Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy											Date: February 2015	
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 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	343.477	41.609	34.471	54.218	-	54.218	26.160	26.139	26.744	27.310	Continuing	Continuing
0344: *SUB AUXILIARIES*	2.767	0.904	0.811	0.921	-	0.921	0.905	0.873	0.892	0.911	Continuing	Continuing
0766.: *IUSS Detect/Classif System*	340.710	40.705	33.660	53.297	-	53.297	25.255	25.266	25.852	26.399	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element (PE) comprises two projects - 0766 and 0344. 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 (FSS) is classified, with details available at a higher classification level. Project 0344 funds the Shallow Water Surveillance System (SWSS) project to develop and demonstrate the technology to enable autonomous installation of a passive acoustic array with processing and communications gear.

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 against both diesel and nuclear powered submarines. 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.

In order to continue with reductions in life cycle costs and continue with system-wide consolidation, a short-term goal is to develop a 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 will be used for all new system installations and replace the legacy systems as they reach end of life and require upgrading. Additionally, SURTASS has 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 Shallow Water Surveillance System (SWSS) project (0344) funds the development and demonstration of the Version 1 system with technology to enable autonomous classification and reporting of specific submarine targets of interest.

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy					Date: February 2015
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 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**
Previous President's Budget	41.609	39.371	31.473	-	31.473
Current President's Budget	41.609	34.471	54.218	-	54.218
Total Adjustments	-	-4.900	22.745	-	22.745
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-4.900			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	25.000	-	25.000
• Rate/Misc Adjustments	-	-	-2.255	-	-2.255

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

Program Adjustments:
Decrease of $4.9M in FY15 is a classified adjustment. Details are available at a higher level of classification.
Increase of $25.0M in FY16 is to accelerate IUSS Capability. Increase is in response to an Emerging Threat Advisory Board (ETAB) recommendation.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
0344: *SUB AUXILIARIES*	2.767	0.904	0.811	0.921	-	0.921	0.905	0.873	0.892	0.911	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Shallow Water Surveillance System (SWSS) project (0344) funds the development and demonstration of the Version 1 system with technology to enable autonomous classification and reporting of specific submarine targets of interest.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: SWSS	0.904	0.811	0.921	-	0.921
Articles:	-	-	-	-	-
FY 2014 Accomplishments: FY14 SWSS funding was used to continue new development and integration of components to support FY15 system demonstration.					
FY 2015 Plans: FY15 SWSS funding will be used to complete system integration test and to conduct initial fully integrated system demonstration. Following system demonstration, system ruggedization testing and transition to manufacturing efforts will be conducted.					
FY 2016 Base Plans: FY16 funding will be used to implement features for system ruggedization and reliability testing.					
FY 2016 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	0.904	0.811	0.921	-	0.921

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Under Development

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *SUB AUXILIARIES*

E. Performance Metrics

SWSS Requirements Document has been developed. Details are available at a higher level of classification.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *SUB AUXILIARIES*

