Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy												Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0204311N *I Integrated Surveillance System*							
COST ($ in Millions)	**Prior Years**	**FY 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
Total Program Element	640.903	83.349	98.370	76.279	-	76.279	84.025	75.896	71.332	72.603	Continuing	Continuing
0344: *Deployable Surveillance Systems*	34.885	16.077	30.429	10.547	-	10.547	1.860	0.000	0.000	0.000	0.000	93.798
0766: *IUSS Detect/Classif System*	575.396	60.542	56.964	63.994	-	63.994	80.465	74.829	70.497	71.751	Continuing	Continuing
1768: *Ship Plan Development and Design*	30.622	6.730	0.977	1.738	-	1.738	1.700	1.067	0.835	0.852	Continuing	Continuing
9999: *Congressional Adds*	0.000	0.000	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.000

A. Mission Description and Budget Item Justification

The Deployable Surveillance Systems (DSS) project (0344), complementing the Fixed Surveillance System (FSS) and Surveillance Towed Array Sensor System (SURTASS), provides flexible and responsive wide area surveillance to the Theater Anti-Submarine Warfare (TASW) commanders worldwide. DSS will operate as adjunct systems to meet the established FSS and SURTASS missions and to meet additional missions as articulated in the OPNAV Top Level Requirements document and follow-on Course of Action Analysis (COAA) and as dictated by TASW commanders evolving and emergent operational requirements. DSS is comprised of the following systems: Deep Water Passive (DWP), Deep Water Active (DWA), and Mobile Passive Active System (MPAS). Informed by TASW Offset operations and the tailored requirements process, the DSS Middle Tier Acquisition (MTA) Rapid Fielding. Program will focus initially on the DWP increment and associated spiral development updates. Spiral developments to meet the evolving submarine threat will leverage on-going Navy, Defense Advanced Research Projects Agency (DARPA), and small business research efforts including processing and sensor technology. Follow-on increments will be focused on DWA and MPAS, of which MPAS is currently outside the Future Years Defense Program (FYDP). FY24 includes funds for DWA that will provide a rapidly deployable sustained surveillance capability in response to emergent Fleet Undersea Warfare (USW) coverage gaps to include mitigating array outages or platform shortages. This funding will be used to procure one DWA cluster (consisting of 3 DWA Advanced Development Model units) and conduct a fleet demonstration in order to (1) prepare the rationale for using a MTA Program for a future DWA program; (2) conduct a Fleet demonstration to validate Top-Level Requirements; and (3) identify full DWA MTA funding requirements.

Project 0766 provides for Integrated Undersea Surveillance Systems (IUSS) Research and Development Projects under the Maritime Surveillance Systems (MSS) Program Office (PEO UWS PMS 485). IUSS provides the Navy with its primary means of submarine detection, both nuclear and diesel. A portion of project 0766 Fixed Surveillance System (FSS) is classified, with details available at a higher classification level.

The IUSS Research and Development project (0766) funds Surveillance Towed Array Sensor System (SURTASS) Passive and SURTASS Low Frequency Active (LFA) developments. SURTASS provides the mobile, tactical arm of the Integrated Undersea Surveillance System, providing long range detection and cueing for tactical weapons platforms or other vessels of interest. SURTASS LFA provides an active adjunct capability for IUSS passive and tactical sensors to assist in countering the quieter diesel and nuclear threats of the 2000s and beyond. The LFA tasks are directed at detection of slow quiet threats in harsh littoral waters.

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0204311N *I Integrated Surveillance System*

Development and improvement continues on the common IUSS processor based on NAVSEA's Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (ARCI) program with a cyclical tech refresh of hardware and software in conjunction with the submarine Advanced Processor Build (APB) process. The IUSS Integrated Common Processor (ICP) has the capability to process and display data from all fixed and mobile underwater systems. The IUSS ICP is used for all new system installations and replaces the legacy systems as they reach end of life and require upgrading. Additionally, SURTASS consolidated on the TB-29A Twin-line array, a variant of the Submarine TB-29A Long line array. This reduced the number of array variants employed by SURTASS from 3 to 1, and enabled development and logistics cost savings by leveraging off the submarine TB-29A program.

SURTASS-E provides a SURTASS passive capability packaged into ISO-Vans for mobilization on Vessels of Opportunity (VOOs). It was developed as a CNO Rapid Prototyping, Experimentation, and Demonstration (RPED) program to provide a SURTASS variant that addresses emergent Theater ASW Commander requirements for SURTASS capability.

Project 1768 T-ARC(X) is a candidate replacement program for U.S. Navy's only organic undersea cable laying and repair ship, USNS ZEUS (T-ARC 7), which is approaching the end of her extended service life. The ship's main mission is to deploy, repair, and retrieve undersea cables and equipment, with a secondary mission of conducting acoustic, hydrographic and bathymetric surveys.

Project C916 funds efforts for design of Next Generation Surveillance Array (NGSA) to include Critical Design Review (CDR), purchase and assemble Advanced Development Model (ADM) and engage industry to build and deliver Open Architecture Telemetry (OAT) components.

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	84.037	68.417	71.104	-	71.104
Current President's Budget	83.349	98.370	76.279	-	76.279
Total Adjustments	-0.688	29.953	5.175	-	5.175
• Congressional General Reductions	-	-0.147			
• Congressional Directed Reductions	-	-2.400			
• Congressional Rescissions	-	-			
• Congressional Adds	-	32.500			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.688	0.000			
• Program Adjustments	0.000	0.000	4.468	-	4.468
• Rate/Misc Adjustments	0.000	0.000	0.707	-	0.707

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2022	FY 2023
Project: 9999: *Congressional Adds*		
Congressional Add: *Next-gen twin-line towed array*	0.000	10.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0204311N *I Integrated Surveillance System*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2022	FY 2023
Congressional Add Subtotals for Project: 9999	0.000	10.000
Congressional Add Totals for all Projects	0.000	10.000

Change Summary Explanation

FY2023 Funding has the following adjustments since the PB23 budget submission:
- $8 million Congressional add to PU 0344 Deployable Surveillance Systems for Deep Water Active.
- $14.5 million Congressional add to PU 0344 Deployable Surveillance Systems.
- $10 million Congressional add for the SURTASS Next Generation Surveillance Array.
- $2.4 million Congressional reduction to PU 0344 Deployable Surveillance for Deep Water Passive 1.1 fabrication excess to need.
- $.147 million general FFRDC Reduction.

