Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy											Date: March 2019	
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 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Cost To Complete**	**Total Cost**
Total Program Element	24.591	4.621	27.284	6.779	-	6.779	7.512	7.664	7.823	7.980	Continuing	Continuing
2466: *NSRP ASE*	24.591	4.621	4.319	3.752	-	3.752	4.421	4.507	4.602	4.694	Continuing	Continuing
3435: *Advanced Shipyard Technology*	0.000	0.000	2.965	3.027	-	3.027	3.091	3.157	3.221	3.286	Continuing	Continuing
9999: *Congressional Adds*	0.000	0.000	20.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	20.000

A. Mission Description and Budget Item Justification

The National Shipbuilding Research Program (NSRP) is an industry and enterprise wide research collaboration that seeks to reduce the Navy's shipbuilding and repair cost. The resulting technologies implemented in NSRP-ASE member shipyards, benefit both the shipyard and the US Navy.

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

B. Program Change Summary ($ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	4.808	7.284	6.779	-	6.779
Current President's Budget	4.621	27.284	6.779	-	6.779
Total Adjustments	-0.187	20.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	20.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.187	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2018	FY 2019
Project: 9999: *Congressional Adds*		
Congressional Add: *Advanced Additive Technologies for Sustainment of Navy Assets*	0.000	20.000
Congressional Add Subtotals for Project: 9999	0.000	20.000
Congressional Add Totals for all Projects	0.000	20.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy	Date: March 2019
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)*

Change Summary Explanation

The decrease from FY 2019 to FY 2020 is result of programmatic changes for efficiency and effectiveness.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy											Date: March 2019	
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*				Project (Number/Name) 2466 / *NSRP ASE*			
COST ($ in Millions)	**Prior Years**	**FY 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Cost To Complete**	**Total Cost**
2466: *NSRP ASE*	24.591	4.621	4.319	3.752	-	3.752	4.421	4.507	4.602	4.694	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

NSRP ASE is a collaboration of U.S. shipyards working with the Navy customer to reduce the cost of building and repairing naval ships and improving shipbuilding industry productivity through advanced technology and processes. NSRP ASE is an innovative and proven approach to public/private cooperation to manage cost-shared R&D based on a national consensus Strategic Investment Plan. The Plan targets potential industry-wide technology and process solutions which are vetted by industry experts and builds upon the progress made over the previous years. The collaboration's organizational structure promotes teaming of industry, government and academia to achieve the continuous product and process improvements necessary for improved Navy ship affordability. Solutions include both leverage of best commercial practices and creation of industry-wide initiatives with aggressive technology transfer to, and buy-in by, multiple U.S. shipyards. Navy PEOs (Ships, Subs and Carriers) and NAVSEA are directly involved in NSRP. The Plan calls for matching government and industry investments over several years.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**
Title: Technology Development Projects	4.621	4.319	3.752	0.000	3.752
Articles:	-	-	-	-	-
Description: The NSRP is an ongoing Research and Development program. This program awards small research projects and large research projects to (1) Improve Quality; (2) Reduce Total Ownership Costs; and, (3) Increase Energy Efficiency. These research projects have been known to produce technological advances in shipbuilding that once implemented have resulted in savings for the Navy.					
FY 2019 Plans: (1) Complete technology development projects in the four major initiative areas (Ship Design and Material Technologies, Ship Production Technologies, Business Process and Information Systems, and Infrastructure and Support (Regulatory Compliance, Technology Transfer and Workforce Development)) that will be competitively selected by industry subject matter experts and Navy stakeholders during GFY19, targeting the following priorities in Naval shipbuilding and repair: (1) Improving Quality; (2) Reduction of Total Ownership Costs; and, (3) Increasing Energy Efficiency. It is anticipated that projects selected will continue to be focused in the following areas: - Promotion of Modular Construction - Reduction of Re-work - Improving Production Engineering - Improving Specifications and Standards					

