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 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603553N *I Surface ASW*							
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	186.242	8.543	1.053	1.096	-	1.096	1.126	1.148	1.174	1.198	Continuing	Continuing
1704.: *Undersea Warfare*	186.242	2.262	1.053	1.096	-	1.096	1.126	1.148	1.174	1.198	Continuing	Continuing
3349: *Detection and Fusion of Remote Sensors*	0.000	6.281	-	-	-	-	-	-	-	-	-	6.281

A. Mission Description and Budget Item Justification

The CNO's ASW initiative is a focused effort to identify the most promising ASW technologies through a process of discovery, assessment, experimentation, and analysis. The CNO's ASW initiative will coordinate the development of technologies which move beyond incremental or marginal improvements in ASW effectiveness. The CNO's vision of "fundamentally changing the way ASW is currently conducted to render the enemy submarine irrelevant against US and coalition forces" necessitates a change in the calculus of how the US Navy conducts ASW. Central to the CNO's ASW initiatives achieving the CNO's vision are several innovative approaches which include using the art-of-the-technologically-possible; minimizing force-on-force; reducing the ASW end-to-end time line; supporting rapid maneuver; developing off-board and distributed ASW detection systems; and finding innovative weapons solutions. To achieve these key approaches, it is essential to develop new ASW technologies and conduct at-sea experiments to prove/disprove technology concepts and collect corroborating data.

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	2.349	1.060	1.104	-	1.104
Current President's Budget	8.543	1.053	1.096	-	1.096
Total Adjustments	6.194	-0.007	-0.008	-	-0.008
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	6.500	-			
• SBIR/STTR Transfer	-0.306	-			
• Rate/Misc Adjustments	-	-0.007	-0.008	-	-0.008

Change Summary Explanation

FY2014 reprogramming in Project 3349 is a USPACOM requirement for integration of tasking and collection efforts for national intelligence, surveillance and reconnaissance integrated with At-Sea Anti-Submarine Warfare data collection.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603553N / *Surface ASW*	Project (Number/Name) 1704. / *Undersea Warfare*	

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
1704.: *Undersea Warfare*	186.242	2.262	1.053	1.096	-	1.096	1.126	1.148	1.174	1.198	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The CNO's ASW initiative is a focused effort to identify the most promising ASW technologies through a process of discovery, assessment, experimentation, and analysis. The CNO's ASW initiative will coordinate the development of technologies which move beyond incremental or marginal improvements in ASW effectiveness. The CNO's vision of "fundamentally changing the way ASW is currently conducted to render the enemy submarine irrelevant against US and coalition forces" necessitates a change in the calculus of how the US Navy conducts ASW. Central to the CNO's ASW initiatives achieving the CNO's vision are several innovative approaches which include using the art-of-the-technologically-possible; minimizing force-on-force; reducing the ASW end-to-end time line; supporting rapid maneuver; developing off-board and distributed ASW detection systems; and finding innovative weapons solutions. To achieve these key approaches, it is essential to develop new ASW technologies and conduct at-sea experiments to prove/disprove technology concepts and collect corroborating data.