The FY 2024 funding request has the following adjustments:
- $15.539 million reduction in programmatic adjustments.
- $12.24 million increase to fund PU 0344 Deployable Surveillance Systems Deep Water Active.
- $8.0 million increase to fund Harbinger (details available at a higher level of classification).
- $.474 million decrease for various Navy adjustments.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 0344 / *Deployable Surveillance Systems*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
0344: *Deployable Surveillance Systems*	34.885	16.077	30.429	10.547	-	10.547	1.860	0.000	0.000	0.000	0.000	93.798
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Deployable Surveillance Systems (DSS) project (0344), complementing Fixed Surveillance System (FSS) and Surveillance Towed Array Sensor System (SURTASS), provides flexible and responsive wide area surveillance to the Theater Anti-Submarine Warfare (TASW) commanders worldwide. DSS will operate as adjunct systems to meet the established FSS and SURTASS missions and to meet additional missions as articulated in the Office of the Chief of Naval Operations (OPNAV) Top Level Requirements document and follow-on Course of Action Analysis (COAA) and as dictated by TASW commanders evolving and emergent operational requirements. DSS is comprised of the following systems: Deep Water Passive (DWP), Deep Water Active (DWA), and Mobile Passive Active System (MPAS). Informed by TASW Offset operations and the tailored requirements process, the DSS Middle Tier Acquisition (MTA) Rapid Fielding Program will focus initially on the DWP increment and associated spiral development updates. Spiral developments to meet the evolving submarine threat will leverage on-going Navy, Defense Advanced Research Projects Agency (DARPA), and small business research efforts including processing and sensor technology. Follow-on increments will be focused on DWA and MPAS, of which MPAS is currently outside the Future Years Defense Program (FYDP). FY23 includes Congressional Add funds ($22.5M) for DSS/DWA that will provide a rapidly deployable sustained surveillance capability in response to emergent Fleet Undersea Warfare (USW) coverage gaps to include mitigating array outages or platform shortages. This funding will be used to procure one DWA cluster in order to (1) prepare the rationale for using a MTA Program for a future DWA program; (2) conduct a Fleet demonstration to validate Top-Level Requirements; and (3) identify full DWA MTA funding requirements.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Deployable Surveillance Systems (DSS) Deep Water Passive (DWP)	16.077	7.929	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2023 Plans: - Commence deployment and Sustainment of previously fabricated DWP units - Commence non-recurring engineering in support of Test Bed					
FY 2024 Base Plans: - Complete Outcome Determination DWP Acquisition Decision Memorandum (ADM)					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement:					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
The $7.929M decrease from FY23 to FY24 is due to the completion of the development and procurement of DWP units and transition to operations and maintenance.					
Title: Deployable Surveillance Systems (DSS) Deep Water Active (DWA)	0.000	22.500	10.547	0.000	10.547
Articles:	-	-	-	-	-
FY 2023 Plans: - Commence non-recurring engineering - Commence fabrication of one (1) Advanced Development model (ADM) cluster - Commence refurbishment of four (4) ADM clusters					
FY 2024 Base Plans: - Complete fabrication of one (1) Advanced Development model (ADM) cluster - Commence fabrication of one (1) ADM cluster - Commence refurbishment of wave gliders.					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: The $11.953 million decrease from FY2023 to FY2024 is due to $22.5M of Congressional Adds in support of DWA that moved project commencement one fiscal year (FY) to the left from FY24 to FY23.					
Accomplishments/Planned Programs Subtotals	16.077	30.429	10.547	0.000	10.547

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

FY 2022: Quick Reaction Assessment (QRA) Test Plan
FY 2023: Initiate Deep Water Active (DWA) Increment
FY 2024: Fabricate one (1) DWA Advanced Development Model (ADM) cluster
FY 2024: Outcome Determination DWP ADM

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS DWP Spiral 1.1 LRIP Units	C/CPFF	Leidos : MS	8.299	6.240	Jun 2022	3.263	Jan 2023	0.000		-		0.000	0.000	17.802	-
DSS DWP Spiral 1.1 LRIP Units Refurbishment	C/CPFF	Teledyne Webb Research : MA	0.302	0.292	Mar 2022	0.000		0.000		-		0.000	0.000	0.594	-
DSS DWP Spiral 1.1 LRIP Units Logistics	C/CPFF	Leidos : MS	0.750	0.773	Jun 2022	0.000		0.000		-		0.000	0.000	1.523	-
DSS DWP Spiral 1.5 Fiber Optic Cable	C/CPFF	Various : Various	0.000	1.044	Mar 2022	0.000		0.000		-		0.000	0.000	1.044	-
DSS DWP Processing	C/CPFF	APL/JHU : MD	1.826	0.741	Mar 2022	0.600	Mar 2023	0.000		-		0.000	0.000	3.167	-
DSS DWP Processing	C/CPFF	Leidos : MS	1.450	0.000		0.000		0.000		-		0.000	0.000	1.450	-
DSS DWP Processing	C/CPFF	Sandia National Lab : NM	0.300	0.000		0.500	Sep 2023	0.000		-		0.000	0.000	0.800	-
DSS DWP Processing	C/CPFF	Proteq : VA	1.200	0.000		0.000		0.000		-		0.000	0.000	1.200	-
DSS DWP Risk Reduction	Various	Various : Various	1.049	0.538	Feb 2022	0.715	Feb 2023	0.000		-		0.000	0.000	2.302	-
DSS DWP Risk Reduction	WR	NUWC Newport : RI	0.964	0.625	Dec 2021	1.163	Nov 2022	0.000		-		0.000	0.000	2.752	-
DSS DWP Risk Reduction (NRE)	C/CPFF	Leidos : MS	7.200	0.291	Nov 2021	0.584	Jan 2023	0.000		-		0.000	0.000	8.075	-
DSS DWA ADM & NRE	C/CPFF	GD APS : RI	0.000	0.000		17.912	Jun 2023	6.051	Jun 2024	-		6.051	0.000	23.963	-
DSS DWA Risk Reduction	WR	NUWC Newport : RI	0.000	0.000		0.000		0.970	Nov 2023	-		0.970	0.000	0.970	-
DSS DWA Risk Reduction	C/CPFF	ARL/UT : TX	0.000	0.000		1.500	Mar 2023	0.410	Mar 2024	-		0.410	0.000	1.910	-
DSS DWA Risk Reduction	Various	Various : Various	0.000	0.000		0.000		0.130	Feb 2024	-		0.130	0.000	0.130	-
DSS DWA Processing	C/CPFF	APL/JHU : MD	0.000	0.000		0.688	Mar 2023	0.410	Mar 2024	-		0.410	0.000	1.098	-
		Subtotal	23.340	10.544		26.925		7.971		-		7.971	0.000	68.780	N/A

Remarks

The FY 2024 decrease is due to Congressional Adds in support of DWA that moved project commencement one Fiscal year (FY) to the left from FY24 to FY23.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 0344 / *Deployable Surveillance Systems*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS C4I Integration	WR	NIWC PAC : CA	1.900	0.000		0.000		0.000		-		0.000	0.000	1.900	-
DSS C4I Integration	WR	NUWC Newport : RI	3.485	0.773	Nov 2021	0.000		0.000		-		0.000	0.000	4.258	-
DSS C4I Integration	WR	Navy Research Lab : DC	0.330	0.000		0.000		0.000		-		0.000	0.000	0.330	-
DSS T&E	WR	NIWC PAC : CA	0.404	0.416	Nov 2021	0.000		0.000		-		0.000	0.000	0.820	-
DSS DWP ISEA	WR	NUWC Keyport : WA	3.659	3.417	Dec 2021	0.000		0.000		-		0.000	0.000	7.076	-
DSS DWA C4I Integration	WR	NUWC Newport : RI	0.000	0.000		0.600	Mar 2023	0.730	Nov 2023	-		0.730	0.000	1.330	-
DSS DWA ISEA	WR	NUWC Keyport : WA	0.000	0.000		1.500	Mar 2023	0.890	Dec 2023	-		0.890	0.000	2.390	-
		Subtotal	9.778	4.606		2.100		1.620		-		1.620	0.000	18.104	N/A