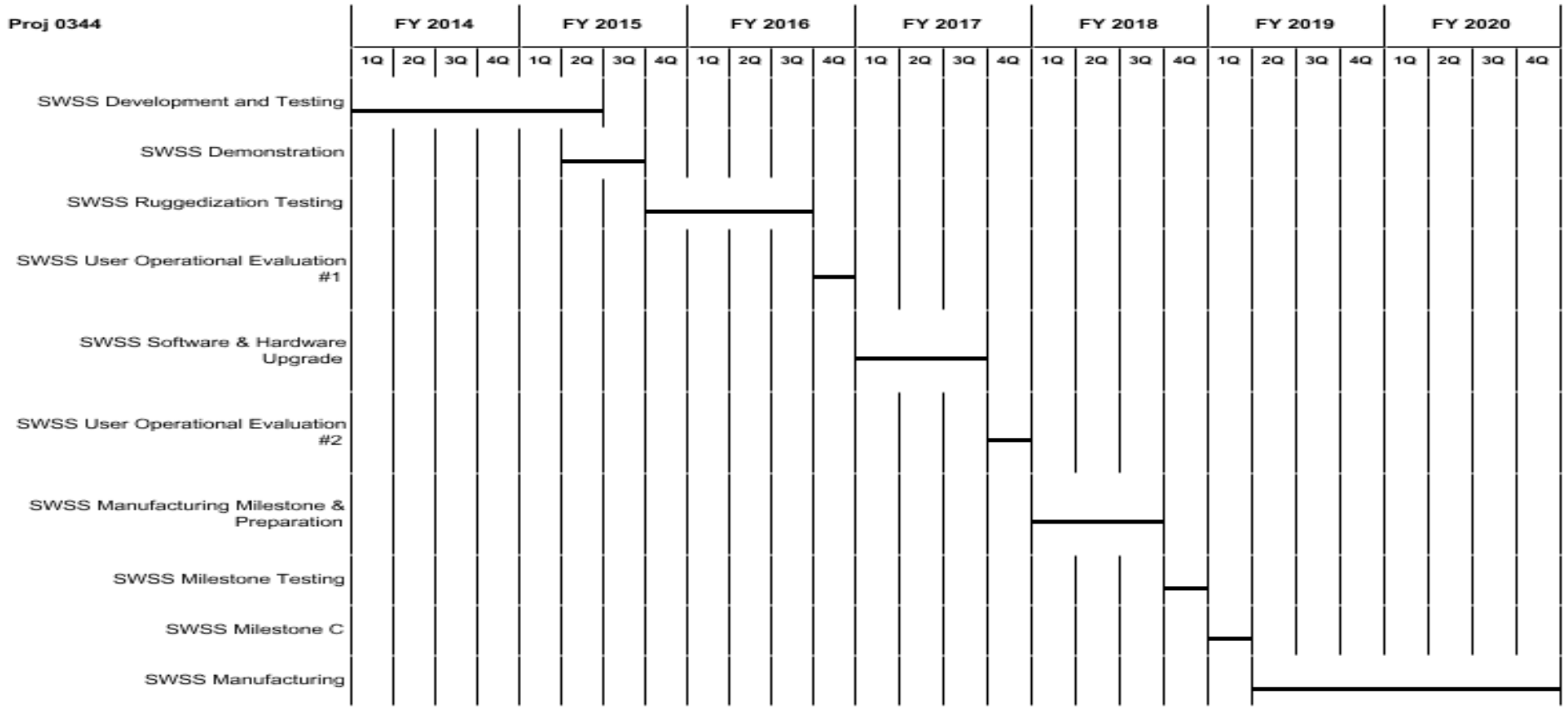
Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering Trade Studies	WR	SSC PAC : San Diego CA	1.000	-		-		-		-		-	-	1.000	-
Component Technology Risk Reduction Testing	WR	SSC PAC : San Diego CA	1.767	0.709	Nov 2013	0.621	Nov 2014	-		-		-	-	3.097	-
Makai Development	SS/CPFF	Makai : Honolulu HI	0.000	0.195	Jan 2014	0.190	Jan 2015	-		-		-	-	0.385	-
System Ruggedization and Reliability Testing	WR	SSC PAC : San Diego CA	0.000	-		-		0.621	Dec 2015	-		0.621	-	0.621	-
User Operational Evaluation	WR	SSC PAC : San Diego CA	0.000	-		-		0.300	Dec 2015	-		0.300	Continuing	Continuing	Continuing
		Subtotal	2.767	0.904		0.811		0.921		-		0.921	-	-	-

	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2.767	0.904		0.811		0.921		-		0.921	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *SUB AUXILIARIES*



