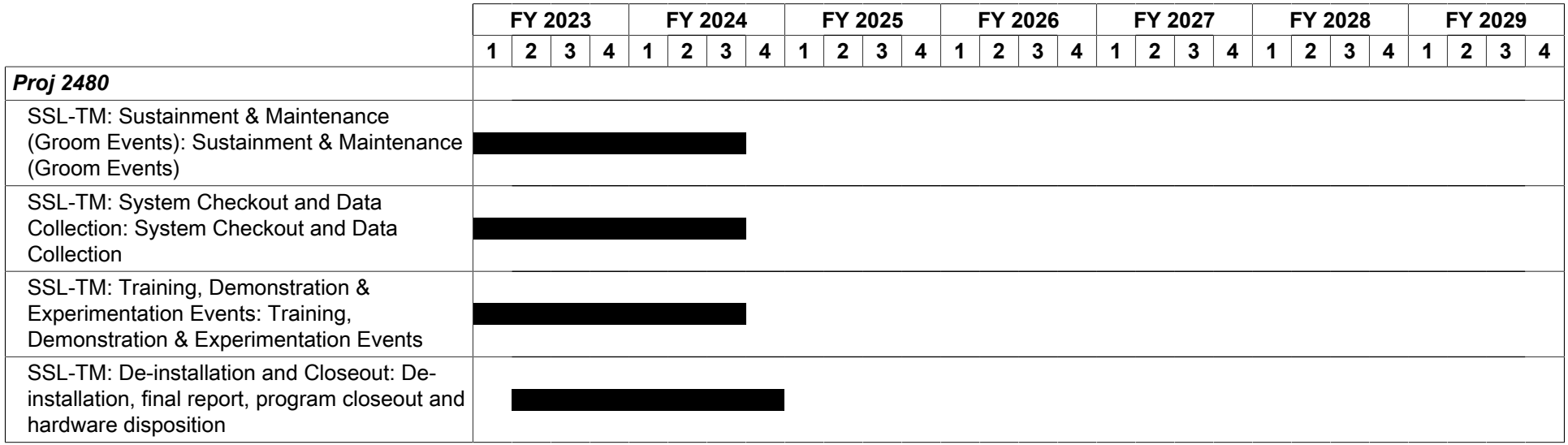

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 2480 / *SSL-TM*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2480				
SSL-TM: Sustainment & Maintenance (Groom Events): Sustainment & Maintenance (Groom Events)	1	2023	3	2024
SSL-TM: System Checkout and Data Collection: System Checkout and Data Collection	1	2023	3	2024
SSL-TM: Training, Demonstration & Experimentation Events: Training, Demonstration & Experimentation Events	1	2023	3	2024
SSL-TM: De-installation and Closeout: De-installation, final report, program closeout and hardware disposition	2	2023	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603382N / *Advanced Combat Systems Tech*	Project (Number/Name) 3423 / *LOCUST*	

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
3423: *LOCUST*	10.156	38.583	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	48.739
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Low-Cost UAV Swarming Technology (LOCUST) demonstration is part of the Department of Defense (DOD) Third Offset Strategy as one element in the Effector Grid category for small autonomous systems. LOCUST leverages the BA-3 Innovative Naval Prototype program developing and demonstrating swarming technology. The BA-3 effort is developing both the air vehicle, UAS swarming behaviors, and miniaturized sensor systems. ONR has demonstrated an autonomous system capable of launching 33 UASs in 40 seconds and flying them in a coordinated swarm. This BA-4 effort is trailing the BA-3 demonstration of technologies by a fiscal quarter and then demonstrating the technology in operationally relevant environments with military mission applications. To achieve the ability to operate in relevant environments with military applications, LOCUST is ruggedizing the air platform to survive extended deployments in high shock and vibration environments while in the launchers as well as in-flight for adverse electromagnetic and weather conditions. Significant additional effort is being done to integrate the air platform, command and control, and launchers into and onto several different manned and unmanned host platforms for mission deployment. Scale-up considerations for manufacturing and supply-chain assurance/vulnerability are being pursued.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Low-Cost Uav Swarming Technology (LOCUST)	38.583	0.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
Description: This Project focuses on demonstration of mixed-initiative UAV swarming behaviors, enabling the development of payload appropriate CONOPS/TTPs for Many Vehicle/Many Salvo swarms, and provides unmanned system capability to degrade threat Integrated Air Defense Systems (IADS) in support of follow-on manned system operations.					
FY 2024 Plans: N/A					
FY 2025 Base Plans: N/A					
FY 2025 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	38.583	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3423 / *LOCUST*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

There are multiple phases for this non-acquisition project.