Remarks

The FY 2024 decrease is due to $22.5M of Congressional Adds in support of DWA that moved project commencement one Fiscal year (FY) to the left from FY24 to FY23.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation (OT&E)	WR	COTF : VA	0.000	0.000		0.167	Apr 2023	0.000		-		0.000	0.000	0.167	-
		Subtotal	0.000	0.000		0.167		0.000		-		0.000	0.000	0.167	N/A

Remarks

The FY 2024 decrease is due to completion of DWP testing.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS DWP Management Services	C/CPFF	BAH : VA	1.767	0.927	Jan 2022	0.937	Jan 2023	0.000		-		0.000	0.000	3.631	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 0344 / *Deployable Surveillance Systems*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS DWA Management Services	C/BA	BAH : VA	0.000	0.000		0.300	Jun 2023	0.956	Jan 2024	-		0.956	0.000	1.256	-
		Subtotal	1.767	0.927		1.237		0.956		-		0.956	0.000	4.887	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	34.885	16.077		30.429		10.547		-		10.547	0.000	91.938	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

DSS POAP

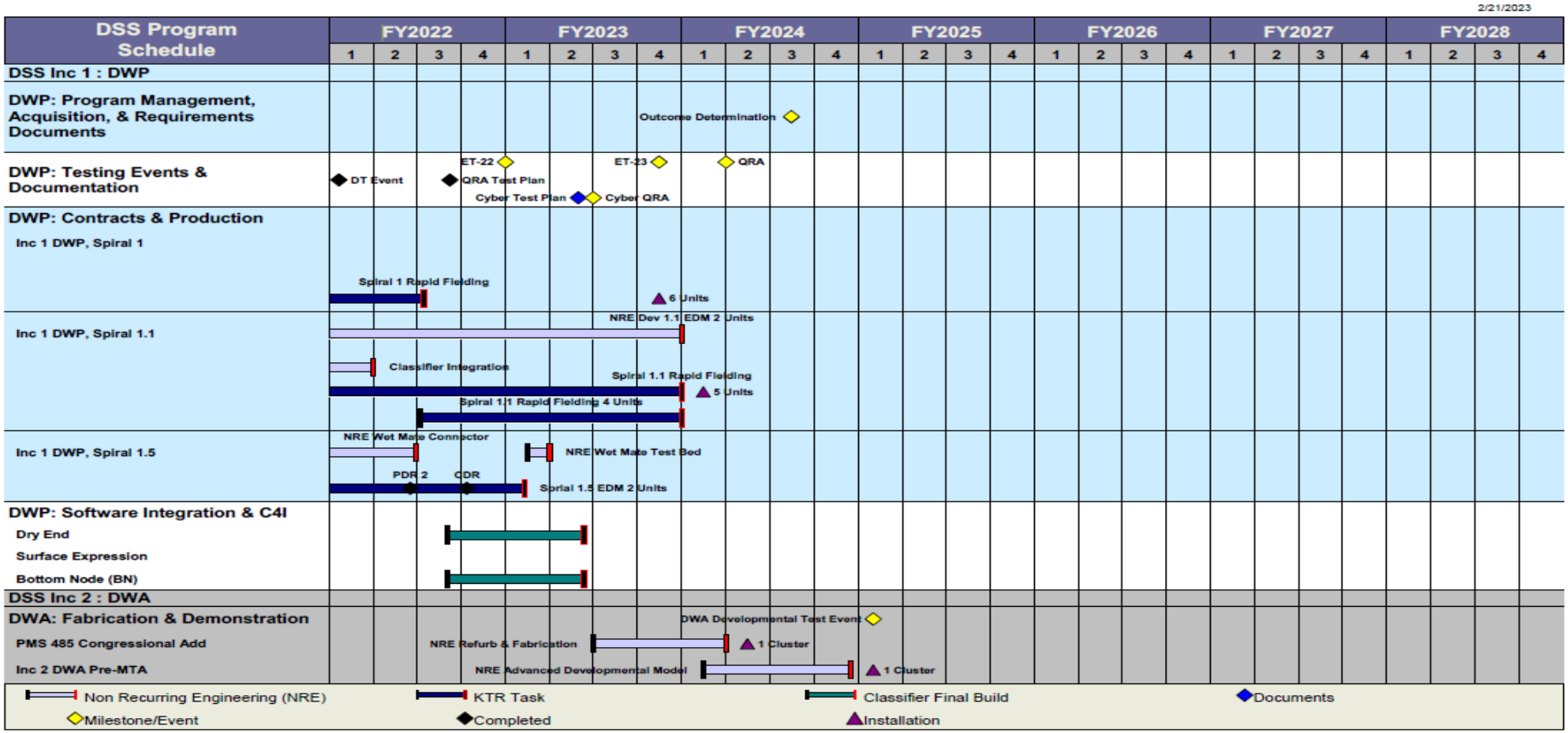

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0344				
DWP Middle Tier Acquisition Documentation: Milestones: Outcome Determination Acquisition Decision Memorandum	3	2024	3	2024
DWP Test and Evaluation Milestones: Developmental Test Event	1	2022	1	2022
DWP Test and Evaluation Milestones: Quick Reaction Assessment Test Plan	3	2022	3	2022
DWP Test and Evaluation Milestones: Quick Reaction Assessment Engineering Test 22	4	2022	4	2022
DWP Test and Evaluation Milestones: Cyber Test Plan	2	2023	2	2023
DWP Test and Evaluation Milestones: Cyber Quick Reaction Assessment	2	2023	2	2023
DWP Test and Evaluation Milestones: Quick Reaction Assessment Engineering Test 23	4	2023	4	2023
DWP Test and Evaluation Milestones: Quick Reaction Assessment	1	2024	1	2024
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1 LRIP (6 Units)	1	2022	3	2022
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1 Installation (6 Units)	4	2023	4	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1.1 LRIP (5 Units)	1	2022	4	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1.1 Installation (5 Units)	1	2024	1	2024
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1.1 LRIP (4 Units)	3	2022	4	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): Non- Recurring Engineering Wet Mate Connector	1	2022	3	2022

