Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy											Date: March 2014	
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 0603254N *I ASW Systems Development*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	110.781	7.306	6.964	7.782	-	7.782	7.150	7.304	7.241	7.391	Continuing	Continuing
1292: *Adv ASW Sensors & Proc*	103.223	5.095	4.601	5.577	-	5.577	4.937	5.044	5.024	5.126	Continuing	Continuing
3222: *Advanced High Altitude ASW*	7.558	2.211	2.363	2.205	-	2.205	2.213	2.260	2.217	2.265	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Includes RDT&E funds for advanced development and developmental testing of airborne anti-submarine warfare (ASW) systems, including aircraft, equipment, and devices for use against all types of submarine targets.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	8.090	7.964	8.141	-	8.141
Current President's Budget	7.306	6.964	7.782	-	7.782
Total Adjustments	-0.784	-1.000	-0.359	-	-0.359
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-1.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.156	-			
• Program Adjustments	-	-	-0.242	-	-0.242
• Rate/Misc Adjustments	0.002	-	-0.117	-	-0.117
• Congressional General Reductions Adjustments	-0.630	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy	Date: March 2014
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 0603254N *I ASW Systems Development*

Schedule:
1292. New Over-the-horizon (OTH) Communications (Comms) added for commencement in FY19.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603254N / *ASW Systems Development*				Project (Number/Name) 1292 / *Adv ASW Sensors & Proc*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
1292: *Adv ASW Sensors & Proc*	103.223	5.095	4.601	5.577	-	5.577	4.937	5.044	5.024	5.126	Continuing	Continuing
Quantity of RDT&E Articles	0.000	100.000	100.000	100.000	-	100.000	100.000	100.000	100.000	100.000		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This program provides Air Anti-Submarine Warfare (ASW) platform effectiveness through development and maturization of advanced hardware and software associated with airborne acoustic and non-acoustic systems. This includes sensors and components, processing, post-processing, data recording and display capabilities to address regional threat scenarios against surfaced or submerged conventionally and nuclear powered submarines. Key objectives are platform accommodations of advanced active and passive sensors and components, improved detection, classification, localization, tracking, and increased capacity and flexibility to handle multi-sensor data loads. Programs being funded during the FYDP will investigate technologies such as: Over the Horizon (OTH) Communications, Distributed Netted Sensors, transient signals, and source and receiver improvement technologies that will enhance passive and Multi-static Active Sensor Systems capabilities. Other programs being funded during the FYDP will provide for the development and maturization of persistent tactical search technologies that will allow transition to the localization and attack phase in all operationally relevant environments. In addition, the program will provide for the development and subsequent experimentation, including data collection and engineering measurement, of Multi-static Active Coherent sources and receivers, laser technologies, electro-optical and Multi-Spectral camera technologies, Radar, and Magnetic Anomaly Detection sensors. Those technologies that are deemed mature and provide increased operational capability will be approved for a production Rapid Capability Insertion (RCI) build. The test articles, which consist of passive/active sensors/components and associated processors, will support at-sea trials and experiments.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: System performance assessments	5.095	4.601	5.577
Articles:	100.000	100.000	100.000
FY 2013 Accomplishments: System performance assessed for Multi-static Active Coherent ASW algorithms and other Acoustic and Non-Acoustic system enhancements. The test articles, which consisted of passive/active sensors/components and associated processors, supported at-sea trial and experiments.			
FY 2014 Plans: System performance assessments for Multi-Static Active Coherent ASW algorithms and other Acoustic and Non-Acoustic system enhancements. The test articles, which consist of passive/active sensors/components and associated processors, will support at-sea trial and experiments. Develop prototype software development for use in at-sea experiment/exercise participation and data collection. Gather data analysis on engineering measurement program on Science and Technology, Research and Development and operational fleet collected data.			
FY 2015 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603254N / *ASW Systems Development*	**Project (Number/Name)** 1292 / *Adv ASW Sensors & Proc*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
System performance assessments for Multi-Static Active Coherent ASW algorithms and other Acoustic and Non-Acoustic system enhancements. The test articles, which consist of passive/active sensors/components and associated processors, will support at-sea trial and experiments. Develop prototype software development for use in at-sea experiment/exercise participation and data collection. Gather data analysis on engineering measurement program on Science and Technology, Research and Development and operational fleet collected data.			
Accomplishments/Planned Programs Subtotals	5.095	4.601	5.577

