Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy											Date: April 2022	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0204311N *I Integrated Surveillance System*							
COST ($ in Millions)	**Prior Years**	**FY 2021**	**FY 2022**	**FY 2023 Base**	**FY 2023 OCO**	**FY 2023 Total**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Cost To Complete**	**Total Cost**
Total Program Element	589.595	112.574	84.037	68.417	-	68.417	71.104	65.559	62.410	63.114	Continuing	Continuing
0344: *Deployable Surveillance Systems*	8.500	26.385	16.592	10.329	-	10.329	0.000	0.000	0.000	0.000	0.000	61.806
0766: *IUSS Detect/Classif System*	512.329	63.067	60.542	57.111	-	57.111	68.287	64.723	61.559	62.279	Continuing	Continuing
1768: *Ship Plan Development and Design*	20.000	10.622	6.903	0.977	-	0.977	2.817	0.836	0.851	0.835	Continuing	Continuing
9999: *Congressional Adds*	48.766	12.500	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	61.266

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, which are currently outside the Future Years Defense Program (FYDP).

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.

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

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy	Date: April 2022
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0204311N *I Integrated Surveillance 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.

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	112.574	84.276	0.000	-	0.000
Current President's Budget	112.574	84.037	68.417	-	68.417
Total Adjustments	0.000	-0.239	68.417	-	68.417
• Congressional General Reductions	-	-0.239			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	0.000	-	0.000
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000
• Adjustments to Budget Year	-	-	68.417	-	68.417

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2021	FY 2022
Project: 9999: *Congressional Adds*		
Congressional Add: *Maritime Surveillance System Sensor & Signal Processing Performance Improvements*	12.500	0.000
Congressional Add Subtotals for Project: 9999	12.500	0.000
Congressional Add Totals for all Projects	12.500	0.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy	Date: April 2022
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0204311N *I Integrated Surveillance System*

Change Summary Explanation

The FY 2023 funding request was reduced by $18.103 million to account for the availability of prior year execution balances.

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

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
Appropriation/Budget Activity 1319 / 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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
0344: *Deployable Surveillance Systems*	8.500	26.385	16.592	10.329	-	10.329	0.000	0.000	0.000	0.000	0.000	61.806
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Deployable Surveillance Systems (DSS) project (0344), complementing FSS and 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, which are currently outside the Future Years Defense Program (FYDP).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Deployable Surveillance Systems (DSS)	26.385	16.592	10.329	0.000	10.329
Articles:	-	-	-	-	-
FY 2022 Plans: - Fabricate four (4) DWP Spiral 1.1 LRIP units - Recovery effort for FY 2019 fabricated DWP Spiral 1.0 Surface Nodes					
FY 2023 Base Plans: - Fabrication of two (2) DWP Spiral Node 1.1 LRIP Units - Deployment and Sustainment of previously fabricated DWP units - Non-recurring engineering in support of Test Bed					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: The $6.263 million decrease from FY2022 to FY2023 is due to completion of integration of Non-Recurring Engineering (NRE) efforts into the Spiral 1.5 baseline and a reduction of LRIP units from a QTY of 4 to 2.					
Accomplishments/Planned Programs Subtotals	26.385	16.592	10.329	0.000	10.329

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

FY 2019: DWP Acquisition Decision Memorandum (ADM) signed by PEO SUB 14Mar19
FY 2020: DWP Spiral 1.1 Rapid Fielding
FY 2020-2021: Engineering: DWP Risk Reduction
FY 2020-2021: C4I Integration Stage 1
FY 2020-2023: Software Integration - Build 21
FY 2021: DWP Spiral 1.1 Acquisition Strategy (AS)
FY 2021: Initiate DWP Spiral 1.1 Low Rate Initial Production (LRIP)
FY 2021: Master Test Strategy
FY 2022: Initiate DWP Spiral 1.1 LRIP
FY 2022: Quick Reaction Assessment (QRA) Test Plan
FY 2023: Continue DWP Spiral 1.1 LRIP Production
FY 2024: DWP Spiral 1.1 Post Implementation Review (PIR)
FY 2024: Outcome Determination ADM