Phase 1 - Marine Corps Warfighting Laboratory (MCWL) Air Combat Element (ACE) will lead the Phase I effort in FY 2018 & FY 2019. MCWL will procure additional launchers, LOCUST platforms and payloads. MCWL will work with the Common Launch Tube Program of Record to procure the multiple missile Common Launch Tube. MCWL will task NAWC AD to help integrate the launcher system onto the MV-22 and support flight test and flight certification. MCWL will use a supporting Warfare Center to integrate the launcher onto a Marine Corps Polaris Corporation M-RZR vehicle or M-RZR trailer. MCWL ACE will closely coordinate with the BA-3 LOCUST program manager to procure the new 6" diameter, additive manufactured, air frame (purchase through BA-3 activity contract). MCWL Experimental Division will define CONOPS/TTPs, the experimental parameters and measures of effectiveness, and operational experiments suitable to apply the capability in a relevant operational environment to evaluate the military utility of the system to a small Marine Corps maneuver element. The Center for Naval Analysis will consolidate the post demonstration report for the systems military utility.

Phase II -ONR execute a multi-domain swarm effort in FY 2020-2023 to demonstrate the advantages of small swarming UAVs against adversary defenses. ONR will work with the Naval Warfare Development Center (NWDC) to develop CONOPS / TTPS for this mission capability and fleet experimentation. NSWC Panama City Division (NSWC PCD) will provide operational and logistics support for the launch and recovery of the vehicles. Initiation of Phase II in FY2020 intentionally follows the 6.3 INP by two fiscal years to allow the INP to develop and mature the miniaturized payloads required for an operational demo. Additionally, close coordination and involvement with acquisition community through these NWDC events and well as simulation exercises and the objective experiments and demonstrations is being done to shape requirements and budget submissions

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3423 / *LOCUST*

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
Multi-Rotor Platform Procur	MIPR	NRL : Wash, DC	0.013	0.000		0.000		0.000		-		0.000	0.000	0.013	-
Multi-Rotor Platform Payload	MIPR	MITRE : Mclean, VA	0.350	0.000		0.000		0.000		-		0.000	0.000	0.350	-
Payload Procurement	C/CPFF	Raytheon : Tucson, AZ	1.904	0.000		0.000		0.000		-		0.000	0.000	1.904	-
Multi-Rotor Tests	MIPR	NSWC : Indian Head, MD	0.025	0.000		0.000		0.000		-		0.000	0.000	0.025	-
Fixed-Wing Procurement	C/CPFF	Raytheon : Tuxson, AZ	4.155	0.000		0.000		0.000		-		0.000	0.000	4.155	-
Platform Specific Launcher Development	Various	Various : Various	1.201	0.000		0.000		0.000		-		0.000	0.000	1.201	-
Command and Control Integration	Various	Various : Various	0.560	0.000		0.000		0.000		-		0.000	0.000	0.560	-
Fixed Wing Tests	Various	Various : Various	1.588	0.000		0.000		0.000		-		0.000	0.000	1.588	-
All Up Round Hardware	C/CPFF	Raytheon : Tucson, AZ	0.000	9.500	Apr 2024	0.000		0.000		-		0.000	0.000	9.500	-
Production Line Planning and Support	C/CPFF	Raytheon : Tucson, AZ	0.000	13.000	Jun 2023	0.000		0.000		-		0.000	0.000	13.000	-
Engineering Services and Readiness Support Planning	C/CPFF	Raytheon : Tucson, AZ	0.000	10.083	Jun 2023	0.000		0.000		-		0.000	0.000	10.083	-
		Subtotal	9.796	32.583		0.000		0.000		-		0.000	0.000	42.379	N/A

Remarks

Complete the LOCUST INP and transition it to a program office to support combatant commander requirements. Funds will support pre-production activities, purchase of operational test assets, and engineering services, with FY2023 funds added for Advanced Concept of Operations.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3423 / *LOCUST*

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)	Various	Not Specified : Not Specified	0.000	1.200	May 2023	0.000		0.000		-		0.000	0.000	1.200	-
Developmental Test & Evaluation (DT&E)	MIPR	NSWC Indian Head : Not Specified	0.000	1.800	Mar 2023	0.000		0.000		-		0.000	0.000	1.800	-
		Subtotal	0.000	3.000		0.000		0.000		-		0.000	0.000	3.000	N/A

Remarks

NSWC Indian Head $1,000K - System Safety T&E
NSWC Indian Head $800K - T&E Planning and Execution

Perform test planning and component safety qualification and testing. Provide test support.