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Production Milestones: DWP Low Rate Initial Production (LRIP): Non- Recurring Engineering Test Bed	1	2023	1	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): Classifier Integration Non- Recurring Engineering Development	1	2022	2	2022
Production Milestones: DWP EDMs: DWP Spiral 1.01 EDM (2 Units)	1	2022	4	2023
Production Milestones: DWP EDMs: DWP Spiral 1.5 EDM (2 Units)	1	2022	1	2023
Production Milestones: DWP Software Integration & C4I: DWP (Dry End)	3	2022	2	2023
Production Milestones: DWP Software Integration & C4I: DWP (Bottom Node)	3	2022	2	2023
DWA: Contracts and Production: DWA Non-Recurring Engineering Refurbishment and Fabrication	3	2023	1	2024
DWA: Contracts and Production: DWA Refurbishment and Fabrication Installation	2	2024	2	2024
DWA: Contracts and Production: DWA Advanced Development Models (ADM) (1 Cluster)	1	2024	4	2024
DWA: Contracts and Production: DWA Advanced Development Model Installation (1 Cluster)	1	2025	1	2025
DWA: Contracts and Production: DWA Developmental Test Event	1	2025	1	2025

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy												Date: March 2023
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*				Project (Number/Name) 0766 / *IUSS Detect/Classif System*			
COST ($ in Millions)	**Prior Years**	**FY 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
0766: *IUSS Detect/Classif System*	575.396	60.542	56.964	63.994	-	63.994	80.465	74.829	70.497	71.751	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

A. This project includes efforts for SURTASS, Expeditionary SURTASS (SURTASS-E), Theater Anti-submarine Warfare (ASW) Offset Initiative, and Fixed Surveillance System (FSS). The SURTASS project comprises the mobile, tactical arm of the Integrated Undersea Surveillance System (IUSS), providing long range detection and cueing for tactical weapons platforms against both diesel and nuclear powered submarines. SURTASS also provides the undersea surveillance necessary to support regional conflicts and sea-lane protection. SURTASS has experienced recent passive and active success against diesel submarines operating in shallow water. SURTASS is leveraging existing developments and reducing costs by using Non-Developmental Items and commercial hardware, supporting common Navy Undersea Warfare processing and towed array developments, and increasing operator efficiency through computer-aided detection and classification processing. SURTASS development efforts include Low Frequency Active (LFA)/Compact Low Frequency Active (CLFA) improvements, common IUSS processing, twin-line array development and processing, improved detection and classification/passive automation to counter quieter threats, additional signal processing, integrated active and passive operations, improved Battle Group support, and improved information processing.

LFA provides an active adjunct capability for IUSS passive and tactical sensors to counter the quieter diesel and nuclear threats of the 1990s and beyond. The LFA tasks are directed at detection of slow, quiet threats in harsh littoral waters. Improvements include TL-29A/LFA integration enhancements, advanced waveforms for littoral/shallow water operations including Doppler sensitive waveforms, and processing algorithms to reduce clutter and reverberation false alarms in shallow water. The Integrated Common Processor (ICP) is a derivative of the Naval Sea Systems Command (NAVSEA) Submarine Acoustic Rapid Commercial Off the Shelf (COTS) Insertion (ARCI) program and is being augmented for IUSS requirements. Together, the LFA/CLFA improvements, TL-29A, and the ICP support the SURTASS Active Improvement Program.

Functional improvements to ICP are delivered to the Fleet in software "builds" while hardware improvements are delivered through the Tech Insertion (TI) process. Software improvements delivered via the Advanced Surveillance Build (ASB) process are based on the Advanced Processor Build (APB) process begun by the NAVSEA Submarine USW program. Each ASB will introduce new capabilities into SURTASS systems including improved automation, normalizer techniques, adaptive beam forming, and display enhancements. SURTASS participates in the process by contributing algorithms for consideration, supplying peer group members for review of candidate algorithms, participating in test evolutions, and incorporating improved algorithms into operational systems. The TI process, modeled after the NAVSEA Submarine Undersea Warfare (USW) hardware improvement program, delivers processing technology improvements to platforms on roughly a 4-6 year cycle. Hardware upgrades for active and passive arrays and communications systems will also be provided during TI upgrades, but not on a regular planned development cycle as for the processing upgrades.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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SURTASS-E provides a SURTASS passive capability packaged into ISO-Vans for mobilization on Vessels of Opportunity (VOOs). It was developed as a CNO Rapid Prototyping, Experimentation, and Demonstration (RPED) program to provide a SURTASS variant that addresses emergent Theater ASW Commander requirements for SURTASS capability.

B. PEO UWS is involved with the development and maintenance of various IUSS systems. These systems include Fixed Distributed systems (FDS), Fixed Distributed Systems-Commercial (FDS-C), and SURTASS. The existing system architectures, signal processing, contact management, and reporting requirements will be evaluated as well as the requirements for future systems. The cyclical development of the ICP will take advantage of automation advancement, array technology improvements, along with IUSS, submarine, and surface USW system commonality to address these requirements.
The FSS portion of 0766 is classified with details available at a higher classification level.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Integrated Common Processor (ICP)	10.430	6.107	10.718	0.000	10.718
Articles:	-	-	-	-	-
FY 2023 Plans: - ASB-23 improvements planned to begin in FY2023: Improvements to AIS to Acoustic Track Association, Initial implementation of Deep Learning Capabilities, Improvements (Advanced Processing, Active, Passive, Cyber, & Advanced Sensors), Improved OMI, Improved Cyber Security and Program Protection. - Continue ASB-21 Integration and Test in FY2023. - Technology Insertion Hardware improvements in FY2023: Continue TI-24 improvements for cyber security, Program Protection (afloat and Engineering Measurements Program (EMP)) & address hardware obsolescence.					
FY 2024 Base Plans: - Continue development of ASB-23 which includes :Improvements to AIS to Acoustic Track Association; Improved passive automation tuning; Improved Active OMI, Continued improvements to active array monitoring; Improved Cyber Security and Program Protection. - Begin development of additional ASB-23 capabilities which includes: Ownership noise reduction; ONR Active Initiatives; Improved Target Motion Analysis, Automated passive display requantization; improve active transmit startup; improved Active CW processing; Improved Active Automation; improved Cyber Security and P2. - Continue ASB-23 Integration and Test in Q3 FY2024. - Begin TI-24 Hardware Design to develop Technology Insertions hardware improvements for Cyber Security, Program Protection (afloat and Engineering Measurements Program (EMP)) and address hardware obsolescence. - Continue Advanced Capabilities development of Artificial Intelligence/Machine Learning algorithms for enhanced human-machine performance; Continue system infrastructure modernization to streamline system development, to provide more flexibility in hardware and to enable for more frequent software updates of					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
software to include patches/baseline and new capabilities; advanced beamforming techniques for the fielding of new variants of modern arrays. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Funding increase of $4.611M due to Advanced Capabilities development of Artificial Intelligence/Machine Learning algorithms for enhanced human-machine performance, system modernization to support development of hardware and software to include advanced beamforming techniques for the fielding of new variants of modern arrays.					
Title: TL-29A/Twin-Line	2.000	1.544	3.958	0.000	3.958
Articles:	-	-	-	-	-
FY 2023 Plans: - Continue development of upgraded telemetry components to address component obsolescence. - Continue development of fishing net mitigation solutions and upgrades to reduce potential for array damage from fishing apparatus. - Continue at-sea test and evaluation efforts to demonstrate passive array system hardware and processing enhancements and net mitigation equipment. - Continue evaluation of true fiber optic array technologies and array components, including Twin-line variants of newsubmarine Long-line arrays for future application to SURTASS. - Continue development of future passive systems to outfit T-AGOS(X). ***FY 2024 Base Plans:*** - Continue development of upgraded telemetry components to address component obsolescence. - Continue development of fishing net mitigation solutions and upgrades to reduce potential for array damage from fishing apparatus. - Continue at-sea test and evaluation efforts to demonstrate passive array system hardware and processing enhancements and net mitigation equipment. - Continue evaluation of true fiber optic array technologies and array components, including Twin-line variants of newsubmarine Long-line arrays for future application to SURTASS. - Continue development of future passive systems to outfit T-AGOS(X).					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Develop replacement technologies for obsolete and manufacturer discontinued parts and to address high failure items and other reliability and maintainability improvements. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Funding increased $2.414M to develop replacement technologies for obsolete and manufacturer discontinued parts and to address high failure items and other reliability and maintainability improvements.					
Title: Classified Effort ***Articles:*** ***Description:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2023 Plans:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2024 Base Plans:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** The FSS portion of 0766 is classified with details available at a higher classification level.	48.112 -	49.313 -	49.318 -	0.000 -	49.318 -
Accomplishments/Planned Programs Subtotals	60.542	56.964	63.994	0.000	63.994

