Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604261N: Acoustic Search Sensors

DATE: April 2013

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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	321.669	49.353	34.299	30.208	-	30.208	27.044	21.406	18.418	18.706	Continuing	Continuing
0480: ASW Sensors & Proc	275.966	25.087	19.453	19.624	-	19.624	17.531	13.796	14.097	14.313	Continuing	Continuing
3224: High Altitude ASW	45.703	24.266	14.846	10.584	-	10.584	9.513	7.610	4.321	4.393	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Includes RDT&E funds for engineering development and operational test and evaluation of acoustic search sensors/systems and complementary equipment for Anti Submarine Warfare (ASW) aircraft.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	48.838	34.299	30.416	-	30.416
Current President's Budget	49.353	34.299	30.208	-	30.208
Total Adjustments	0.515	0.000	-0.208	-	-0.208
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	1.927	0.000			
SBIR/STTR Transfer	-1.412	0.000			
 Program Adjustments 	0.000	0.000	-0.024	=	-0.024
 Rate/Misc Adjustments 	0.000	0.000	-0.184	-	-0.184

Change Summary Explanation

Technical: Not applicable.

PE 0604261N: Acoustic Search Sensors

Navy

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604261N: Acoustic Search Sensors	
BA 5: System Development & Demonstration (SDD) Schedule: 3224. A 15 Mar 12 Acquisition Decision Memoran Category Program to a series of Engineering Change Propos	ndum from PEO(A) Milestone Decision Authority approv	ed the transition from a planned Acquisition N/SSQ-101 sonobuoys.

PE 0604261N: Acoustic Search Sensors Navy

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

DATE: April 2013

R-1 ITEM NOMENCLATURE

PE 0604261N: Acoustic Search Sensors

0480: ASW Sensors & Proc

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
0480: ASW Sensors & Proc	275.966	25.087	19.453	19.624	-	19.624	17.531	13.796	14.097	14.313	Continuing	Continuing
Quantity of RDT&E Articles	0	500	50	75		75	200	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

The Anti-Submarine Warfare (ASW) Sensors and Processing project provides the tools and methods necessary to maintain naval superiority by preventing threat submarines from disrupting the U.S. Navy's ability to control the sea lines of communication and completing their hostile missions. This project encompasses the Engineering & Manufacturing Development phase and the follow on increments of sensor systems to improve the mission effectiveness of airborne ASW platforms in cueing, searching, localizing, tracking, and attacking subsurface targets. Smaller and quieter threat submarines drive the requirement for continued advancement in ASW sensor capabilities for both blue water and littoral environments. The littoral regions of the world create an additional ASW challenge to overcome the increase in background clutter caused by the shallow water depth, high volume of shipping, and commercial radio frequency interference. Project 0480 provides funding to the multi-static active ASW family of systems for the engineering development of solutions that detect, classify, and track threat submarines. Multi-static Active Coherent (MAC) and Advanced Processing Builds (APB) are efforts funded during the period identified. The MAC program, which started in FY08, encompasses the development of an active coherent (electronic) source sonobuoy, modifications to the existing Air Deployable Active Receiver sonobuoy, development, integration, and test of aircraft avionics software and MAC system. It also provides upgrades to the Multi-static mission planning tool, the Tactical Operational Readiness Trainer and the Tactical Ground Replay System. MAC provides a large area search capability in all water environments and will eliminate current impulsive source safety, training, and Rules of Engagement restrictions. Project 0480 also provides funding for the APB program which provides software enhancements for signal processing improvements, clutter reduction, automation, improved displays and controls, as well as improved communication links for reduced operator workload resulting in increased target detection and classification capabilities and interoperability. APB also includes an Air ASW Engineering Measurement Program that collects ASW system data and identifies areas where beneficial improvements can be made and provides common software and hardware solutions across all Air ASW platforms. The 825 sonobuoy test articles in FY12/15 will support software and hardware integration flight tests and Technical Evaluation/Operational Evaluation for the MAC program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Complete APB System Qualification Test /Fleet Release	0.514	2.888	8.485
Articles:	0	0	0
FY 2012 Accomplishments: Complete APB(2) Tech Eval and get approval for software release in September 2012. Continue software development/Integration for APB(3).			
FY 2013 Plans:			

PE 0604261N: Acoustic Search Sensors

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604261N: Acoustic Search Sensors	0480: <i>ASN</i>	/ Sensors & Proc
BA 5: System Development & Demonstration (SDD)			

