Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy											Date: February 2018	
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 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**Cost To Complete**	**Total Cost**
Total Program Element	406.030	57.043	50.572	36.959	-	36.959	59.619	81.759	84.409	84.902	Continuing	Continuing
0344: *SUB AUXILIARIES*	0.000	0.000	0.000	0.000	-	0.000	8.500	22.500	25.100	24.400	Continuing	Continuing
0766: *IUSS Detect/Classif System*	406.030	57.043	50.572	36.959	-	36.959	51.119	59.259	59.309	60.502	Continuing	Continuing

A. Mission Description and Budget Item Justification

Project 0766 provides for Integrated Undersea Surveillance Systems (IUSS) Research and Development Projects under the Maritime Surveillance Systems (MSS) Program Office (PEO SUB 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 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 1990s 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 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.

The Navy's Theater Anti-Submarine Warfare (TASW) Offset Strategy responds to an urgent EUROCOM/AFRICOM requirement for additional maritime intelligence, surveillance, and reconnaissance capabilities. PEOSUB, in conjunction with 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 FY16, funds were reprogrammed to complete the first prototype contracting and deployment in support of the Navy's TASW Offset Strategy. In FY17, the IUSS Research and Development project (0766) funded the second major prototype contracting and deployment to support the Navy's TASW Offset Strategy. This is a Military Intelligence Program (MIP).

Project 0344 funds the Deployable System of Systems project which complements FSS and SURTASS by providing flexibility to TASW commanders worldwide by allowing the Fleet to address operational gaps in wide area undersea surveillance by using a deep water deployable system.

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy					Date: February 2018
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*			
B. Program Change Summary ($ in Millions)	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**
Previous President's Budget	58.542	38.972	40.135	-	40.135
Current President's Budget	57.043	50.572	36.959	-	36.959
Total Adjustments	-1.499	11.600	-3.176	-	-3.176
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	11.600	-2.803	-	-2.803
• Rate/Misc Adjustments	0.000	0.000	-0.373	-	-0.373
• Congressional General Reductions Adjustments	-0.015	-	-	-	-
• Congressional Directed Reductions Adjustments	-1.484	-	-	-	-

Change Summary Explanation

Program Adjustments: FY18 Increase of $11.600 million is to support continued funding for the TASW ERI PBR.

The FY 2019 funding request was reduced by $0.149 million to reflect the Department of the Navy's effort to support the Office of Management and Budget directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.

The FY 2019 funding request was reduced by $9.758 million to account for the availability of prior year execution balances.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 0344 / *SUB AUXILIARIES*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
0344: *SUB AUXILIARIES*	0.000	0.000	0.000	0.000	-	0.000	8.500	22.500	25.100	24.400	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Deployable System of Systems project (0344), complementing FSS and SURTASS, provides flexibility to Theater Anti-Submarine Warfare commanders worldwide, allowing the Fleet to address operational gaps in wide area undersea surveillance by using a deep water deployable system. The Deployable Family of Systems will operate as adjunct systems to meet the established FSS and SURTASS missions. Informed by TASW offset operations, following priority needs, systems will be transitioned to development and testing in FY21-23.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
0766: *IUSS Detect/Classif System*	406.030	57.043	50.572	36.959	-	36.959	51.119	59.259	59.309	60.502	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

A. This project includes efforts for SURTASS and the Theater ASW Offset Initiative. 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 LFA/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 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.