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• OPN/2237: *SURTASS*	67.500	25.030	33.910	-	33.910	25.204	28.804	29.148	29.371	Continuing	Continuing

Remarks

D. Acquisition Strategy

FY 2022: ASB Step 4 Testing. TL-29A/ICP FOT&E
FY 2023: ICP Tech Refresh. TL-29A/ICP FOT&E

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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FY 2024: ASB Step 4 Testing. TL-29A/ICP FOT&E
The FSS portion of 0766 is classified with details available at a higher classification level.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	62.719	4.018	Dec 2021	0.720	Dec 2022	5.222	Dec 2023	-		5.222	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	SS/CPFF	APL/JHU : MD	9.255	0.907	Apr 2022	0.585	Apr 2023	0.597	Apr 2024	-		0.597	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	L-3 : MD	6.575	0.594	Dec 2021	0.480	Dec 2022	0.490	Dec 2023	-		0.490	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	77.655	1.204	Dec 2021	0.705	Dec 2022	0.719	Dec 2023	-		0.719	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	Warfare Centers : CA	7.062	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	SS/CPFF	APL/JHU : MD	5.791	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : MO	7.880	0.580	Apr 2022	0.400	Apr 2023	1.471	Apr 2024	-		1.471	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	L-3 : MD	3.192	0.302	Dec 2021	0.172	Dec 2022	0.175	Dec 2023	-		0.175	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	C/CPFF	L-3 CSC : MD	0.204	0.195	Dec 2021	0.149	Dec 2022	0.152	Dec 2023	-		0.152	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	C/CPFF	Makai : HI	0.200	0.203	Mar 2022	0.103	Mar 2023	0.105	Mar 2024	-		0.105	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	11.676	0.000		0.000		0.000		-		0.000	0.000	11.676	-
SURTASS-E	Various	Various : Not Specified	4.560	0.000		0.000		0.000		-		0.000	0.000	4.560	-
FSS - Classified	Various	TBD : Not Specified	260.992	48.112	Nov 2021	49.313	Nov 2022	49.318	Nov 2023	-		49.318	Continuing	Continuing	Continuing
		Subtotal	457.761	56.115		52.627		58.249		-		58.249	Continuing	Continuing	N/A

Remarks

The $5.617 million increase from FY 2023 to FY 2024 is due to:
1. Advanced Capabilities development of Artificial Intelligence/Machine Learning algorithms for enhanced human-machine performance, system modernization to support development of hardware and software to include advanced beamforming techniques for the fielding of new variants of modern arrays.
2. Development replacement technologies for obsolete and manufacturer discontinued parts and to address high failure items and other reliability and maintainability improvements.
The FSS portion of 0766 is classified with details available at a higher classification level.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	WR	NIWC PAC : CA	6.311	0.292	Nov 2021	0.285	Nov 2022	0.291	Nov 2023	-		0.291	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	APL/JHU : MD	8.228	0.768	Apr 2022	0.749	Apr 2023	0.764	Apr 2024	-		0.764	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	Lockheed Martin : VA	8.001	0.716	Dec 2021	0.699	Dec 2022	0.713	Dec 2023	-		0.713	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	7.001	0.336	Jan 2022	0.328	Jan 2023	0.335	Jan 2024	-		0.335	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	10.374	0.000		0.000		0.000		-		0.000	0.000	10.374	-
ARRAY IMPROVEMENTS	WR	Warfare Centers : RI	0.340	0.345	Nov 2021	0.345	Nov 2022	1.673	Nov 2023	-		1.673	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	2.529	0.000		0.000		0.000		-		0.000	0.000	2.529	-
SURTASS-E	WR	Warfare Centers : CA	1.240	0.000		0.000		0.000		-		0.000	0.000	1.240	Continuing
		Subtotal	44.024	2.457		2.406		3.776		-		3.776	Continuing	Continuing	N/A

Remarks

The $1.370 million increase from FY 2023 to FY 2024 is due to:
1. Support associated with Advanced Capabilities development of Artificial Intelligence/Machine Learning algorithms for enhanced human-machine performance, system modernization to support development of hardware and software to include advanced beamforming techniques for the fielding of new variants of modern arrays.
2. Support associated with development replacement technologies for obsolete and manufacturer discontinued parts and to address high failure items and other reliability and maintainability improvements.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	C/CPFF	LOCKHEED MARTIN : VA	8.500	0.665	Dec 2021	0.648	Dec 2022	0.661	Dec 2023	-		0.661	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	SS/CPFF	ARL/UT : TX	0.425	0.293	Apr 2022	0.286	Apr 2023	0.292	Apr 2024	-		0.292	0.000	1.296	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 0766 / *IUSS Detect/Classif System*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	C/CPFF	Various : Various	10.603	0.103	Jan 2022	0.101	Jan 2023	0.103	Jan 2024	-		0.103	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	Warfare Centers : Various	22.564	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	SS/CPFF	APL/JHU : MD	2.278	0.265	Apr 2022	0.265	Apr 2023	0.270	Apr 2024	-		0.270	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	OPTEVOR : VA	0.400	0.000		0.000		0.000		-		0.000	0.000	0.400	-
		Subtotal	44.770	1.326		1.300		1.326		-		1.326	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	11.060	0.534	Jan 2022	0.521	Jan 2023	0.531	Jan 2024	-		0.531	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	16.501	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	1.280	0.110	Jan 2022	0.110	Jan 2023	0.112	Jan 2024	-		0.112	Continuing	Continuing	Continuing
		Subtotal	28.841	0.644		0.631		0.643		-		0.643	Continuing	Continuing	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	575.396	60.542		56.964		63.994		-		63.994	Continuing	Continuing	N/A

Remarks

The R3 and the R4 / R4A reflect the UNCLASSIFIED portion of the PE.
The FSS portion of 0766 is classified with details available at a higher classification level.

