

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy	Date: February 2015
---	----------------------------

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>					R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>							
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	403.529	28.344	23.214	35.763	-	35.763	38.014	39.077	30.686	51.089	Continuing	Continuing
0480: <i>ASW Sensors & Proc</i>	316.257	18.098	15.988	26.906	-	26.906	33.120	35.042	26.562	46.875	Continuing	Continuing
3224: <i>High Altitude ASW</i>	87.272	10.246	7.226	8.857	-	8.857	4.894	4.035	4.124	4.214	Continuing	Continuing

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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	29.195	23.227	22.045	-	22.045
Current President's Budget	28.344	23.214	35.763	-	35.763
Total Adjustments	-0.851	-0.013	13.718	-	13.718
• Congressional General Reductions	-	-0.013			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.047	-			
• SBIR/STTR Transfer	-0.804	-			
• Program Adjustments	-	-	14.000	-	14.000
• Rate/Misc Adjustments	-	-	-0.282	-	-0.282

Change Summary Explanation

Technical: Not applicable.

Schedule:
 0480 Schedule 1. Received technical correction for MAC Enhancements (MAC-E) with funding in FY16-FY20. Added MAC-E schedule events accordingly.
 Additional LRIP procurement added in FY14 (awarded 4Q/14) and FRP delayed to FY15 contract award (1Q/15) to accommodate completion of OPEVAL and beyond LRIP reporting.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604261N / Acoustic Search Sensors	
<div>0480 Schedule 2. No changes.</div> <div>3224. Moved P-8A (ECP3) Integration Contract Award from 3Q/14 to 1Q/15 and Digital Telemetry Contract Award from 3Q/18 to 2Q/17 to align with the P-8A integrated master schedule.</div>		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>			
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
0480: <i>ASW Sensors & Proc</i>	316.257	18.098	15.988	26.906	-	26.906	33.120	35.042	26.562	46.875	Continuing	Continuing
Quantity of RDT&E Articles		75	200	200	-	200	200	75	100	100		

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 Production and Deployment Phase 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. The Multi-Static Active Coherent (MAC) program encompasses modifications to the active coherent (electronic) source sonobuoy and the Air Deployable Active Receiver sonobuoy and development, integration, and test of aircraft software. It also provides upgrades to the Multi-static mission planning tool, the tactical crew trainers and the tactical ground replay system. This program includes MAC Enhancements that will shorten the ASW kill chain by enabling the warfighter to search larger areas in less time with more precision. Project 0480 also provides funding for the Advanced Processing Builds (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 sonobuoy test articles in FY14-FY20 will support software and hardware integration flight tests and Technical Evaluation/Follow-On Test & Evaluation for the MAC program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: APB System Qualification Test/Fleet Release for P-3C. Rapid Capability Insertion (RCI)/Fleet Release for P-8A	6.959	12.114	12.906	-	12.906
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Continued software development/integration for APB(3). Released APB(2) software to Fleet. Conducted APB(3) SQT and prepared software for Fleet release. Commenced system Fleet Introduction Training.					
FY 2015 Plans:					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy							Date: February 2015				
Appropriation/Budget Activity 1319 / 5			R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>			Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
Release APB(3) software to Fleet. Final APB release for P-3. Commence software development/Engineering Measurement Program (EMP) for P-8A RCI(2). Continue system Fleet Introduction Training. FY 2016 Base Plans: Continue software development/Engineering Measurement Program (EMP) for P-8A RCI (2). Continue system Fleet Introduction Training. FY 2016 OCO Plans: N/A											
Title: Multi-static Active Coherent (MAC) Articles:						11.139 75	3.874 200	14.000 200	- -	14.000 200	
FY 2014 Accomplishments: Completed OT and released MAC software to Fleet. Delivered software for FOT&E. Conducted decision brief for limited initial rate production on SSQ-125. Completed FOT&E. Continued SSQ-125A ECP effort to increase source level. FY 2015 Plans: Continue SSQ-125A ECP. Commence SSQ-125A EDM production to support ECP test. FY 2016 Base Plans: Deliver SSQ-125A EDM units in 1Q/2Q. Complete Hardware development and ECP testing. Commence MAC-E Software development. FY 2016 OCO Plans: N/A											
Accomplishments/Planned Programs Subtotals						18.098	15.988	26.906	-	26.906	
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/4048: <i>Sonobuoys - All Types</i>	41.101	54.719	32.298	-	32.298	37.266	47.508	48.458	47.074	Continuing	Continuing
Remarks											