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy		Date: April 2022
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 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS DWP Spiral 1.1 LRIP Units	C/CPFF	Leidos : MS	0.000	8.299	Jun 2021	6.755	Jun 2022	5.663	Jan 2023	-		5.663	0.000	20.717	-
DSS DWP Spiral 1.1 LRIP Units Refurbishment	C/CPFF	Teledyne Webb Research : MA	0.000	0.302	Mar 2021	0.292	Mar 2022	0.000		-		0.000	0.000	0.594	-
DSS DWP Spiral 1.1 LRIP Units Logistics	C/CPFF	Leidos : MS	0.000	0.750	Jun 2021	0.773	Jun 2022	0.000		-		0.000	0.000	1.523	-
DSS DWP Spiral 1.5 Fiber Optic Cable	C/CPFF	Various : Various	0.000	0.000		1.044	Mar 2022	0.000		-		0.000	0.000	1.044	-
DSS Processing	C/CPFF	APL/JHU : MD	0.440	1.386	Mar 2021	0.741	Mar 2022	0.600	Mar 2023	-		0.600	0.000	3.167	-
DSS Processing	C/CPFF	Leidos : MS	1.450	0.000		0.000		0.000		-		0.000	0.000	1.450	-
DSS Processing	C/CPFF	Sandia National Lab : NM	0.300	0.000		0.000		0.000		-		0.000	0.000	0.300	-
DSS Processing	C/CPFF	Proteq : VA	1.200	0.000		0.000		0.000		-		0.000	0.000	1.200	-
DSS Risk Reduction	Various	Various : Various	0.500	0.549	Feb 2021	0.538	Feb 2022	0.715	Feb 2023	-		0.715	0.000	2.302	-
DSS Risk Reduction	WR	NUWC Newport : RI	0.000	0.964	Dec 2021	0.625	Dec 2021	1.663	Nov 2022	-		1.663	0.000	3.252	-
DSS Risk Reduction (NRE)	C/CPFF	Leidos : MS	0.000	7.200	Nov 2020	0.291	Nov 2021	0.584	Jan 2023	-		0.584	0.000	8.075	-
		Subtotal	3.890	19.450		11.059		9.225		-		9.225	0.000	43.624	N/A

Remarks

The FY 2023 decrease is due to a reduction of 1.1 LRIP units.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
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	1.985	1.500	Nov 2020	0.773	Nov 2021	0.000		-		0.000	0.000	4.258	-
DSS C4I Integration	WR	Navy Research Lab : DC	0.300	0.030	Feb 2021	0.000		0.000		-		0.000	0.000	0.330	-
DSS T&E	WR	NIWC PAC : CA	0.000	0.404	Nov 2020	0.416	Nov 2021	0.000		-		0.000	0.000	0.820	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy		Date: April 2022
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 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS ISEA	WR	NUWC Keyport : WA	0.000	3.659	Dec 2020	3.417	Dec 2021	0.000		-		0.000	0.000	7.076	-
		Subtotal	4.185	5.593		4.606		0.000		-		0.000	0.000	14.384	N/A

Remarks

The FY 2023 reduction is due to transition of support from RDT&E to O&M,N.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS T&E	WR	COTF : VA	0.000	0.000		0.000		0.167	Apr 2023	-		0.167	0.000	0.167	-
		Subtotal	0.000	0.000		0.000		0.167		-		0.167	0.000	0.167	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DSS	C/CPFF	BAH : VA	0.425	1.342	Jan 2021	0.927	Jan 2022	0.937	Jan 2023	-		0.937	0.000	3.631	-
		Subtotal	0.425	1.342		0.927		0.937		-		0.937	0.000	3.631	N/A

	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	8.500	26.385		16.592		10.329		-		10.329	0.000	61.806	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