B. PEO SUB 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.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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. Theater Anti-Submarine Warfare Strategy (TASW) Offset Initiative responds to an urgent EUROCOM/AFRICOM requirement for additional maritime intelligence, surveillance, and reconnaissance capabilities. PEOSUB, in conjunction with 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.
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Integrated Common Processor (ICP)	13.851	15.831	13.650	0.000	13.650
Articles:	-	-	-	-	-
FY 2018 Plans: Develop advanced Undersea Warfare (USW) sensor technology and associated processor and Advanced Surveillance Build (ASB) processing to enhance capabilities necessary to meet Key Performance Parameters against adversary's advanced submarines. Both processing and sensors are required to detect increasingly quiet threats in a cluttered environment with the emerging situation of insufficient numbers of qualified Fleet operators available to staff. These CNO high priority systems provide for the requirement to increase focus on operator workload reduction and processing capability enhancement/development as well as increased sensitivity of sensors. Work will include development of software updates, improvements to reduce existing and projected cyber security threat vectors, as well as, improving the overall Program Protection posture for afloat ICP installations and associated Engineering Measurements Program (EMP) systems. Continue to investigate methods to reduce surface ship clutter in order to enhance detection performance to include incorporation of Passive Sonar Automation Technology (PSAT) aspects. Continue to support Technical Insertion-18 (TI-18) hardware replacement to enhance ICP surveillance capability.					
FY 2019 Base Plans: Develop advanced Undersea Warfare (USW) sensor technology and associated processor and Advanced Surveillance Build (ASB) processing to enhance capabilities necessary to meet Key Performance Parameters against adversary's advanced submarines. Both processing and sensors are required to detect increasingly quiet threats in a cluttered environment with the emerging situation of insufficient numbers of qualified Fleet operators available to staff. These CNO high priority systems provide for the requirement to increase focus on operator workload reduction and processing capability enhancement/development as well as increased sensitivity of sensors. Work will include development of software updates, improvements to reduce existing and projected cyber security threat vectors, as well as, improving the overall Program Protection posture for afloat ICP installations and associated Engineering Measurements Program (EMP) systems. Continue to investigate					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
methods to reduce surface ship clutter in order to enhance detection performance to include incorporation of Passive Sonar Automation Technology (PSAT) aspects. Continue to support Technical Insertion-18 (TI-18) hardware replacement to enhance ICP surveillance capability. The FY 2019 funding request was reduced by $2.2 million to account for the availability of prior year execution balances. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** The FY 2019 funding request overall was reduced by $9.758 million to account for the availability of prior year execution balances; a $2.2M decrease between FY18 and FY19 specifically to the ICP program.					
Title: Compact Low Frequency Active (CLFA) ***Articles:*** ***FY 2018 Plans:*** Continue product improvement and upgrade efforts associated with CLFA and LFA OT&E, and development of cyber security enhancements. Conduct pier-side and at-sea test and evaluation efforts to research alternative LFA/CLFA system performance enhancements. Will conduct yearly cyber security evaluation of deployed systems. ***FY 2019 Base Plans:*** Continue product improvement and upgrade efforts associated with CLFA and LFA OT&E, and development of cyber security enhancements. Conduct pier-side and at-sea test and evaluation efforts to research alternative LFA/CLFA system performance enhancements. Will conduct yearly cyber security evaluation of deployed systems. Investigate future active systems to outfit T-AGOS X development. ***FY 2019 OCO Plans:*** N/A	2.000 -	2.000 -	2.000 -	0.000 -	2.000 -
Title: TL-29A/Twin-Line ***Articles:*** ***FY 2018 Plans:*** Continue development of true fiber optic array technologies and array components with reduced connection points. Continue efforts to explore Twin-line variants of new submarine Long-line arrays for future application to SURTASS. Continue development of fishing net mitigation approaches and supports associated test	2.000 -	2.000 -	2.000 -	0.000 -	2.000 -

