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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				PE 0603254N: <i>ASW Systems Development</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	7.969	7.896	8.090	-	8.090	8.047	8.220	8.288	8.458	Continuing	Continuing
1292: <i>Adv ASW Sensors & Proc</i>	5.529	5.435	5.648	-	5.648	5.651	5.825	5.875	5.999	Continuing	Continuing
3222: <i>Advanced High Altitude ASW</i>	2.440	2.461	2.442	-	2.442	2.396	2.395	2.413	2.459	Continuing	Continuing

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; and advanced, high-performance, underwater, mobile target for use in fleet ASW training exercises and for the operational evaluation of the MK-30 torpedo and the MK-48 torpedo weapons system improvement program.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	8.249	7.915	8.125	-	8.125
Current President's Budget	7.969	7.896	8.090	-	8.090
Total Adjustments	-0.280	-0.019	-0.035	-	-0.035
• Congressional General Reductions	-	-0.019			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.208	-			
• Program Adjustments	-	-	-0.048	-	-0.048
• Rate/Misc Adjustments	-	-	0.013	-	0.013
• Congressional General Reductions	-0.072	-	-	-	-
Adjustments					

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603254N: ASW Systems Development				PROJECT 1292: Adv ASW Sensors & Proc			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1292: Adv ASW Sensors & Proc	5.529	5.435	5.648	-	5.648	5.651	5.825	5.875	5.999	Continuing	Continuing
Quantity of RDT&E Articles	100	100	100	0	100	100	100	100	100		

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 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 advanced processing 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 2011	FY 2012	FY 2013
Title: System performance assessments		5.529	5.435	5.648
Articles:		100	100	100
FY 2011 Accomplishments: 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.				
FY 2012 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.				
FY 2013 Plans:				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>	PROJECT 1292: <i>Adv ASW Sensors & Proc</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
System performance assessments for Multi-Static Active Coherent (MAC) 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.			
Accomplishments/Planned Programs Subtotals		5.529	5.435
C. Other Program Funding Summary (\$ in Millions) N/A			
D. Acquisition Strategy The included technology development are primarily in-house with contractor participation through existing vehicles.			
E. Performance Metrics System performance assessments for MAC Air Anti-Submarine Warfare (ASW) algorithms and other Acoustic and Non-Acoustic system enhancements by Air ASW Technology Assessment Board.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603254N: ASW Systems Development				PROJECT 1292: Adv ASW Sensors & Proc					
Product Development (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Primary Hdw Development	Various	VARIOUS:VARIOUS	0.916	0.400	Dec 2011	0.400	Dec 2012	-		0.400	Continuing	Continuing	Continuing	
Subtotal			0.916	0.400		0.400		-		0.400				
Support (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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	3.425	-		-		-		-	0.000	3.425		
Studies & Analysis	WR	NAWCAD:PATUXENT RIVER, MD	5.181	-		0.300	Dec 2012	-		0.300	Continuing	Continuing	Continuing	
Subtotal			8.606	-		0.300		-		0.300				
Test and Evaluation (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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	15.681	0.500	Dec 2011	0.700	Dec 2012	-		0.700	Continuing	Continuing	Continuing	
Subtotal			15.681	0.500		0.700		-		0.700				
Management Services (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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	14.087	3.327	Dec 2011	1.558	Dec 2012	-		1.558	Continuing	Continuing	Continuing	
ENG & TECH SVCS (NON-FFRDC)	Various	VARIOUS:VARIOUS	2.682	0.100	Dec 2011	0.070	Dec 2012	-		0.070	Continuing	Continuing	Continuing	
MGT & PROF SVCS (FFRDC)	Various	VARIOUS:VARIOUS	0.416	0.195	Dec 2011	0.300	Dec 2012	-		0.300	Continuing	Continuing	Continuing	
Government Eng Spt	WR	NAWCAD:PATUXENT RIVER, MD	55.724	0.847	Dec 2011	2.310	Dec 2012	-		2.310	Continuing	Continuing	Continuing	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>				PROJECT 1292: <i>Adv ASW Sensors & Proc</i>					