2016PB - 0204311N - 0344

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0344 / *SUB AUXILIARIES*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0344				
SWSS Development and Testing: System Development and Subsystem Testing	1	2014	2	2015
SWSS Demonstration: System Demonstration	2	2015	3	2015
SWSS Ruggedization Testing: Ruggedization Testing	4	2015	3	2016
SWSS User Operational Evaluation #1: SWSS User Operational Evaluation #1	4	2016	4	2016
SWSS Software & Hardware Upgrade: SWSS Software & Hardware Upgrade	1	2017	3	2017
SWSS User Operational Evaluation #2: SWSS User Operational Evaluation #2	4	2017	4	2017
SWSS Manufacturing Milestone & Preparation: SWSS Manufacturing Milestone & Preparation	1	2018	3	2018
SWSS Milestone Testing: SWSS Milestone Testing	4	2018	4	2018
SWSS Milestone C: SWSS Milestone C	1	2019	1	2019
SWSS Manufacturing: Manufacturing	2	2019	4	2020

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
0766.: *IUSS Detect/Classif System*	340.710	40.705	33.660	53.297	-	53.297	25.255	25.266	25.852	26.399	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

A. This project includes efforts for SURTASS. 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 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 LFA task includes development and testing of a compact LFA transmit source array for SWATH-P ships, and upgrade of LFA processing capability in the IUSS Integrated Common Processing (ICP) architecture. The ICP is a derivative of the NAVSEA Submarine Acoustic Rapid COTS Insertion (ARCI) program, and is being augmented for IUSS requirements. Together, the LFA improvements, TL-29A, and the ICP support the SURTASS Active Improvement Program.

Functional improvements 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-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 FDS, FDS-C, and SURTASS. The near-term goal is development of ICP, which will result in a single IUSS processor baseline, with minor maintenance efforts continuing on fielded systems. The existing system architecture, signal processing, contact management, and reporting requirements will be evaluated as well as the requirements for future systems. The development

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766. / *IUSS Detect/Classif System*

of the ICP will take advantage of automation advancement, array technology improvements, along with IUSS, submarine, and surface USW system commonality. Additionally, a long term goal is to activate all IUSS sensors as part of a coordinated Active Improvement Program.
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Integrated Common Processor (ICP)	10.389	9.633	11.074	-	11.074
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Continued development of new automation algorithms and techniques for addressing multi-array high beam count requirements. Continued to develop software to implement technology refresh for SURTASS ships as well the Integrated Undersea Surveillance Systems' (IUSS) Advanced Surveillance Build (ASB) in coordination with the Submarine Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (ARCI) program Advanced Processor Build (APB). Continued to address processing improvement recommendations and deficiencies associated with CLFA DT/OT and LFA FOT&E.					
FY 2015 Plans: Continue development of operator automation to allow operator to more quickly detect targets of interest. Specific focus on compensating for array shape in a ship maneuver as well as system improvements to alert the operator of potential targets of interest in both the active and passive realms. Continue to develop software to implement technology refresh for SURTASS ships as well the Integrated Undersea Surveillance Systems' (IUSS) Advanced Surveillance Build (ASB) in coordination with the Submarine Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (ARCI) program Advanced Processor Build (APB). Continue to address processing improvement recommendations and deficiencies associated with CLFA and/or LFA FOT&E and/or DT/OT.					
FY 2016 Base Plans: Continue development of operator automation to allow operator to more quickly detect targets of interest. Specific focus on compensating for array shape in a ship maneuver as well as system improvements to alert the operator of potential targets of interest in both the active and passive realms. Continue to develop software to implement technology refresh for SURTASS ships as well the Integrated Undersea Surveillance Systems' (IUSS) Advanced Surveillance Build (ASB) in coordination with the Submarine Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (ARCI) program Advanced Processor Build (APB). Continue to address processing improvement recommendations and deficiencies associated with CLFA and/or LFA FOT&E and/or DT/OT.					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Update processing to provide seamless integration of active/passive processing to support geo-centric contact-based search. Investigate methods to reduce surface ship clutter in order to enhance detection performance. Support technical insertion hardware replacement to enhance ICP surveillance capability. ***FY 2016 OCO Plans:*** N/A					
Title: Compact Low Frequency Active ***Articles:*** ***FY 2014 Accomplishments:*** Continued development of product improvements and corrections associated with CLFA DT/OT and LFA FOT&E. Conducted at-sea testing of product improvements. ***FY 2015 Plans:*** Continue development of product improvements and corrections associated with CLFA DT/OT and LFA FOT&E. Conduct at-sea testing of product improvements. ***FY 2016 Base Plans:*** Continue product improvement and upgrade efforts associated with CLFA DT/OT and LFA FOT&E. Conduct pierside and at-sea test and evaluation efforts to research alternative LFA/CLFA system performance enhancements. ***FY 2016 OCO Plans:*** N/A	1.750 -	1.500 -	1.750 -	- -	1.750 -
Title: TB-29A/Twin-Line ***Articles:*** ***FY 2014 Accomplishments:*** Continued development of connectionless array technologies and true fiber-optic arrays. Continued efforts to explore Twin-line variants of new submarine Long-line arrays for future application to SURTASS. Continued development of fishing net mitigation approaches. ***FY 2015 Plans:***	1.750 -	1.500 -	1.750 -	- -	1.750 -

