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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2016 Navy	<b>Date:</b> February 2015
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<b>Appropriation/Budget Activity</b>	<b>R-1 Program Element (Number/Name)</b>											
1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	PE 0604373N / Airborne Mine Countermeasures (AMCM)											
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	564.550	109.486	38.941	11.647	-	11.647	29.476	21.084	16.523	16.876	Continuing	Continuing
0529: <i>ABN Mine Hunt System</i>	270.881	40.862	13.319	-	-	-	-	-	-	-	-	325.062
2047: <i>ALMDS</i>	154.949	34.918	10.140	4.084	-	4.084	9.063	5.176	6.040	6.166	Continuing	Continuing
2473: <i>Airborne Mine Neutralization System</i>	114.838	27.764	7.507	5.921	-	5.921	6.621	3.160	-	-	-	165.811
4026: <i>Strat Into Medal, Tactics &amp; Trng Organic Force</i>	19.823	5.062	7.094	1.642	-	1.642	12.345	11.462	9.535	9.742	Continuing	Continuing
9179: <i>Surf Navy Integ Undersea Tactical Tech</i>	4.059	0.880	0.881	-	-	-	1.447	1.286	0.948	0.968	Continuing	Continuing

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

This program element provides resources to develop advanced mine countermeasures equipment systems to counter known and projected mine threats. The mine countermeasures systems provide mobile, quick reaction forces capable of land or sea-based minehunting and minesweeping operations worldwide. Resources are for developing and deploying advanced mine-hunting and minesweeping systems and the intelligence and oceanographic capabilities that will enable mine warfare superiority. Tactics and techniques used vary across a diversity of environments and threats, including both asymmetric and emerging. Resources provide for systems and support of mine warfare systems, maritime systems, and expeditionary systems to allow for continuous operations of the Navy's warships and support vessels, other military vessels, and commercial vessels. Core capabilities include forward presence, deterrence, sea control, power projection, maritime security, humanitarian assistance and disaster response to maintain freedom of the seas. Capability improvements include conducting minefield reconnaissance (mine density and location) at high area search rates, improving detection capability, decreasing sensor false alarm rates, reducing or eliminating post-mission analysis detect, classify, identify, decide time, improving neutralization time, improving network communications, automatic target recognition, and achieving in-stride detect-to-engage capability. Concept of operations includes development of cooperative, unmanned, modular systems; the establishment of capable networked command and control systems; and standing up an accurate and interactive environmental system with the ability to form and disseminate a Common Environmental Picture. Other areas of importance include search and rescue; surface fire support; ASW operations; protection/offense against small craft/vehicles; air to air operations; very shallow water MCM; swimmer defense and torpedo defense. Efforts benefit the MCM force by transforming the Navy from the platform-centered legacy set of systems to a capability-centered force that is distributed, networked, and able to provide unique maritime influence and access across the entire maritime domain.

The Airborne Mine Countermeasures (AMCM) programs will provide detection, classification, localization, identification, neutralization, and influence clearance capabilities. The "Next Generation" AMCM systems will provide capabilities to the Littoral Combat Ship (LCS) Mine Countermeasure Mission (MCM) Package. This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy				Date: February 2015	
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0604373N I Airborne Mine Countermeasures (AMCM)			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	109.354	38.941	68.797	-	68.797
Current President's Budget	109.486	38.941	11.647	-	11.647
Total Adjustments	0.132	-	-57.150	-	-57.150
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	3.721	-			
• SBIR/STTR Transfer	-3.590	-			
• Program Adjustments	-	-	-29.600	-	-29.600
• Rate/Misc Adjustments	0.001	-	-27.550	-	-27.550
Change Summary Explanation					
The FY 2016 funding request was reduced by \$11.8 million to account for the availability of prior year execution balances.					
Program Adjustments:					
FY14 \$132K in Total Adjustments: Reprogramming +\$6,600K ALMDS early deployment(from CMS), -\$2,879K Realigned to RMS, SBIR -\$3,590K, and -\$1K Misc Adjustments.					
FY16 -\$45,187 in Total Adjustments: Reprogramming -29,600K AMNS Near Surface and ALMDS adjustments, -\$9,571K AN/AQS-20 realignment to PE 0603502N, -\$6,000K execution and -\$16K- misc adjustments.					

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 0529 / ABN Mine Hunt System			
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
0529: ABN Mine Hunt System	270.881	40.862	13.319	-	-	-	-	-	-	-	-	325.062
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

This project contains resources for systems, subsystems, and sensors integrated for use with multiple platforms for mine detection, classification, localization, identification, neutralization, and influence clearance capabilities. Research, development, test, and evaluation efforts are for increasing capability by decreasing time required to conduct Mine Countermeasures (MCM) operations, ensuring low risk to naval and commercial vessels, and removing the man from the minefield. Increased capability includes conducting minefield reconnaissance (mine density and location) at high area search rates, improving detection capability, decreasing sensor false alarm rates, and reducing post-mission analysis for detection, classification, identification, and neutralization.

The AN/AQS-20A is a mine hunting and identification system with acoustic and optic sensors housed in an underwater towed body. The acoustic sensors are designed for the detection, classification and localization of bottom, close-tethered, and volume targets in a single pass. The Electro-Optic Identification Device (EOD) replaces the Volume Search Sonar (VSS) for identification of bottom targets. The system will be deployed from the Littoral Combat Ship (LCS) as part of the MCM Mission Package (MP). The AN/WLD-1(V)2 Remote Minehunting System (RMS) Remote Multi-Mission Vehicle (RMMV) tows the AN/AQS-20A.

The AN/AQS-20A Block 1 is undergoing a Pre-Planned Product Improvement (P3I) program to upgrade the Forward Looking Sonar (FLS) and Side-Looking Sonars (SLS) to improve Probability of Classifying a Mine-like object as a Mine, False Classification, and Depth Localization performance to meet Block 2 performance. The Forward Looking Sonar will be replaced with a new High Frequency Wideband design. The SLS will be replaced with a new Multi-function SLS with Synthetic Aperture Sonar (SAS) capability, as well as, improved signal processing and Signal to Noise Ratio. The Block 1 P3I program began in FY12 and will complete in FY15. All Block 1 units will be upgraded to meet Block 2 capability. Award and management of the competitive contract for Low Rate Initial Production (LRIP)/Full Rate Production (FRP) Block 2 units began in FY14 and continues through FY18. Materiel Reliability, obsolesence, and performance Engineering Change Proposal (ECP) efforts continue beyond FY20.

The AN/AQS-20A will support LCS Mine Countermeasures Mission Package (MCM MP) Developmental Testing (DT) and Initial Operational Test and Evaluation (IOT&E) in FY15. Materiel Reliability and obsolescence Engineering Change Proposals (ECPs) efforts continue through FY15 supporting AN/AQS-20A and LCS MCM MP FY15 Developmental Testing (DT) and Initial Operational Test and Evaluation (IOT&E) and beyond.

The AN/AQS-24 Mine Hunting and Identification system is comprised of acoustic sensors housed in an underwater towed body. The AN/AQS-24 Volume Search upgrade will be developed, tested, and integrated for use with multiple platforms including the MH-53E Helicopter. This capability is in support of an Urgent Operational Need (UON) and will improve the rapid detection and locaization of volume sea mines. RDT&E funding is completed - FY14

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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 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 0529 / ABN Mine Hunt System	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: AN/AQS-20A Product Development:	16.208	6.799	-	-	-
	Articles: -	-	-	-	-
FY 2014 Accomplishments:					
- Completed fabrication and subsystem testing of two FLS.					
- Initiated Materiel Reliability improvement Engineering Change Proposals (ECPs) on Electro-Optics Identification (EOID), as well as, power amplifiers for Volume Search Sonar (VSS) and FLS.					
- Completed fabrication and subsystem testing of improved SLS.					
- Integrated improved sensors into Engineering Development Models (EDMs).					
- Initiated and completed RMMV version 6.0 integration with Block 2 EDMs.					
- Delivered Block 2 EDMs for Developmental Testing.					
- Procured spares to support DT and IOT&E.					
FY 2015 Plans:					
- Continue Materiel Reliability Improvement ECPs and incorporate into systems for IOT&E.					
- Upgrade Block 1 maintenance trainers to Block 2 configuration.					
- Complete Block 1 P3I Technical Data Package (TDP)					
- Initiate SAS Acoustic Identification development.					
FY 2016 Base Plans:					
-Realigned to Program Element 0603502N.					
FY 2016 OCO Plans:					
N/A					
Title: AN/AQS-20A Support:	2.078	2.100	-	-	-
	Articles: -	-	-	-	-
Description: RDT&E Articles Quantity					
FY 2014 Accomplishments:					
- Initiated updates to Block 2 logistics products.					
- Provided ongoing technical engineering support to Block 1 and Block 2.					
- Conducted repairs to Block 2 EDMs following DT activities.					
FY 2015 Plans:					
- Provide ongoing technical engineering support to AN/AQS-20A.					