The detection and identification of underwater mines based on structural acoustic features has been successfully demonstrated. This structural acoustics (SA) approach offers significant increases in coverage rates together with higher probabilities of detection and lower false alarm rates against most of the threat mines the Navy is expected to encounter in the foreseeable future. Highly successful blind tests have been carried out demonstrating high performance detection and classification with low false alarm rates. This technology is now in transition to the fleet. The work proposed here, is to develop and demonstrate a long range/high coverage rate ASW systems concept based on the Low-Frequency Broadband (LFBB) technology using a fleet sonar AN/SQQ-89 on surface combatants.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: CNO ASW Initiatives	1.074	1.053	1.096	-	1.096
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Collected systems and performance data during select Fleet exercises and at-sea testing events. Analyzed and distributed collected data. Conducted studies and analysis of alternatives in support of the CNO ASW initiative.					
FY 2015 Plans: Collect systems and performance data during select Fleet exercises and at-sea testing events. Analyze and distribute collected data. Conduct studies and analysis of alternatives in support of the CNO ASW initiative.					
FY 2016 Base Plans: Collect systems and performance data during select Fleet exercises and at-sea testing events. Analyze and distribute collected data. Conduct studies and analysis of alternatives in support of the CNO ASW initiative.					
FY 2016 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 1704. / *Undersea Warfare*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
Title: AN/SQS-53C Structural Acoustics Sensor Program	1.188	-	-	-	-
Articles:	-	-	-	-	-
Description: The detection and identification of underwater mines based on structural acoustic features has been successfully demonstrated. This structural acoustics (SA) approach offers significant increases in coverage rates together with higher probabilities of detection and lower false alarm rates against most of the threat mines the Navy is expected to encounter in the foreseeable future. Highly successful blind tests have been carried out demonstrating high performance detection and classification with low false alarm rates. This technology is now in transition to the fleet. The Navy will develop and demonstrate a long range/high coverage rate ASW systems concept based on the LFBB technology using a fleet sonar AN/SQQ-89 on surface combatants. Specifically, using a standard AN/SQQ-53C as a source and the Multi-Function Towed Array (MFTA) as a receiver. In the Speed to Fleet effort, the Navy will build a special processor that will "roll on" the surface combatant and be able to be integrated into the existing AN/SQQ-89 system. The processor will run codes already developed in the ONR programs, but now adapted to the ASW problem. Ultimately, the demonstration will involve testing and documenting the ability of the approach to distinguish and correctly identify low Doppler bottom, near bottom, submarines and false targets as a function of speed and range from target fields. ***FY 2014 Accomplishments:*** - Continued processor build. - Continued software build. - Completed demonstration test planning. - Complete system installation. ***FY 2015 Plans:*** N/A ***FY 2016 Base Plans:*** N/A ***FY 2016 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	2.262	1.053	1.096	-	1.096

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 1704. / *Undersea Warfare*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

Use competitively awarded contracts from Broad Agency Announcement (BAA) solicitations and University Affiliated Research Centers (UARCs).
N/A

E. Performance Metrics

Investigate promising ASW technologies via annual at-sea experiments.
Conduct Demonstration Sea Tests 3Q14 (Gray Ship).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603553N / *Surface ASW*	Project (Number/Name) 1704. / *Undersea Warfare*	

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
Technology Development	C/CPFF	AAC : NY	1.134	-		-		-		-		-	-	1.134	-
Technology Development	C/CPFF	Adaptive Methods : VA	3.788	-		-		-		-		-	-	3.788	-
Technology Development	C/CPFF	Alion Sciences : VA	8.000	-		-		-		-		-	-	8.000	-
Technology Development	C/CPAF	EG&G : VA	2.050	-		-		-		-		-	-	2.050	-
Technology Development	C/CPFF	In-Depth Engineering : VA	3.635	-		-		-		-		-	-	3.635	-
Technology Development	C/CPFF	JHU/APL : MD	25.333	-		-		-		-		-	-	25.333	-
Technology Development	C/CPFF	L-3 Communications : VA	3.000	-		-		-		-		-	-	3.000	-
Technology Development	C/CPFF	Lockheed Martin - ISS : NY	7.110	-		-		-		-		-	-	7.110	-
Technology Development	WR	NSWC/Carderock : MD	3.201	-		-		-		-		-	-	3.201	-
Technology Development	WR	NUWC/Keyport : WA	0.790	-		-		-		-		-	-	0.790	-
Technology Development	WR	NUWC/Newport : RI	33.260	-		-		-		-		-	-	33.260	-
Technology Development	C/CPFF	Northrop Grumman : VA	4.684	-		-		-		-		-	-	4.684	-
Technology Development	C/CPFF	UT/ARL : TX	4.908	-		-		-		-		-	-	4.908	-
Technology Development	C/CPFF	VAR : VAR*	4.694	-		-		-		-		-	-	4.694	-
Technology Development	WR	NFESC/PH : CA	5.350	-		-		-		-		-	-	5.350	-
Technology Development	MIPR	SSGC : MS	3.253	-		-		-		-		-	-	3.253	-
Detection/Classification Algorithms (LRS)	WR	NAWC/Pax River : MD	2.400	-		-		-		-		-	-	2.400	-
Detection/Classification Algorithms (LRS)	C/CPFF	VAR : VAR*	8.600	-		-		-		-		-	-	8.600	-
Technology Development (LRS)	WR	NRL : DC	2.500	-		-		-		-		-	-	2.500	-
Technology Development (LRS)	C/CPFF	VAR : VAR*	14.950	-		-		-		-		-	-	14.950	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 1704. / *Undersea Warfare*