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
Project Management	TBD	Not Specified : Not Specified	0.360	0.000		0.000		0.000		-		0.000	0.000	0.360	-
Project management	MIPR	PMS340 : Not Specified	0.000	3.000	Mar 2023	0.000		0.000		-		0.000	0.000	3.000	-
		Subtotal	0.360	3.000		0.000		0.000		-		0.000	0.000	3.360	N/A

Remarks

Provide program management and technical oversight of contractor fabrication efforts and production readiness. Provide management of testing and qualifications. Execute contract actions.

	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	10.156	38.583		0.000		0.000		-		0.000	0.000	48.739	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3423 / *LOCUST*

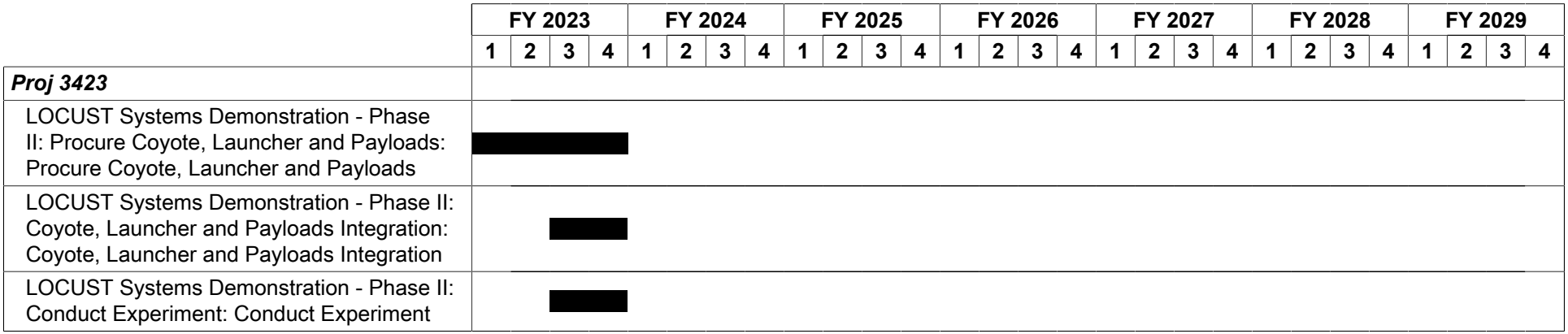

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3423 / *LOCUST*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3423				
LOCUST Systems Demonstration - Phase II: Procure Coyote, Launcher and Payloads: Procure Coyote, Launcher and Payloads	1	2023	4	2023
LOCUST Systems Demonstration - Phase II: Coyote, Launcher and Payloads Integration: Coyote, Launcher and Payloads Integration	3	2023	4	2023
LOCUST Systems Demonstration - Phase II: Conduct Experiment: Conduct Experiment	3	2023	4	2023

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603382N / *Advanced Combat Systems Tech*	Project (Number/Name) 3438 / *Innovative Naval Prototype (INP) Transition (6.4)*	

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
3438: *Innovative Naval Prototype (INP) Transition (6.4)*	0.000	11.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project addresses the advanced component development and prototype demonstration associated with ONR's Innovative Naval Prototypes (INP) Program and the Leap Ahead Technology (LA-Tech) investments. INP and LA-Tech investments represent game changing technologies with the potential to revolutionize operational concepts. They are disruptive in nature as they would dramatically change the way naval forces fight. INPs and LA-Techs push the imagination of our nation's technical talent to deliver transformational warfighting capabilities. Investments may include such mission areas as Unmanned and Autonomous Systems, Directed Energy / Electric Weapons, Electromagnetic Maneuver Warfare, Cyber Warfare, and Undersea Warfare.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: MISR-T Unmanned Aerial Systems (UAS)	11.000	0.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2024 Plans: N/A					
FY 2025 Base Plans: N/A					
FY 2025 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	11.000	0.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

This project has been a Navy Acquisition Executive directed effort to fundamentally alter the business, technical and policy environment for warfare systems acquisition to result in improved affordability, increased access to innovation, a reduction in time to field, improved operational availability, agility, and promote cultural environment change. The Navy's OSA Enterprise effort is built off of past successes such as the Acoustic Rapid Commercial-off-the-Shelf Insertion (ARCI) program policy statement

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3438 / *Innovative Naval Prototype (INP) Transition (6.4)*

dated 5 August 2004, the Deputy Chief of Naval Operations (DCNO) requirement dated 23 December 2005, and the Naval OSA Strategy of 2011) and is now being extended and scaled for applicability across the Department of the Navy to enable open, affordable and rapid integrated capability development. This effort continues to expand into and enable related strategic support for Rapid Prototyping, Experimentation and Demonstration and the leveraging of large and small business capabilities, the defense industrial base, government laboratories, and academia partnered with agile contracting approaches to support the evolution of the business, technical and policy landscape for warfare systems acquisition.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3438 / *Innovative Naval Prototype (INP) Transition (6.4)*