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Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 0529 / ABN Mine Hunt System		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
<div>- Complete updates to Block 2 logistics products based on the results of DT.</div> <div>- Conduct repairs to AN/AQS-20A following TECHEVAL activities.</div> <div>FY 2016 Base Plans:</div> <div>-Realigned to Program Element 0603502N.</div> <div>FY 2016 OCO Plans:</div> <div>N/A</div>						
<div>Title: AN/AQS-20A Test and Evaluation</div> <div>Articles:</div> <div>Description: RDT&amp;E Articles Quantity</div> <div>FY 2014 Accomplishments:</div> <div>- AN/AQS-20A Block 1 successfully supported 385 Total System Operating Hours over 18 missions during the RMMV RGP v4.2 Developmental Test (DT-IIG).</div> <div>- Updated RMS Test and Evaluation Master Plan (TEMP) with AN/AQS-20A Block 2 requirements.</div> <div>- Participated in LCS MCM Mission Module DT events.</div> <div>- Conducted integration and validation testing of the 3 Block 2 EDMs from Research Vessel Athena and the RMMV.</div> <div>- Participated in RMS (RMMV v6.0 and AN/AQS-20A) Contractor and Developmental Testing.</div> <div>FY 2015 Plans:</div> <div>- Participate in RMS (RMMV v6.0 and AN/AQS-20A) Developmental and Integrated Testing.</div> <div>- Conduct Technical Evaluation (TECHEVAL) and IOT&amp;E of AN/AQS-20A.</div> <div>- Support LCS MCM MP TECHEVAL and IOT&amp;E.</div> <div>FY 2016 Base Plans:</div> <div>-Realigned to Program Element 0603502N.</div> <div>FY 2016 OCO Plans:</div> <div>N/A</div>		3.606	3.100	-	-	-
		-	-	-	-	-
<div>Title: AN/AQS-20A Management Services</div> <div>Articles:</div>		1.288	1.320	-	-	-
		-	-	-	-	-

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Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 0529 / ABN Mine Hunt System		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
<p><b>Description:</b> RDT&amp;E Articles Quantity</p> <p><b>FY 2014 Accomplishments:</b></p> <ul style="list-style-type: none"><li>- Updated Acquisition Program Baseline (APB).</li><li>- Continued to provide planning and management for the AN/AQS-20A program.</li><li>- Awarded and managed the competitive contract for Low Rate Initial Production (LRIP) /Full Rate Production (FRP) Block 2 units.</li><li>- Provided Program Office travel support.</li></ul> <p><b>FY 2015 Plans:</b></p> <ul style="list-style-type: none"><li>- Continue to provide planning and management for the AN/AQS-20A program to include the competitive contract.</li><li>- Update acquisition documentation such as the Acquisition Strategy and Plan in support of procuring Block 1 P3I kits and follow-on maintenance, and support.</li><li>- Provide Program Office travel support.</li></ul> <p><b>FY 2016 Base Plans:</b></p> <ul style="list-style-type: none"><li>-Realigned to Program Element 0603502N.</li></ul> <p><b>FY 2016 OCO Plans:</b></p> <p>N/A</p>						
<p><b>Title:</b> AN AQS-24 Product Development</p> <p><b>Articles:</b></p> <p><b>FY 2014 Accomplishments:</b></p> <p>Upgraded the fielded AN/AQS-24 systems by integrating a volume search capability (AN/AQS-24C).</p> <p><b>FY 2015 Plans:</b></p> <p>N/A</p> <p><b>FY 2016 Base Plans:</b></p> <p>N/A</p> <p><b>FY 2016 OCO Plans:</b></p> <p>N/A</p>		10.791 -	- -	- -	- -	- -
<p><b>Title:</b> AN AQS-24 Test and Evaluation</p>		5.090	-	-	-	-

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Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 0529 / ABN Mine Hunt System	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Tested the AN/AQS-24C system volume search capability on the MH-53E Helicopter.					
FY 2015 Plans: N/A					
FY 2016 Base Plans: N/A					
FY 2016 OCO Plans: N/A					
Title: AN AQS-24 Program Management	0.250	-	-	-	-
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Provided management support and contract oversight for the development of the AN/AQS-24C Volume Search Capability					
FY 2015 Plans: N/A					
FY 2016 Base Plans: N/A					
FY 2016 OCO Plans: N/A					
Title: AN AQS-24 Support	1.551	-	-	-	-
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Provided Engineering and Logistical support for the initial fielding of the AN/AQS-24C Volume Search Capability					
FY 2015 Plans: N/A					
FY 2016 Base Plans:					

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Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 0529 / ABN Mine Hunt System				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A												
FY 2016 OCO Plans: N/A												
Accomplishments/Planned Programs Subtotals								40.862	13.319	-	-	-
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 4248: Airborne Mine Countermeasure (AN/AQS-20A/24)	42.500	19.524	1.771	-	1.771	18.819	7.343	-	-	Continuing	Continuing	
• OPN 1601: LCS MCM Mission Modules (AN/AQS-20A)	16.196	8.244	85.742	-	85.742	53.191	46.551	49.993	-	Continuing	Continuing	
• RDT&E 0603502N: Surface & Shallow Water MCM	-	-	9.571	-	9.571	9.888	4.140	4.285	4.371	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
AN/AQS-20A LRIP procurement continues following Block 2 competitive contract award in FY14. FRPDR will occur in second quarter FY16. Procure P3I kits to upgrade all Block 1 units to meet Block 2 capability.												
AN/AQS-24C contract award will occur 3Q FY14 and integrate and test volume search upgrade kits.												
E. Performance Metrics												
AN/AQS-20A Block 2 competitive award in FY14.												
AN/AQS-20A - Successfully support LCS MCM MP IOT&E in FY15.												



