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 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0708730N *I Maritime Tech (MARITECH)*							
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	11.136	2.049	3.284	4.326	-	4.326	3.656	3.361	3.428	3.501	Continuing	Continuing
3435: *Advanced Shipyard Technology*	11.136	2.049	3.284	4.326	-	4.326	3.656	3.361	3.428	3.501	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Advanced Shipyard Technology (AST) seeks to improve the productivity, quality, and reduce costs of maintenance performed by the Navy public shipyards. The resulting technologies developed by this program benefit both the naval shipyard and the US Navy.

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	2.133	3.284	4.326	-	4.326
Current President's Budget	2.049	3.284	4.326	-	4.326
Total Adjustments	-0.084	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.084	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000

Change Summary Explanation

The FY23 reduction of -$0.084 is due to SBIR reductions/adjustments.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*				Project (Number/Name) 3435 / *Advanced Shipyard 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**
3435: *Advanced Shipyard Technology*	11.136	2.049	3.284	4.326	-	4.326	3.656	3.361	3.428	3.501	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

N/A

A. Mission Description and Budget Item Justification

The Current CNO Navigation Plan of 2022 priorities and objectives includes Readiness, Capabilities, Capacity, and Sailors. Maintenance of nuclear powers ships and submarines is a core driver of Readiness. Identifying and rapidly fielding advanced technologies is a core driver supporting Capabilities. Advanced Shipyard Technology (AST) aligns with both priorities by developing, maturing, and demonstrating technology (production processes, human augmentation, business process, IT, tooling, etc.), for rapid acquisition by the naval shipyards. Advanced Shipyard Technology funding facilitates collaboration between government (Naval Sea Systems Command (NAVSEA), the public naval shipyards, Navy customers, Naval Warfare Centers, etc.), academia, and industry. AST is an innovative approach to leverage public/private cooperation agreements and target technology and process solutions through an ongoing, iterative approach. FY25 funds will focus efforts in the following technology areas; Asset Visibility and Management, Extended Reality, Unmanned Systems, Advanced Manufacturing, Operational IT, Inspection and Testing, Robotics and Process Automation, and Corrosion Control and Repair. Development efforts are outlined in the FY 2025 Base Plans. Rapidly maturing technologies in these eight focus areas is necessary to meet the CNO's target of 80% operationally available submarines. Funding ensures widespread adoption of innovative improvements, enhancing proficiency and productivity of the public naval shipyard workforce to achieve the continuous product and process improvements necessary for improved Navy ship repair costs, and an overall reduction in availability duration. Reducing availability durations saves on average $1M per day of maintenance delay. This program requires proper resourcing to cover additional projects, initiatives, and for proper implementation and sustainment of efforts.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Advanced Shipyard Technology	2.049	3.284	4.326	0.000	4.326
Articles:	-	-	-	-	-
FY 2024 Plans: Continuous spiral development of technologies in our 8 focus areas (Asset Visibility and Management, Extended Reality, Unmanned Systems, Advanced Manufacturing, Operational IT, Inspection and Testing, Robotics and Process Automation, and Corrosion Control and Repair), as competitively selected by sustainment and technology subject matter experts and Navy stakeholders. The following are priorities in Naval sustainment and repair:					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Increase operational availability of nuclear-powered ships and submarines by shortening availability durations and mitigating risks to on time delivery. AST supports these priorities by increasing productivity of mechanics and engineers, reducing Life Cycle Costs (LCC), improving workforce safety and efficacy, and reducing rework. ***FY 2025 Base Plans:*** FY25 technology development efforts (in priority order): Demonstration of Unmanned systems and Extended Reality technologies to support FY26 full scale implementation. Demonstration of Advanced Manufacturing and Repair and Operational IT to support FY27 full scale implementation. Rapid prototyping of new technologies supporting Corrosion Control and Repair, Robotics and Process Automation, Inspection and Testing, and Asset Visibility and Management. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** FY25 increase ($1.042) will be used to increase our RDTE efforts related to Corrosion Control and Repair and Robotics and Process Automation to provide for safer and more efficient work practices at the public naval shipyards.					
Accomplishments/Planned Programs Subtotals	2.049	3.284	4.326	0.000	4.326

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

RDTE Efforts will utilize:

Direct Cite and Reimbursable Work Orders to Naval Warfare Centers

The Commercial Technologies for Maintenance Activities (CTMA) Cooperative Agreement.

Other Transactional Authorities (OTA).

Small Business Innovative Research (SBIR) phase II.5 and phase III

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

Note: For technologies developed within this program, other Procurement (OPN) and Operations and Maintenance (OMN) funding lines of accounting that support the public shipyards will be required to scale and field technologies based on their level of maturity and measure of benefit to the public naval shipyards.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*	Project (Number/Name) 3435 / *Advanced Shipyard 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
Technology Development	Various	Various : Locations	11.136	2.049	Jun 2023	3.284	Feb 2024	4.326	Feb 2025	-		4.326	Continuing	Continuing	Continuing
		Subtotal	11.136	2.049		3.284		4.326		-		4.326	Continuing	Continuing	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	11.136	2.049		3.284		4.326		-		4.326	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

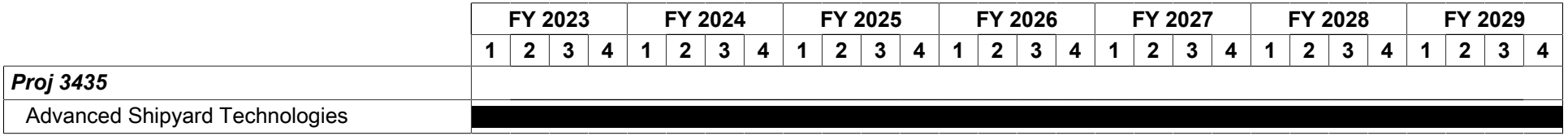

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3435				
Advanced Shipyard Technologies	1	2023	4	2029