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance Syst em*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

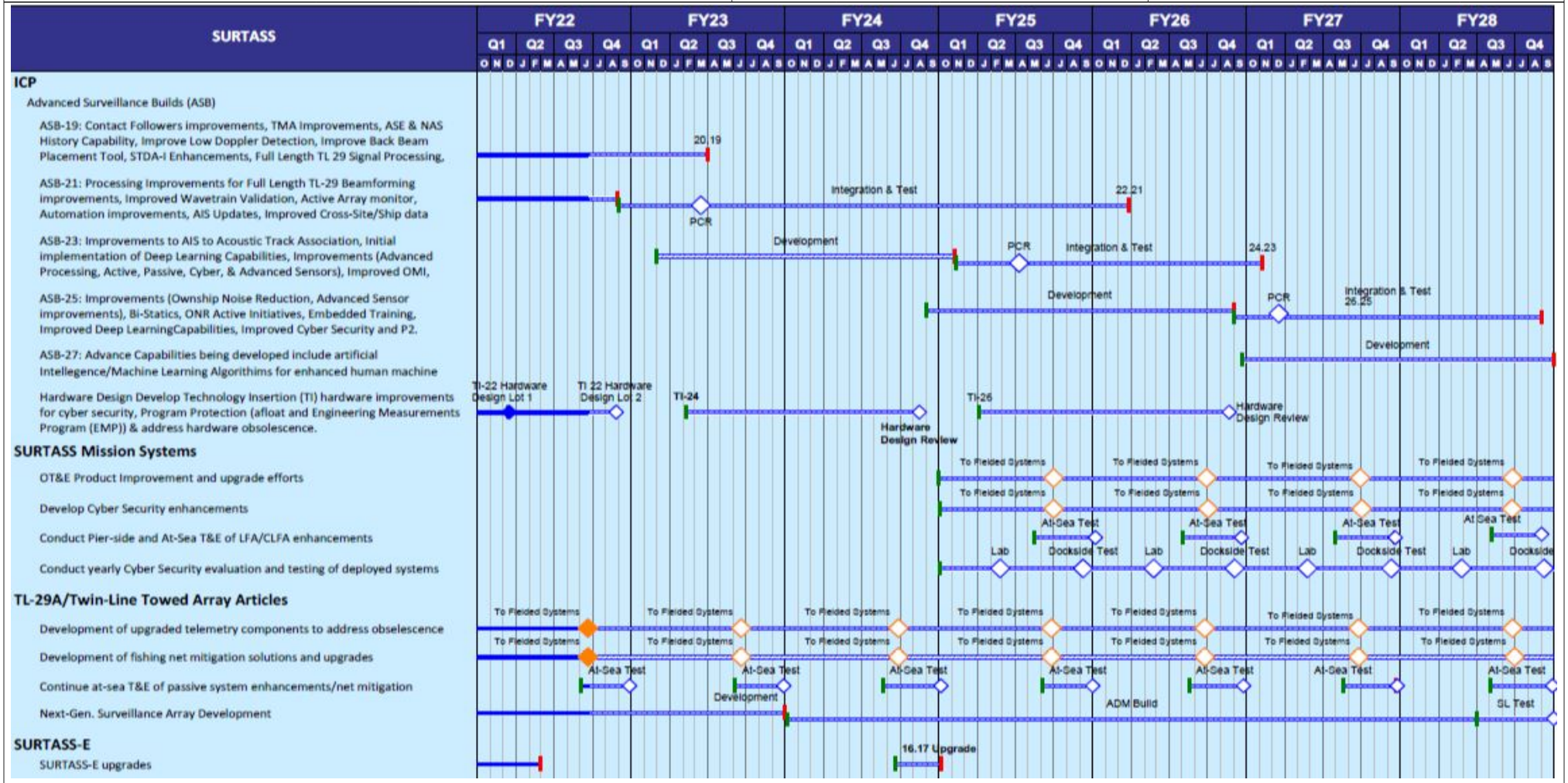


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0766.L24				
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: LFA/CLFA Cyber Security Evaluation and Testing (2025-28)	1	2025	4	2028
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: Pier-side and At-Sea T&E of LFA/CLFA Enhancements (2025)	3	2025	4	2025
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: Pier-side and At-Sea T&E of LFA/CLFA Enhancements (2026)	3	2026	4	2026
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: Pier-side and At-Sea T&E of LFA/CLFA Enhancements (2027)	3	2027	4	2027
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: Pier-side and At-Sea T&E of LFA/CLFA Enhancements (2028)	3	2028	4	2028
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2022)	3	2022	4	2022
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2023)	3	2023	4	2023
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2024)	3	2024	4	2024
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2025)	3	2025	4	2025
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2026)	3	2026	4	2026
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2027)	3	2027	4	2027
TEST and EVALUATION MILESTONES: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2028)	3	2028	4	2028

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
TEST and EVALUATION MILESTONES: TL-29A Testing: Towed Array Next-Gen Surveillance Array SL Test	3	2028	4	2028
TEST and EVALUATION MILESTONES: ICP Advanced Surveillance Builds (ASB): ASB-19 Integration and Test	1	2022	2	2023
TEST and EVALUATION MILESTONES: ICP Advanced Surveillance Builds (ASB): ASB-21 Integration and Test	4	2022	1	2026
TEST and EVALUATION MILESTONES: ICP Advanced Surveillance Builds (ASB): ASB-23 Integration and Test	1	2025	1	2027
TEST and EVALUATION MILESTONES: ICP Advanced Surveillance Builds (ASB): ASB-25 Integration and Test	4	2026	4	2028
DEVELOPMENT MILESTONES: LFA/CLFA Development: LFA/CLFA OT&E Product Improvement/Upgrade Efforts (FY25-28)	1	2025	4	2028
DEVELOPMENT MILESTONES: LFA/CLFA Development: LFA/CLFA Cyber Security Enhancements (FY25-28)	1	2025	4	2028
DEVELOPMENT MILESTONES: TL-29A Development: TL-29A Develop Telemetry Components (Upgrades) (Yearly)	1	2022	4	2028
DEVELOPMENT MILESTONES: TL-29A Development: TL-29A Develop Fishing Net Mitigation (Yearly)	1	2022	4	2028
DEVELOPMENT MILESTONES: TL-29A Development: Towed Array Next-Gen Survellance Array Development	1	2022	4	2023
DEVELOPMENT MILESTONES: TL-29A Development: Towed Array Next-Gen Surveillance Array ADM Build	1	2024	2	2028
DEVELOPMENT MILESTONES: ICP Development: ASB 21 Development	1	2022	4	2022
DEVELOPMENT MILESTONES: ICP Development: ASB 23 Development	1	2023	1	2025
DEVELOPMENT MILESTONES: ICP Development: ASB 25 Development	4	2024	4	2026
DEVELOPMENT MILESTONES: ICP Development: ASB 27 Development	4	2026	4	2028
DEVELOPMENT MILESTONES: SURTASS-E: Upgrades 14.15	1	2022	2	2022
DEVELOPMENT MILESTONES: SURTASS-E: Upgrades 16.17	3	2024	4	2024