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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 0529 / ABN Mine Hunt System					
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
AN/AQS-20A Hardware/ Software Development Q-20 on the H-53	SS/CPIF	Raytheon : Portsmouth, RI	31.120	-		-		-		-		-	-	31.120	-
AN/AQS-20A Hardware/ Software Development Q-20A on the H-60	C/CPFF	Raytheon : Portsmouth, RI	60.150	-		-		-		-		-	-	60.150	-
AN/AQS-20A Hardware/ Software Development	WR	NSWC, PC : Panama City FL	14.578	-		-		-		-		-	-	14.578	-
AN/AQS-20A Hardware/ Software Development	C/FP	Northrop Grumman : Melbourne, FL	4.572	-		-		-		-		-	-	4.572	-
AN/AQS-20A P3I	C/CPFF	Raytheon : Portsmouth, RI	16.441	10.263	Oct 2013	4.673	Nov 2014	-		-		-	-	31.377	-
AN/AQS-20A P3I	C/CPFF	ARL/UT : Austin, TX	7.767	2.658	Oct 2013	0.450	Dec 2014	-		-		-	-	10.875	-
AN/AQS-20A P3I	WR	NSWC, PC : Panama City FL	3.732	1.085	Oct 2013	0.476	Nov 2014	-		-		-	-	5.293	-
AN/AQS-24 Hardware/ Software Development	C/CPIF	Northrop Grumman : Annapolis, MD	0.000	6.072	Nov 2013	-		-		-		-	-	6.072	-
AN/AQS-24 Hardware/ Software Development	C/CPFF	ARL/UT : Austin, TX	0.000	4.191	Nov 2013	-		-		-		-	-	4.191	-
AN/AQS-24 Hardware/ Software Development	WR	NSWC, PC : Panama City, FL	0.000	0.528	Nov 2013	-		-		-		-	-	0.528	-
AN/AQS-20A Materiel Reliability ECP Development	C/CPFF	Raytheon : Portsmouth, RI	0.000	2.075	Oct 2013	1.000	Nov 2014	-		-		-	-	3.075	-
AN/AQS-20A P3I	WR	Naval Research Lab : Stennis Space Center, MS	0.225	0.127	Oct 2013	0.200	Nov 2014	-		-		-	-	0.552	-
Subtotal			138.585	26.999		6.799		-		-		-	-	172.383	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2016 Navy</b>												<b>Date: February 2015</b>			
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)						<b>Project (Number/Name)</b> 0529 / ABN Mine Hunt System			
<b>Support (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
AN/AQS-20A Engineering Services	WR	NSWC, PC : Panama City, FL	31.570	1.600	Oct 2013	2.100	Nov 2014	-		-		-	-	35.270	-
AN/AQS-20A Engineering Services	C/CPFF	Raytheon : Portsmouth, RI	3.686	-		-		-		-		-	-	3.686	-
AN/AQS-20A Engineering Services	Various	Various : Various	54.018	-		-		-		-		-	-	54.018	-
AN/AQS-20A Engineering Services 2	SS/CPIF	Raytheon : Portsmouth, RI	3.464	-		-		-		-		-	-	3.464	-
AN/AQS-20A ILS Function	WR	NSWC, PC : Panama City FL	6.368	0.478	Oct 2013	-		-		-		-	-	6.846	-
AN/AQS-20A ILS Function	SS/CPIF	Raytheon : Portsmouth, RI	1.546	-		-		-		-		-	-	1.546	-
AN/AQS-20A ILS Function	Various	Various : Various	0.981	-		-		-		-		-	-	0.981	-
AN/AQS-20A Engineering Services	WR	NSWC/CD : Carderock, MD	0.500	-		-		-		-		-	-	0.500	-
AN/AQS-24 Engineering Services/ILS Functions	C/CPIF	Northrop Grumman : Annapolis, MD	0.000	0.250	Nov 2013	-		-		-		-	-	0.250	-
AN/AQS-24 Engineering Services/ILS Functions	C/CPFF	ARL/UT : Austin, TX	0.000	0.741	Nov 2013	-		-		-		-	-	0.741	-
AN/AQS-24 Engineering Services/ILS Functions	WR	NSWC, PC : Panama City, FL	0.000	0.560	Nov 2013	-		-		-		-	-	0.560	-
<b>Subtotal</b>			102.133	3.629		2.100		-		-		-	-	107.862	-
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
AN/AQS-20A T&E Functions	WR	COTF : Norfolk, VA	0.000	0.200	Oct 2013	0.300	Dec 2014	-		-		-	-	0.500	-
AN/AQS-20A T&E Functions	WR	NSWC, PC : Panama City FL	18.115	3.106	Oct 2013	2.600	Nov 2014	-		-		-	-	23.821	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy** **Date:** February 2015

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)	<b>Project (Number/Name)</b> 0529 / ABN Mine Hunt System
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<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
AN/AQS-20A T&E Functions	C/CPFF	Raytheon : Portsmouth, RI	4.134	0.300	Oct 2013	0.100	Nov 2014	-		-		-	-	4.534	-
AN/AQS-20A T&E Functions	Various	Various : Various	1.583	-		-		-		-		-	-	1.583	-
AN/AQS-24 T&E Functions	WR	NSWC, PC : Panama City, FL	0.000	1.700	Nov 2013	-		-		-		-	-	1.700	-
AN/AQS-24 T&E Functions	WR	NAVAIR : Pax River, MD	0.000	0.290	Nov 2013	-		-		-		-	-	0.290	-
AN/AQS-24 T&E Functions	WR	COTF : Norfolk, VA	0.000	1.600	Nov 2013	-		-		-		-	-	1.600	-
AN/AQS-24 T&E Functions	C/CPIF	Northrop Grumman : Annapolis, MD	0.000	1.000	Nov 2013	-		-		-		-	-	1.000	-
AN/AQS-24 T&E Functions	C/CPFF	ARL/UT : Austin, TX	0.000	0.500	Nov 2013	-		-		-		-	-	0.500	-
AN/AQS-20A T&E Functions	C/CPFF	ARL/UT : Austin, TX	0.000	-		0.100	Dec 2014	-		-		-	-	0.100	-
<b>Subtotal</b>			23.832	8.696		3.100		-		-		-	-	35.628	-

**Remarks**

COFT - Naval Command Operational Test and Evaluation Force

<b>Management Services (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
AN/AQS-20A Management Services	TBD	Various : Various	5.732	1.248	Oct 2013	1.280	Dec 2014	-		-		-	-	8.260	-
AN/AQS-20A Travel	TBD	Various : Various	0.587	0.040	Nov 2013	0.040	Jan 2015	-		-		-	-	0.667	-
AN/AQS-20A Acquisition Workforce Fund	Various	Various : Various	0.012	-		-		-		-		-	-	0.012	-
AN/AQS-24 Program Management	WR	NSWC, PC : Panama City, FL	0.000	0.250	Nov 2013	-		-		-		-	-	0.250	-
Need Item Text	C/BA	Not Specified : Not Specified	0.000	-		-		-		-		-	-	-	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2016 Navy												<b>Date:</b> February 2015		
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)				<b>Project (Number/Name)</b> 0529 / ABN Mine Hunt System				

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
<b>Subtotal</b>			6.331	1.538		1.320		-		-		-	-	9.189	-

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	270.881	40.862	13.319	-	-	-	-	325.062	-

**Remarks**

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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 0604373N / Airborne Mine

Countermeasures (AMCM)

Project (Number/Name)

0529 / ABN Mine Hunt System

Proj 0529	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
AN/AQS-20A Development Phase																												
	AN/AQS-20A Block 1 P3I																											
	Block 1 & 2 ECP Development																											
AN/AQS-20A Test & Evaluation Milestones																												
AN/AQS-20A Production Milestones																												
AN/AQS-20A Low Rate Initial Production (LRIP)																												

2016PB - 0604373N - 0529

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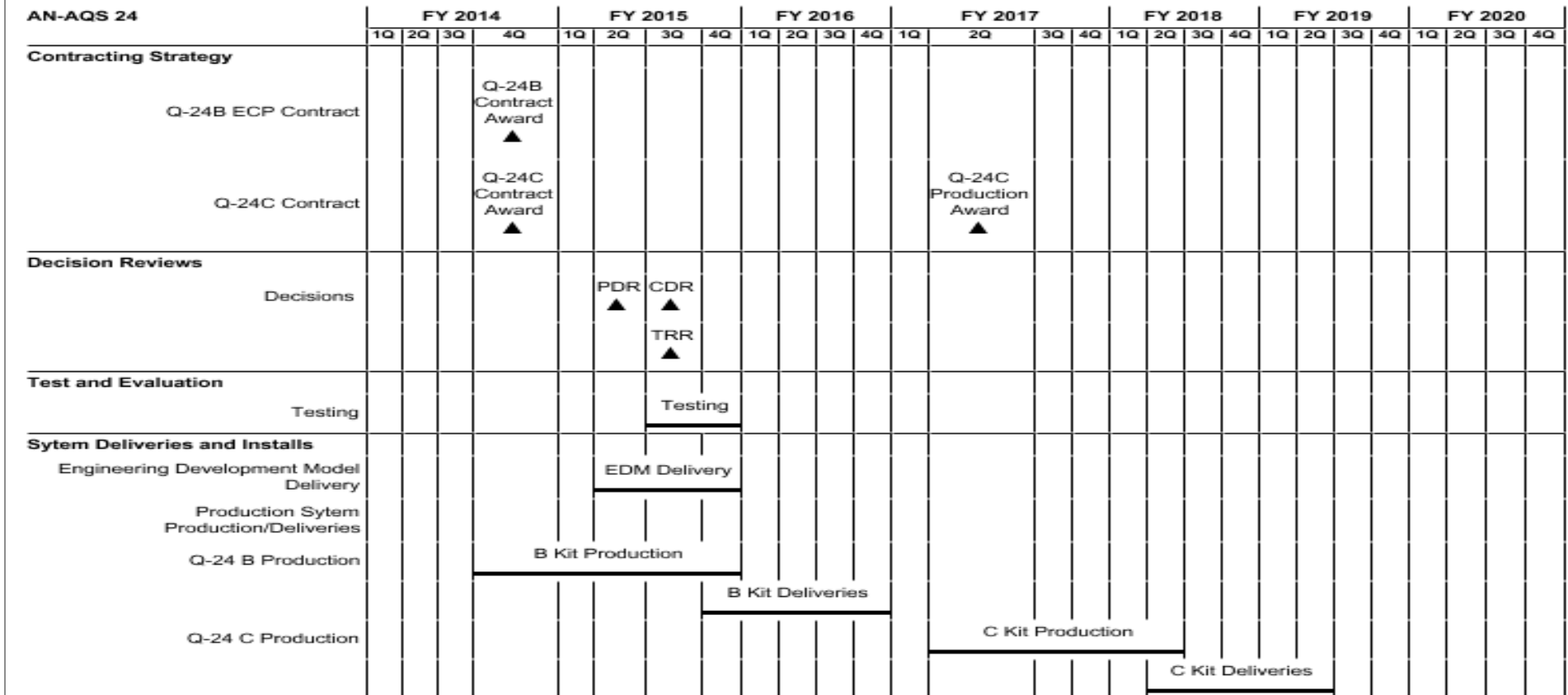
**Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy**