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 2466 / *NSRP ASE*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
- Improving Manufacturing Processes - Improving Production Planning - Data Exchange - Improving Safety & Health / Reducing Environmental Impacts - Education and Training - Total Ownership Cost (2) Continue technology transfer among the Navy, shipbuilding industry, academia, equipment and material suppliers and the R&D community					
FY 2020 Base Plans: (1) Complete technology development projects in the four major initiative areas (Ship Design and Material Technologies, Ship Production Technologies, Business Process and Information Systems, and Infrastructure and Support (Regulatory Compliance, Technology Transfer and Workforce Development)) that will be competitively selected by industry subject matter experts and Navy stakeholders during GFY20, targeting the following priorities in Naval shipbuilding and repair: (1) Improving Quality; (2) Reduction of Total Ownership Costs; and, (3) Increasing Energy Efficiency. It is anticipated that projects selected will continue to be focused in the following areas: - Promotion of Modular Construction - Reduction of Re-work - Improving Production Engineering - Improving Specifications and Standards - Improving Manufacturing Processes - Improving Production Planning - Data Exchange - Improving Safety & Health / Reducing Environmental Impacts - Education and Training - Total Ownership Cost (2) Continue technology transfer among the Navy, shipbuilding industry, academia, equipment and material suppliers and the R&D community					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement:					

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 2466 / *NSRP ASE*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
The decrease from FY 2019 to FY 2020 is result of programmatic changes for efficiency and effectiveness.					
Accomplishments/Planned Programs Subtotals	4.621	4.319	3.752	0.000	3.752

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

R&D projects have been solicited and awarded by an industry collaboration represented by the Executive Control Board (ECB) of the National Shipbuilding Research Program (NSRP). The Navy has entered into an agreement with the industry collaboration using "other transaction" authority pursuant to 10 U.S.C. 2371.

E. Performance Metrics

Quarterly reports and reviews

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*	Project (Number/Name) 2466 / *NSRP ASE*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Development	Various	ECB NSRP : Not Specified	23.720	4.621	Dec 2017	4.319	Dec 2018	3.752	Dec 2019	-		3.752	Continuing	Continuing	Continuing
		Subtotal	23.720	4.621		4.319		3.752		-		3.752	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Gov't Support Services	WR	NSWCCD : Not Specified	0.650	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Contractor Support Services	Various	Various : Not Specified	0.221	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	0.871	0.000		0.000		0.000		-		0.000	Continuing	Continuing	N/A

	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	24.591	4.621		4.319		3.752		-		3.752	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 2466 / *NSRP ASE*