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
Processor Build	WR	NRL : District of Columbia	1.544	-		-		-		-		-	-	1.544	-
Software Build	WR	NRL : District of Columbia	1.697	-		-		-		-		-	-	1.697	-
System Install	WR	NRL : District of Columbia	0.193	0.700	Oct 2013	-		-		-		-	0.250	1.143	-
Demonstration Planning and Design	WR	NRL : District of Columbia	0.097	-		-		-		-		-	0.100	0.197	-
Demonstration/Test	WR	NRL : District of Columbia	0.000	-		-		-		-		-	0.750	0.750	-
Analysis and Documentation of Demonstration Tests	WR	NRL : District of Columbia	0.000	-		-		-		-		-	0.150	0.150	-
		Subtotal	146.171	0.700		-		-		-		-	1.250	148.121	-

Remarks

Note: Funds identified as LRS (Littoral Remote Sensing) were part of the 2011/2012 DoD Omnibus Reprogrammings for ASW/ISR Capability.
*Consists of multiple performing activities with funding for each not greater than $1M per year.

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
At-Sea Test/Experiment	WR	ONR : VA	5.500	-		-		-		-		-	-	5.500	-
Developmental Test & Evaluation	C/CPFF	AAC : NY	1.067	-		-		-		-		-	-	1.067	-
Developmental Test & Evaluation	C/CPFF	JHU/APL : MD	1.455	0.650	Apr 2014	0.630	Dec 2014	0.640	Dec 2015	-		0.640	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	NRL : DC	0.537	-		-		-		-		-	-	0.537	-
Developmental Test & Evaluation	WR	NSMA : VA	0.907	-		-		-		-		-	-	0.907	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603553N / *Surface ASW*	Project (Number/Name) 1704. / *Undersea Warfare*	

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
Developmental Test & Evaluation	WR	NSWC/Carderock : MD	1.172	-		-		-		-		-	-	1.172	-
Developmental Test & Evaluation	WR	NUWC/Newport : RI	11.341	0.112	Apr 2014	-		-		-		-	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	SPAWAR : CA	0.277	-		-		-		-		-	-	0.277	-
Developmental Test & Evaluation	C/CPFF	UT/ARL : TX	1.844	-		-		-		-		-	-	1.844	-
Developmental Test & Evaluation	C/CPFF	VAR : VAR*	4.580	0.187	Apr 2014	0.303	Feb 2015	0.336	Dec 2015	-		0.336	Continuing	Continuing	Continuing
Enhanced Data Collection	C/CPFF	JHU/APL : MD	4.462	-		-		-		-		-	-	4.462	-
Enhanced Data Collection	C/CPFF	UT/ARL : TX	2.000	-		-		-		-		-	-	2.000	-
Demonstration Execution	Various	NRL : District of Columbia	0.000	0.168	Oct 2013	-		-		-		-	-	0.168	-
Demonstration Performance Analysis	Various	NRL : District of Columbia	0.000	0.170	Oct 2013	-		-		-		-	-	0.170	-
		Subtotal	35.142	1.287		0.933		0.976		-		0.976	-	-	-

Remarks

*Consists of multiple performing activities with funding for each not greater than $1M per year.