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
PRODUCTION MILESTONES: ICP Technology Insertion: Hardware Design ICP Tech Insertion TI-24	2	2023	4	2024
PRODUCTION MILESTONES: ICP Technology Insertion: Hardware Design ICP Tech Insertion TI-26	2	2025	4	2026

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 1768 / *Ship Plan Development and Design*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
1768: *Ship Plan Development and Design*	30.622	6.730	0.977	1.738	-	1.738	1.700	1.067	0.835	0.852	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

T-Auxiliary, Repair, Cable (T-ARC) is a candidate replacement program for U.S. Navy's only organic undersea cable laying and repair ship, USNS ZEUS (T-ARC 7), which is approaching the end of her extended service life. The ship's main mission is to deploy, repair, and retrieve undersea cables and equipment, with a secondary mission of towing projectors.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: T-ARC(X) Cable Ship Design and Total Ship Integration	6.730	0.977	1.738	0.000	1.738
Articles:	-	-	-	-	-
FY 2023 Plans: - Continue design integration and T&E planning. - Update indicative design to incorporate new requirements and support revised SEA05C cost estimate. - Continue development of acquisition documentation in support of Milestone B/C. - Continue to coordinate acquisition efforts with NAVSEA, MSC, PEO SHIPS, CNO, ASN RD&A, OSD, and Fleet.					
FY 2024 Base Plans: - Continue development of acquisition documentation in support of Milestone B/C. - Continue updating indicative design to incorporate new requirements and support revised SEA05C cost estimate. - Update and release DD&C RFP. - Continue to coordinate acquisition efforts with NAVSEA, MSC, PEO SHIPS, CNO, ASN RD&A, OSD, and Fleet.					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement:					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 1768 / *Ship Plan Development and Design*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
The increase of $0.761M is due to updating the indicative design to support revised SEA05C cost estimate and to release the RFP to support the FY 2026 DD&C award.					
Accomplishments/Planned Programs Subtotals	6.730	0.977	1.738	0.000	1.738

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• SCN/5080: *TARC Cable Repair Ship*	0.000	0.000	0.000	-	0.000	0.000	767.939	0.000	0.000	0.000	767.939

Remarks

D. Acquisition Strategy

Issued Request for Proposal (RFP) in FY 2020 and awarded Industry Studies in FY 2021. Issue RFP for Detail Design and Construction (DD&C) in FY 2024 for a FY 2026 award.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 1768 / *Ship Plan Development and Design*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Industry Studies	C/FFP	Various : Various	14.500	0.000		0.000		0.000		-		0.000	0.000	14.500	-
Engineering Integration/ Design/Indictive Design	Various	Various : Various	3.968	1.812	May 2022	0.555	Mar 2023	0.337	Jan 2024	-		0.337	2.719	9.391	-
		Subtotal	18.468	1.812		0.555		0.337		-		0.337	2.719	23.891	N/A

Remarks

Increase in Engineering Integration/Design/Indictive Design requirements from FY23 to FY24 is due to updating the Indictive Design to ensure alignment with SEA05C cost estimate to support FY 2026 DD&C contract award.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Requirements Definition	Various	Various : Various	1.040	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Spec and Technical Data Package Development	Various	Various : Various	4.064	1.930	Jan 2023	0.226	Mar 2023	0.201	Jan 2024	-		0.201	0.000	6.421	-
Milestone Documentation/ RFP development	Various	Various : Various	3.797	2.022	Jan 2023	0.196	Mar 2023	1.200	Jan 2024	-		1.200	0.765	7.980	-
Systems Integration	Various	Various : Various	2.386	0.911	May 2022	0.000		0.000		-		0.000	0.353	3.650	-
		Subtotal	11.287	4.863		0.422		1.401		-		1.401	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	Various	Various : Various	0.867	0.055	May 2022	0.000		0.000		-		0.000	11.235	12.157	-
		Subtotal	0.867	0.055		0.000		0.000		-		0.000	11.235	12.157	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 1768 / *Ship Plan Development and Design*	

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	30.622	6.730		0.977		1.738		-		1.738	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 1768 / *Ship Plan Development and Design*

