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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 0303354N: <i>ASW Systems Development - MIP</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	2.150	1.078	13.172	-	13.172	17.986	17.998	14.013	12.083	Continuing	Continuing
0490: <i>Airborne Acoustic Intelligence (AAI)</i>	2.150	1.078	13.172	-	13.172	17.986	17.998	14.013	12.083	Continuing	Continuing

A. Mission Description and Budget Item Justification

The mission of Airborne Acoustic Intelligence (AAI) (CNO Project K-0416) is to provide Sound Pressure Level quality recordings of targets of interest and an associated new technology, rapid prototyping mechanism for the application of state-of-the-art collection sensors. The program will develop and rapidly deploy new technology concepts in hardware and software to effectively address emerging littoral threats and to improve the present Undersea Warfare capability in support of the preparation of the Battlespace and Sea Shield/Sea Trial Initiatives. AAI also provides a measurement analysis capability to reconstruct, analyze, and develop active and target strength measurement validation. The AAI data collection program provides passive and active acoustic and non-acoustic data essential for the design and development of environmental models, sensors, weapons, software algorithms, and tactical decision aids. AAI employs developmental and prototypical hardware installed in uniquely configured Anti Submarine Warfare aircraft to collect data of interest, and specially configured ground support facilities to conduct reconstruction and analysis of this data. AAI includes calibrated recording systems, advanced detection and tracking systems, special sensors, advanced processing systems and techniques and specially derived operational tactics.

Funding was moved in FY11 from PE 0603254N to this PE (0303354N) and is a Military Intelligence Program.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.161	1.078	1.177	-	1.177
Current President's Budget	2.150	1.078	13.172	-	13.172
Total Adjustments	-0.011	-	11.995	-	11.995
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	11.994	-	11.994
• Rate/Misc Adjustments	-	-	0.001	-	0.001
• Congressional General Reductions Adjustments	-0.011	-	-	-	-

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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 0303354N: <i>ASW Systems Development - MIP</i>	
<u>Change Summary Explanation</u> 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 0303354N: ASW Systems Development - MIP				PROJECT 0490: Airborne Acoustic Intelligence (AAI)			
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
0490: Airborne Acoustic Intelligence (AAI)	2.150	1.078	13.172	-	13.172	17.986	17.998	14.013	12.083	Continuing	Continuing
Quantity of RDT&E Articles	1	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The mission of Airborne Acoustic Intelligence (AAI) (CNO Project K-0416) is to provide Sound Pressure Level (SPL) quality recordings of targets of interest and an associated new technology, rapid prototyping mechanism for the application of state-of-the-art collection sensors. The program will develop and rapidly deploy new technology concepts in hardware and software to effectively address emerging littoral threats and to improve the present Undersea Warfare capability in support of the preparation of the Battlespace and Sea Shield/Sea Trial Initiatives. AAI also provides a measurement analysis capability to reconstruct, analyze and develop active target strength measurement validation. The AAI data collection program provides passive and active acoustic and non-acoustic data essential for the design and development of environmental models, sensors, weapons, software algorithms, and tactical decision aids. AAI employs developmental and prototypical hardware installed in uniquely configured ASW aircraft to collect data of interest, and specially configured ground support facilities to conduct reconstruction and analysis of this data. AAI includes calibrated recording systems, advanced detection and tracking systems, special sensors, advanced processing systems and techniques and specially derived operational tactics. The one RDT&E article consists of a SPL collection suite.

Funding was moved in FY11 from PE 0603254N to this new PE 0303354N and is considered a Military Intelligence Program.

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

	FY 2011	FY 2012	FY 2013
Title: Systems Engineering / Aircraft Mods Active Acoustic Program Articles: FY 2011 Accomplishments: Engineering to support SPL Recording. Post mission processor upgrades for Calibrated Acoustic Intelligence (ACINT). P-8A aircraft calibration unit enhancements. Engineering development of Target Strength processing placed on Hold. FY 2012 Plans: Engineering to support SPL Recording. Post mission processor upgrades for Calibrated ACINT. P-8A aircraft calibration unit enhancements. Engineering development of Target Strength processing placed on Hold. FY 2013 Plans: Engineering to support SPL Recording. Post mission processor upgrades for Calibrated ACINT. P-8A aircraft calibration unit enhancements. Engineering support of the Active Target Strength sensor program.	1.000 1	0.500 0	1.412 0
Title: Data Collection and Analysis Articles:	0.750 0	0.400 0	0.430 0