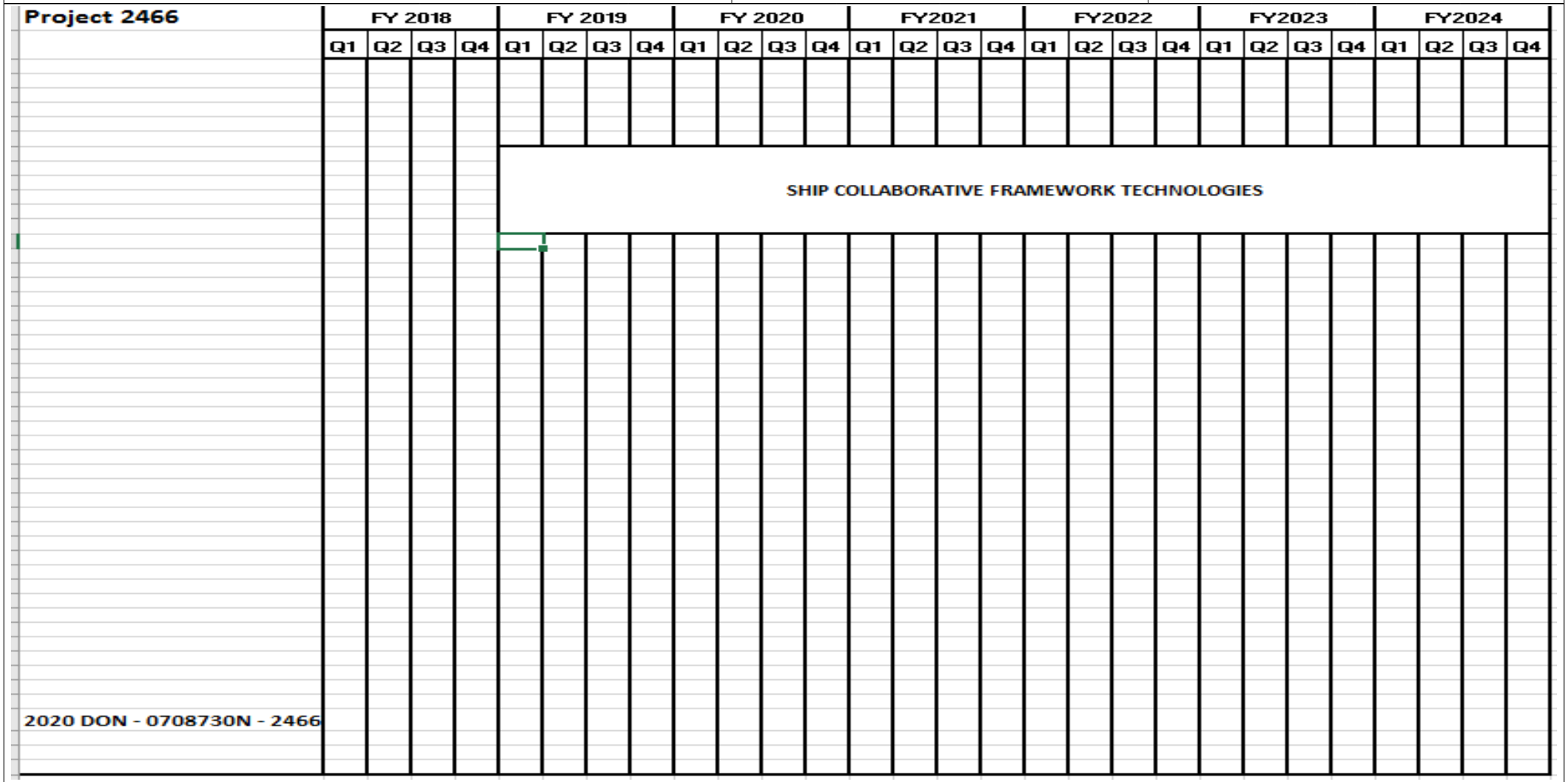

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 2466 / *NSRP ASE*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2466				
Ship Collaborative Framework Technologies	1	2019	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy											Date: March 2019	
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 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Cost To Complete**	**Total Cost**
3435: *Advanced Shipyard Technology*	0.000	0.000	2.965	3.027	-	3.027	3.091	3.157	3.221	3.286	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Advanced Shipyard Technology (AST) develops, matures, and transitions technology (production processes, human augmentation, business process, IT, tooling, etc.), into the naval shipyards. Advanced Shipyard Technology funding will facilitate collaboration between government (Naval Sea Systems Command (NAVSEA), the public naval shipyards, Navy customers, Naval Warfare Centers, and others), academia, and industry. AST is an innovative approach to leverage public/private cooperation and target technology and process solutions that build on progress made over the previous years. 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Technology Transfer	0.000	2.965	3.027	0.000	3.027
Articles:	-	-	-	-	-
FY 2019 Plans: Complete and accelerate technology transfer projects in the four major initiative areas (Predictive Planning, Proficient Workforce Development, Infrastructure-IT and Support, and Shipyard Execution) to deliver ships to the warfighter on time at the best cost. These funds enable "See, Solve, and Sustain" naval shipyard innovations through targeting of projects that deliver improvements in Critical Path Work, and Reduction of Total Ownership Costs (Improve Quality, Safety, and Throughput). Specific projects will be competitively selected by Navy subject matter experts during FY18, targeting the following capabilities in Naval Shipyards: a. Implement accelerated technology transfer and best practices on Shipyard Maintenance among industry, academia, and other DOD Services (e.g. automation, artificial intelligence, virtual reality, augmented reality, and geolocation). b. Accelerate technical approvals on new methods, such as laser ablation and cold spray disruptive technologies. c. Establish and Sustain Naval Shipyard Laboratory Operations, Partnerships, and Results.					
FY 2020 Base Plans: Complete technology development projects in the six major initiative areas (Surface Restoration, Additive Manufacturing and Repair, Expeditionary Maintenance, Automation and Robotics, Digital Shipyard, and					