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Release APB(2) software to Fleet. Continue software development/Integration for APB(3).			
FY 2014 Plans:			
Conduct APB(3) Software Qualification Test (SQT) and prepare APB(3) for software release.			
Title: Multi-static Active Coherent (MAC)	24.573	16.565	11.139
Articles:	500	50	75
FY 2012 Accomplishments: Conduct Milestone C and Low Rate Initial Production decision briefs with Milestone Decision Authority. Conduct Operational Test flights in 3rd quarter FY-2012.			
FY 2013 Plans: Release Multi-static Active Coherent (MAC) software to Fleet in 1st quarter. Conduct decision brief for Full Rate Production on SSQ-125 in 1st quarter. Initiate Engineering Change Proposal (ECP) to the SSQ-125 to increase source level. Integrate next version of software to support commencement of Follow-on Test and Evaluation (FOT&E) in 4th quarter FY-2013.			
FY 2014 Plans: Continue ECP effort to increase source level of SSQ-125. Complete FOT&E in 2nd quarter and release software to fleet in 3rd quarter.			
Accomplishments/Planned Programs Subtotals	25.087	19.453	19.624

C. Other Program Funding Summary (\$ in Millions)

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
OPN/4048: Sonobuoys - All	24.431	17.034	47.759		47.759	47.411	51.596	52.975	45.450	Continuing	Continuing
Types											

Remarks

D. Acquisition Strategy

The development and integration of MAC using coherent source technology into the P-3C and P-8A Aircraft. Sole source contracts have been awarded for Sensor Development (ERAPSCO) and for Displays and Control and Integration on P-3C aircraft (Lockheed Martin, Manassas) and P-8A aircraft.

E. Performance Metrics

Continued development/test of a MAC coherent source and related software that will satisfy the large area search requirement in the harsh, shallow water littorals as stated in the Acquisition Program Baseline agreement.

PE 0604261N: Acoustic Search Sensors

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Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604261N: Acoustic Search Sensors

PROJECT

0480: ASW Sensors & Proc

DATE: April 2013

Product Developmen	t (\$ in Mi	llions)		FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary Hdw Development	Various	VARIOUS:VARIOUS	18.505	1.400	Oct 2011	2.288	Dec 2012	1.191	Dec 2013	-		1.191	Continuing	Continuing	Continuing
Primary Hdw Development	SS/CPIF	ERAPSCO:FT. WAYNE IN	3.350	3.350	Oct 2011	3.658	Dec 2012	3.600	Dec 2013	-		3.600	Continuing	Continuing	Continuing
		Subtotal	21.855	4.750		5.946		4.791		0.000		4.791			

Support (\$ in Million	Support (\$ in Millions)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Software Development	WR	NAWCAD:PATUXENT RIVER, MD	19.204	1.000	Oct 2011	1.000	Nov 2012	1.000	Nov 2013	-		1.000	Continuing	Continuing	Continuing
Software Development	SS/CPIF	LOCKHEED MARTIN:MANASSAS VA	3.000	3.000	Oct 2011	1.000	Nov 2012	1.000	Nov 2013	-		1.000	Continuing	Continuing	Continuing
Software Development	Various	VARIOUS:VARIOUS	7.802	0.529	Oct 2011	0.457	Nov 2012	0.500	Nov 2013	-		0.500	Continuing	Continuing	Continuing
Studies & Analysis	WR	NAWCAD:PATUXENT RIVER, MD	12.340	1.000	Oct 2011	0.562	Nov 2012	0.700	Nov 2013	-		0.700	Continuing	Continuing	Continuing
Technical Data	WR	NAWCAD:PATUXENT RIVER, MD	15.359	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	57.705	5.529		3.019		3.200		0.000		3.200			

Test and Evaluation	Test and Evaluation (\$ in Millions)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Dev Test & Eval	WR	NAWCAD:PATUXENT RIVER, MD	17.700	2.000	Nov 2011	1.000	Nov 2012	1.000	Nov 2013	-		1.000	Continuing	Continuing	Continuing
		Subtotal	17.700	2.000		1.000		1.000		0.000		1.000			

PE 0604261N: Acoustic Search Sensors

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PROJECT PE 0604261N: Acoustic Search Sensors