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
Program Management Support	C/CPAF	BAE Systems : MD	4.579	0.125	Apr 2014	0.120	Nov 2014	0.120	Dec 2015	-		0.120	Continuing	Continuing	Continuing
Travel	Allot	NAVSEA PEO IWS 5 : DC	0.300	-		-		-		-		-	-	0.300	-
Travel (LRS)	Allot	ONR : DC	0.050	-		-		-		-		-	-	0.050	-
Demonstration Planning and Test Plan	Various	NRL : District of Columbia	0.000	0.150	Oct 2013	-		-		-		-	-	0.150	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603553N / *Surface ASW*	Project (Number/Name) 1704. / *Undersea Warfare*	

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
Subtotal			4.929	0.275		0.120		0.120		-		0.120	-	-	-

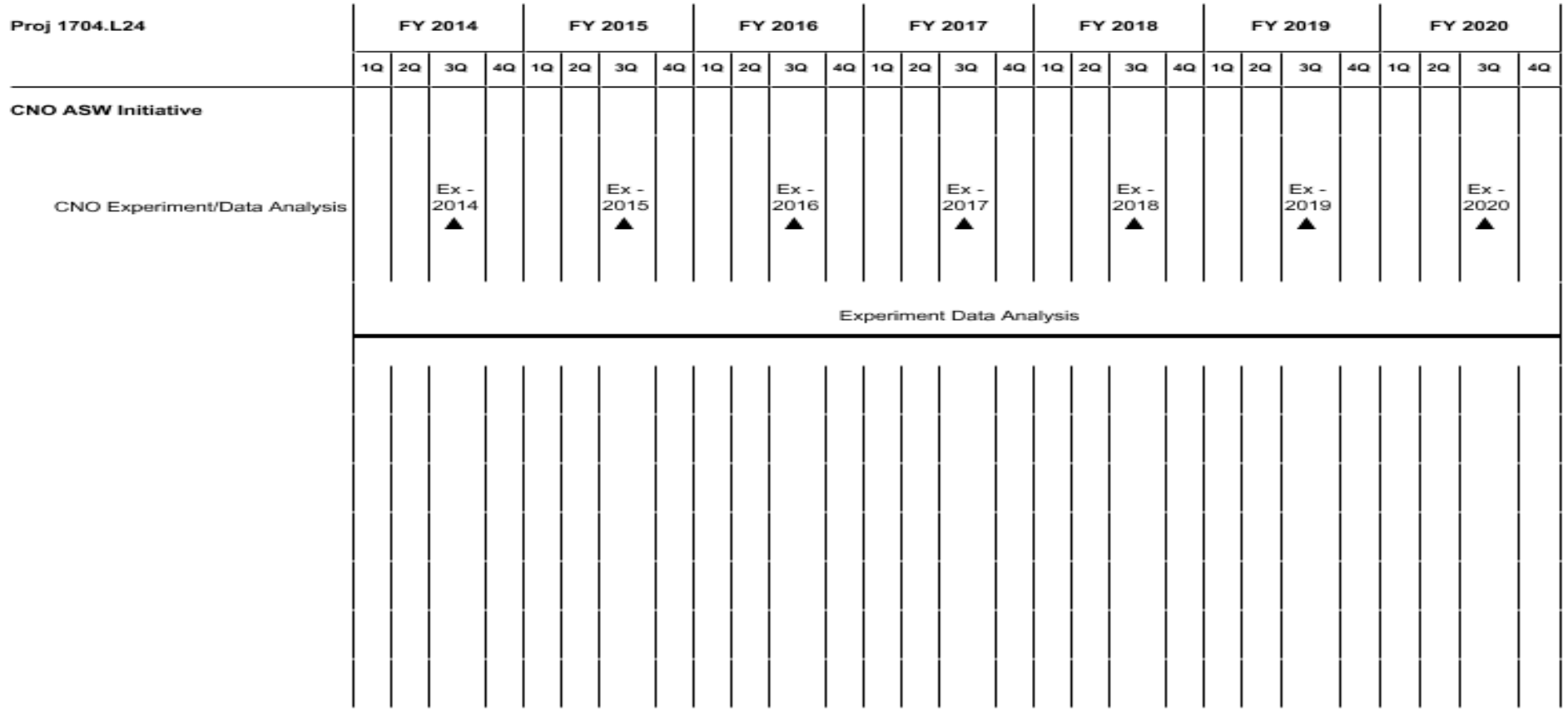
Remarks

Note: Funds identified as LRS (Littoral Remote Sensing) were part of the 2011/2012 DoD Omnibus Reprogrammings for ASW/ISR Capability.