**Date:** February 2015

**Appropriation/Budget Activity**  
1319 / 5

**R-1 Program Element (Number/Name)**  
PE 0604373N / Airborne Mine  
Countermeasures (AMCM)

**Project (Number/Name)**  
0529 / ABN Mine Hunt System



2016PB - 0604373N - 0529

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)	<b>Project (Number/Name)</b> 0529 / ABN Mine Hunt System	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 0529</b>				
AN/AQS-20A Development Phase: AN/AQS-20A Block 1 P3I	1	2014	4	2015
AN/AQS-20A Development Phase: AN/AQS-20A Materiel Reliability, Obsolescence, and Performance ECP Development (Block 1 & 2)	1	2014	4	2015
AN/AQS-20A Test & Evaluation Milestones: AN/AQS-20A Littoral Combat Ship Based LCS MCM Mission Module TECHEVAL	3	2015	3	2015
AN/AQS-20A Test & Evaluation Milestones: AN/AQS-20A Littoral Combat Ship Based LCS MCM Mission Module IOT&E	3	2015	4	2015
AN/AQS-20A Test & Evaluation Milestones: RMS version 6.0 Contractor Testing (CT)/ Developmental Test (DT)/Integrated Test (IT)	4	2014	1	2015
AN/AQS-20A Test & Evaluation Milestones: Littoral Combat Ship Mine Countermeasure Mission Package Developmental Testing	4	2014	1	2015
AN/AQS-20A Production Milestones: AN/AQS-20A Low Rate Initial Production (LRIP): AN/AQS-20A Block 2 Low Rate Initial Production (LRIP) Basic Award (3 Units)	2	2014	2	2014
AN/AQS-20A Production Milestones: AN/AQS-20A Low Rate Initial Production (LRIP): AN/AQS-20A Block 2 Low Rate Initial Production (LRIP) Basic Award (2 Units)	4	2014	4	2014
AN/AQS-20A Production Milestones: AN/AQS-20A Low Rate Initial Production (LRIP): AN/AQS-20A Block 2 Low Rate Initial Production (LRIP) Option 1 Award (1 Unit)	1	2015	1	2015
<b>AN-AQS 24</b>				
Contracting Strategy: Q-24B ECP Contract: Q-24B Contract Award	4	2014	4	2014
Contracting Strategy: Q-24C Contract: Q-24C Contract Award	4	2014	4	2014
Contracting Strategy: Q-24C Contract: Production Award	2	2017	2	2017
Decision Reviews: Decisions: Preliminary Design Review	2	2015	2	2015
Decision Reviews: Decisions: Critical Design Review	3	2015	3	2015

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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 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 0529 / ABN Mine Hunt System
		Start		End
Events by Sub Project		Quarter	Year	Quarter Year
Decision Reviews: Decisions: Test Readiness Review		3	2015	3 2015
Test and Evaluation: Testing: Testing		3	2015	4 2015
Sytem Deliveries and Installs: Engineering Development Model Delivery: Engineering Development Model Delivery		2	2015	4 2015
Sytem Deliveries and Installs: Q-24 B Production: B Kit Production		4	2014	4 2015
Sytem Deliveries and Installs: Q-24 B Production: B Kit Deliveries & Integration		4	2015	4 2016
Sytem Deliveries and Installs: Q-24 C Production: C Kit Production		2	2017	2 2018
Sytem Deliveries and Installs: Q-24 C Production: C Kit Deliveries & Integration		2	2018	2 2019



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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2047 / ALMDS			
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
2047: ALMDS	154.949	34.918	10.140	4.084	-	4.084	9.063	5.176	6.040	6.166	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The Airborne Laser Mine Detection System (ALMDS), designation AN/AES-1, is a light detection and ranging (LIDAR) Airborne Mine Countermeasures (AMCM) high area coverage system that detects, classifies, and localizes near-surface moored sea mines. The system is deployed from the MH-60S helicopter and will provide Organic Airborne Mine Countermeasures (OAMCM) defense to the battle force. The system represents a capability that does not exist in the current Mine Countermeasures (MCM) inventory.												
ALMDS Pre-planned Product Improvement (P3I) began in 2013.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Hardware and Software technology development and demonstration/Engineering Services: <div>Articles:</div> Description: Engineering, oversight, and support of engineering efforts to meet baseline performance and P3I performance.  FY 2014 Accomplishments: Provided OA phase B, DT Phase 4 period 2 support. Continued P3I development and implementation (False Alarm Algorithms, false classification density, dual slope, laser tail, laser pulse width and VSW). Continued engineering services, pod repair, and maintenance. Supported ALMDS early deployment efforts.  FY 2015 Plans: Provide LCS Independence MCM IOT&E support. Continue to provide engineering services, pod repair, and maintenance. Continue P3I development (False Alarm Algorithms, false classification density, dual slope, laser tail, laser pulse width and VSW).  FY 2016 Base Plans: Continue to provide engineering services, pod repair, and maintenance. Conduct FOT&E on LCS MCM variant.  FY 2016 OCO Plans: N/A								22.989	6.582	1.615	-	1.615
								-	-	-	-	-
Title: Integrated Logistics Support:								0.940	0.834	0.595	-	0.595

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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 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 2047 / ALMDS		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Articles:		-	-	-	-	-
FY 2014 Accomplishments: Provided Logistics support to LRIP units, OA phase B, DT phase 4 period 2, IOC and FR PDR preparation efforts and early deployment.						
FY 2015 Plans: Provide logistics support, depot analysis to LRIP units, LCS MCM MP IOT&E support, IOC and FR PDR preparation.						
FY 2016 Base Plans: Provide logistics support, depot analysis to LRIP units, IOC and FR PDR support.						
FY 2016 OCO Plans: N/A						
Title: Testing and Evaluation:		8.486	1.745	1.102	-	1.102
Articles:		-	-	-	-	-
FY 2014 Accomplishments: Supported OA phase B, DT phase 4 period 2, environmental qualification test (EQT), early depolyment and P3I data collection flight test.						
FY 2015 Plans: Complete EQT, OA phase B, DT phase 4 period 2, and support Mine Countermeasures (MCM) Mission Package (MP) IOT&E.						
FY 2016 Base Plans: Complete LCS IOT&E/AMNS OT reports and ALMDS upgrade testing. Conduct FOT&E of LCS Mine Countermeasures (MCM) Mission Package (MP).						
FY 2016 OCO Plans: N/A						
Title: Project Management:		2.503	0.979	0.772	-	0.772
Articles:		-	-	-	-	-
Description: Completion of OA						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Navy				<b>Date:</b> February 2015	
<b>Appropriation/Budget Activity</b> 1319 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)		<b>Project (Number/Name)</b> 2047 / ALMDS	