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>	Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>
<p><u>D. Acquisition Strategy</u></p> <p>To develop and integrate MAC into the P-3C and P-8A Aircraft using coherent source technology. Sole source contracts have been awarded for Sensor Development (ERAPSCO) and for Displays and Control and Integration on P-3C aircraft (Lockheed Martin) and P-8A aircraft (Boeing).</p> <p><u>E. Performance Metrics</u></p> <p>Develop and test a MAC coherent source and related software that will satisfy the Multi-static Active wide area ASW search requirement.</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Development	SS/CPIF	ERAPSCO : FT. WAYNE IN	8.758	4.791	Dec 2013	2.547	Dec 2014	2.500	Dec 2015	-		2.500	17.500	36.096	36.096
Prior year Prod Dev no longer funded in the FYDP	Various	VARIOUS : VARIOUS	19.905	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			28.663	4.791		2.547		2.500		-		2.500	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	WR	NAWCAD : PATUXENT RIVER, MD	21.204	1.000	Nov 2013	1.000	Nov 2014	4.797	Dec 2015	-		4.797	Continuing	Continuing	Continuing
Software Development	SS/CPIF	LOCKHEED MARTIN : MANASSAS VA	7.000	1.000	Nov 2013	1.000	Nov 2014	1.273	Dec 2015	-		1.273	3.727	14.000	14.000
Software Development	Various	VARIOUS : VARIOUS	8.788	0.500	Nov 2013	0.500	Nov 2014	2.750	Dec 2015	-		2.750	Continuing	Continuing	Continuing
Studies & Analysis	WR	NAWCAD : PATUXENT RIVER, MD	13.902	0.700	Nov 2013	1.000	Nov 2014	1.469	Dec 2015	-		1.469	Continuing	Continuing	Continuing
Technical Data	WR	NAWCAD : PATUXENT RIVER, MD	15.359	-		-		1.000	Dec 2015	-		1.000	Continuing	Continuing	Continuing
Training	WR	NAWCAD : PATUXENT RIVER, MD	0.000	-		-		1.500	Dec 2015	-		1.500	Continuing	Continuing	Continuing
Subtotal			66.253	3.200		3.500		12.789		-		12.789	-	-	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>					
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Eval	WR	NAWCAD : PATUXENT RIVER, MD	22.458	3.034	Nov 2013	4.051	Nov 2014	3.996	Dec 2015	-		3.996	Continuing	Continuing	Continuing
Subtotal			22.458	3.034		4.051		3.996		-		3.996	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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 (APB)	Various	VARIOUS : VARIOUS	36.109	2.500	Nov 2013	1.758	Nov 2014	3.238	Dec 2015	-		3.238	Continuing	Continuing	Continuing
Contractor Eng Spt (APB)	C/CPFF	NAVMAR APPLIED SCIENCES CORP : WARMINSTER, PA	2.837	1.500	Nov 2013	1.190	Nov 2014	1.290	Dec 2015	-		1.290	2.810	9.627	9.627
Government Eng Spt	WR	NAWCAD : PATUXENT RIVER, MD	94.813	1.740	Nov 2013	1.745	Nov 2014	2.005	Dec 2015	-		2.005	Continuing	Continuing	Continuing
Eng & Tech Spt Srvc (NON-FFRDC)	Various	VARIOUS : VARIOUS	54.450	1.121	Nov 2013	1.008	Nov 2014	0.907	Dec 2015	-		0.907	Continuing	Continuing	Continuing
Mgt & Prof SptT Srvc (FFRDC)	Various	VARIOUS : VARIOUS	9.806	0.212	Nov 2013	0.189	Nov 2014	0.181	Dec 2015	-		0.181	Continuing	Continuing	Continuing
Prior Years Mgmt Svcs no longer funded in the FYDP	Various	VARIOUS : VARIOUS	0.868	-		-		-		-		-	-	0.868	-
Subtotal			198.883	7.073		5.890		7.621		-		7.621	-	-	-
			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			316.257	18.098		15.988		26.906		-		26.906	-	-	-
Remarks															

UNCLASSIFIED

PE 0604261N: *Acoustic Search Sensors*
Navy

R-1 Line #98

Appropriation/Budget Activity 1319 / 5										R-1 Program Element (Number/Name) PE 0604261N / Acoustic Search Sensors										Project (Number/Name) 0480 / ASW Sensors & Proc																			
Proj: 0480 ASW Sensors & Processors - Multistatic Active Coherent										FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					
										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	4Q		
Acquisition Milestones																																							
Milestones													FRP Decision ◆								P-8A Inc 3 MS B ◆							P-8A Inc 3 MS C ◆											
System Development																																							
Hardware Development										ECP																													
EDM Delivery																H/W EDM ▼																							
Software Development																																							
Software Integration Delivery																																							
Test & Evaluation																																							
Technical Evaluation																																							
Development Test																	ECP Test																						
Operational Evaluation																																							
										OT ▼																													
										Commence FOT&E ▼			Complete FOT&E ▼																										
Production Milestones																																							
Contract Awards													LRIP ●		FRP ●							SSQ-125A ECP LRIP ●																	
Deliveries																																							
2016PB - 0604261N - 0480																																							