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	186.242	2.262		1.053		1.096		-		1.096	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 1704. / *Undersea Warfare*



2016PB - 0603553N - 1704.L24

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 1704. / *Undersea Warfare*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 1704.L24				
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2014)	3	2014	3	2014
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2015)	3	2015	3	2015
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2016)	3	2016	3	2016
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2017)	3	2017	3	2017
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2018)	3	2018	3	2018
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2019)	3	2019	3	2019
CNO ASW Initiative: CNO Experiment/Data Analysis: Conduct At-Sea Experiment (2020)	3	2020	3	2020
CNO ASW Initiative: CNO Experiment/Data Analysis: Analyze Experimental Data/ Studies	1	2014	4	2020
AN/SQS-53C SAS pg. 1				
Phase B: Demonstration: Demonstration Test Planning	2	2014	2	2014
Phase B: Demonstration: Demonstration Tests	3	2014	3	2014
Phase B: Demonstration: Analysis and Documentation of Demonstration Tests	4	2014	4	2014
Phase B: Demonstration: Milestone C	4	2014	4	2014

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603553N / *Surface ASW*	Project (Number/Name) 3349 / *Detection and Fusion of Remote Sensors*	

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
3349: *Detection and Fusion of Remote Sensors*	-	6.281	-	-	-	-	-	-	-	-	-	6.281
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Littoral Remote Sensing (LRS) project develops remote sensing algorithms for detection and classification of maritime targets.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: The Littoral Remote Sensing (LRS)	6.281	-	-	-	-
Articles:	-	-	-	-	-

Description: The Littoral Remote Sensing (LRS) project develops remote sensing algorithms for detection and classification of maritime targets.

Funding decreases from FY2014 to FY2015 due to the completion of the S&T protions of the project and transitions to RDTEN (starting FY15) PE 0603207N, 2363 - Remote Sensing Capability Development and then OMN (starting FY16) PE 0702207N, 1C5C - Op Meteorology and Oceanography.

FY 2014 Accomplishments:
- Implemented advanced development and testing of remote sensing algorithms for detection and classification for maritime targets.
- Developed and tested simultaneous retrieval of environmental parameters from imagery for use in reducing false alarms and improving classification of maritime targets.
- Developed and tested fusion of multiple remote sensing retrievals to enhance target exploitation.
- Prepared transition paths for operational evaluation and user training of LRS algorithms and conops.

FY 2015 Plans:
N/A

FY 2016 Base Plans:
N/A

FY 2016 OCO Plans:

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 3349 / *Detection and Fusion of Remote Sensors*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
Accomplishments/Planned Programs Subtotals	6.281	-	-	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Competitively awarded contracts from Broad Agency Announcement (BAA) solicitations.

E. Performance Metrics

Conduct Detection and classification algorithm development and testing starting in 4QFY2014 and ending 3QFY2015.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 3349 / *Detection and Fusion of Remote Sensors*

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
Detection and classification algorithms	WR	NRL : NRL-DC	0.000	0.500	Sep 2014	-		-		-		-	-	0.500	-
Detection and classification algorithms	C/CPFF	Various : Various	0.000	2.500	Sep 2014	-		-		-		-	-	2.500	-
Technology development	WR	NAWCAD : Pax River, MD	0.000	0.300	Oct 2014	-		-		-		-	-	0.300	-
Technology development	WR	SPAWAR : San Diego, CA	0.000	0.200	Oct 2014	-		-		-		-	-	0.200	-
Technology development	C/CPFF	Various : Various	0.000	2.760	Oct 2014	-		-		-		-	-	2.760	-
		Subtotal	0.000	6.260		-		-		-		-	-	6.260	-

