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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced

PE 0303354N I ASW Systems Development - MIP

Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	3.228	12.077	4.908	6.495	-	6.495	9.907	9.621	8.438	9.117	Continuing	Continuing
0490: Airborne Acoustic Intelligence (AAI)	3.228	12.077	4.908	6.495	-	6.495	9.907	9.621	8.438	9.117	Continuing	Continuing

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### A. Mission Description and Budget Item Justification

The mission of Airborne Acoustic Intelligence (AAI) (CNO Project K-0416) is to provide advanced antisubmarine warfare capabilities through rapid development of new technology and prototype mechanisms for the collection of antisubmarine warfare (ASW) related intelligence. This includes full spectrum intelligence collections and cataloging of current targets of interest. The program develops and swiftly deploys disruptive innovation to counter emerging threats in order to maintain the United States' current undersea warfare superiority. AAI employs the capability to quickly reconstruct and analyze passive and active measurements of submarine vulnerabilities providing actionable intelligence to fleet commanders. The AAI data collection program provides full spectrum intelligence data essential for the design and development of advanced sensors, weapon systems, environmental models, and tactical decision aids. AAI collection systems are installed and employed on uniquely configured aircraft, specially configured ground support facilities, ships, and other assets as required for the collection, processing, exfiltration, and dissemination of undersea intelligence. AAI includes recording systems, advanced detection and tracking systems, specially designed sensors, advanced processing systems and techniques, and specially derived tactics.

This is a Military Intelligence Program (MIP).

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.

PE 0303354N: ASW Systems Development - MIP

Navy

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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 0303354N I ASW Systems Development - MIP

B.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	13.172	8.448	9.603	-	9.603
Current President's Budget	12.077	4.908	6.495	-	6.495
Total Adjustments	-1.095	-3.540	-3.108	-	-3.108
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-3.540			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-	-			
<ul> <li>Program Adjustments</li> </ul>	-	-	-0.063	-	-0.063
<ul> <li>Rate/Misc Adjustments</li> </ul>	-	-	-3.045	-	-3.045
<ul> <li>Congressional General Reductions</li> </ul>	-1.095	-	-	-	-
Adjustments					

# **Change Summary Explanation**

Technical: Not Applicable

Schedule: Added delivery of new Airborne Avionics capabilities in 1Q/15.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014					
Appropriation/Budget Activity 1319 / 4		_	am Elemen 54N / ASW S	•		Number/Name) rborne Acoustic Intelligence (AAI)										
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				
0490: Airborne Acoustic Intelligence (AAI)	3.228	12.077	4.908	6.495	-	6.495	9.907	9.621	8.438	9.117	Continuing	Continuing				
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-						

<sup>\*</sup> The FY 2015 OCO Request will be submitted at a later date.

### A. Mission Description and Budget Item Justification

The mission of Airborne Acoustic Intelligence (AAI) (CNO Project K-0416) is to provide advanced antisubmarine warfare capabilities through rapid development of new technology and prototype mechanisms for the collection of antisubmarine warfare (ASW) related intelligence. This includes full spectrum intelligence collections and cataloging of current targets of interest. The program develops and swiftly deploys disruptive innovation to counter emerging threats in order to maintain the United States' current undersea warfare superiority. AAI employs the capability to quickly reconstruct and analyze passive and active measurements of submarine vulnerabilities providing actionable intelligence to fleet commanders. The AAI data collection program provides full spectrum intelligence data essential for the design and development of advanced sensors, weapon systems, environmental models, and tactical decision aids. AAI collection systems are installed and employed on uniquely configured aircraft, specially configured ground support facilities, ships, and other assets as required for the collection, processing, exfiltration, and dissemination of undersea intelligence. AAI includes recording systems, advanced detection and tracking systems, specially designed sensors, advanced processing systems and techniques, and specially derived tactics.