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604261N / Acoustic Search Sensors

Project (Number/Name)

0480 / ASW Sensors & Proc

Proj: 0480 ASW Sensors & Processors - Advanced Processing Builds (APB)	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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	4Q
Acquisition Milestones																												
Milestones		APB (2) Flt Rel ▼			APB (3) Flt Rel ▼												RCI (2) Flt Rel ▼											
System Development																												
Software Development																												
	APB (2) S/W Rel ▼				APB (3) S/W Rel ▼																							
Test & Evaluation																												
Technical Evaluation		APB (3) SQT ▼															RCI (2) SQT ▼											
Fleet Introduction Training																												

2016PB - 0604261N - 0480 Transitioning to P8 RCI FY15-FY17

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>	Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj: 0480 ASW Sensors & Processors - Multistatic Active Coherent				
Acquisition Milestones: Milestones: Full Rate Production (FRP) Decision	4	2014	4	2014
Acquisition Milestones: Milestones: P-8A Increment 3 MS B	2	2017	2	2017
Acquisition Milestones: Milestones: P-8A Increment 3 MS C	2	2019	2	2019
System Development: Hardware Development: Engineering Change Proposal	1	2014	2	2016
System Development: EDM Delivery: Eng Dev Model (H/W EDM) 2	3	2015	3	2015
System Development: Software Development: MAC-E Software Development	1	2016	4	2020
Test & Evaluation: Development Test: Engineering Change Proposal Test	1	2016	2	2016
Test & Evaluation: Development Test: MAC-E Development Test	3	2018	4	2020
Test & Evaluation: Operational Evaluation: OT	1	2014	1	2014
Test & Evaluation: Operational Evaluation: MAC-E FOT&E	2	2020	4	2020
Test & Evaluation: Operational Evaluation: Commence FOT&E	1	2014	1	2014
Test & Evaluation: Operational Evaluation: Complete FOT&E	3	2014	3	2014
Production Milestones: Contract Awards: Low Rate Initial Production (LRIP)	4	2014	4	2014
Production Milestones: Contract Awards: Full Rate Production (FRP)	1	2015	1	2015
Production Milestones: Contract Awards: SSQ-125A Engineering Change Proposal LRIP	2	2017	2	2017
Proj: 0480 ASW Sensors & Processors - Advanced Processing Builds (APB)				
Acquisition Milestones: Milestones: APB (2) Fleet Release	2	2014	2	2014
Acquisition Milestones: Milestones: APB (3) Fleet Release	1	2015	1	2015
Acquisition Milestones: Milestones: RCI (2) Fleet Release	2	2018	2	2018
System Development: Software Development: System Development/Engineering Measurement	1	2014	4	2020

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>		Project (Number/Name) 0480 / <i>ASW Sensors & Proc</i>	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
System Development: Software Development: APB (2) Software Release		1	2014	1	2014
System Development: Software Development: APB (3) Software Release		4	2014	4	2014
Test & Evaluation: Technical Evaluation: APB (3) SQT		2	2014	2	2014
Test & Evaluation: Technical Evaluation: RCI (2) SQT		3	2017	3	2017
Test & Evaluation: Technical Evaluation: RCI (3) SQT		3	2020	3	2020

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 3224 / <i>High Altitude ASW</i>			
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
3224: <i>High Altitude ASW</i>	87.272	10.246	7.226	8.857	-	8.857	4.894	4.035	4.124	4.214	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The High Altitude Anti-Submarine Warfare (HAASW) program increases P-8A operational flexibility and effectiveness throughout the kill chain at higher than traditional ASW altitudes. FY10-FY16 activities include Sonobuoy Technology Development (TD), P-8A Aircraft integration, Training, Test & Evaluation, and Initial Operational Capability. TD includes hardware modifications to current production 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. The digital telemetry will improve sonobuoy communication performance in high Radio Frequency Interference environments, increase Air Deployable Active Receiver (SSQ-101) channel availability, and provide NATO compatibility. FY16-FY19 activities include the integration of an algorithm that will adjust sonobuoy release/drop points for more accurate sonobuoy placement and integrating digital telemetry into the SSQ-53 and SSQ-62.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Provide precision delivery of sonobuoys	10.246	7.226	8.857	-	8.857
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Finalized the HAASW sonobuoy qualification and certification and integrated the ECP into the SSQ-53, SSQ-62, and SSQ-101 sonobuoys. Continue HAASW software development and P-8A Integrated Test (IT).					
FY 2015 Plans: Continued P-8A IT. Initiate P-8A Inc 2 FOT&E.					
FY 2016 Base Plans: Continue P-8A Increment 2 Follow-On Operational Test & Evaluation (FOT&E) and reach Initial Operational Capabilities (IOC).					
FY 2016 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	10.246	7.226	8.857	-	8.857