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
and evaluation efforts to facilitate operations in littoral waters and reduced potential for array damage from fishing apparatus. Continue development of upgraded components to address component obsolescence. Improvements intended to modernize equipment to address system deficiencies, improve operational reliability, and reduce maintenance touch-points. ***FY 2019 Base Plans:*** Continue development of true fiber optic array technologies and array components with reduced connection points. Continue efforts to explore Twin-line variants of new submarine Long-line arrays for future application to SURTASS. Continue development of fishing net mitigation approaches and supports associated test and evaluation efforts to facilitate operations in littoral waters and reduced potential for array damage from fishing apparatus. Continue development of upgraded components to address component obsolescence. Improvements intended to modernize equipment to address system deficiencies, improve operational reliability, and reduce maintenance touch-points. ***FY 2019 OCO Plans:*** N/A					
Title: Theater Anti-Submarine Warfare (TASW)	27.596	11.600	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2018 Plans: OCO: Execute preliminary staging, planning and preparation for, and execution of the Q1FY19 TASW prototype operations. Complete contract actions for additional prototype units to augment existing prototype barriers. Complete deployment of additional prototype units. Recover and demilitarize TASW hardware in FY19 following completion of TASW FY19 prototype operations ***FY 2019 Base Plans:*** N/A ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:***					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
The decrease of $11.6M from FY 2018 to FY 2019 to $0.0M in FY 2019 is due to conclusion of the TASW ERI effort in FY 2018					
Title: Classified Effort	11.596	19.141	19.309	0.000	19.309
Articles:	-	-	-	-	-
Description: The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2018 Plans:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2019 Base Plans:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding request was reduced by $0.168 million as the aggregate of program increases detailed at higher classification level, reductions to account for the availability of prior year execution balances, and directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.					
Accomplishments/Planned Programs Subtotals	57.043	50.572	36.959	0.000	36.959

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• OPN/2237: *SURTASS*	43.743	30.180	57.872	-	57.872	22.084	18.188	24.462	24.918	Continuing	Continuing

Remarks

D. Acquisition Strategy

FY 2010: T&E Milestones: CLFA/TL-29A/ICP DT.
FY 2011: Engineering Milestones: ICP Tech Refresh.
FY 2011: T&E Milestones: CLFA/TL-29A/ICP DT. LFA/TL-29A/ICP FOT&E.
FY 2012: T&E Milestones: CLFA/TL-29A/ICP DT/OT. LFA/TL-29A/ICP FOT&E.
FY 2013: LFA/TL-29A/ICP FOT&E.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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FY 2014: ICP Tech Refresh. CLFA OT/CLFA/TL-29A/ICP FOT&E
FY 2015: ICP Tech Refresh. LFA/CLFA/TL-29A/ICP FOT&E
FY 2016: ICP Tech Refresh. ASB Step 4 Testing.
FY 2017: ICP Tech Refresh. CLFA/TL-29A/ICP FOT&E
FY 2018: ICP Tech Refresh. ASB Step 4 Testing.
FY 2018: LFA/TL-29A/ICP FOT&E
FY 2019: ICP Tech Refresh. CLFA/TL-29A/ICP FOT&E
The FSS portion of 0766 is classified with details available at a higher classification level.