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue development of connectionless array technologies and true fiber-optic arrays. 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. ***FY 2016 Base Plans:*** Continue development of connectionless array technologies and true fiber-optic arrays. 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 associated test and evaluation efforts. Develop upgraded components to enhance system performance ***FY 2016 OCO Plans:*** N/A					
Title: Classified Effort	26.816	21.027	38.723	-	38.723
Articles:	-	-	-	-	-
Description: The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2014 Accomplishments:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2015 Plans:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2016 Base Plans:*** The FSS portion of 0766 is classified with details available at a higher classification level. ***FY 2016 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	40.705	33.660	53.297	-	53.297

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• OPN/2237: *Surveillance Towed Array Sensor System*	9.545	9.619	12.953	-	12.953	4.208	14.778	12.051	15.519	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.
FY 2014: ICP Tech Refresh. LFA/CLFA/TL/29A/ICP FOT&E
FY 2015: ICP Tech Refresh. LFA/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 achieve CLFA Initial Operational Capability. 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 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 2016 Navy		Date: February 2015
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 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	19.977	4.841	Nov 2013	4.792	Nov 2014	4.801	Dec 2015	-		4.801	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	SS/CPFF	APL/JHU : MD	1.668	0.540	Nov 2013	0.513	Nov 2014	0.640	Feb 2016	-		0.640	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	65.173	0.764	Nov 2013	0.659	Nov 2014	1.593	Dec 2015	-		1.593	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	ADAPTIVE Methods : VA	1.025	0.575	Dec 2013	0.550	Nov 2014	0.500	Dec 2015	-		0.500	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	NFESC : CA	0.962	0.420	Nov 2013	0.425	Nov 2014	0.425	Dec 2015	-		0.425	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	WR	SSC PAC : CA	0.877	0.240	Nov 2013	0.225	Nov 2014	0.240	Dec 2015	-		0.240	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	SS/CPFF	APL/JHU : MD	1.455	0.464	Nov 2013	0.374	Nov 2014	0.610	Feb 2016	-		0.610	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENT/ CLFA/LFA	Various	VARIOUS : Not Specified	116.910	0.081	Nov 2013	0.081	Nov 2014	-		-		-	-	117.072	-
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : VA	1.396	0.652	Nov 2013	0.575	Nov 2014	0.735	Feb 2016	-		0.735	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	WR	ADAPTIVE METHODS : VA	0.566	0.223	Nov 2013	0.200	Nov 2014	0.225	Jan 2016	-		0.225	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	8.790	0.319	Nov 2013	0.296	Nov 2014	0.310	Dec 2015	-		0.310	Continuing	Continuing	Continuing
FSS - Classified	Various	TBD : Not Specified	49.304	26.816	Nov 2013	21.027	Nov 2014	38.723	Nov 2015	-		38.723	Continuing	Continuing	Continuing
		Subtotal	268.103	35.935		29.717		48.802		-		48.802	-	-	-