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Infrastructure) that will be competitively selected by sustainment and technology subject matter experts and Navy stakeholders. The following are priorities in Naval sustainment and repair: (1) Reduce Critical Path; (2) Reduce Cycle Times; (3) Reduce Life cycle Costs, (4) Increase throughput and, (5) Improve workforce safety and efficacy. It is anticipated that projects selected will continue to be focused in the following areas: - Modernizing Industrial Processes - Improving Material Availability - Increasing Workforce Capacity - New repair technologies - Reducing Re-work - Improving Worker Efficiency - Improving Scheduling and Planning - Improving Safety & Health / Reducing Environmental Impacts - Education and Training - Total Ownership Cost (2) Leverage technology transfer opportunities ***FY 2020 OCO Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** The increase from FY 2019 to FY 2020 is due to normal inflation factors.					
Accomplishments/Planned Programs Subtotals	0.000	2.965	3.027	0.000	3.027

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Technologies will be developed and fielded based on their level of maturity and measure of benefit to the public naval shipyards.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

E. Performance Metrics

Quarterly reports and reviews.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
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 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Development	Various	Various : Locations	0.000	0.000		2.965	Dec 2018	3.027	Dec 2019	-		3.027	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		2.965		3.027		-		3.027	Continuing	Continuing	N/A

	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		2.965		3.027		-		3.027	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