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>
<b><i>FY 2014 Accomplishments:</i></b> Program management, financial management and contractor support.  <b><i>FY 2015 Plans:</i></b> Program management, financial management and contractor support.  <b><i>FY 2016 Base Plans:</i></b> Program management, financial management and contractor support.  <b><i>FY 2016 OCO Plans:</i></b> N/A					
<b>Accomplishments/Planned Programs Subtotals</b>	34.918	10.140	4.084	-	4.084

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
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 4248: Airborne MCM	10.237	-	2.300	-	2.300	2.300	2.300	-	-	-	113.319
• OPN 1601: LCS	7.951	16.173	16.448	-	16.448	16.728	17.062	-	-	105.764	180.126
MCM Mission Modules											
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> The program entered Production and Development Acquisition Phase following MS C in May 2005. August 2007 program authorized to meet full performance in two increments. The first LRIP lot was awarded as a new sole-source contract to the SD&D contractor in FY05. FRP will be based on Increment 1 performance. In FY14 a new competitive awarded FFP production contract is planned. This is a Fixed-Price Incentive (FPI) contract with cost and schedule incentives.											
<b>E. Performance Metrics</b> Conducted Operational Assessment (OA) Phase A in FY12. Conducted OA Phase B, Environmental Qualification Test (EQT), and Equipment Qualifications Test in FY14 . On track to support OA Phase B and DT phase 4 period 2 in FY14, and LCS MCM MP IOT&E in FY15.											

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2047 / ALMDS					
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
Hardware/Software Development	WR	NSWC PC : Panama City FL	1.958	0.942	Nov 2013	0.502	Nov 2014	0.123	Nov 2015	-		0.123	-	3.525	-
Hardware/Software Development	C/CPAF	Northrop Grumman : Melbourne, FL	30.976	10.047	Nov 2013	0.200	Nov 2014	-	Nov 2015	-		-	-	41.223	-
Hardware/Software Development	WR	NUWC NPT : VA	1.083	0.378	Nov 2013	0.453	Nov 2014	0.150	Nov 2015	-		0.150	-	2.064	-
Hardware/Software Development	WR	NSWC IH : MD	0.200	0.585	Nov 2013	0.374	Nov 2014	-		-		-	-	1.159	-
Engineering Services1	WR	NSWC PC : Panama City FL	15.511	2.626	Nov 2013	2.287	Nov 2014	0.777	Nov 2015	-		0.777	Continuing	Continuing	Continuing
Engineering Services2	C/CPAF	Northrop Grumman : Melbourne, FI	21.152	4.576	Nov 2013	0.200	Nov 2014	0.250	Nov 2015	-		0.250	-	26.178	-
Engineering Services3	WR	NUWC NPT : VA	19.337	0.785	Nov 2013	0.961	Nov 2014	0.550	Nov 2015	-		0.550	Continuing	Continuing	Continuing
Engineering Services4	MIPR	Various : Various	3.922	1.500	Nov 2013	0.944	Nov 2014	0.490	Nov 2015	-		0.490	Continuing	Continuing	Continuing
Engineering Services5	MIPR	various : Various	1.024	1.550	Nov 2013	0.661	Nov 2014	0.377	Nov 2015	-		0.377	-	3.612	-
Subtotal			95.163	22.989		6.582		2.717		-		2.717	-	-	-
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
ILS Functions1	WR	NSWC PC : Panama City FL	4.620	0.145	Nov 2013	0.634	Nov 2014	0.395	Nov 2015	-		0.395	Continuing	Continuing	Continuing
ILS Functions2	WR	Northrop Grumman : Melbourne FL	7.091	0.795	Nov 2013	0.200	Nov 2014	0.200	Nov 2015	-		0.200	Continuing	Continuing	Continuing
ILS Functions3	C/CPAF	Various/NRL Stennis : Various	1.062	-		-		-		-		-	-	1.062	-
ILS Functions4	WR	NSWC PC : Panama City FL	0.300	-		-		-		-		-	-	0.300	-
Subtotal			13.073	0.940		0.834		0.595		-		0.595	-	-	-

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2047 / ALMDS					
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
Testing and Evaluation1	C/CPAF	Northrp Grumman : Melbourne FL	15.771	1.683	Nov 2013	0.150	Nov 2014	-		-		-	Continuing	Continuing	Continuing
Testing and Evaluation2	WR	NSWC PC : Panama City FL	18.152	5.613	Nov 2013	1.595	Nov 2014	-	Nov 2015	-		-	Continuing	Continuing	Continuing
Testing and Evaluation	C/CPAF	Various : Various	1.894	1.190	Nov 2013	-		-		-		-	-	3.084	-
Testing and Evaluation	WR	NAWC AD PAX : Panama City FL	2.110	-		-		-		-		-	-	2.110	-
Subtotal			37.927	8.486		1.745		-		-		-	-	-	-
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
Management Support1	C/CPAF	NGC : Various	0.380	2.053	Nov 2013	0.100	Nov 2014	0.265	Nov 2015	-		0.265	-	2.798	-
Management Support2	WR	NSWC PC : Panama City FL	5.994	-	Nov 2013	0.879	Nov 2014	0.507	Nov 2015	-		0.507	-	7.380	-
Management Support3	WR	ARINC : Panama City FL	2.332	0.450	Nov 2013	-		-		-		-	-	2.782	-
DAWDF	Various	Various : Various	0.080	-		-		-		-		-	-	0.080	-
Subtotal			8.786	2.503		0.979		0.772		-		0.772	-	13.040	-
			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			154.949	34.918		10.140		4.084		-		4.084	-	-	-
Remarks															

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PE 0604373N: *Airborne Mine Countermeasures (AMCM)*  
Navy

R-1 Line #110

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PE 0604373N / Airborne Mine Countermeasures (AMCM)

2047 / ALMDS

ALMDS	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		
<b>Acquisition Milestones</b>																												
Full Rate Production Decision																												
Initial Operating Capability																											IOC P3I ▲	
<b>System Development</b>																												
Increment I Development		Increment I P3I Upgrade Development																										
<b>Test &amp; Evaluation Milestones</b>																												
DT Development Testing					MCM DT Ph 4 Pd 2																							
					P3I Flight Test																							
					OA Phase B																							
OT OPERATIONAL TESTING (OPEVAL)									LCS Independence Class IOT&E																			
<b>Production Milestones</b>																												
					LRIP #5 ▲																							
														</														

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)	<b>Project (Number/Name)</b> 2047 / ALMDS	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>ALMDS</b>				
Acquisition Milestones: Full Rate Production Decision: Full Rate Production Decision	2	2016	2	2016
Acquisition Milestones: Initial Operating Capability: Initial Operating Capability Independence Class	2	2016	2	2016
Acquisition Milestones: Initial Operating Capability: Initial Operating Capability P3I	4	2020	4	2020
System Development: Increment I Development: Increment I P3I Upgrade Development	1	2014	4	2019
Test & Evaluation Milestones: DT Development Testing: MCM DT PH 4 Period 2	4	2014	1	2015
Test & Evaluation Milestones: DT Development Testing: P3I Flight Test	4	2014	1	2015
Test & Evaluation Milestones: DT Development Testing: OA Phase B	4	2014	1	2015
Test & Evaluation Milestones: DT Development Testing: P3I Lab Ground Test	4	2018	1	2019
Test & Evaluation Milestones: DT Development Testing: P3I DT/IT (FOT&E)	1	2020	2	2020
Test & Evaluation Milestones: OT OPERATIONAL TESTING (OPEVAL): LCS IOT&E Independence Class	3	2015	4	2015
Test & Evaluation Milestones: OT OPERATIONAL TESTING (OPEVAL): LCS FOT&E	1	2016	2	2016
Production Milestones: LRIP 5 Units start	4	2014	4	2014
Production Milestones: Full Rate Production (FRP) Start (FRP 1)	2	2016	2	2016
Production Milestones: Full Rate Production (FRP) Start (FRP 2)	2	2017	2	2017
Production Milestones: Full Rate Production (FRP) Start (FRP 3)	2	2018	2	2018
Production Milestones: Full Rate Production (FRP) Start (FRP 4)	2	2019	2	2019
Production Milestones: Full Rate Production (FRP) Start (FRP 5)	2	2020	2	2020
Production Deliveries: LRIP 5 Units Deliveries	1	2016	2	2016
Production Deliveries: Full Rate Production Delivery Start (FRP 1)	1	2018	2	2018