Remarks

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
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 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	WR	SSC PAC : CA	3.418	0.300	Nov 2013	0.274	Nov 2014	0.250	Dec 2015	-		0.250	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	APL/JHU : MD	0.487	0.490	Jan 2014	0.434	Nov 2014	0.700	Feb 2016	-		0.700	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	C/CPFF	Lockheed Martin : VA	0.912	0.940	Nov 2013	0.700	Nov 2014	0.700	Dec 2015	-		0.700	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	4.046	0.303	Nov 2013	0.277	Nov 2014	0.280	Dec 2015	-		0.280	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENTS/CLFA/ LFA	WR	SSC PAC : CA	0.498	0.165	Nov 2013	0.115	Nov 2014	0.150	Dec 2015	-		0.150	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENTS/CLFA/ LFA	Various	VARIOUS : Not Specified	7.394	0.093	Nov 2013	0.068	Nov 2014	0.075	Jan 2016	-		0.075	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	0.867	0.280	Nov 2013	0.205	Nov 2014	0.200	Jan 2016	-		0.200	Continuing	Continuing	Continuing
		Subtotal	17.622	2.571		2.073		2.355		-		2.355	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	C/CPFF	LOCKHEED MARTIN : VA	2.384	0.675	Nov 2013	0.582	Nov 2014	0.700	Dec 2015	-		0.700	Continuing	Continuing	Continuing
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	7.120	0.377	Nov 2013	0.334	Nov 2014	0.375	Dec 2015	-		0.375	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENTS/CLFA/ LFA	WR	OPTEVFOR : Not Specified	0.250	0.124	Nov 2013	0.088	Nov 2014	0.090	Mar 2016	-		0.090	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENTS/CLFA/ LFA	Various	VARIOUS : Not Specified	20.723	0.070	Nov 2013	0.056	Nov 2014	0.070	Dec 2015	-		0.070	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
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 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ARRAY IMPROVEMENTS	SS/CPFF	APL/JHU : MD	0.385	0.185	Nov 2013	0.135	Nov 2014	0.185	Feb 2016	-		0.185	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	2.768	-	Nov 2013	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	33.630	1.431		1.195		1.420		-		1.420	-	-	-

Management Services ($ in Millions)