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/4048: <i>Sonobuoys - All Types</i>	-	182.946	168.763	-	168.763	171.509	201.086	202.384	206.665	Continuing	Continuing

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015	
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 3224 / <i>High Altitude ASW</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2016</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Complete</u>	<u>Total Cost</u>
Remarks											
D. Acquisition Strategy											
<p>A 15 March 12 Acquisition Decision Memorandum from PEO(A) (Milestone Decision Authority) approved the transition from a planned Acquisition Category (ACAT) Program to a series of Engineering Change Proposal (ECP) modifications to the AN/SSQ-53, AN/SSQ-62 and AN/SSQ-101 sonobuoys. Affordability deferred the digital telemetry requirement in the SSQ-53 and SSQ-62 sonobuoys to FY17-FY19. All major contracts (ERAPSCO & Boeing) to meet P-8A Inc2 ECP2 requirements have been awarded. IOC is planned for P-8A Inc2 ECP2 in FY16. The P-8A Inc2 ECP3 contract award that develops and integrates the GPS drop vector algorithm (GDVA) will be awarded in FY15. P-8A Inc2 ECP3 IOC is planned for FY17.</p>											
E. Performance Metrics											
<p>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 sonobuoys.</p>											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 3224 / <i>High Altitude ASW</i>					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Development	SS/CPIF	ERAPSCO : FT. WAYNE IN	30.052	2.654	Nov 2013	-		-		-		-	0.823	33.529	33.529
Primary Hdw Development	TBD	TBD : TBD	0.000	-		-		1.000	Nov 2015	-		1.000	Continuing	Continuing	Continuing
Prior year Prod Dev no longer funded in the FYDP	Various	VARIOUS : VARIOUS	5.863	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			35.915	2.654		-		1.000		-		1.000	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
A/C Software Integration	C/CPFF	BOEING : SEATTLE WA	19.705	3.336	Nov 2013	3.519	Nov 2014	5.385	Nov 2015	-		5.385	2.443	34.388	34.388
Prior year Support cost no longer funded in the FYDP	Various	VARIOUS : VARIOUS	4.861	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			24.566	3.336		3.519		5.385		-		5.385	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Eval	Various	VARIOUS : VARIOUS	2.450	1.362	Nov 2013	1.135	Nov 2014	-		-		-	Continuing	Continuing	Continuing
Subtotal			2.450	1.362		1.135		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	2.176	0.723	Nov 2013	0.700	Nov 2014	0.135	Nov 2015	-		0.135	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>				Project (Number/Name) 3224 / <i>High Altitude ASW</i>					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ENG & TECH SVCS (NON-FFRDC)	Various	VARIOUS : VARIOUS	3.013	-	Nov 2013	-		-		-		-	Continuing	Continuing	Continuing
Government Eng Spt	WR	NAWCAD : PATUXENT RIVER, MD	18.620	2.154	Nov 2013	1.845	Nov 2014	2.337	Nov 2015	-		2.337	Continuing	Continuing	Continuing
Travel	C/T&M	VARIOUS : VARIOUS	0.532	0.017	Nov 2013	0.027	Nov 2014	-		-		-	Continuing	Continuing	Continuing
Subtotal			24.341	2.894		2.572		2.472		-		2.472	-	-	-
			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			87.272	10.246		7.226		8.857		-		8.857	-	-	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity