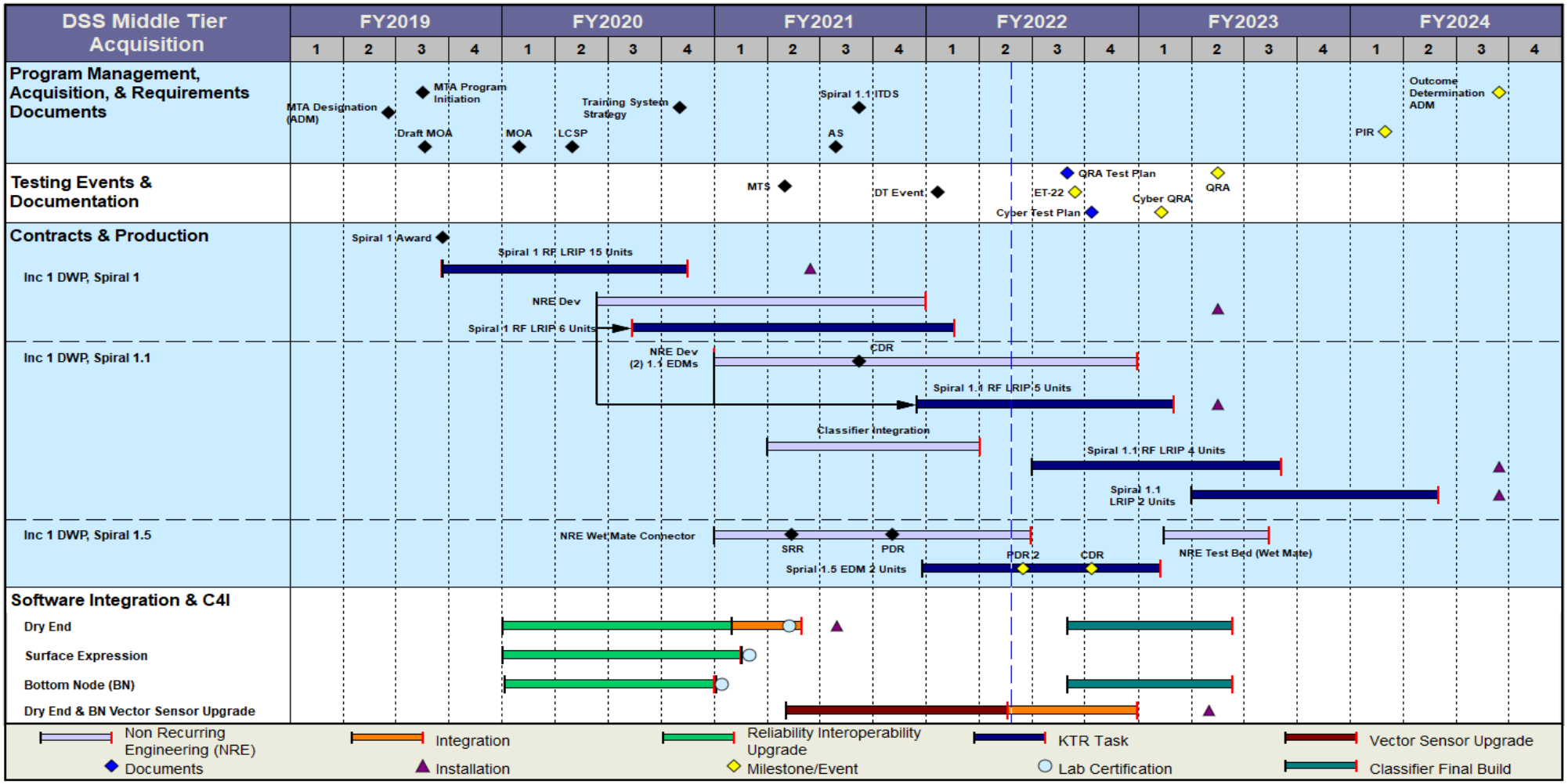


Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *Deployable Surveillance Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0344				
Test and Evaluation Milestones: Master Test Strategy	2	2021	2	2021
Test and Evaluation Milestones: Quick Reaction Assessment	2	2023	2	2023
Test and Evaluation Milestones: Quick Reaction Assessment Engineering Test 22	3	2022	3	2022
Test and Evaluation Milestones: Quick Reaction Assessment Test Plan	3	2022	3	2022
Test and Evaluation Milestones: Developmental Test Event	1	2022	1	2022
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1 LRIP (6 Units)	1	2022	1	2022
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1.1 LRIP (5 Units)	4	2021	1	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1.1 LRIP (4 Units)	2	2022	3	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): Non- Recurring Engineering Event Wet Mate Connector	1	2021	3	2022
Production Milestones: DWP Low Rate Initial Production (LRIP): DWP Spiral 1.1 LRIP (2 Units)	2	2023	2	2024
Production Milestones: DWP Low Rate Initial Production (LRIP): Non- Recurring Engineering Test Bed	1	2023	3	2023
Production Milestones: DWP Low Rate Initial Production (LRIP): Spiral 1 Non-Recurring Engineering Development	4	2021	4	2021
Production Milestones: DWP Low Rate Initial Production (LRIP): Classifier Integration Non- Recurring Engineering Development	1	2021	2	2022
Production Milestones: DWP EDMs: DWP Spiral 1.01 EDM (2 Units)	1	2021	4	2022
Production Milestones: DWP EDMs: DWP Spiral 1.5 EDM (2 Units)	1	2022	1	2023

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
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**
Middle Tier Acquisition Documentation: Spiral 1.1 Information Technology Deployment Strategy	3	2021	3	2021
Middle Tier Acquisition Documentation: Acquisition Strategy	3	2021	3	2021
Middle Tier Acquisition Documentation: Milestones: Post Implementation Review	1	2024	1	2024
Middle Tier Acquisition Documentation: Milestones: Outcome Determination Acquisition Decision Memorandum	3	2024	3	2024

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
0766: *IUSS Detect/Classif System*	512.329	63.067	60.542	57.111	-	57.111	68.287	64.723	61.559	62.279	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, 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 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.