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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 0604373N / Airborne Mine Countermeasures (AMCM)		Project (Number/Name) 2047 / ALMDS	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Production Deliveries: Full Rate Production Delivery Start (FRP 2)		1	2019	2	2019
Production Deliveries: Full Rate Production Delivery Start (FRP 3)		1	2020	2	2020



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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2473 / Airborne Mine Neutralization System			
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
2473: Airborne Mine Neutralization System	114.838	27.764	7.507	5.921	-	5.921	6.621	3.160	-	-	-	165.811
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Airborne Mine Neutralization System (AMNS) is a mine neutralization system, deployed from the MH-60S and MH-53E helicopters using an expendable mine neutralization device.												
The AMNS (Archerfish) will be deployed from the MH-60S helicopter with the capability to neutralize bottom and moored mines using an expendable mine neutralization device. These systems will be deployed from the Littoral Combat Ship and will provide organic airborne mine neutralization capability as part of Littoral Combat Ship (LCS) Mine Warfare Mission Module. This capability will be of critical importance in littoral zones, confined straits, choke points and the Amphibious Objective Area (AOA). Improved AMNS (iAMNS) provides an expendable, reacquisition, identification and neutralization capability against bottom, moored and Near Surface sea mines. iAMNS is deployed from both MH-60S multi mission helicopters and Unmanned Surface Vehicles (USV), or any craft of opportunity, using existing common communications, command & control and launching equipment.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)												
								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: AMNS: Development/Engineering Support								11.774	3.124	3.434	-	3.434
Articles:								-	-	-	-	-
FY 2014 Accomplishments: Developed logistics products, including training materials and interactive technical manual. Provided engineering support, including review for product development and integration.												
FY 2015 Plans: Provide engineering support, including review for product development and integration. Develop logistics products, including training materials and interactive technical manuals.												
FY 2016 Base Plans:												

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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 0604373N / Airborne Mine Countermeasures (AMCM)	Project (Number/Name) 2473 / Airborne Mine Neutralization System				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Provide engineering support, including review for product development and integration. Develop logistics products, including training materials and interactive technical manuals. <b>FY 2016 OCO Plans:</b> N/A						
<b>Title:</b> AMNS: Test and Evaluation  <b>Articles:</b>		14.068 -	3.000 -	1.225 -	- -	1.225 -
<b>FY 2014 Accomplishments:</b> Conducted DT/IT and Operational Assessment (OA) Phase A. Started OA Phase B. <b>FY 2015 Plans:</b> Complete OA phase B. Support MCM Tech Eval and LCS IOT&E / AMNS OT. <b>FY 2016 Base Plans:</b> Complete LCS IOT&E/AMNS OT reports and AMNS upgrade testing. Conduct FOT&E of LCS Mine Countermeasures (MCM) Mission Package (MP). <b>FY 2016 OCO Plans:</b> N/A						
<b>Title:</b> AMNS: Management Services  <b>Articles:</b>		1.922 -	1.383 -	1.262 -	- -	1.262 -
<b>FY 2014 Accomplishments:</b> Provide program management support, contract management and travel for AMNS <b>FY 2015 Plans:</b> Provide program management support, contract management and travel for AMNS <b>FY 2016 Base Plans:</b> Provide program management support, contract management and travel for AMNS <b>FY 2016 OCO Plans:</b> N/A						
Accomplishments/Planned Programs Subtotals		27.764	7.507	5.921	-	5.921

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2473 / Airborne Mine Neutralization System			
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 4248: Airborne MCM - AMNS (MH-60 & MH-53)	9.650	-	-	6.800	6.800	5.435	8.270	0.790	-	-	74.017
• WPN 4225: Airborne MCM - AMNS (MH-60 & MH-53)	6.286	9.479	7.766	-	7.766	17.919	15.346	11.941	10.349	-	125.228
• OPN 1601: LCS MCM Mission Modules	-	-	9.335	-	9.335	6.388	6.046	6.338	3.233	29.879	64.019
Remarks											
D. Acquisition Strategy											
AMNS: The Navy awarded six (6) LRIP's to Raytheon in September 2010. Following successful completion of Developmental Testing (Inert) on MH-60S, the Navy awarded four (4) additional LRIP units to Raytheon in September 2011. The Navy awarded four (4) additional LRIP units to Raytheon in March - May 2014. Following a successful OT on an MH-60S, FRP is planned for FY16. The Navy has awarded a sole source contract to BAE for neutralizer procurements.											
E. Performance Metrics											
Successfully complete Operational Test (OT) and receive Full Rate Production Decision approval.											

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2473 / Airborne Mine Neutralization System					
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
Hardware/Software Development	Various	Various : Various	3.359	-		-		-		-		-	-	3.359	-
Hardware/Software Development	WR	NSWC PC : Panama City, FL	3.447	3.659	Nov 2013	1.256	Nov 2014	0.190	Nov 2015	-		0.190	3.965	12.517	-
Hardware/Software Development	C/CPAF	Raytheon : Portsmouth, RI	18.445	6.374	Nov 2013	1.868	Nov 2014	0.253	Nov 2015	-		0.253	4.760	31.700	-
Hardware/Software Development	SS/CPIF	Lockheed Martin : Syracuse, NY	3.331	-		-		-		-		-	-	3.331	-
iAMNS Development	C/CPIF	TBD : TBD	0.000	-		-		-		-		-	-	-	-
(Near Surface) Hardware/Software Development	WR	NUWC, NPT : Newport, RI	4.950	1.741	Nov 2013	-		-		-		-	-	6.691	-
(Near Surface) Hardware/Software Development	C/CPIF	Raytheon : Portsmouth, RI	4.033	-		-		-		-		-	-	4.033	-
Subtotal			37.565	11.774		3.124		0.443		-		0.443	8.725	61.631	-
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
Development Test & Evaluation	SS/CPFF	Lockheed Martin : Syracuse, NY	1.254	-		-		-		-		-	-	1.254	-
Operational Test & Evaluation	SS/CPFF	Lockheed Martin : Syracuse, NY	0.767	-		-		-		-		-	-	0.767	-
Test Assets	C/CPIF	Raytheon : Portsmouth, RI	3.310	-		-		-		-		-	-	3.310	-
(AMNS) Development Test & Evaluation	WR	NSWC, PC : Panama City, FL	34.303	3.863	Nov 2013	-		1.000	Nov 2015	-		1.000	0.125	39.291	-
(AMNS) Development Test & Evaluation	C/CPIF	Raytheon : Portsmouth, RI	14.045	3.123	Nov 2013	-		1.000	Nov 2015	-		1.000	0.375	18.543	-
(AMNS) Operational Test & Evaluation	WR	COTF : Norfolk, VA	9.288	7.082	Nov 2013	3.000	Nov 2014	2.216	Nov 2015	-		2.216	0.125	21.711	-

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 2473 / Airborne Mine Neutralization System					
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
Subtotal			62.967	14.068		3.000		4.216		-		4.216	0.625	84.876	-
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
iAMNS Management Support	C/BA	NSWC PC : NSWC PC	0.000	-		0.600	Nov 2014	0.200	Nov 2015	-		0.200	0.181	0.981	-
(AMNS) Program Management Support	C/CPFF	Various : Various	6.707	0.221	Nov 2013	0.300	Nov 2014	0.327	Nov 2015	-		0.327	-	7.555	-
(AMNS) Program Management Support	C/CPIF	Raytheon : Portsmouth, RI	0.595	1.401	Nov 2013	0.296	Nov 2014	0.462	Nov 2015	-		0.462	0.250	3.004	-
(AMNS) Program Management Support	Various	Field Activity : Various	1.783	0.250	Nov 2013	0.146	Nov 2014	0.273	Nov 2015	-		0.273	-	2.452	-
(AMNS) Travel	Allot	NAVSEA : Washington, DC	0.068	0.050	Nov 2013	0.041	Nov 2014	-		-		-	-	0.159	-
DAWDF	Sub Allot	NAVSEA : Washington, DC	5.153	-		-		-		-		-	-	5.153	-
Subtotal			14.306	1.922		1.383		1.262		-		1.262	0.431	19.304	-
			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			114.838	27.764		7.507		5.921		-		5.921	9.781	165.811	-
Remarks															