E. Performance Metrics

Successfully complete CLFA Operational Test Readiness Review. Successfully complete CLFA Developmental Test / Operational Test. Successful demonstration of required LFA/CLFA improvements capability. Successful transition of Submarine Advanced Processing Build (APB) functionality and advanced capabilities into IUSS products. Successful transition of net mitigation technologies into Towed Array baseline.
The FSS portion of 0766 is classified with details available at a higher classification level.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	33.644	5.552	Feb 2017	6.326	Dec 2017	5.437	Dec 2018	-		5.437	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	SS/CPFF	APL/JHU : MD	3.361	0.767	May 2017	1.054	Apr 2018	1.170	Apr 2019	-		1.170	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	67.689	2.004	Feb 2017	2.056	Dec 2017	1.765	Dec 2018	-		1.765	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	ADAPTIVE Methods : VA	2.650	0.687	Feb 2017	0.774	Dec 2017	0.680	Dec 2018	-		0.680	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	NFESC : CA	2.170	0.363	Feb 2017	0.414	Dec 2017	0.413	Dec 2018	-		0.413	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	SSC PAC : CA	1.547	0.205	Jan 2017	0.199	Nov 2017	0.197	Nov 2018	-		0.197	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	SS/CPFF	APL/JHU : MD	2.815	0.557	May 2017	0.512	Apr 2018	0.509	Apr 2019	-		0.509	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : VA	3.465	0.842	May 2017	0.920	Apr 2018	0.927	Apr 2019	-		0.927	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	ADAPTIVE METHODS : VA	1.247	0.503	Feb 2017	0.339	Dec 2017	0.321	Dec 2018	-		0.321	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	9.760	0.355	Feb 2017	0.441	Jan 2018	0.448	Jan 2019	-		0.448	Continuing	Continuing	Continuing
TASW FIELDING	Various	SSC PAC : CA	3.084	0.848	Mar 2017	0.200	Dec 2017	0.000		-		0.000	0.000	4.132	-
TASW FIELDING	Various	NUWC NEWPORT : RI	1.153	1.390	Jul 2017	0.300	Nov 2017	0.000		-		0.000	0.000	2.843	-
TASW FIELDING	SS/CPFF	APL/UW : WA	12.075	0.999	Jul 2017	0.900	Feb 2018	0.000		-		0.000	0.000	13.974	-
TASW FIELDING	Various	VARIOUS : CA	1.883	0.401	Jul 2017	0.000		0.000		-		0.000	0.000	2.284	-
TASW FIELDING	C/CPFF	LEIDOS : CA	34.858	19.552	Feb 2017	5.500	Dec 2017	0.000		-		0.000	0.000	59.910	-
TASW FIELDING	C/CPFF	PROTEQ : VA	1.180	1.650	Sep 2017	1.000	Mar 2018	0.000		-		0.000	0.000	3.830	-
TASW FIELDING	SS/CPFF	SANDIA : NM	0.000	0.621	May 2017	0.000		0.000		-		0.000	0.000	0.621	-
TASW FIELDING	WR	NAVY OCEANOGRAPHIC OFFICE : MS	0.000	0.000		0.200	Feb 2018	0.000		-		0.000	0.000	0.200	-
FSS - Classified	Various	TBD : Not Specified	138.084	11.596	Nov 2016	19.141	Nov 2017	19.309	Nov 2018	-		19.309	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	320.665	48.892		40.276		31.176		-		31.176	Continuing	Continuing	N/A

Remarks

The FSS portion of 0766 is classified with details available at a higher classification level.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	WR	SSC PAC : CA	4.242	0.381	Apr 2017	0.412	Nov 2017	0.362	Nov 2018	-		0.362	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	APL/JHU : MD	2.111	1.031	May 2017	1.537	Apr 2018	1.007	Apr 2019	-		1.007	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	Lockheed Martin : VA	3.252	0.906	Feb 2017	1.012	Dec 2017	0.889	Dec 2018	-		0.889	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	4.906	0.397	Mar 2017	0.414	Jan 2018	0.364	Jan 2019	-		0.364	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	SSC PAC : CA	0.928	0.195	Jan 2017	0.195	Nov 2017	0.195	Nov 2018	-		0.195	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	7.630	0.141	Mar 2017	0.141	Jan 2018	0.141	Jan 2019	-		0.141	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	1.552	0.200	Mar 2017	0.195	Jan 2018	0.197	Jan 2019	-		0.197	Continuing	Continuing	Continuing
TASW FIELDING	WR	NUWC NEWPORT : MA	0.180	0.250	Jul 2017	0.700	Nov 2017	0.000		-		0.000	0.000	1.130	-
TASW FIELDING	WR	NUWC KEYPORT : WA	0.400	0.125	Jul 2017	0.120	Nov 2017	0.000		-		0.000	0.000	0.645	-
TASW FIELDING	SS/CPFF	APL/JHU : MD	0.350	0.750	Feb 2017	0.200	Jan 2018	0.000		-		0.000	0.000	1.300	-
TASW FIELDING	WR	SSC PAC : CA	0.000	0.700	Mar 2017	0.750	Nov 2017	0.000		-		0.000	0.000	1.450	-
		Subtotal	25.551	5.076		5.676		3.155		-		3.155	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy		Date: February 2018
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 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	4.341	0.846	Feb 2017	0.846	Dec 2017	0.745	Dec 2018	-		0.745	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	8.206	0.550	May 2017	0.550	Jan 2018	0.487	Jan 2019	-		0.487	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	OPTEVFOR : VA	0.552	0.095	Feb 2017	0.095	Dec 2017	0.100	Dec 2018	-		0.100	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	20.919	0.084	Mar 2017	0.084	Jan 2018	0.084	Jan 2019	-		0.084	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : MD	0.890	0.235	May 2017	0.235	Apr 2018	0.235	Apr 2019	-		0.235	Continuing	Continuing	Continuing
TASW FIELDING	WR	NUWC NEWPORT : MA	0.149	0.250	Jul 2017	0.300	Feb 2018	0.000		-		0.000	0.000	0.699	-
TASW FIELDING	WR	NAVY OCEANOGRAPHIC OFFICE : MS	0.854	0.060	Jul 2017	0.030	Feb 2018	0.000		-		0.000	0.000	0.944	-
		Subtotal	35.911	2.120		2.140		1.651		-		1.651	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	7.110	0.730	Jun 2017	0.850	Jan 2018	0.745	Jan 2019	-		0.745	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	15.850	0.125	Jun 2017	0.125	Jan 2018	0.125	Jan 2019	-		0.125	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	0.558	0.100	Jun 2017	0.105	Jan 2018	0.107	Jan 2019	-		0.107	Continuing	Continuing	Continuing
TASW FIELDING	C/CPFF	BAH : VA	0.385	0.000		1.400	Jan 2018	0.000		-		0.000	0.000	1.785	-
		Subtotal	23.903	0.955		2.480		0.977		-		0.977	Continuing	Continuing	N/A