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.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Integrated Common Processor (ICP)	15.406	10.430	6.107	0.000	6.107
Articles:	-	-	-	-	-
FY 2022 Plans: - ASB-21 improvements planned for completion in FY2022 include: Processing Improvements for Full Length TL-29 Beamforming improvements, Improved Wavetrain Validation, Active Array monitor, Automation improvements, AIS Updates, Improved Cross-Site/Ship data sharing, Full Length TL-29 Beamforming improvements, Improved Data Retrieval, Environmental Monitoring and Overlays, Improved Cyber Security and P2. - Begin ASB-21 Integration and Test in Q3 FY2022. - Technology Insertion Hardware improvements in FY2022: Begin TI-24 improvements for cyber security, Program Protection (afloat and Engineering Measurements Program (EMP)) & address hardware obsolescence.					
FY 2023 Base 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 P2. - 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 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: The $4.323 million decrease from FY 2022 to FY 2023 is due to reduction of Advanced Surveillance Build (ASB) improvements for Integrated Common Processor (ICP).					
Title: Compact Low Frequency Active (CLFA)	2.000	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Articles:	-	-	-	-	-
FY 2022 Plans: N/A ***FY 2023 Base Plans:*** N/A ***FY 2023 OCO Plans:*** N/A					
Title: TL-29A/Twin-Line	2.000	2.000	1.544	0.000	1.544
Articles:	-	-	-	-	-
FY 2022 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 new submarine Long-line arrays for future application to SURTASS. - Continue development of future passive systems to outfit T-AGOS(X).					
FY 2023 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).					
FY 2023 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** The $0.456 million decrease from FY 2022 to FY 2023 is due to a reduction of array improvements for TL-29A Towed Array.					
Title: SURTASS-E ***Articles:*** ***FY 2022 Plans:*** N/A ***FY 2023 Base Plans:*** N/A ***FY 2023 OCO Plans:*** N/A	6.200 -	0.000 -	0.000 -	0.000 -	0.000 -
Title: Classified Effort ***Articles:*** ***Description:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2022 Plans:*** N/A ***FY 2023 Base Plans:*** N/A ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** The FSS portion of 0766 is classified with details available at a higher classification level.	37.461 -	48.112 -	49.460 -	0.000 -	49.460 -
Accomplishments/Planned Programs Subtotals	63.067	60.542	57.111	0.000	57.111

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• OPN/2237: *SURTASS*	63.838	67.500	25.030	-	25.030	68.188	62.330	27.997	28.471	Continuing	Continuing

Remarks

D. Acquisition Strategy

FY 2019: ICP Tech Refresh. CLFA/TL-29A/ICP FOT&E
FY 2020: ASB Step 4 Testing. LFA/CLFA/TL-29A/ICP FOT&E
FY 2021: ICP Tech Refresh. LFA/TL-29A/ICP FOT&E
FY 2022: ASB Step 4 Testing. TL-29A/ICP FOT&E
FY 2023: ICP Tech Refresh. 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 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	56.620	6.099	Dec 2020	4.018	Dec 2021	0.720	Dec 2022	-		0.720	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	SS/CPFF	APL/JHU : MD	7.938	1.317	Apr 2021	0.907	Apr 2022	0.585	Apr 2023	-		0.585	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	L-3 : MD	5.713	0.862	Dec 2020	0.594	Dec 2021	0.480	Dec 2022	-		0.480	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	75.907	1.748	Dec 2020	1.204	Dec 2021	0.705	Dec 2022	-		0.705	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	Warfare Centers : CA	6.424	0.638	Dec 2020	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	SS/CPFF	APL/JHU : MD	5.189	0.602	Apr 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : MO	7.304	0.576	Apr 2021	0.580	Apr 2022	0.400	Apr 2023	-		0.400	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	L-3 : MD	2.892	0.300	Dec 2020	0.302	Dec 2021	0.172	Dec 2022	-		0.172	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	C/CPFF	L-3 CSC : MD	0.000	0.204	Dec 2020	0.195	Dec 2021	0.149	Dec 2022	-		0.149	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	C/CPFF	Makai : HI	0.000	0.200	Mar 2021	0.203	Mar 2022	0.103	Mar 2023	-		0.103	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	0.000	4.560	Feb 2021	0.000		0.000		-		0.000	0.000	4.560	-
FSS - Classified	Various	TBD : Not Specified	223.531	37.461	Nov 2020	48.112	Nov 2021	49.460	Nov 2022	-		49.460	Continuing	Continuing	Continuing
		Subtotal	403.194	54.567		56.115		52.774		-		52.774	Continuing	Continuing	N/A