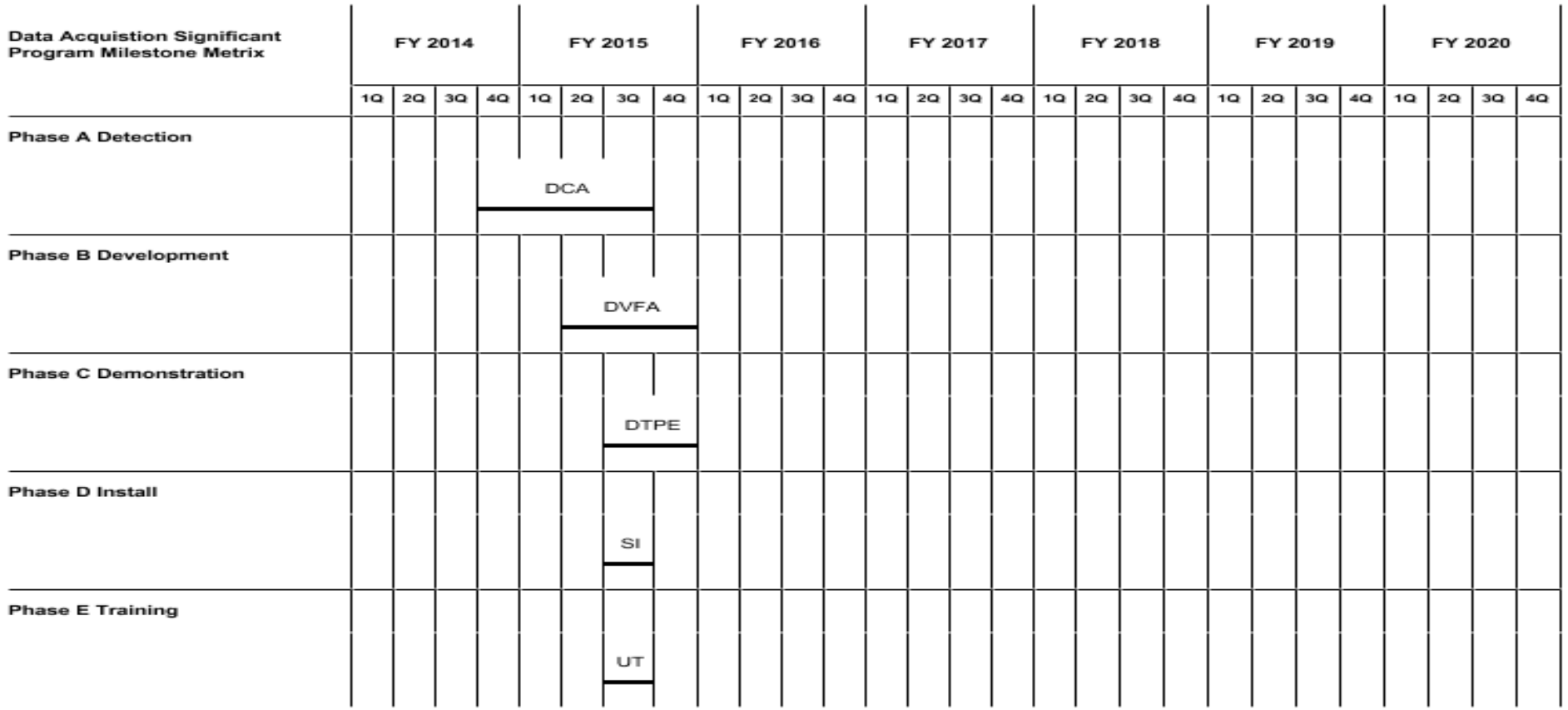
Support ($ in Millions)

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
Travel	Allot	ONR : DC	0.000	0.021	Oct 2014	-		-		-		-	-	0.021	-
		Subtotal	0.000	0.021		-		-		-		-	-	0.021	-

	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	0.000	6.281		-		-		-		-	-	6.281	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 3349 / *Detection and Fusion of Remote Sensors*



2016PB - 0603553N - 3349

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603553N / *Surface ASW*	**Project (Number/Name)** 3349 / *Detection and Fusion of Remote Sensors*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Data Acquistion Significant Program Milestone Metrix				
Phase A Detection: Detection and classification algorithm development and testing	4	2014	3	2015
Phase B Development: Develop multi-sensor fusion algorithms and testing	2	2015	4	2015
Phase C Demonstration: Demonstration test planning and execution	3	2015	4	2015
Phase D Install: System install	3	2015	3	2015
Phase E Training: User training	3	2015	3	2015