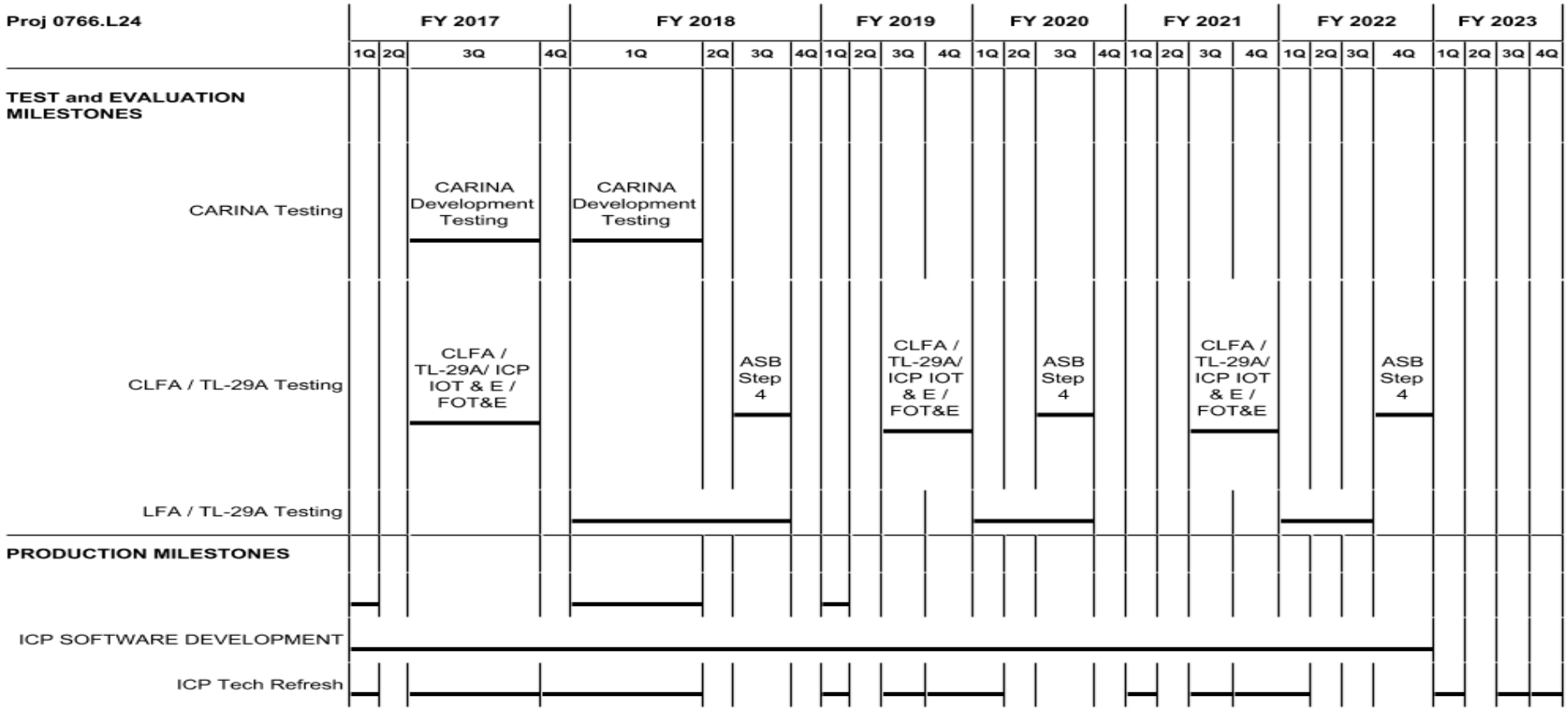
Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204311N / *Integrated Surveillance System*	Project (Number/Name) 0766 / *IUSS Detect/Classif System*	