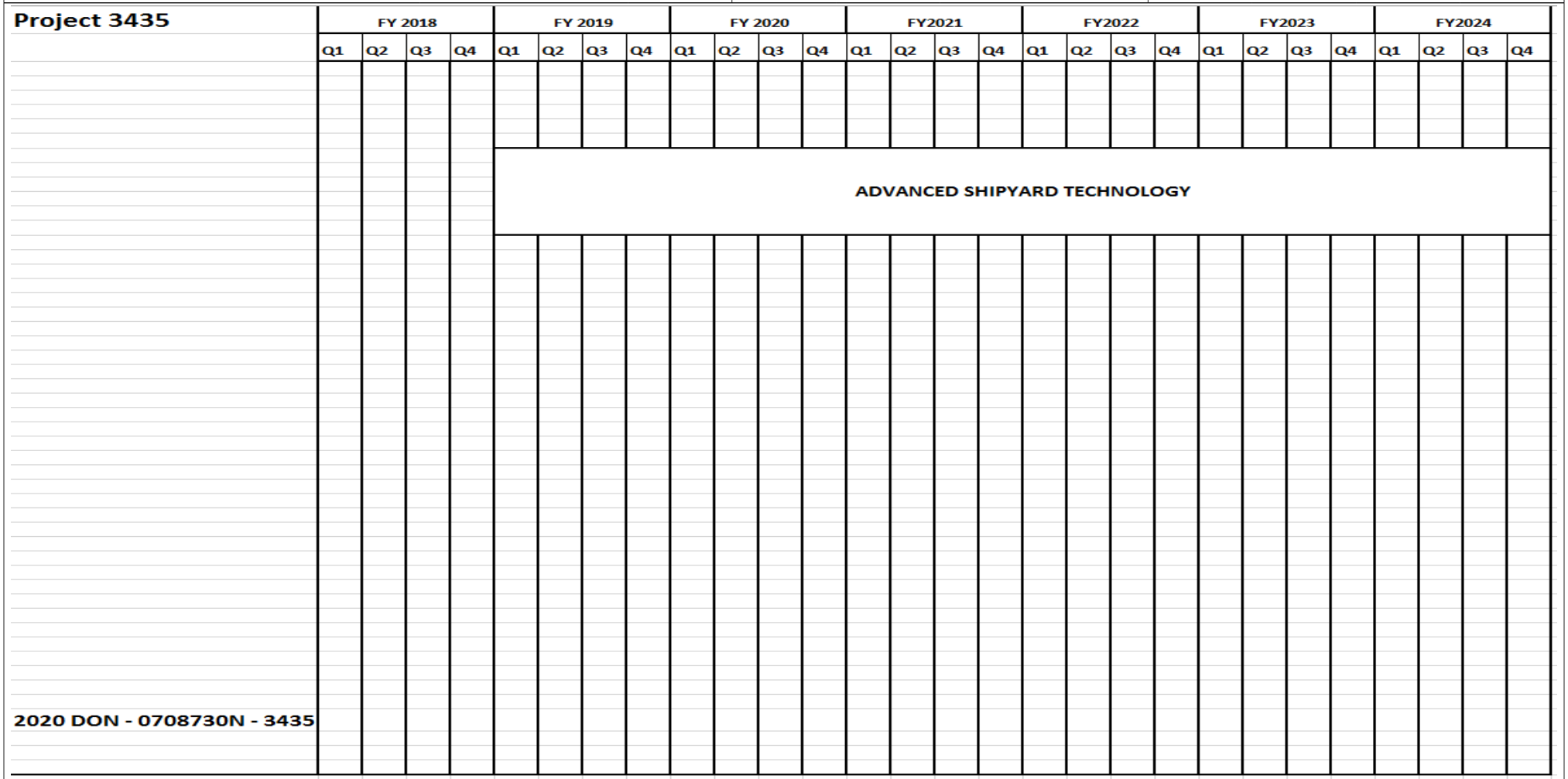

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 3435 / *Advanced Shipyard Technology*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3435				
Advanced Shipyard Technologies	1	2019	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*	Project (Number/Name) 9999 / *Congressional Adds*	

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
9999: *Congressional Adds*	0.000	0.000	20.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	20.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Advanced Shipyard Technology (AST) develops, matures, and transitions technology (production processes, human augmentation, business process, IT, tooling, etc.), into the naval shipyards. Advanced Shipyard Technology funding will facilitate collaboration between government (Naval Sea Systems Command (NAVSEA), the public naval shipyards, Navy customers, Naval Warfare Centers, and others), academia, and industry. AST is an innovative approach to leverage public/private cooperation and target technology and process solutions that build on progress made over the previous years. 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. The congressional add will accelerate the delivery of technical capabilities to support the warfighter and to advance technologies that will modernize and sustain military systems in an efficient, cost-effective manner. The additional funding will support the development of advanced additive technologies for sustainment of navy assets including Cold Spray.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019
Congressional Add: Advanced Additive Technologies for Sustainment of Navy Assets	0.000	20.000
FY 2018 Accomplishments: N/A		
FY 2019 Plans: N/A		
Congressional Adds Subtotals	0.000	20.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Technologies will be developed and fielded based on their level of maturity and measure of benefit to the public naval shipyards.

E. Performance Metrics

Quarterly reports and reviews.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*	Project (Number/Name) 9999 / *Congressional Adds*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Development	MIPR	Penn State U : University Park, PA	0.000	0.000		2.000	Jan 2019	0.000		-		0.000	0.000	2.000	-
Technology Development	WR	PNSY : Kittery , Maine	0.000	0.000		1.000	Jan 2019	0.000		-		0.000	0.000	1.000	-
Technology Development	WR	NSWCPD : Philladelphia, PA	0.000	0.000		0.065	Jan 2019	0.000		-		0.000	0.000	0.065	-
Technology Development	WR	NSWCPC : Panama City, FL	0.000	0.000		0.900	Jan 2019	0.000		-		0.000	0.000	0.900	-
Technology Development	MIPR	NAVAIR : San Diego, CA	0.000	0.000		5.000	Mar 2019	0.000		-		0.000	0.000	5.000	-
Technology Development	MIPR	ARMY ARL : Adelphi, MD	0.000	0.000		8.000	Jul 2019	0.000		-		0.000	0.000	8.000	-
Technology Development	MIPR	MANTECH : Washignton DC	0.000	0.000		1.000	Aug 2019	0.000		-		0.000	0.000	1.000	-
Technology Development	MIPR	CTMA : Washington DC	0.000	0.000		0.300	Sep 2019	0.000		-		0.000	0.000	0.300	-
Technology Development	WR	NUWC Keyport : Keyport, WA	0.000	0.000		0.750	Sep 2019	0.000		-		0.000	0.000	0.750	-
		Subtotal	0.000	0.000		19.015		0.000		-		0.000	0.000	19.015	N/A

Remarks

Funds provided to support the development of Cold Spray and Additive Manufacturing Technologies.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	WR	NUWC Keyport : Keyport, WA	0.000	0.000		0.985	Jun 2019	0.000		-		0.000	0.000	0.985	-
		Subtotal	0.000	0.000		0.985		0.000		-		0.000	0.000	0.985	N/A

Remarks

Cost-Reimbursable services for project management and technical insertion to public shipyards

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*	Project (Number/Name) 9999 / *Congressional Adds*	