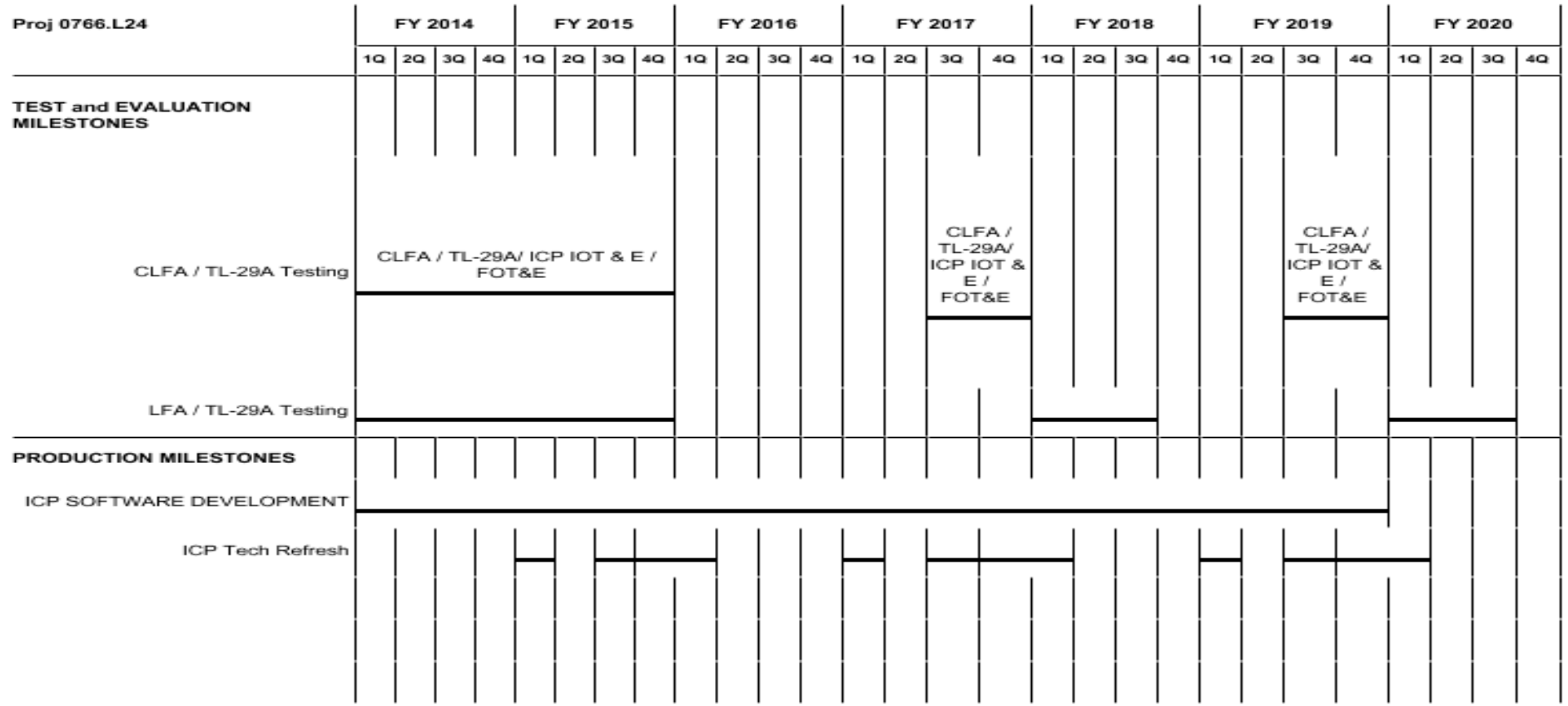
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IUSS COMMON ARCHITECTURE	Various	VARIOUS : Not Specified	5.473	0.584	Nov 2013	0.518	Nov 2014	0.535	Mar 2016	-		0.535	Continuing	Continuing	Continuing
ACTIVE IMPROVEMENTS/CLFA/ LFA	Various	VARIOUS : Not Specified	15.599	0.093	Nov 2013	0.068	Nov 2014	0.090	Mar 2016	-		0.090	Continuing	Continuing	Continuing
ARRAY IMPROVEMENTS	Various	VARIOUS : Not Specified	0.283	0.091	Nov 2013	0.089	Nov 2014	0.095	Mar 2016	-		0.095	Continuing	Continuing	Continuing
		Subtotal	21.355	0.768		0.675		0.720		-		0.720	-	-	-

	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	340.710	40.705		33.660		53.297		-		53.297	-	-	-

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 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0204311N / *Integrated Surveillance System*	**Project (Number/Name)** 0766. / *IUSS Detect/Classif System*



2016PB - 0204311N - 0766.L24

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
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: CLFA / TL-29A Testing: CLFA / TL-29A/ ICP IOT & E / FOT&E (COMPL 2015)	1	2014	4	2015
TEST and EVALUATION MILESTONES: CLFA / TL-29A Testing: CLFA / TL-29A/ ICP IOT & E / FOT&E (COMPL 2017)	3	2017	4	2017
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: LFA / TL-29A Testing: LFA / TL-29A/ ICP FOT & E (COMPLETE 2016)	1	2014	4	2015
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
PRODUCTION MILESTONES: ICP SOFTWARE DEVELOPMENT: ICP Software Development	1	2014	4	2019
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 1st QTR FY15	1	2015	1	2015
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 3rd QTR FY15	3	2015	3	2015
PRODUCTION MILESTONES: ICP Tech Refresh: ICP Tech Refresh 4th QTR FY15	4	2015	1	2016
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