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

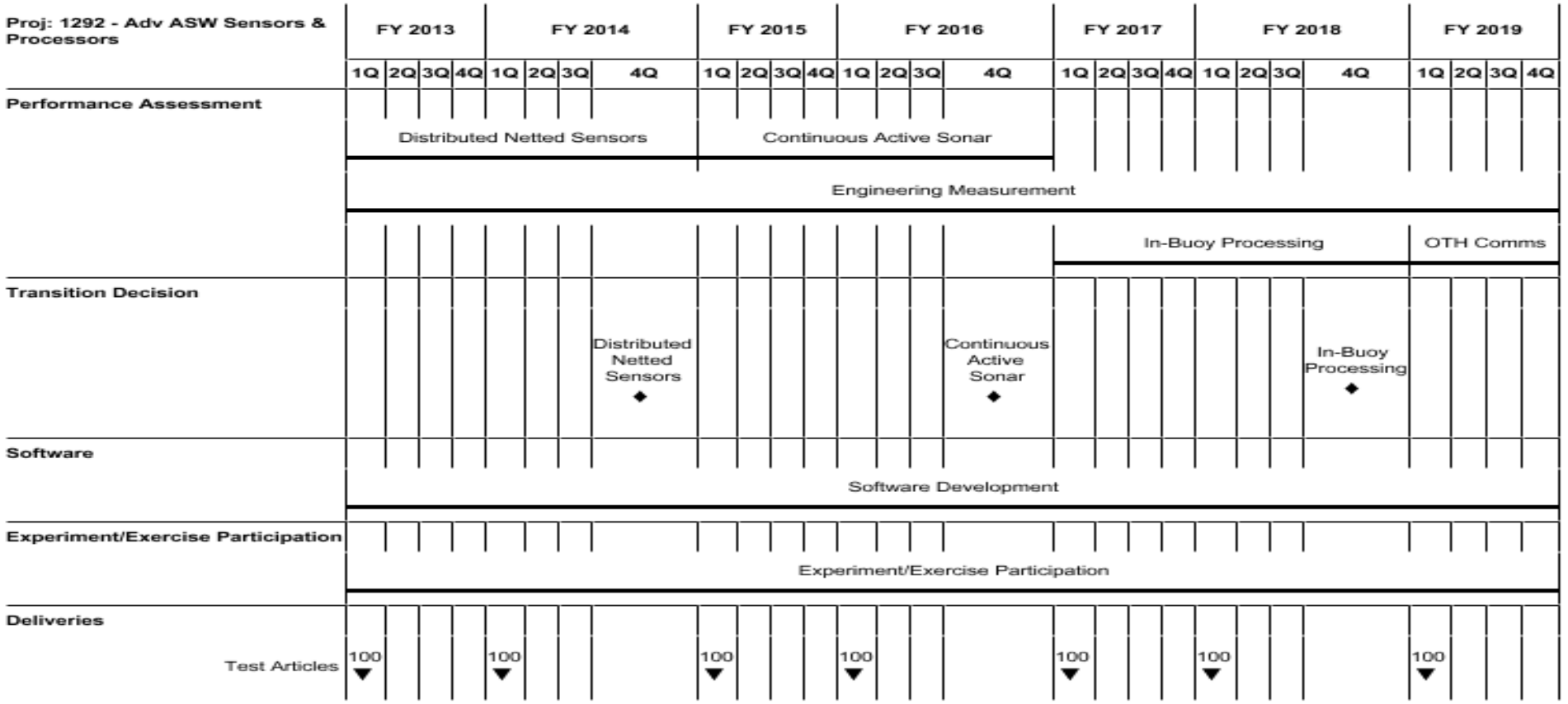
D. Acquisition Strategy

The included technology development are primarily in-house with contractor participation through existing vehicles.

E. Performance Metrics

System performance assessments for Multi-Static Active Coherent Air Anti-Submarine Warfare (ASW) algorithms and other Acoustic and Non-Acoustic system enhancements by Air ASW Technology Assessment Board.

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603254N / *ASW Systems Development*	**Project (Number/Name)** 1292 / *Adv ASW Sensors & Proc*



2015OSD - 0603254N - 1292

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603254N / *ASW Systems Development*				Project (Number/Name) 3222 / *Advanced High Altitude ASW*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
3222: *Advanced High Altitude ASW*	7.558	2.211	2.363	2.205	-	2.205	2.213	2.260	2.217	2.265	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Advanced High Altitude Anti-Submarine Warfare (Adv HAASW) program performs research, analyses, and early prototype demonstration activities for new technologies to support future Air Anti-Submarine Warfare (ASW) programs for P-8A and other platforms. Emphasis is placed on evaluation of technologies and prototype systems in realistic operating environments with a focus new sensors and system components.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Research, analyses, and early prototype demonstration activities	2.211	2.363	2.205
Articles:	-	-	-
FY 2013 Accomplishments: Researched and analyzed areas focused on future acoustic and non-acoustic technologies which supported future programs to better perform the ASW mission at higher altitudes such as, Sonobuoy Enhancements; RADAR Intelligence, Surveillance, and Reconnaissance and Periscope Detection; Tactical ASW LIDAR Detection Systems; Data Fusion; and Miniature Magnetic Anomaly Detectors.			
FY 2014 Plans: FY14 is scheduled to perform studies, analyses and early prototyping of acoustic and non-acoustic technologies suitable for High Altitude ASW operations for the P-8A aircraft.			
FY 2015 Plans: FY15 is scheduled to perform studies, analyses and early prototyping of acoustic and non-acoustic technologies suitable for High Altitude ASW operations for the P-8A aircraft.			
Accomplishments/Planned Programs Subtotals	2.211	2.363	2.205