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
Unmanned Task Force Sprint 2	C/BA	Naval Air Center : Pax River	0.000	11.000	Aug 2023	0.000		0.000		-		0.000	0.000	11.000	-
		Subtotal	0.000	11.000		0.000		0.000		-		0.000	0.000	11.000	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	11.000		0.000		0.000		-		0.000	0.000	11.000	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3438 / *Innovative Naval Prototype (INP) Transition (6.4)*

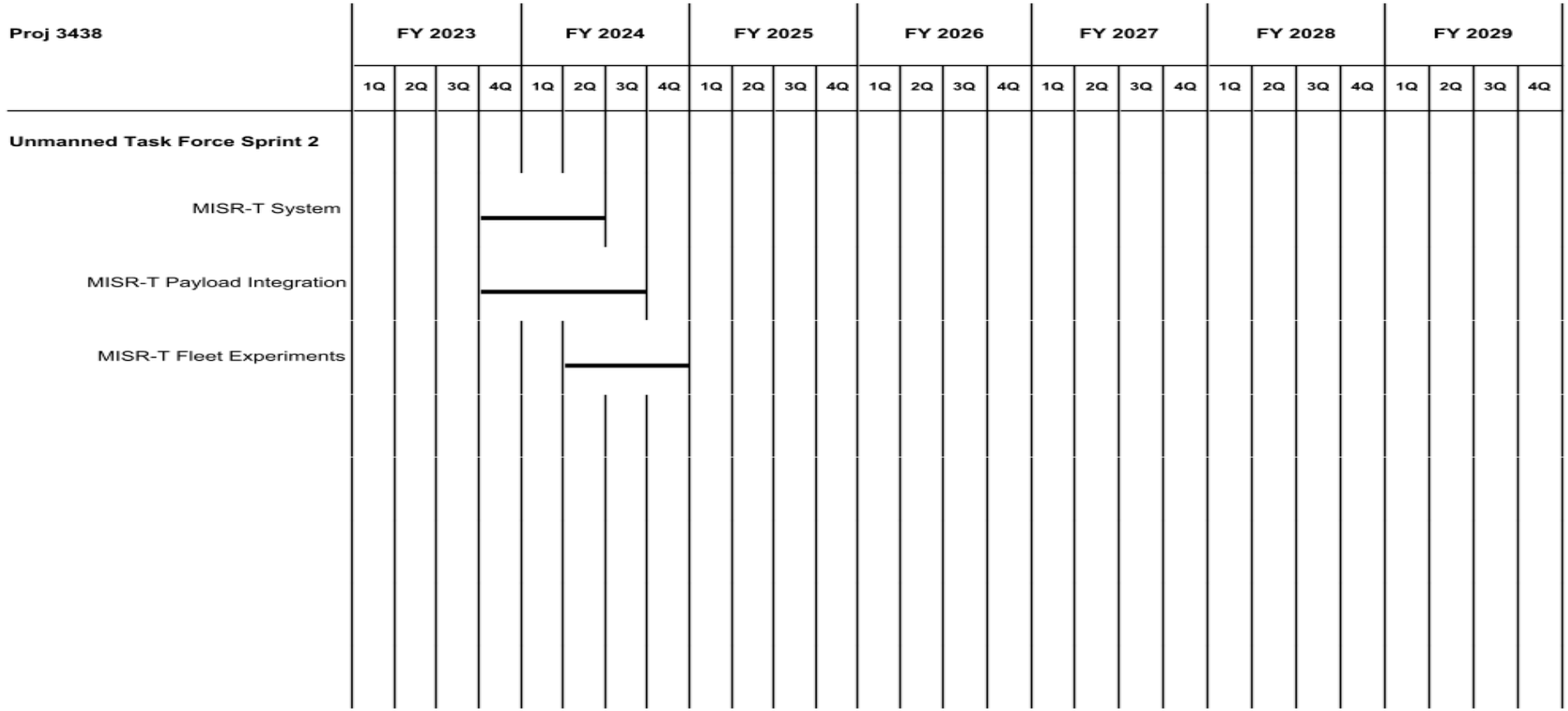

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 3438 / *Innovative Naval Prototype (INP) Transition (6.4)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3438				
Unmanned Task Force Sprint 2: MISR-T System: DEMO	4	2023	2	2024
Unmanned Task Force Sprint 2: MISR-T Payload Integration: Targeting Resiliency-Payload Integration	4	2023	3	2024
Unmanned Task Force Sprint 2: MISR-T Fleet Experiments: Vessel lethality -Range Threats	2	2024	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603382N / *Advanced Combat Systems Tech*				Project (Number/Name) 9999 / *Congressional Adds*			
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**
9999: *Congressional Adds*	2.896	18.998	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	21.894
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Congressional Interest Items not included in other Projects.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2023	FY 2024
Congressional Add: Minotaur data dissemination and interoperability ***FY 2023 Accomplishments:*** The development of Minimum Viable Product (MVP) using the Business of Innovation for Tri-service Integration and Test (I&T) support efforts, systems and software engineering, technical, and programmatic requirements. Develop and use R&D DevSecOps Environment to leverage USCG USMC Lab infrastructure. ***FY 2024 Plans:*** N/A	6.275	0.000