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0303354N: ASW Systems Development - MIP	PROJECT 0490: Airborne Acoustic Intelligence (AAI)		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: Data collection support at Operational Wings. Ongoing collection of high interest acoustic and non-acoustic data in support of Measurement/Measuring and Signature Intelligence (MASINT)/Office of Naval Intelligence (ONI) threat assessment requirements. Reduction, Analysis and Fleet Rapid Feedback. Conduct airborne special operations support. Essential performance modeling and evaluation for advanced technology sensor systems design and Fleet tactics development.				
FY 2012 Plans: Data collection support at Operational Wings. Ongoing collection of high interest acoustic and non-acoustic data in support of MASINT/ONI threat assessment requirements. Reduction, Analysis and Fleet Rapid Feedback. Conduct airborne special operations support. Essential performance modeling and evaluation for advanced technology sensor systems design and Fleet tactics development.				
FY 2013 Plans: Data collection support at Operational Wings. Ongoing collection of high interest acoustic and non-acoustic data in support of MASINT/ONI threat assessment requirements. Reduction, Analysis and Fleet Rapid Feedback. Conduct airborne special operations support. Essential performance modeling and evaluation for advanced technology sensor systems design and Fleet tactics development.				
Title: Active Measurement Validation <div>Articles:</div>		0.400 0	0.178 0	0.415 0
FY 2011 Accomplishments: Active Measurement Validation of targets of interest. Provides the acoustic analysis of echo characterization (which includes: signal excess measurements, peak frequency, trend analysis and pulse duration measurements) and target strength.				
FY 2012 Plans: Active Measurement Validation of targets of interest. Provides the acoustic analysis of echo characterization (which includes: signal excess measurements, peak frequency, trend analysis and pulse duration measurements) and target strength.				
FY 2013 Plans: Active Measurement Validation of targets of interest. Provides the acoustic analysis of echo characterization (which includes: signal excess measurements, peak frequency, trend analysis and pulse duration measurements) and target strength.				
Title: Product Development <div>Articles:</div>		-	-	10.915 0
FY 2013 Plans:				

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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 0303354N: <i>ASW Systems Development - MIP</i>	PROJECT 0490: <i>Airborne Acoustic Intelligence (AAI)</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			
Initiate Active Target Strength Sensor development program.			
Accomplishments/Planned Programs Subtotals			FY 2011 2.150 FY 2012 1.078 FY 2013 13.172
C. Other Program Funding Summary (\$ in Millions) N/A			
D. Acquisition Strategy Airborne Acoustic Intelligence is a CNO Special Project. The included technology developments are primarily in-house with contractor participation through existing vehicles.			
E. Performance Metrics MIP Program.			

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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 0303354N: ASW Systems Development - MIP				PROJECT 0490: Airborne Acoustic Intelligence (AAI)					
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
Active Measurement Validation	WR	NAWCAD:PATUXENT RIVER, MD	0.400	0.178	Oct 2011	0.415	Dec 2012	-		0.415	0.000	0.993	
Ancillary Hdw Development	WR	NAWCAD:PATUXENT RIVER, MD	0.750	0.400	Oct 2011	0.430	Dec 2012	-		0.430	Continuing	Continuing	Continuing
Systems Eng	WR	NAWCAD:PATUXENT RIVER, MD	0.100	0.036	Oct 2011	0.912	Dec 2012	-		0.912	Continuing	Continuing	Continuing
Primary Hdw Development	TBD	TBD:TBD	-	-		10.915	Dec 2012	-		10.915	Continuing	Continuing	Continuing
Subtotal			1.250	0.614		12.672		-		12.672			
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
Mgt & Prof Spt Svcs (Non-FFRDC)	Various	VARIOUS:VARIOUS	0.900	0.464	Dec 2011	0.500	Dec 2012	-		0.500	Continuing	Continuing	Continuing
Subtotal			0.900	0.464		0.500		-		0.500			
			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			2.150	1.078		13.172		-		13.172			
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 0303354N: <i>ASW Systems Development - MIP</i>	PROJECT 0490: <i>Airborne Acoustic Intelligence (AAI)</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 0303354N: <i>ASW Systems Development - MIP</i>	PROJECT 0490: <i>Airborne Acoustic Intelligence (AAI)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj: 0490 Airborne Acoustic Intelligence (AAI)</i>				
Systems Engineering: P-3/P-8 Avionics Suite: P-3/P-8 Avionics Suite	1	2011	4	2017
Sys Eng Tactical Acoustic Processor (TAPS): Sys Eng Tactical Acoustic Processor (TAPS)	1	2011	4	2017
Product Development: Data Collection and Analysis	1	2011	4	2017
Product Development: Active Target Strength sensor processing development	1	2013	4	2017
Test & Evaluation: Technical Evaluation	1	2015	4	2017
Deliveries: TAPS Processor	3	2011	3	2011
Deliveries: P3/P8 Avionics	3	2013	3	2013