Remarks

The $4.689 million decrease from FY 2022 to FY 2023 in product development is due to reductions to Advanced Surveillance Build (ASB) improvements for Integrated Common Processor (ICP) and to TL-29A towed array 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 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	WR	NIWC PAC : CA	5.888	0.423	Nov 2020	0.292	Nov 2021	0.285	Nov 2022	-		0.285	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	APL/JHU : MD	7.051	1.177	Apr 2021	0.768	Apr 2022	0.749	Apr 2023	-		0.749	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	Lockheed Martin : VA	6.962	1.039	Dec 2020	0.716	Dec 2021	0.699	Dec 2022	-		0.699	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	6.575	0.426	Jan 2021	0.336	Jan 2022	0.328	Jan 2023	-		0.328	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	10.034	0.340	Jan 2021	0.000		0.000		-		0.000	0.000	10.374	-
ARRAY IMPROVEMENTS	WR	Warfare Centers : RI	0.000	0.340	Nov 2020	0.345	Nov 2021	0.345	Nov 2022	-		0.345	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	0.000	1.240	Dec 2020	0.000		0.000		-		0.000	0.000	1.240	Continuing
		Subtotal	39.039	4.985		2.457		2.406		-		2.406	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	7.535	0.965	Dec 2020	0.665	Dec 2021	0.648	Dec 2022	-		0.648	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	SS/CPFF	ARL/UT : TX	0.000	0.425	Apr 2021	0.293	Apr 2022	0.286	Apr 2023	-		0.286	0.000	1.004	-
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	10.453	0.150	Jan 2021	0.103	Jan 2022	0.101	Jan 2023	-		0.101	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	Various : Not Specified	22.264	0.300	Apr 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : MD	2.008	0.270	Apr 2021	0.265	Apr 2022	0.265	Apr 2023	-		0.265	Continuing	Continuing	Continuing
SURTASS-E	WR	OPTEVOR : VA	0.000	0.400	Jan 2021	0.000		0.000		-		0.000	0.000	0.400	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy			Date: April 2022
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 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			42.260	2.510		1.326		1.300		-		1.300	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	10.285	0.775	Jan 2021	0.534	Jan 2022	0.521	Jan 2023	-		0.521	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	16.381	0.120	Jan 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	1.170	0.110	Jan 2021	0.110	Jan 2022	0.110	Jan 2023	-		0.110	Continuing	Continuing	Continuing
Subtotal			27.836	1.005		0.644		0.631		-		0.631	Continuing	Continuing	N/A

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	512.329	63.067		60.542		57.111		-		57.111	Continuing	Continuing	N/A

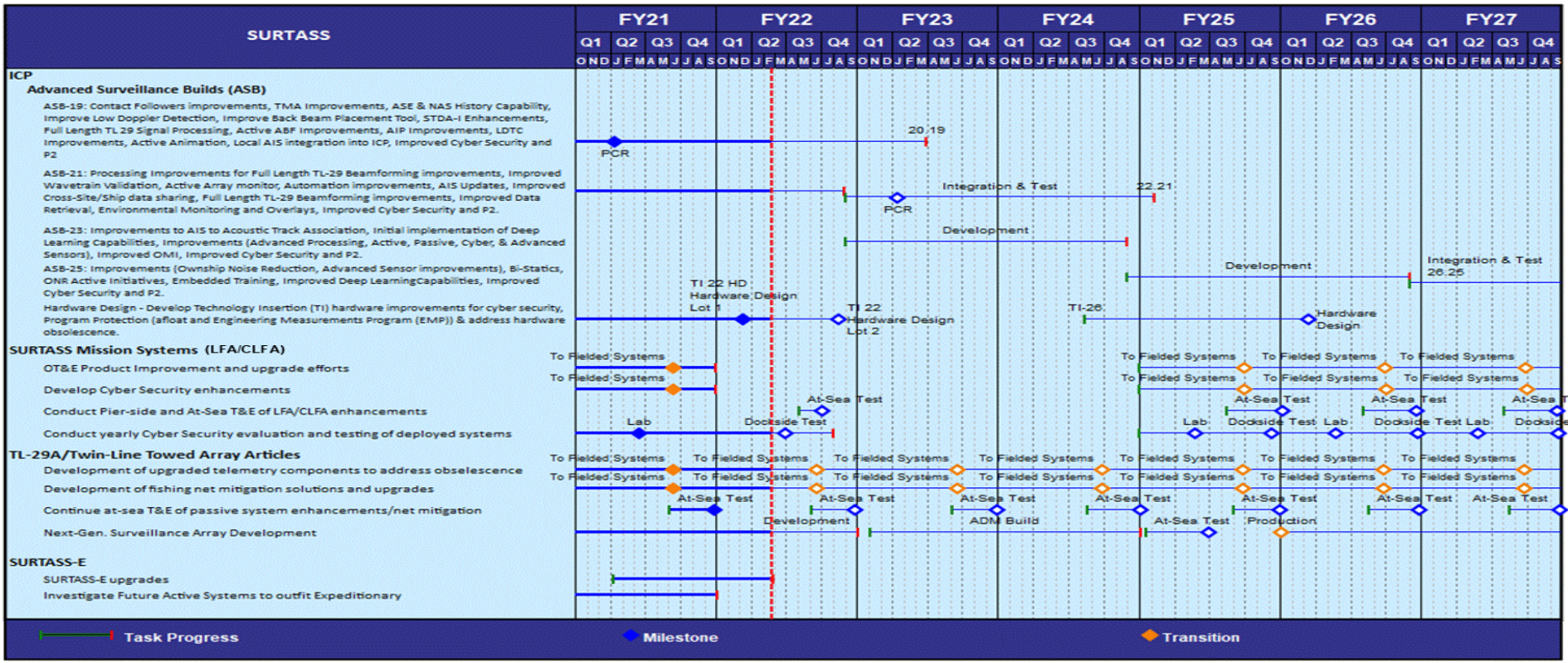
Remarks

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 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*