Congressional Add: Force-level dynamic interoperable C2 ***FY 2023 Accomplishments:*** Conduct Force-level dynamic interoperable C2 research ***FY 2024 Plans:*** N/A	7.723	0.000
Congressional Add: Modernized Personnel Transfer Systems ***FY 2023 Accomplishments:*** N/A ***FY 2024 Plans:*** N/A	5.000	0.000
Congressional Adds Subtotals	18.998	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 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 9999 / *Congressional Adds*

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
SRI	MIPR	DTIC : Ft. Belvoir, VA	2.896	5.548	Aug 2023	0.000		0.000		-		0.000	0.000	8.444	-
SRI	MIPR	GSA : Atlanta, GA	0.000	0.125	Nov 2023	0.000		0.000		-		0.000	0.000	0.125	-
SRI	WR	NSWCS : Various	0.000	0.602	Jun 2023	0.000		0.000		-		0.000	0.000	0.602	-
IERUS	MIPR	DTIC : Ft. Belvoir, VA	0.000	1.423	Sep 2023	0.000		0.000		-		0.000	0.000	1.423	-
IERUS	MIPR	GSA : Atlanta, GA	0.000	6.300	Oct 2023	0.000		0.000		-		0.000	0.000	6.300	-
Advanced Bolline Ladder	MIPR	DTIC : Ft. Belvoir, VA	0.000	4.400	Dec 2023	0.000		0.000		-		0.000	0.000	4.400	-
Advanced Bolline Ladder	MIPR	GSA : Atlanta, GA	0.000	0.300	Mar 2024	0.000		0.000		-		0.000	0.000	0.300	-
Advanced Bolline Ladder	WR	NSWCs : Various	0.000	0.300	Mar 2024	0.000		0.000		-		0.000	0.000	0.300	-
		Subtotal	2.896	18.998		0.000		0.000		-		0.000	0.000	21.894	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2.896	18.998		0.000		0.000		-		0.000	0.000	21.894	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 9999 / *Congressional Adds*

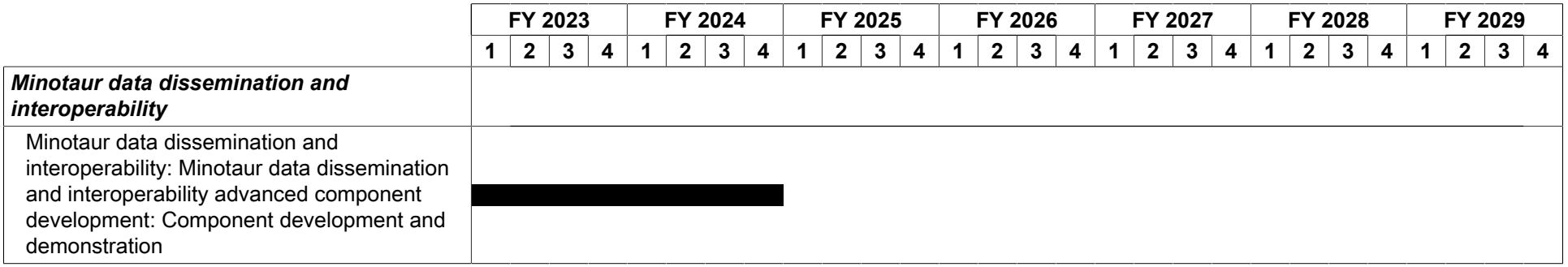

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603382N / *Advanced Combat Systems Tech*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Minotaur data dissemination and interoperability				
Minotaur data dissemination and interoperability: Minotaur data dissemination and interoperability advanced component development: Component development and demonstration	1	2023	4	2024