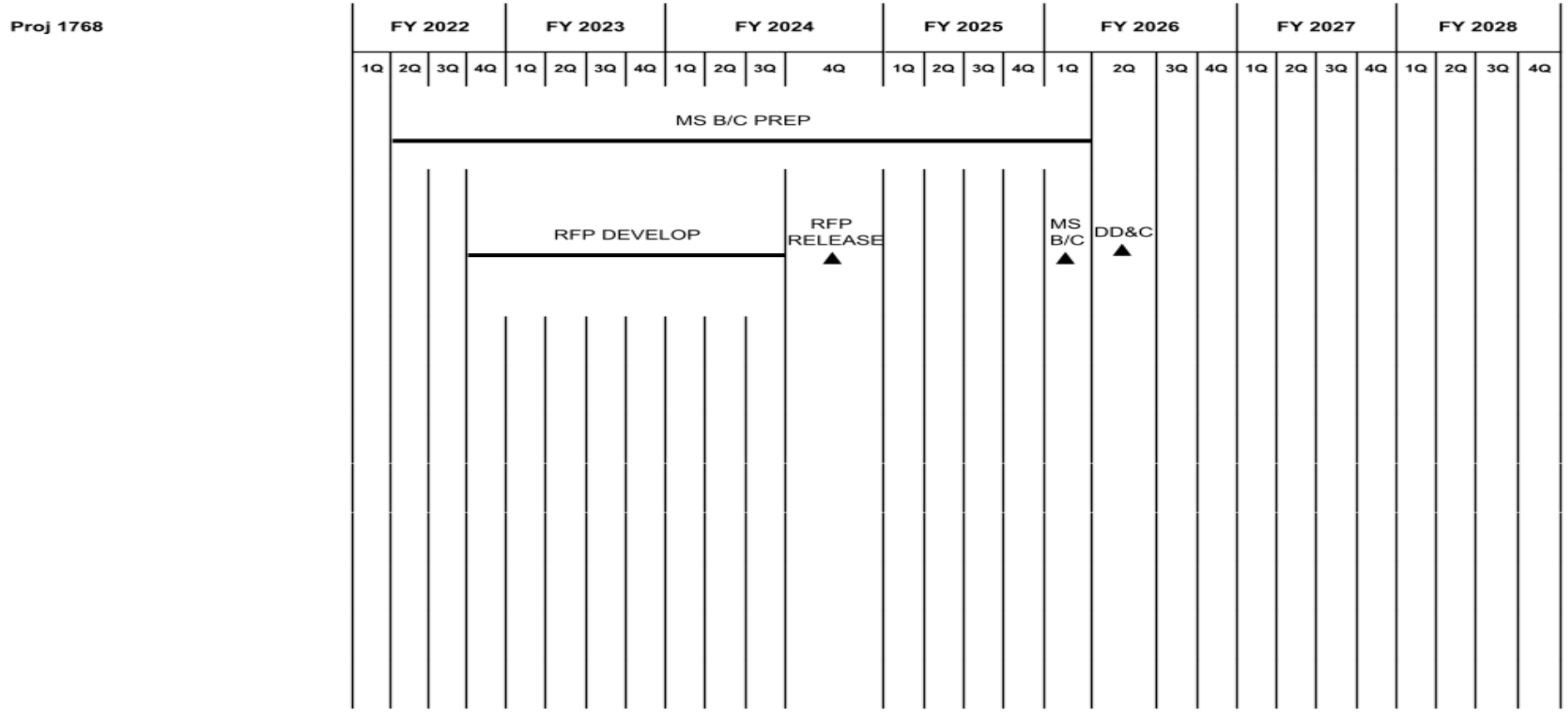


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 1768 / *Ship Plan Development and Design*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 1768				
Milestone B/C Document Preparation	2	2022	1	2026
Detail Design & Construction Specification and Request For Proposal Development	4	2022	3	2024
Issue Detail Design & Construction Request For Proposal	4	2024	4	2024
Milestone B/C	1	2026	1	2026
Issue Detail Design & Construction Award	2	2026	2	2026

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 9999 / *Congressional Adds*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
9999: *Congressional Adds*	0.000	0.000	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project C916 funds efforts for design of Next Generation Surveillance Array (NGSA) to include Critical Design Review (CDR), purchase and assemble Advanced Development Model (ADM) and engage industry to build and deliver Open Architecture Telemetry (OAT) components.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023
Congressional Add: Next-gen twin-line towed array	0.000	10.000
FY 2022 Accomplishments: N/A		
FY 2023 Plans: - Complete Critical Design Review (CDR) Q2FY24. - Procure Next Generation Surveillance Array (NGSA) Advanced Development Model (ADM) material. - Assemble NGSA ADM material Q3FY24. - Award Other Transaction Authority (OTA) for Open Architecture Telemetry (OAT) orientation. - Various Program Management and Engineering tasks.		
Congressional Adds Subtotals	0.000	10.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

FY23: Rapid Prototype

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 9999 / *Congressional Adds*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Design and Manufacture Array	WR	NUWC Newport : Newport, RI	0.000	0.000		4.600	Apr 2023	0.000		-		0.000	0.000	4.600	-
Qualify Prototype Array Components w/ Industry	TBD	NUWC Newport : Newport, RI	0.000	0.000		2.500	Apr 2023	0.000		-		0.000	0.000	2.500	-
Design and Manufacture Array	C/CPFF	Johns Hopkins : Columbia, MD	0.000	0.000		2.600	Apr 2023	0.000		-		0.000	0.000	2.600	-
Evaluate COTS Array Components	C/CPFF	MAKAI : Hawaii	0.000	0.000		0.200	Apr 2023	0.000		-		0.000	0.000	0.200	-
		Subtotal	0.000	0.000		9.900		0.000		-		0.000	0.000	9.900	N/A

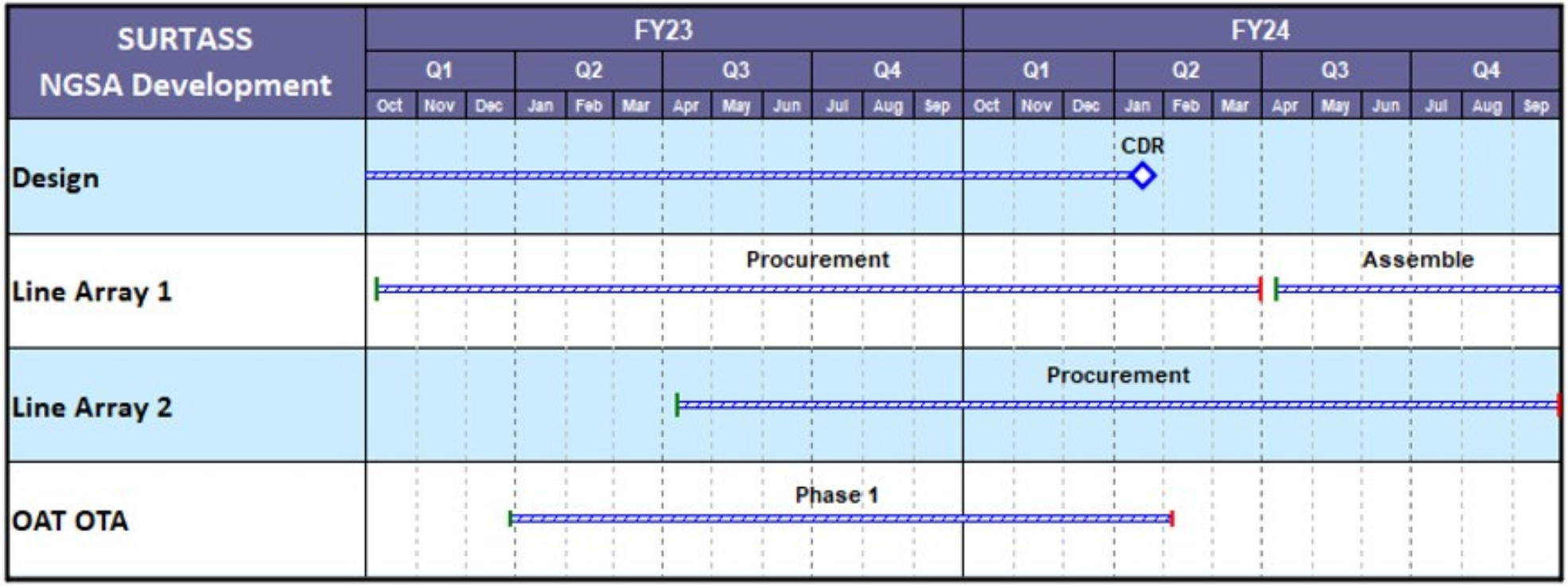
Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management and Engineering Support	C/CPFF	Booz Allen Hamilton : McClean, VA	0.000	0.000		0.100	Apr 2023	0.000		-		0.000	0.000	0.100	-
		Subtotal	0.000	0.000		0.100		0.000		-		0.000	0.000	0.100	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		10.000		0.000		-		0.000	0.000	10.000	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 9999 / *Congressional Adds*



Acronyms
OAT – Open Architecture Telemetry
OTA - Other Transactional Authority
NGSA - Next Generation Surveillance Array

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9999				
DEVELOPMENT MILESTONES: Next Generation Surveillance Array (NGSA) Design	1	2023	2	2024
DEVELOPMENT MILESTONES: NGSA Critical Design Review (CDR)	2	2024	2	2024
PRODUCTION MILESTONES: Line Array 1: NGSA Material Procurement	1	2023	2	2024
PRODUCTION MILESTONES: Line Array 1: NGSA Assembly	3	2024	4	2024
PRODUCTION MILESTONES: Line Array 2: NGSA Material Procurement	3	2023	4	2024
ACQUISITION MILESTONES: Open Architecture Telemetry (OAT) Other Transactional Authority (OTA) Phase 1	2	2023	2	2024