This is a Military Intelligence Program (MIP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Systems Engineering / Aircraft Mods Active Acoustic Program	1.412	0.569	0.767
Articles:	-	-	-
FY 2013 Accomplishments: Upgraded post mission processors for Calibrated Acoustic Intelligence (ACINT). Enhanced P-8A aircraft calibration units.			
Provided engineering support of the Active Target Strength sensor program.			
<b>FY 2014 Plans:</b> Post mission processor upgrades for Calibrated ACINT. P-8A aircraft calibration unit enhancements. Engineering support of the Active Target Strength sensor program.			
FY 2015 Plans: Engineering to support full spectrum intelligence collections. Post mission processor upgrades for Calibrated ACINT. Airborne avionics unit development and enhancements.			
Title: Data Collection and Analysis	0.430	0.600	1.626

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	arch 2014			
Appropriation/Budget Activity 1319 / 4		t (Number/Name) Airborne Acoustic Intelligence (AA					
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2013	FY 2014	FY 2015		
	Art	icles:	-	-	-		
FY 2013 Accomplishments: Supported data collection at Operational Wings. Collected high in: Measurement and Signature Intelligence/Office of Naval Intelligence Analysis and Fleet Rapid Feedback. Conducted airborne special of and evaluation for advanced technology sensor systems design an	ce (MASINT/ONI) threat assessment requirements. Reduce operations support. Provided essential performance models						
FY 2014 Plans: Data collection support at Operational Wings. Ongoing collection of MASINT/ONI threat assessment requirements. Reduction, Analoperations support. Essential performance modeling and evaluation tactics development.	ysis and Fleet Rapid Feedback. Conduct airborne special	et					
FY 2015 Plans: Data collection support at Operational Wings. Ongoing collection of MASINT/ONI threat assessment requirements. Reduction, Analoperations support. Essential performance modeling and evaluation tactics development.	ysis and Fleet Rapid Feedback. Conduct airborne special	et					
Title: Active Measurement Validation			0.415	0.200	0.63		
	Art	icles:	-	-	-		
FY 2013 Accomplishments:  Provided Active Measurement Validation of targets of interest. Proincluded: signal excess measurements, peak frequency, trend ana	· · · · · · · · · · · · · · · · · · ·						
FY 2014 Plans: Active Measurement Validation of targets of interest. Provides the signal excess measurements, peak frequency, trend analysis and							
<b>FY 2015 Plans:</b> Active Measurement Validation of targets of interest. Provides the signal excess measurements, peak frequency, trend analysis and	· · · · · · · · · · · · · · · · · · ·						
Title: Product Development			9.820	3.539	3.46		
	Art	icles:	-	-	-		
FY 2013 Accomplishments:							

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
1	R-1 Program Element (Number/Name) PE 0303354N / ASW Systems Development	- , (	umber/Name) orne Acoustic Intelligence (AAI)
	- MIP		<u> </u>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Initiated Active Target Strength Sensor development program.			
FY 2014 Plans: Continue Active Target Strength Sensor development program.			
FY 2015 Plans: Continue Active Target Strength Sensor development program.			
Accomplishments/Planned Programs Subtotals	12.077	4.908	6.495

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

N/A

### **Remarks**

## 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

Military Intelligence Program (MIP).

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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 0303354N I ASW Systems Development - MIP									Project (Number/Name) t 0490 I Airborne Acoustic Intelligence (AAI)							(AAI)			
Proj: 0490 Airborne Acoustic Intelligence (AAI)	FY 2013 FY 2014						'	FY 2	015			FY	201	6		FY 2	2017		FY 2018 FY 2019						9				
	1Q	2Q	3Q	40	1Q	2Q	30	40	1Q	2	Q 30	40	10	2 2Q	30	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	30	4Q	
Systems Engineering				-						$\neg$			$\top$														$\neg$		
P-3/P-8 Avionics Suite	_											P-3/	/P-8	Avior	nics	Suite	1												
Sys Eng Tactical Acoustic Processor (TAPS)																													
	<u> </u>													TAPS	S														
Product Development												7	7		1	1													
	<u> </u>	Data Collection and Analysis																											
									Active	Tar	get Si	treng	gth s	enso	r pro	ocessi	ing o	devel	opm	ent									
Test & Evaluation														1		In	itegi	rated	Test	ting			]	]			T		
Deliveries			P3/P8 Avionics	5					Airborn Avionic																				
Prototypes						48 <b>▼</b>				3				78 ▼				234 <b>V</b>				198 <b>V</b>				180	)		
2015PB - 0303354N - 0490																													

PE 0303354N: ASW Systems Development - MIP Navy