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

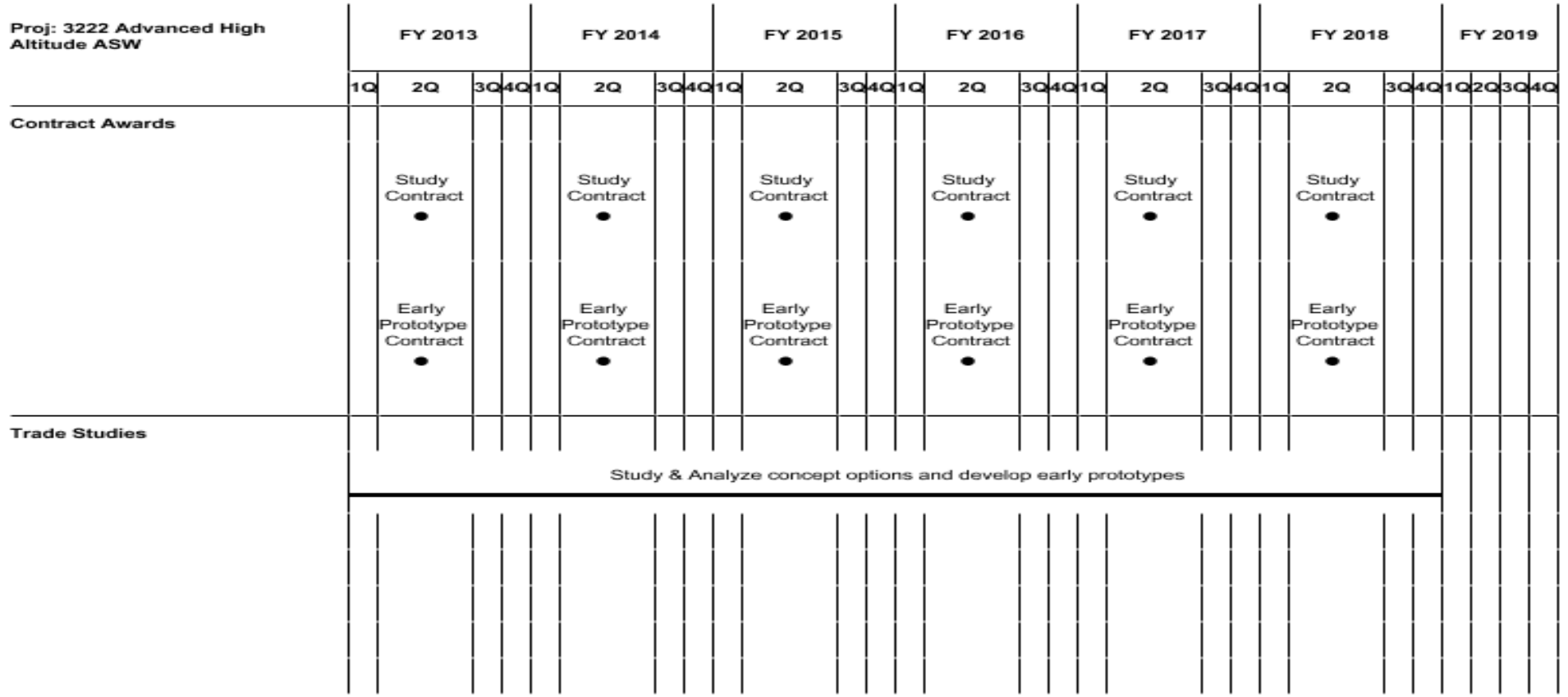
Develop modifications to incorporate capability into current sonobuoy sensors and integration into Air ASW platforms, P-8A as the lead aircraft.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603254N / *ASW Systems Development*	**Project (Number/Name)** 3222 / *Advanced High Altitude ASW*

E. Performance Metrics

Perform Studies and Analysis to better define Advanced HAASW program needs. Early prototypes will be developed to reduce risk for ASW operations at high altitudes by the P-8A aircraft.

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603254N / *ASW Systems Development*	**Project (Number/Name)** 3222 / *Advanced High Altitude ASW*



2015OSD - 0603254N - 3222