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	406.030	57.043		50.572		36.959		-		36.959	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 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766 / *IUSS Detect/Classif System*



2019DON - 0204311N - 0766.L24

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
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: CARINA Testing: CARINA Development Testing	3	2017	3	2017
TEST and EVALUATION MILESTONES: CARINA Testing: CARINA Development Testing (2nd Test)	1	2018	1	2018
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: CLFA / TL-29A/ ICP IOT & E / FOT&E (COMPL 2017)	3	2017	3	2017
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: ASB Step 4 (3rd qtr FY18)	3	2018	3	2018
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: CLFA / TL-29A/ ICP IOT & E / FOT&E (COMPL 2019)	3	2019	4	2019
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: ASB Step 4	3	2020	3	2020
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: CLFA / TL-29A/ ICP IOT & E / FOT&E (COMPL 2021)	3	2021	4	2021
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: ASB Step 4	4	2022	4	2022
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: CLFA / TL-29A/ ICP IOT & E / FOT&E (COMPL 2023)	3	2023	4	2023
TEST and EVALUATION MILESTONES: LFA / TL-29A Testing: LFA / TL-29A/ ICP FOT & E (COMPLETE 2018)	1	2018	3	2018
TEST and EVALUATION MILESTONES: LFA / TL-29A Testing: LFA / TL-29A/ ICP FOT & E (COMPLETE 2020)	1	2020	3	2020
TEST and EVALUATION MILESTONES: LFA / TL-29A Testing: LFA /TL-29A/ICP FOT & E (COMPLETE 2022)	1	2022	3	2022
PRODUCTION MILESTONES: Field First Segment TRAPS/Carina	1	2017	1	2017
PRODUCTION MILESTONES: Field Second Segment TRAPS	1	2018	1	2018

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
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: Field Third Segment TRAPS/CARINA	1	2019	1	2019
PRODUCTION MILESTONES: ICP SOFTWARE DEVELOPMENT: ICP Software Development	1	2017	4	2022
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 1st QTR FY17	1	2017	1	2017
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 3rd QTR FY17	3	2017	3	2017
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 4th QTR FY17	4	2017	1	2018
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 1st QTR FY19	1	2019	1	2019
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 3rd QTR FY19	3	2019	3	2019
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 4th QTR FY19	4	2019	1	2020
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 1st QTR FY21	1	2021	1	2021
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 3rd QTR FY21	3	2021	3	2021
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 4th QTR FY21	4	2021	1	2022
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 1st QTR FY23	1	2023	1	2023
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 3rd QTR FY23	3	2023	3	2023
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 4th QTR FY23	4	2023	4	2023