	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		20.000		0.000		-		0.000	0.000	20.000	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0708730N / *Maritime Tech (MARITECH)*	Project (Number/Name) 9999 / *Congressional Adds*	

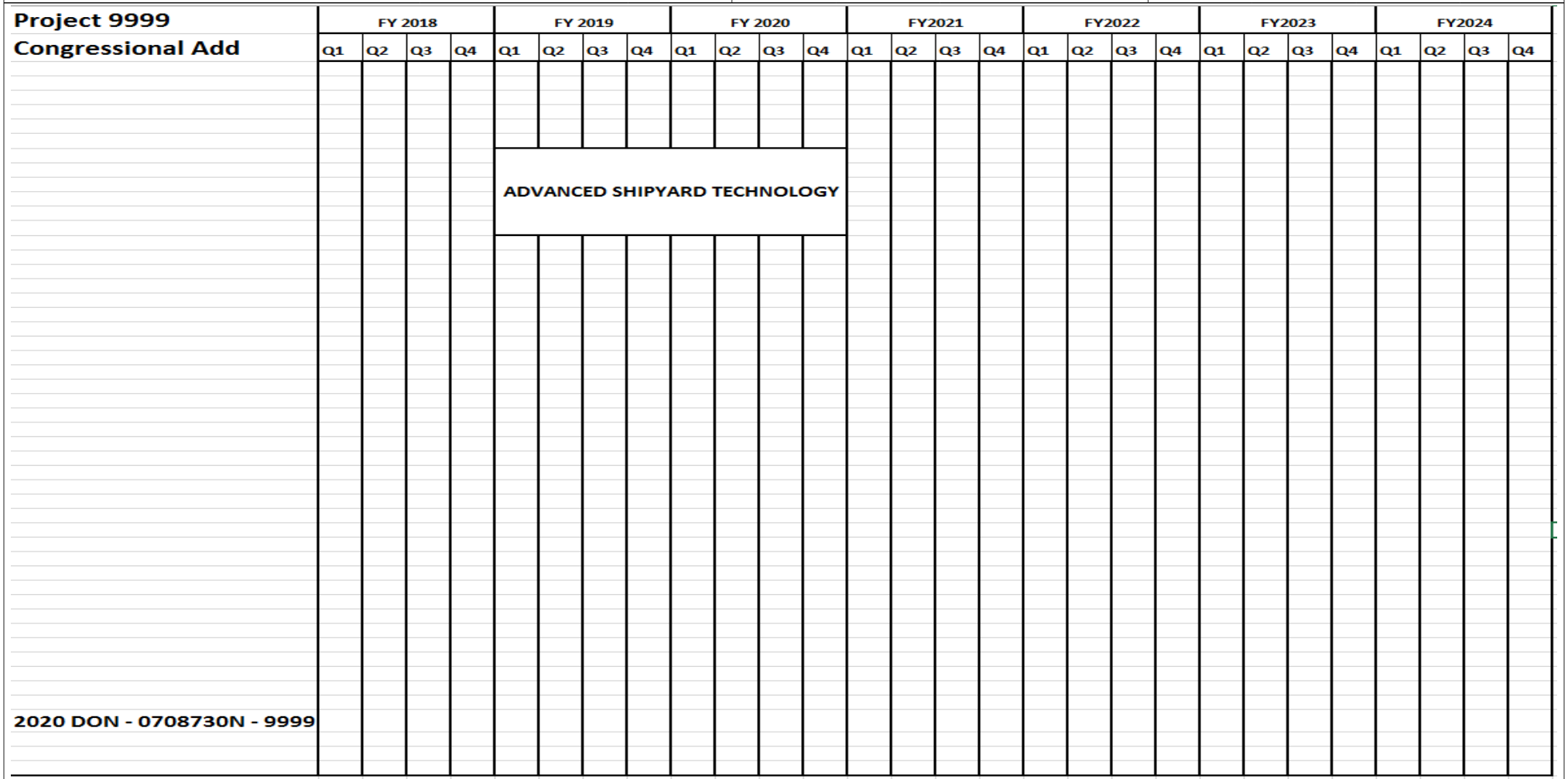

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0708730N / *Maritime Tech (MARITECH)*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9999				
ADVANCED SHIPYARD TECHNOLOGY	1	2019	1	2020