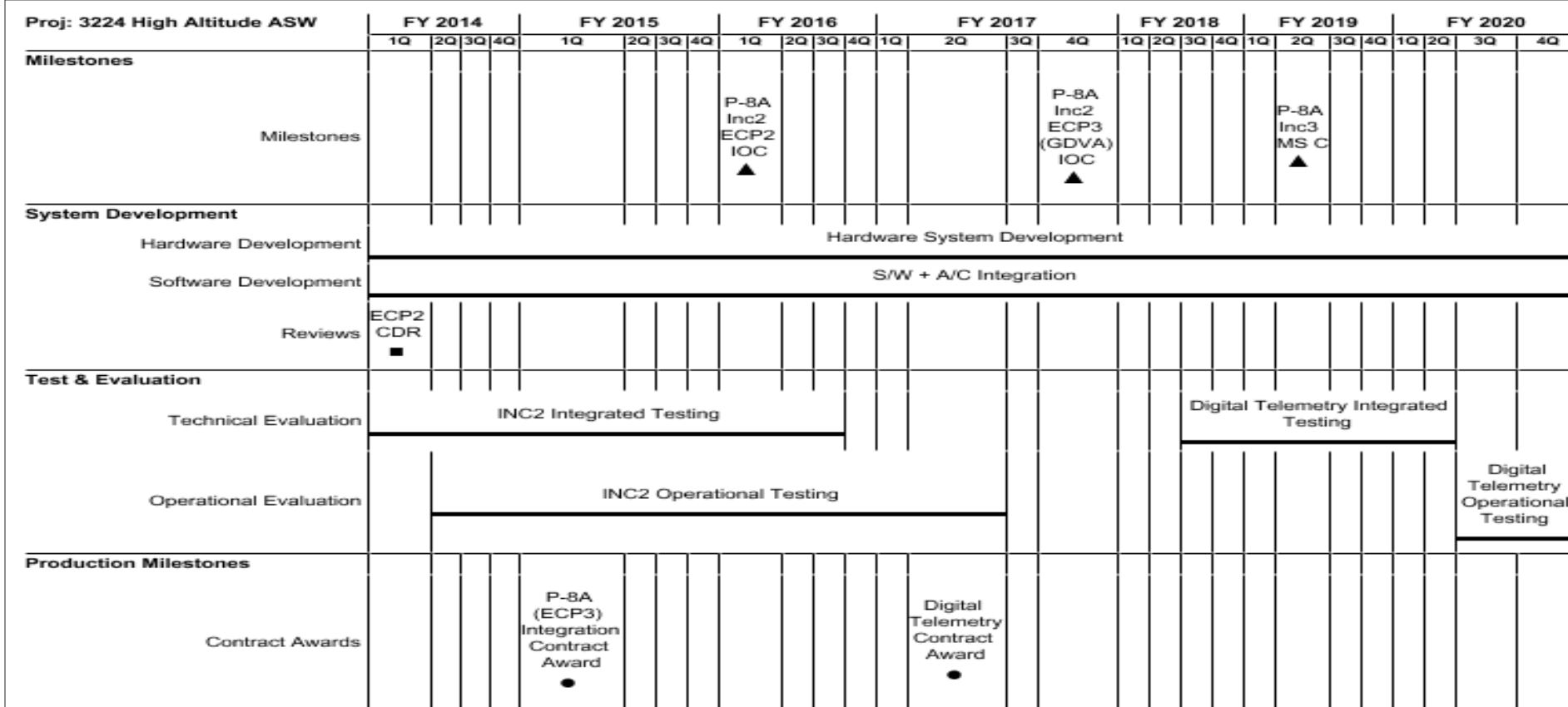
1319 / 5

R-1 Program Element (Number/Name)

PE 0604261N / Acoustic Search Sensors

Project (Number/Name)

3224 / High Altitude ASW



2016PB - 0604261N - 3224

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604261N / <i>Acoustic Search Sensors</i>	Project (Number/Name) 3224 / <i>High Altitude ASW</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj: 3224 High Altitude ASW				
Milestones: Milestones: P-8A Inc2 ECP2 IOC	1	2016	1	2016
Milestones: Milestones: P-8A Inc2 ECP3 (GDVA) IOC	4	2017	4	2017
Milestones: Milestones: P-8A Inc3 MS C	2	2019	2	2019
System Development: Hardware Development: Hardware System Development	1	2014	4	2020
System Development: Software Development: Aircraft Software Development/ Integration	1	2014	4	2020
System Development: Reviews: ECP2 CDR	1	2014	1	2014
Test & Evaluation: Technical Evaluation: INC2 Integrated Testing	1	2014	3	2016
Test & Evaluation: Technical Evaluation: Digital Telemetry Integrated Testing	3	2018	2	2020
Test & Evaluation: Operational Evaluation: INC2 Operational Testing	2	2014	2	2017
Test & Evaluation: Operational Evaluation: Digital Telemetry Operational Testing	3	2020	4	2020
Production Milestones: Contract Awards: P-8A (ECP3) Integration Contract Award	1	2015	1	2015
Production Milestones: Contract Awards: Digital Telemetry Contract Award	2	2017	2	2017