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Various	VARIOUS:VARIOUS	0.068	0.066	Dec 2011	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
Subtotal			72.977	4.535		4.248		-		4.248			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	98.180	5.435		5.648		-		5.648			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>	PROJECT 1292: <i>Adv ASW Sensors & Proc</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>	PROJECT 1292: <i>Adv ASW Sensors & Proc</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj: 1292 - Adv ASW Sensors & Processors				
Performance Assessment: Concurrent Processing/Battery Technology	1	2011	4	2012
Performance Assessment: Distributed Netted Sensors	1	2013	4	2014
Performance Assessment: Continuous Active Sonar	1	2015	4	2016
Performance Assessment: OTH Communications	1	2011	4	2011
Performance Assessment: Engineering Measurement	1	2012	4	2017
Transition Decision: OTH Communications	4	2011	4	2011
Transition Decision: Concurrent Processing/Battery Technology	4	2012	4	2012
Transition Decision: Distributed Netted Sensors	4	2014	4	2014
Transition Decision: Continuous Active Sonar	4	2016	4	2016
Software: Software Development	1	2011	4	2017
Experiment/Exercise Participation: Experiment/Exercise Participation	1	2011	4	2017
Deliveries: Test Articles: Test Article Deliveries (1)	1	2011	1	2011
Deliveries: Test Articles: Test Article Deliveries (2)	1	2012	1	2012
Deliveries: Test Articles: Test Article Deliveries (3)	1	2013	1	2013
Deliveries: Test Articles: Test Article Deliveries (4)	1	2014	1	2014
Deliveries: Test Articles: Test Article Deliveries (5)	1	2015	1	2015
Deliveries: Test Articles: Test Article Deliveries (6)	1	2016	1	2016
Deliveries: Test Articles: Test Article Deliveries (7)	1	2017	1	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>				PROJECT 3222: <i>Advanced High Altitude ASW</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3222: <i>Advanced High Altitude ASW</i>	2.440	2.461	2.442	-	2.442	2.396	2.395	2.413	2.459	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification
 Advanced High Altitude Anti-Submarine Warfare (HAASW) program performs studies and analyses to better perform the Air Anti-Submarine Warfare (ASW) mission on the P-8A aircraft. The P-8A aircraft, a commercial derivative Boeing 737 airframe, operates most efficiently at high altitudes. These studies are to explore technologies, which may lead to additional high altitude ASW capabilities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Provide precision delivery of sonobuoys <div style="text-align: right;">Articles:</div>	2.440 0	2.461 0	2.442 0
FY 2011 Accomplishments: FY11 efforts completed the Advanced HAASW and HAASW, Analysis of Alternatives and Technology Development Strategy initiated in FY11 for the execution of ASW at high altitude by the P-8A aircraft. FY 2012 Plans: FY12 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 2013 Plans: FY13 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	2.440	2.461	2.442

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

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

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.

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Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Development	Various	VARIOUS:VARIOUS	1.370	-		-		-		-	0.000	1.370	1.370
A/C HW/SW Integration	Various	VARIOUS:VARIOUS	-	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.370	-		-		-		-			
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Documentation	Various	VARIOUS:VARIOUS	-	-		-		-		-	Continuing	Continuing	Continuing
Studies & Analysis	WR	NAWCAD:PATUXENT RIVER, MD	0.850	0.100	Nov 2011	0.200	Nov 2012	-		0.200	Continuing	Continuing	Continuing
Studies & Analysis	Various	VARIOUS:VARIOUS	1.065	1.245	Nov 2011	1.526	Nov 2012	-		1.526	Continuing	Continuing	Continuing
Subtotal			1.915	1.345		1.726		-		1.726			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Field Tests	WR	NAWCAD:PATUXENT RIVER, MD	0.050	0.100	Nov 2011	0.080	Nov 2012	-		0.080	Continuing	Continuing	Continuing
Subtotal			0.050	0.100		0.080		-		0.080			
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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	0.200	0.385	Nov 2011	0.100	Nov 2012	-		0.100	Continuing	Continuing	Continuing
ENG & TECH SVCS (NON-FFRDC)	Various	VARIOUS:VARIOUS	0.230	0.150	Nov 2011	0.287	Nov 2012	-		0.287	Continuing	Continuing	Continuing

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Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Eng Spt	WR	NAWCAD: PATUXENT RIVER, MD	1.497	0.472	Nov 2011	0.241	Nov 2012	-		0.241	Continuing	Continuing	Continuing
Travel	Various	VARIOUS: VARIOUS	0.015	0.009	Nov 2011	0.008	Nov 2012	-		0.008	Continuing	Continuing	Continuing
Subtotal			1.942	1.016		0.636		-		0.636			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	5.277	2.461		2.442		-		2.442			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>	PROJECT 3222: <i>Advanced High Altitude ASW</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603254N: <i>ASW Systems Development</i>	PROJECT 3222: <i>Advanced High Altitude ASW</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj: 3222 Advanced High Altitude ASW</i>				
Contract Awards: Analysis of Alternatives Contract	2	2011	2	2011
Contract Awards: Study Contract (1)	2	2013	2	2013
Contract Awards: Study Contract (2)	2	2014	2	2014
Contract Awards: Study Contract (3)	2	2015	2	2015
Contract Awards: Study Contract (4)	2	2016	2	2016
Contract Awards: Study Contract (5)	2	2017	2	2017
Contract Awards: Early Prototype Contract (1)	2	2013	2	2013
Contract Awards: Early Prototype Contract (2)	2	2014	2	2014
Contract Awards: Early Prototype Contract (3)	2	2015	2	2015
Contract Awards: Early Prototype Contract (4)	2	2016	2	2016
Contract Awards: Early Prototype Contract (5)	2	2017	2	2017
Trade Studies: Trade Studies	1	2011	4	2017