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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 0604373N / Airborne Mine Countermeasures (AMCM)

Project (Number/Name)

2473 / Airborne Mine Neutralization System

AMNS	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
<b>Acquisition Milestones</b>																												
AMNS Full Rate Production Decision										FRPD																		
Initial Operational Capability										IOC Independence Class																		
<b>System Development</b>																												
AMNS System Development																												
<b>Test &amp; Evaluation Milestones</b>																												
AMNS Development Testing (MH-60s)																												
AMNS Operational Testing (MH-60s)																												
<b>Production Milestones</b>																												
<b>Production Deliveries</b>																												

2016PB - 0604373N - 2473

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)	<b>Project (Number/Name)</b> 2473 / Airborne Mine Neutralization System	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>AMNS</b>				
Acquisition Milestones: AMNS Full Rate Production Decision: AMNS FRPD	2	2016	2	2016
Acquisition Milestones: Initial Operational Capability: Initial Operational Capability Independence Class	2	2016	2	2016
System Development: AMNS System Development: AMNS System Development	1	2014	2	2015
System Development: AMNS System Development: AMNS System Upgrade Development	1	2016	4	2018
Test & Evaluation Milestones: AMNS Development Testing (MH-60s): DT/IT	1	2014	3	2014
Test & Evaluation Milestones: AMNS Operational Testing (MH-60s): Operational Assessment	3	2014	1	2015
Test & Evaluation Milestones: AMNS Operational Testing (MH-60s): IOT&E Independence Class	3	2015	4	2015
Test & Evaluation Milestones: AMNS Operational Testing (MH-60s): FOT&E LCS	1	2016	2	2016
Production Milestones: AMNS LRIP (FY13)	2	2014	2	2014
Production Milestones: AMNS LRIP (FY14)	3	2014	3	2014
Production Milestones: AMNS FRP (FY16)	3	2016	3	2016
Production Milestones: AMNS FRP (FY17)	3	2017	3	2017
Production Milestones: AMNS FRP (FY18)	3	2018	3	2018
Production Milestones: AMNS FRP (FY19)	3	2019	3	2019
Production Deliveries: Production Deliveries	1	2014	4	2020

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 4026 / Strat Into Medal, Tactics & Trng Organic Force			
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
4026: Strat Into Medal, Tactics & Trng Organic Force	19.823	5.062	7.094	1.642	-	1.642	12.345	11.462	9.535	9.742	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The C4I, Tactics, Mission Planning (CTMP), and Post-Mission Analysis (PMA) program began in FY97 as an initiative to provide near-real-time data linking of mine sensor data between the MH-53E aircraft and ship- and/or shore-based command centers. CTMP evolved into both developing MEDAL modules for each "Next Generation" system and developing "Next Generation" Tactics. Additionally, CTMP provides threat data and system requirements and capabilities to the MEDAL software development effort. Finally, CTMP develops Networked Sensor Analysis for Mine Warfare (NSAM) as a MOSA compliant plug-in architecture of common post-mission analysis tools for "Next Generation" systems.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Hardware/Software Development  Articles:  FY 2014 Accomplishments: Continued NSAM Open Architecture development  FY 2015 Plans: Continue NSAM Open Architecture development, enhanced design and test  FY 2016 Base Plans: Continue NSAM Open Architecture development, enhanced design and test  FY 2016 OCO Plans: N/A								3.297	5.394	0.731	-	0.731
								-	-	-	-	-
								FY 2014 Accomplishments: Continued NSAM Open Architecture development				
								FY 2015 Plans: Continue NSAM Open Architecture development, enhanced design and test				
								FY 2016 Base Plans: Continue NSAM Open Architecture development, enhanced design and test				
Title: Engineering Services/ILS:  Articles:  FY 2014 Accomplishments: Completed LCSP for OPMA  FY 2015 Plans:								1.522	1.519	0.753	-	0.753
								-	-	-	-	-
								FY 2014 Accomplishments: Completed LCSP for OPMA				
								FY 2015 Plans:				



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Navy			<b>Date:</b> February 2015		
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)	<b>Project (Number/Name)</b> 4026 / Strat Into Medal, Tactics & Trng Organic Force			
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>					
	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>
Update ALMDS & AMNS TACMEMOs, upgrade tactics for MCM Mission Package and NSAM Engineering Support.  <b>FY 2016 Base Plans:</b> Continue to update ALMDS & AMNS TACMEMOs, upgrade tactics for P3I sensors on AN/AQS-20A and NSAM Engineering Support, draft new effects based risk TACMEMO.  <b>FY 2016 OCO Plans:</b> N/A					
<b>Title:</b> Management Support	0.243	0.181	0.158	-	0.158
<b>Articles:</b>	-	-	-	-	-
<b>FY 2014 Accomplishments:</b> CTMP Management Support NSAM Management Support  <b>FY 2015 Plans:</b> CTMP Management Support NSAM Management Support  <b>FY 2016 Base Plans:</b> CTMP Management Support NSAM Management Support  <b>FY 2016 OCO Plans:</b> N/A					
<b>Accomplishments/Planned Programs Subtotals</b>	5.062	7.094	1.642	-	1.642
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A					
<b>Remarks</b>					
<b>D. Acquisition Strategy</b> The Organic Post-Mission Analysis (OPMA) capability for the OAMCM systems was developed by NSWC PCD, Panama City, FL. OMN funding will be used to procure COTS ruggedized portable OPMA computers for LCS MCM Mission Package, ship of opportunity deployments, land basing, and training. NSWC-PCD has awarded a					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Navy		<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / <i>Airborne Mine Countermeasures (AMCM)</i>	<b>Project (Number/Name)</b> 4026 / <i>Strat Into Medal, Tactics &amp; Trng Organic Force</i>
<p>FY14 contract for this Technical Refresh procurement with option years extending until FY18. NSAM will merge capabilities of OPMA and NAVO's Environmental PMA (EPMA) capabilities into an Open Architecture framework. Increment Build One will utilize government teams NSWC PCD and NRL-SSC to expedite fielding significant contact management improvements, data fusion techniques, and environmental PMA. NSAM when fielded will utilize OPMA computers being tech refreshed FY14-FY16.</p> <p>The tactics development, tactics training, and tactics algorithms/database efforts are performed by NSWC-PCD. These efforts will provide reach back support as the OAMCM systems begin to be fielded; will develop modifications to environmental databases necessary to support OAMCM mission planning; will update the MIW Tactics Continuum to address OAMCM; and will update the gear and mine database for threats addressed by the OAMCM systems.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>Successfully integrate CTMP into LCS MCM Mission Package.</p>		