CUI

PMS 485: SURTASS Product Plan (FYDP)



CUI

Status Date 2/22/2022

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
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 (2021)	1	2021	4	2021
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: Pier-side and At-Sea T&E of LFA/CLFA Enhancements (2021)	3	2022	4	2022
TEST and EVALUATION MILESTONES: LFA/CLFA Testing: LFA/CLFA Cyber Security Evaluation and Testing (2025-27)	1	2025	4	2027
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: TL-29A Testing: TL-29A At-SEA T&E Passive System/Net Mitigation (2021)	3	2021	4	2021
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

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
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: TL-29A At-SEA T&E Passive System/Net Mitigation (2027)	3	2027	4	2027
TEST and EVALUATION MILESTONES: TL-29A Testing: Towed Array Next-Gen Surveillance Array At-Sea Test	1	2025	2	2025
TEST and EVALUATION MILESTONES: ICP Advanced Surveillance Builds (ASB): ASB-19 Integration and Test	1	2021	1	2023
TEST and EVALUATION MILESTONES: ICP Advanced Surveillance Builds (ASB): ASB-21 Integration and Test	4	2022	1	2025
DEVELOPMENT MILESTONES: LFA/CLFA Development: LFA/CLFA OT&E Product Improvement/Upgrade Efforts (FY21)	1	2021	4	2021
DEVELOPMENT MILESTONES: LFA/CLFA Development: LFA/CLFA Cyber Security Enhancements (FY21)	1	2021	4	2021
DEVELOPMENT MILESTONES: LFA/CLFA Development: LFA/CLFA OT&E Product Improvement/Upgrade Efforts (FY25-27)	1	2025	4	2027
DEVELOPMENT MILESTONES: LFA/CLFA Development: LFA/CLFA Cyber Security Enhancements (FY25-27)	1	2025	4	2027
DEVELOPMENT MILESTONES: TL-29A Development: TL-29A Develop Telemetry Components (Upgrades) (Yearly)	1	2021	4	2027
DEVELOPMENT MILESTONES: TL-29A Development: TL-29A Develop Fishing Net Mitigation (Yearly)	1	2021	4	2027
DEVELOPMENT MILESTONES: TL-29A Development: Towed Array Next-Gen Survellance Array Development	1	2021	4	2022
DEVELOPMENT MILESTONES: TL-29A Development: Towed Array Next-Gen Surveillance Array ADM Build	1	2023	4	2024
DEVELOPMENT MILESTONES: TL-29A Development: Towed Array Next-Gen Surveillance Array Production	1	2026	4	2027
DEVELOPMENT MILESTONES: ICP Development: ASB 21 Development	1	2021	4	2022
DEVELOPMENT MILESTONES: ICP Development: ASB 23 Development	4	2022	4	2024

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
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**
DEVELOPMENT MILESTONES: ICP Development: ASB 25 Development	4	2024	4	2026
DEVELOPMENT MILESTONES: SURTASS-E Upgrades: SURTASS-E Upgrades	2	2021	2	2022
DEVELOPMENT MILESTONES: SURTASS-E Upgrades: Investigate Future Active Systems to Outfit Expeditionary	1	2021	4	2021
PRODUCTION MILESTONES: ICP Technology Insertion: Hardware Design ICP Tech Insertion TI-22	1	2021	4	2022
PRODUCTION MILESTONES: ICP Technology Insertion: Hardware Design ICP Tech Insertion TI-26	3	2024	1	2026

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
1768: *Ship Plan Development and Design*	20.000	10.622	6.903	0.977	-	0.977	2.817	0.836	0.851	0.835	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

T-Auxiliary, Repair, Cable (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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: T-ARC(X) Cable Ship Design and Total Ship Integration	10.622	6.903	0.977	0.000	0.977
Articles:	-	-	-	-	-
FY 2022 Plans: -Continue design integration and T&E planning. -Develop acquisition documentation to support Milestone (MS) B/C and Gate 4/5 -Continue development of Request for Proposal (RFP) for Detail Design & Construction. -Continue specification and Technical Data Package (TDP) development. -Continue to coordinate acquisition efforts with NAVSEA, MSC, PEO SHIPS, CNO, ASN RD&A, OSD, and Fleet.					
FY 2023 Base Plans: - Continue design integration and T&E planning. - Receive proposals and conduct source selection for DD&C Award - Complete 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 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding decreases by $5.926M as the program approaches DD&C award in FY24 and transitions to Lead Hull Test & Evaluation efforts only.					
Accomplishments/Planned Programs Subtotals	10.622	6.903	0.977	0.000	0.977

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
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*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• SCN/5080: *TARC Cable Repair Ship*	0.000	0.000	0.000	-	0.000	710.002	0.000	0.000	0.000	591.240	1,301.242