0480: ASW Sensors & Proc

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ise	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Contractor Eng Spt (APB)	Various	VARIOUS:VARIOUS	30.845	3.132	Nov 2011	2.132	Nov 2012	2.500	Nov 2013	-		2.500	Continuing	Continuing	Continuing
Contractor Eng Spt (APB)	C/CPFF	NAVMAR APPLIED SCIENCES CORP:WARMINSTER PA	0.000	1.349	Nov 2011	1.488	Nov 2012	1.500	Nov 2013	-		1.500	Continuing	Continuing	Continuing
Government Eng Spt	WR	NAWCAD:PATUXENT RIVER, MD	89.050	3.661	Oct 2011	4.221	Nov 2012	5.287	Nov 2013	-		5.287	Continuing	Continuing	Continuing
Eng & Tech Spt Srvc (NON-FFRDC)	Various	VARIOUS:VARIOUS	48.453	4.600	Nov 2011	1.397	Nov 2012	1.121	Nov 2013	-		1.121	Continuing	Continuing	Continuing
Mgt & Prof SptT Srvc (FFRDC)	Various	VARIOUS:VARIOUS	9.490	0.066	Nov 2011	0.250	Nov 2012	0.225	Nov 2013	-		0.225	Continuing	Continuing	Continuing
Prior Years Mgmt Svcs no longer funded in the FYDP	Various	VARIOUS:VARIOUS	0.868	0.000		0.000		0.000		-		0.000	0.000	0.868	
	•	Subtotal	178.706	12.808		9.488		10.633		0.000		10.633			
			All Prior					FY 2	2014	FY 2	2014	FY 2014	Cost To	Total	Target Value of

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	275.966	25.087	19.453	19.624	0.000	19.624			

Remarks

PE 0604261N: Acoustic Search Sensors

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604261N: Acoustic Search Sensors

PROJECT

0480: ASW Sensors & Proc

Proj: 0480 ASW Sensors & Processors - Multistatic Active Coherent		FY 2	012				FY 2013			FY 2				Y 20				FY 2				Y 2		- 1			018
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q -	4Q	1Q	2Q	3Q
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hibit R-4, RDT&E Schedule Profi	ile: F	PB 2	2014	l Nav	'y																DAT	E: A	pril 20	13	
PPROPRIATION/BUDGET ACTIVIT 19: Research, Development, Test & 5: System Development & Demor	& <i>Ev</i>				vy								Acou.			h Se	nsor	s		JEC): AS	T W Ser	nsors	& Pro	С	
Proj: 0480 ASW Sensors & Processors - Advanced Processing Builds (APB)		FY:	2012	2		FY 20	13		FY	2014		F	Y 201	5		FY 2	2016		F	Y 20	17		FY 2	2018	
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cquisition Milestones Milestones					APB (2) Fit Rei							APB (3) Fit Rel							APB (4) Fit Rei						
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est & Evaluation									1																
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PE 0604261N: Acoustic Search Sensors Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

PE 0604261N: Acoustic Search Sensors
0480: ASW Sensors & Proc

Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj: 0480 ASW Sensors & Processors - Multistatic Active Coherent				
Acquisition Milestones: Milestone C	2	2012	2	2012
Acquisition Milestones: Milestones: Full Rate Production (FRP) Decision	1	2013	1	2013
System Development: Hardware Development: Engineering Change Proposal	1	2013	4	2015
System Development: EDM Delivery: Eng Dev Model (H/W EDM) 2	1	2015	1	2015
System Development: Software Integration Delivery: Integration Software Delivery	3	2013	3	2013
Test & Evaluation: Development Test: Engineering Change Proposal Test	3	2015	4	2015
Test & Evaluation: Operational Evaluation: OT	3	2012	3	2012
Test & Evaluation: Operational Evaluation: Commence FOT&E	4	2013	4	2013
Production Milestones: Contract Awards: Low Rate Initial Production (LRIP)	2	2012	2	2012
Production Milestones: Contract Awards: Full Rate Production (FRP)	1	2013	1	2013
Production Milestones: Contract Awards: Engineering Change Proposal	1	2013	1	2013
Proj: 0480 ASW Sensors & Processors - Advanced Processing Builds (APB)				
Acquisition Milestones: Milestones: APB (2) Fleet Release	1	2013	1	2013
Acquisition Milestones: Milestones: APB (3) Fleet Release	1	2015	1	2015
Acquisition Milestones: Milestones: APB (4) Fleet Release	1	2017	1	2017
System Development: Software Development: System Development	1	2012	4	2018
System Development: Software Development: APB (2) Software Release	4	2012	4	2012
System Development: Software Development: APB (3) Software Release	4	2014	4	2014
System Development: Software Development: APB (4) Software Release	4	2016	4	2016
System Development: Software Development: APB (5) Software Release	4	2018	4	2018
Test & Evaluation: Technical Evaluation: APB (3) SQT	2	2014	2	2014