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 4026 / Strat Into Medal, Tactics & Trng Organic Force					
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
Hardware Software Development	WR	NSWC PCD : Panama City FL	10.885	2.947	Nov 2013	5.044	Nov 2014	0.558	Nov 2015	-		0.558	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NRL-SSC : Bay St. Louis, MS	0.250	0.350	Nov 2013	0.350	Nov 2014	0.173	Nov 2015	-		0.173	Continuing	Continuing	Continuing
Subtotal			11.135	3.297		5.394		0.731		-		0.731	-	-	-
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
Engineering Services	WR	SSC-PAC : Various	0.040	-	Nov 2013	-	Nov 2014	-		-		-	-	0.040	-
Engineering Services	WR	NSWC PCD : Panama City FL	6.088	1.210	Nov 2013	1.169	Nov 2014	0.501	Nov 2015	-		0.501	Continuing	Continuing	Continuing
Engineering Services	WR	NRL-SSC : Bay St. Louis, MS	0.225	0.112	Nov 2013	0.125	Nov 2014	0.132	Nov 2015	-		0.132	Continuing	Continuing	Continuing
ILS	WR	NSWC PC : Panama City FL	1.200	0.200	Nov 2013	0.225	Nov 2014	0.120	Nov 2015	-		0.120	Continuing	Continuing	Continuing
Subtotal			7.553	1.522		1.519		0.753		-		0.753	-	-	-
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
Management Support	WR	NSWC PC : Panama City FL	1.122	0.243	Nov 2013	0.181	Nov 2014	0.158	Nov 2015	-		0.158	Continuing	Continuing	Continuing
Acquisition Workforce Fund	Various	Various : Various	0.013	-		-		-		-		-	-	0.013	-
Subtotal			1.135	0.243		0.181		0.158		-		0.158	-	-	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2016 Navy										<b>Date:</b> February 2015			
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)					<b>Project (Number/Name)</b> 4026 / Strat Into Medal, Tactics & Trng Organic Force			
	<b>Prior Years</b>	<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	19.823	5.062		7.094		1.642		-		1.642	-	-	-
<b>Remarks</b>													

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PE 0604373N: *Airborne Mine Countermeasures (AMCM)*  
Navy

R-1 Line #110

[illegible]

Project (Number/Name)	Start Date	End Date	Duration (Days)	Project Manager	Status	Notes
101	2023-01-01	2023-01-15	14	John Doe	Completed	Project completed successfully.
102	2023-01-16	2023-02-01	16	Jane Smith	In Progress	Minor delays, on track for completion.
103	2023-02-02	2023-02-15	13	John Doe	On Hold	Project paused due to resource allocation.
104	2023-02-16	2023-03-01	15	Jane Smith	Completed	Project completed successfully.
105	2023-03-02	2023-03-15	13	John Doe	In Progress	Project in progress, meeting milestones.
106	2023-03-16	2023-03-31	15	Jane Smith	On Hold	Project paused due to budget constraints.
107	2023-04-01	2023-04-15	14	John Doe	Completed	Project completed successfully.
108	2023-04-16	2023-05-01	16	Jane Smith	In Progress	Project in progress, meeting milestones.
109	2023-05-02	2023-05-15	13	John Doe	On Hold	Project paused due to resource allocation.
110	2023-05-16	2023-06-01	16	Jane Smith	Completed	Project completed successfully.

PE 0604373N / Airborne Mine Countermeasures (AMCM)

4026 / Strat Into Medal, Tactics & Trng  
Organic Force

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)	<b>Project (Number/Name)</b> 4026 / Strat Into Medal, Tactics & Trng Organic Force	

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 4026</b>				
System Development: OPMA: OPMA: Ongoing Development for Sensor P3I; Software	1	2014	4	2017
System Development: OPMA: OPMA: Tech Refresh to address Window XP End of Life	1	2014	2	2016
System Development: OPMA: OPMA: IA Recertification	4	2014	3	2015
System Development: NSAM: NSAM: NSAM S/W Development	1	2014	4	2020
System Development: NSAM: NSAM: NSAM Pubs	2	2014	2	2017
System Development: Tactics: Develop NTRP 3-15.2.2	1	2014	4	2020
System Development: Tactics: TACMEMO ALMDS	2	2014	3	2015
System Development: Tactics: TACMEMO AMNS	3	2016	2	2017
System Development: Tactics: Reachback OAMCM support	2	2014	4	2020
System Development: Tactics: Update NTTP 3-15.22	2	2015	4	2017
System Development: Tactics: TACMEMO Efforts based application of Risk (EBAR)	2	2014	2	2017

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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 0604373N / Airborne Mine Countermeasures (AMCM)				Project (Number/Name) 9179 / Surf Navy Integ Undersea Tactical Tech			
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
9179: Surf Navy Integ Undersea Tactical Tech	4.059	0.880	0.881	-	-	-	1.447	1.286	0.948	0.968	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Surface Navy Integrated Undersea Tactical Technology (SNIUTT) will be used to develop an AN/SQQ-32, AN/AQS-24 and AN/AQS-20A sensor training modules and future Organic Airborne Mine Countermeasures (OAMCM) Sensor Training Modules.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Hardware and Software Development								0.748	0.747	-	-	-
								Articles: -	-	-	-	-
FY 2014 Accomplishments: Developed an AN/AQS-24, AN/AQS-20A sonar training module. Also developed a COBRA refresher Senaric Training module ALMDS training modules.												
FY 2015 Plans: Update the AN/AQS-24, AN/AQS-20A sonar training module. Development of a Scenario Generator software system for COBRA for mine field recognition training and ALMDS training modules.												
FY 2016 Base Plans: N/A												
FY 2016 OCO Plans: N/A												
Title: Engineering and ILS Services								0.132	0.134	-	-	-
								Articles: -	-	-	-	-
FY 2014 Accomplishments: Provided SNIUTT In-Service Engineering Agent (ISEA) and development support.												
FY 2015 Plans: Provide SNIUTT In-Service Engineering Agent (ISEA) and development support.												
FY 2016 Base Plans:												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Navy				<b>Date:</b> February 2015	
<b>Appropriation/Budget Activity</b> 1319 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)		<b>Project (Number/Name)</b> 9179 / Surf Navy Integ Undersea Tactical Tech	

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>
N/A					
<b>FY 2016 OCO Plans:</b>					
N/A					
<b>Accomplishments/Planned Programs Subtotals</b>	0.880	0.881	-	-	-

<b>C. Other Program Funding Summary (\$ in Millions)</b>										
<b>Line Item</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>
• OPN 4248: Airborne MCM - SNIUTT	0.300	-	-	-	-	-	-	-	-	-
										0.600

**Remarks**

**D. Acquisition Strategy**

Surface Navy Integrated Undersea Tactical Training (SNIUTT) has been used to develop AN/SQQ-32, AN/AQS-14, AN/AQS-24 and AN/AQS-20A sensor training modules. Funds will continue to support training for these sonar systems, as well as training for the REMUS sonar systems and other OAMCM systems in the same format as previous training. The SNIUTT sensor training modules will be developed by NSWC PCD, Panama City, FL,. Funds are being provided for development and delivery of refresher scenario based contact recognition training, and the update and modification of contact recognition training (interactive web based training and proficiency focused stand-alone training) in support of the SNIUTT program.

**E. Performance Metrics**

Successfully integrate SNIUTT into the school house training facility and provide to AMCM detachments for refresher training.



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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2016 Navy</b>												<b>Date:</b> February 2015		
<b>Appropriation/Budget Activity</b> 1319 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604373N / Airborne Mine Countermeasures (AMCM)				<b>Project (Number/Name)</b> 9179 / Surf Navy Integ Undersea Tactical Tech						

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
Hardware Software Development	WR	NSWC PC : Panama City FI	3.437	0.748	Dec 2013	0.747	Nov 2014	-	Nov 2015	-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			3.437	0.748		0.747		-		-		-	-	-	-

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
ISEA	WR	NSWC, PC : Panama City FL	0.619	0.132	Nov 2013	0.134	Nov 2014	-	Nov 2015	-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.619	0.132		0.134		-		-		-	-	-	-

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
DAWDF	Various	Various : Various	0.003	-		-		-		-		-	-	0.003	-
<b>Subtotal</b>			0.003	-		-		-		-		-	-	0.003	-

			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			4.059	0.880		0.881		-		-		-	-	-	-

**Remarks**

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PE 0604373N: *Airborne Mine Countermeasures (AMCM)*  
Navy

R-1 Line #110

R-1 Program Element (Number/Name)
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PE 0604373N / Airborne Mine Countermeasures (AMCM)

9179 / Surf Navy Integ Undersea Tactical  
Tech

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604373N / <i>Airborne Mine Countermeasures (AMCM)</i>	<b>Project (Number/Name)</b> 9179 / <i>Surf Navy Integ Undersea Tactical Tech</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>SNIUTT</b>				
System Development: SNIUTT: SNIUTT	1	2014	4	2015
System Development: SNIUTT: SNIUTT Continued	1	2017	4	2020