Remarks

D. Acquisition Strategy

Issued Request for Proposal (RFP) in FY2020 and awarded Industry Studies in FY 2021. Issue RFP for Detail Design and Construction (DD&C) in FY 2022 for a FY 2024 award.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy			Date: April 2022
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 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Industry Studies	C/FFP	Various : Various	12.000	2.500	Jan 2021	0.000		0.000		-		0.000	0.000	14.500	-
Engineering Integration/ Design	Various	Various : Various	1.718	2.250	Jan 2021	1.814	Jan 2022	0.555	Jan 2023	-		0.555	1.639	7.976	-
		Subtotal	13.718	4.750		1.814		0.555		-		0.555	1.639	22.476	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
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	1.764	2.300	Jan 2021	1.901	Jan 2022	0.226	Jan 2023	-		0.226	0.000	6.191	-
Milestone Documentation/ RFP development	Various	Various : Various	1.877	1.920	Jan 2021	1.822	Jan 2022	0.196	Jan 2023	-		0.196	0.765	6.580	-
Systems Integration	Various	Various : Various	1.174	1.212	Jan 2021	0.911	Jan 2022	0.000		-		0.000	0.353	3.650	-
		Subtotal	5.855	5.432		4.634		0.422		-		0.422	Continuing	Continuing	N/A

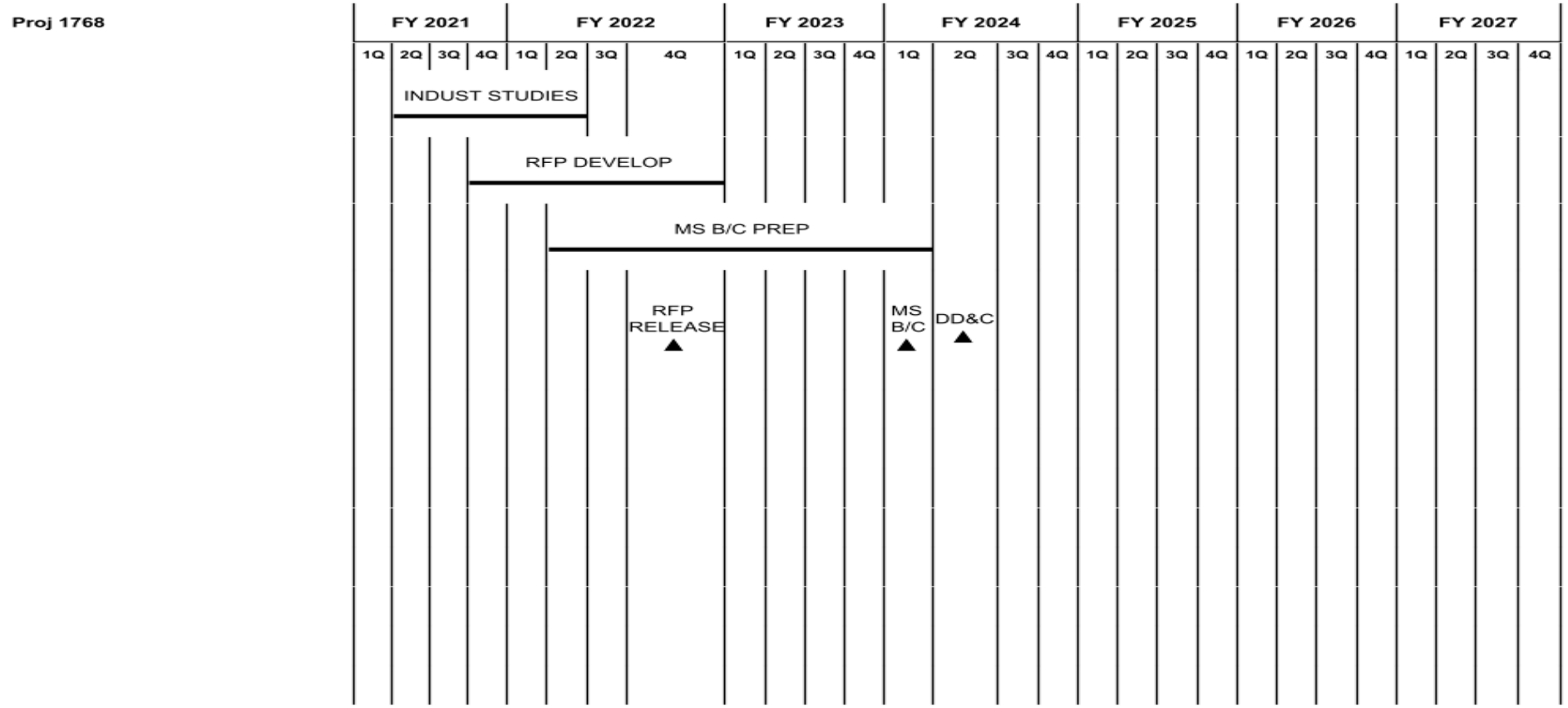
Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	Various	Various : Various	0.427	0.440	Jan 2021	0.455	Jan 2022	0.000		-		0.000	11.235	12.557	-
		Subtotal	0.427	0.440		0.455		0.000		-		0.000	11.235	12.557	N/A