PE 0604261N: Acoustic Search Sensors Navy

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DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE APPROPRIATION/BUDGET ACTIVITY **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604261N: Acoustic Search Sensors 0480: ASW Sensors & Proc BA 5: System Development & Demonstration (SDD)

Start End **Events by Sub Project** Year Year Quarter Quarter Test & Evaluation: Technical Evaluation: APB (4) SQT 2016 2 2 2016 Test & Evaluation: Technical Evaluation: APB (5) SQT 2 2018 2 2018

DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604261N: Acoustic Search Sensors 3224: High Altitude ASW BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3224: High Altitude ASW	45.703	24.266	14.846	10.584	-	10.584	9.513	7.610	4.321	4.393	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

The High Altitude Anti-Submarine Warfare (HAASW) program objective is to ensure Anti-Submarine Warfare (ASW) aircraft operational flexibility and effectiveness thoughout the kill chain at higher than traditional ASW altitudes. FY11-FY16 R&D monies fund the Technology Development (TD), Test & Evaluation and Initial Operational Capability for HAASW integration into the P-8A aircraft. TD includes hardware modifications to existing ASW sonobuoys and software development for the aircraft. Global Positioning System (GPS) integration will provide precise sonobuoy location regardless of aircraft altitude/location to enhance wide area ASW search, localization, track and targeting. FY17-FY18 funds the continued GPS/Digital Telemetry effort to further reduce the kill chain. The digital telemetry will improve sonobuoy communication performance in high Radio Frequency Interference environments, increase Air Deployable Active Receiver channel availability, and provide NATO compatibility. P-8A software will be developed to process GPS and digital telemetry signals and to integrate algorithms that will adjust sonobuoy release/drop points for more accurate sonobuoy placement.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Provide precision delivery of sonobuoys	24.266	14.846	10.584
Articles:	0	0	0
FY 2012 Accomplishments: Sonobuoy Preliminary Design Review is planned for Apr 12. A P-8A Increment 2 Risk Reduction contract will be awarded initiating a P-8A Inc2 (HAASW) Capabilities Analysis and Planning study.			
FY 2013 Plans: Milestone B and Critical Design Review are planned. Boeing Increment 2 Integration contract will be awarded.			
FY 2014 Plans: Full-rate production decision on the qualified HAASW capable SSQ-53, SSQ-62 & SSQ-101. HAASW software and production representative sonobuoy all planned for P-8A Increment 2 Integration testing. Follow on test and evaluation will be initiated.			
Accomplishments/Planned Programs Subtotals	24.266	14.846	10.584

C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0604261N: Acoustic Search Sensors

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604261N: Acoustic Search Sensors	3224: High	Altitude ASW
BA 5: System Development & Demonstration (SDD)			

C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

A 15 Mar 12 Acquisition Decision Memorandum from PEO(A) Milestone Decision Authority approved the transition from a planned Acquisition Category Program to a series of Engineering Change Proposal modifications to the AN/SSQ-53, AN/SSQ-62 and AN/SSQ-101 sonobuoys. The sonobuoy technology development contract was awarded in Aug 11. A follow-on contract to support the Government managed qualification and certification phase will be awarded in FY13. Systems level Test and Evaluation will be conducted on the P-8A.

E. Performance Metrics

Schedule and cost variances are used to track sonobuoy development.	Should Cost methodology has also been employed to manage the development and production
costs of the HAASW capable sonobuovs.	

PE 0604261N: Acoustic Search Sensors Navy

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DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

PE 0604261N: Acoustic Search Sensors

3224: High Altitude ASW

Product Developmen	ıt (\$ in Mi	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary Hdw Development	Various	VARIOUS:VARIOUS	5.009	0.376	Nov 2011	0.478	Nov 2012	0.000		-		0.000	Continuing	Continuing	Continuing
Primary Hdw Development	SS/CPIF	ERAPSCO:FT. WAYNE IN	11.980	11.389	Nov 2011	1.700	Nov 2012	1.800	Nov 2013	-		1.800	3.206	30.075	28.375
		Subtotal	16.989	11.765		2.178		1.800		0.000		1.800			