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	20.000	10.622		6.903		0.977		-		0.977	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
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*



2023PB - 0204311N - 1768

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
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				
Industry Studies	2	2021	2	2022
DD&C Spec and RFP Development	4	2021	4	2022
MS B/C Doc Prep	2	2022	1	2024
Issue DD&C RFP	4	2022	4	2022
MS B/C	1	2024	1	2024
DD&C Award	2	2024	2	2024

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
9999: *Congressional Adds*	48.766	12.500	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	61.266
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Navy's Theater Anti-Submarine Warfare (TASW) Offset Strategy responds to an urgent European Command (EUROCOM)/Africa Command (AFRICOM) requirement for additional maritime intelligence, surveillance, and reconnaissance capabilities. PEO SUB, in conjunction with Commander Submarine Forces (COMSUBFOR) and CNO, directed a rapid prototyping program be undertaken utilizing systems developed by the Office of Naval Research (ONR), the Defense Advanced Research Projects Agency (DARPA) and the Naval Undersea Warfare Center (NUWC). Development of TASW capabilities to meet TASW requirements against evolving threats in the EUROCOM/AFRICOM Area of Responsibility (AOR) will also serve to address similar requirements globally. In FY19, Congressional budget additions funded the fourth major prototype contracting, refurbishment, deployment and non-recurring engineering. This is a Military Intelligence Program (MIP).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022
Congressional Add: Maritime Surveillance System Sensor & Signal Processing Performance Improvements	12.500	0.000
FY 2021 Accomplishments: Design and development of sensor and signal processing performance improvements		
FY 2022 Plans: N/A		
Congressional Adds Subtotals	12.500	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

FY 2019: Deep Water Passive (DWP) Spiral 1 Contract Award
FY 2019: Software Risk Reduction
FY 2019: C4I Risk Reduction
FY 2019: DWP Fabrication of Units (15 Units)
FY 2020: DWP Fabrication of Spiral 1.0 Units and Design/Integrate/Fabricate EDM Units
FY 2021: Sensor & Signal processing development

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy			Date: April 2022
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 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TASW Fielding	WR	NIWC Pacific : CA	2.145	0.000		0.000		0.000		-		0.000	0.000	2.145	-
TASW Fielding	WR	NUWC Newport : RI	3.117	0.000		0.000		0.000		-		0.000	0.000	3.117	-
TASW Fielding	C/CPFF	Leidos : MS	32.918	0.000		0.000		0.000		-		0.000	0.000	32.918	-
TASW Fielding	C/CPFF	APL/JHU : MD	1.760	0.000		0.000		0.000		-		0.000	0.000	1.760	-
TASW Fielding	C/CPFF	Proteq : VA	2.400	0.000		0.000		0.000		-		0.000	0.000	2.400	-
TASW Fielding	WR	Navy Research Lab : DC	0.520	0.000		0.000		0.000		-		0.000	0.000	0.520	-
TASW Fielding	C/CPFF	Sandia National Lab : NM	1.152	0.000		0.000		0.000		-		0.000	0.000	1.152	-
Sensor & Signal Processing	C/CPFF	Various : Not Specified	0.000	12.500	Mar 2021	0.000		0.000		-		0.000	0.000	12.500	-
		Subtotal	44.012	12.500		0.000		0.000		-		0.000	0.000	56.512	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TASW Fielding	WR	Navy Oceanographic Office : MS	0.150	0.000		0.000		0.000		-		0.000	0.000	0.150	-
TASW Fielding	WR	NUWC Keyport : WA	2.450	0.000		0.000		0.000		-		0.000	0.000	2.450	-
		Subtotal	2.600	0.000		0.000		0.000		-		0.000	0.000	2.600	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TASW Fielding	WR	Navy Oceanographic Office : MS	0.025	0.000		0.000		0.000		-		0.000	0.000	0.025	-
		Subtotal	0.025	0.000		0.000		0.000		-		0.000	0.000	0.025	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy			Date: April 2022
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 9999 / *Congressional Adds*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TASW Fielding	C/CPFF	BAH : VA	2.129	0.000		0.000		0.000		-		0.000	0.000	2.129	-
		Subtotal	2.129	0.000		0.000		0.000		-		0.000	0.000	2.129	N/A

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	48.766	12.500		0.000		0.000		-		0.000	0.000	61.266	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 9999 / *Congressional Adds*

	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Proj 9999																												
Sensor and Signal Processing Development: Sensor and Signal Processing Development	[redacted]																											

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
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				
Sensor and Signal Processing Development: Sensor and Signal Processing Development	2	2021	2	2022