Support (\$ in Millions	s)			FY	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Documentation	Various	VARIOUS:VARIOUS	0.450	0.500	Nov 2011	0.300	Dec 2012	0.000		-		0.000	Continuing	Continuing	Continuing
A/C Software Integration	C/CPFF	BOEING:SEATTLE WA	12.367	4.000	Nov 2011	5.601	Dec 2012	2.513	Nov 2013	-		2.513	Continuing	Continuing	Continuing
Prior year Support cost no longer funded in the FYDP	Various	VARIOUS:VARIOUS	3.611	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
		Subtotal	16.428	4.500		5.901		2.513		0.000		2.513			

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Dev Test & Eval	Various	VARIOUS:VARIOUS	0.450	0.500	Nov 2011	1.500	Nov 2012	3.200	Nov 2013	-		3.200	Continuing	Continuing	Continuing
		Subtotal	0.450	0.500		1.500		3.200		0.000		3.200			

Management Service	es (\$ in Mi	illions)		FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Eng Spt	Various	VARIOUS:VARIOUS	0.484	0.946	Oct 2011	0.746	Nov 2012	0.900	Nov 2013	-		0.900	Continuing	Continuing	Continuing
ENG & TECH SVCS (NON-FFRDC)	Various	VARIOUS:VARIOUS	0.719	2.294	Oct 2011	0.983	Nov 2012	0.000	Nov 2013	-		0.000	Continuing	Continuing	Continuing

PE 0604261N: Acoustic Search Sensors Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604261N: Acoustic Search Sensors

3224: High Altitude ASW

PROJECT

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Government Eng Spt	WR	NAWCAD:PATUXENTRIVER, MD	10.172	4.217	Oct 2011	3.511	Nov 2012	2.154	Nov 2013	-		2.154	Continuing	Continuing	Continuing
Travel	C/T&M	VARIOUS:VARIOUS	0.461	0.044	Oct 2011	0.027	Nov 2012	0.017	Nov 2013	-		0.017	Continuing	Continuing	Continuing
		Subtotal	11.836	7.501		5.267		3.071		0.000		3.071			
			All Prior	EV	2012	EV.	2013		2014		2014	FY 2014	Cost To	Total	Target Value of

	All Prior Years	FY 2	012	FY 2	013	FY 20 Bas	FY 2014 OCO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	45.703	24.266		14.846		10.584	0.000	10.584			

Remarks

PE 0604261N: Acoustic Search Sensors Navy

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UNCLASSIFIED Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy DATE: April 2013 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604261N: Acoustic Search Sensors 3224: High Altitude ASW BA 5: System Development & Demonstration (SDD) FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 Proj: 3224 High Altitude ASW FY 2012 FY 2013 2Q 3Q 4Q 2030401020 30 4010203040 3040102030401020 4Q Milestones Phase Phase II - 1 FRP GPS/Digital P-8A Milestones Telemetry Int System Development Hardware System Development Hardware Development S/W + A/C Integration Software Development CDR PDR/CDR PDR Reviews Test & Evaluation Integrated Testing Technical Evaluation P-8A FOT&E Integrated Testing Operational Evaluation **Production Milestones** Risk P-8 Reduction Integration Contract Contract Contract Awards Award Award 2014PB - 0604261N - 3224

DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604261N: Acoustic Search Sensors 3224: High Altitude ASW BA 5: System Development & Demonstration (SDD)

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj: 3224 High Altitude ASW					
Milestones: Milestones: Full Rate Production	3	2014	3	2014	
Milestones: Milestones: Phase I P-8A Integration	1	2016	1	2016	
Milestones: Milestones: Phase II GPS/Digital Telemetry	3	2018	3	2018	
System Development: Hardware Development: Hardware System Development	1	2012	4	2018	
System Development: Software Development: Aircraft Software Development/ Integration	1	2012	4	2018	
System Development: Reviews: PDR	3	2012	3	2012	
System Development: Reviews: CDR	1	2013	1	2013	
System Development: Reviews: PDR/CDR	2	2016	2	2016	
Test & Evaluation: Technical Evaluation: Integrated Testing	1	2013	1	2015	
Test & Evaluation: Operational Evaluation: P-8A FOT&E	2	2014	4	2015	
Test & Evaluation: Operational Evaluation: Integrated Testing	4	2016	1	2018	
Production Milestones: Contract Awards: Risk Reduction Contract Award	1	2012	1	2012	
Production Milestones: Contract Awards: P-8 Integration Contract Award	1	2013	1	2013	