

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>
---	--

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	43.769	45.885	41.142	-	41.142	42.731	51.475	42.026	36.570	Continuing	Continuing
0529: <i>ABN Mine Hunt System</i>	4.554	7.139	3.798	-	3.798	4.542	9.945	9.225	10.596	Continuing	Continuing
2047: <i>ALMDS</i>	10.630	13.413	11.379	-	11.379	13.611	20.764	24.422	17.618	Continuing	Continuing
2427: <i>OASIS</i>	9.411	6.029	8.160	-	8.160	3.057	2.251	-	-	0.000	28.908
2473: <i>Airborne Mine Neutralization System</i>	14.000	16.597	15.153	-	15.153	16.061	12.831	-	-	0.000	74.642
4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>	1.862	1.798	1.757	-	1.757	4.562	4.773	7.450	7.417	Continuing	Continuing
9179: <i>Surf Navy Integ Undersea Tactical Tech</i>	0.922	0.909	0.895	-	0.895	0.898	0.911	0.929	0.939	Continuing	Continuing
9999: <i>Congressional Adds</i>	2.390	-	-	-	-	-	-	-	-	0.000	2.390

A. Mission Description and Budget Item Justification

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Airborne Mine Countermeasures (AMCM) programs will deploy to the fleet as sensors integrated into the MH-53E and MH-60S platforms in order to provide Mine-Like Object Detection/classification/localization, Mine Identification, mine reacquisition and neutralization, and influence clearance capabilities. The "Next Generation" AMCM systems will provide this set of capabilities to the Littoral Combat Ship (LCS) Mine Warfare Mission Module. This capability will be of critical importance in littoral zones, confined straits, choke points, near surface and the Amphibious Objective Area (AOA). Some interest in the following areas has been expressed: 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. Surface Navy Integrated Undersea Tactical Technology (SNIUTT) will be used to develop an AN/SQQ-32, AN/AQS-14, AN/AQS-24 and AN/AQS-20A sensor training modules and future Organic Airborne Mine Countermeasures (OAMCM) Sensor Training Modules.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>
---	--

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	50.899	45.885	47.892	-	47.892
Current President's Budget	43.769	45.885	41.142	-	41.142
Total Adjustments	-7.130	-	-6.750	-	-6.750
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-5.249	-			
• SBIR/STTR Transfer	-1.671	-			
• Program Adjustments	-	-	-6.041	-	-6.041
• Section 219 Reprogramming	-0.210	-	-	-	-
• Rate/Misc Adjustments	-	-	-0.709	-	-0.709

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: *Congressional Adds*

Congressional Add: *Common Air Mine Countermeasures Tow Cable*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	FY 2010	FY 2011
	2.390	-
	2.390	-
	2.390	-

Change Summary Explanation

Program Adjustments: FY12 -\$6,750 in Total Adjustments: for OASIS +\$2,500K, for AMNS +\$6,200K, RAMICS -\$13,100K, ALMDS -\$1,641K, and decrease for Misc. Adjustments -\$709K.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 0529: <i>ABN Mine Hunt System</i>
---	--	---

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
0529: <i>ABN Mine Hunt System</i>	4.554	7.139	3.798	-	3.798	4.542	9.945	9.225	10.596	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project includes a sonar for mine detection, classification and identification. The Navy does not possess a capability to conduct minefield reconnaissance (mine density and location) at high area search rates. The AN/AQS-20A is being developed to address the emergent requirements for mine identification and to integrate AMCM systems with a MH-60S platform. The AN/AQS-20A will also be the mine hunting sonar component for the Remote Minehunting System (RMS). The AN/AQS-20A will be developed to meet the requirements of the Littoral Combat Ship (LCS) Mine Warfare Mission Module.

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

	FY 2010	FY 2011	FY 2012
<p>Title: Accomplishments/Effort/Subtotal Cost: Support</p> <p align="right">Articles:</p> <p>Description: RDT&E Articles Quantity</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> - Began to develop Integrated Logistic Support (ILS) and supportability product and training materials - Continued Tactics, mission planning, and Post Mission Analysis (PMA) during AN/AQS-20A Developmental Testing phase - Continued to replenish deep minefield <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> - Continue to develop ILS and supportability product and training materials - Continue to replenish deep minefield <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> -Provide ongoing Technical Design Authority support to AN/AQS-20A. 	0.387 0	0.429 0	0.237 0
<p>Title: Accomplishments/Effort/Subtotal Cost: Test and Evaluation</p> <p align="right">Articles:</p> <p>Description: RDT&E Articles Quantity</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> - Completed AN/AQS-20A Developmental Testing from the MH-60S. 	1.655 0	3.585 0	0.552 0

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 0529: <i>ABN Mine Hunt System</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
<ul style="list-style-type: none"> - Conducted AN/AQS-20A Integration Testing. <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> - Conduct Shore and Littoral Combat Ship (LCS) based AN/AQS-20A Operational Testing from the MH-60S. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Complete AN/AQS-20A support of Littoral Combat Ship (LCS) 2 Mine Countermeasures Mission Package Developmental Testing. 				
<p>Title: Accomplishments/Effort/Subtotal Cost: Management Services</p> <p align="right">Articles:</p> <p>Description: RDT&E Articles Quantity</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> - Continued documentation development in support of Full Rate Production Decision Review (FRPDR) in FY11 - Continued to provide planning and management for the AN/AQS-20A program <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> - Complete documentation development in support of Full Rate Production Decision Review (FRPDR) in FY11 - Continue to provide planning and management for the AN/AQS-20A program <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue to provide planning and management for the AN/AQS-20A program 		0.232 0	0.355 0	0.164 0
<p>Title: Accomplishments/Effort/Subtotal Cost: Product Development</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none"> - Continued cable design improvement - Performed Environmental Data Collection analysis <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> - Continue Environmental Data Collection analysis <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Evaluate Forward Look Sonar (FLS) to improve detection and localization of volume and close-tethered mines. 		2.280 0	2.770 0	2.845 0

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy	DATE: February 2011
--	----------------------------

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 0529: <i>ABN Mine Hunt System</i>
---	--	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
- Review obsolescence issues that are candidates for P3I. Conduct technical performance analysis and real time performance evaluation.			
Accomplishments/Planned Programs Subtotals	4.554	7.139	3.798

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN 4248: <i>Airborne Mine Countermeasure</i>	14.520	0.000	8.920	0.000	8.920	0.000	0.000	0.000	0.000	0.000	23.440
• OPN 1600: <i>LCS Mission Modules</i>	21.780	22.650	8.920	0.000	8.920	15.800	24.294	49.800	50.647	Continuing	Continuing

D. Acquisition Strategy

AN/AQS-20A achieved Milestone C on 10 May 2005.

Sole Source to Raytheon for MH-60S systems. Low Rate Initial Production (LRIP) procurement began in FY05, FY06 and FY07. Full Rate Production Decision Review (FRPDR) is expected in August 2011 with competitive contract award January 2012.

E. Performance Metrics

Successfully complete Developmental Test/Operational Test.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 0529: <i>ABN Mine Hunt System</i>
---	--	---

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware/Software Development Q-20 on the H-53	SS/CPIF	Raytheon:Portsmouth, RI	31.120	-		-		-		-	0.000	31.120	
Hardware/Software Development Q-20A on the H-60	C/CPFF	Raytheon:Portsmouth, RI	60.150	-		-		-		-	0.000	60.150	
Hardware/Software Development	WR	NSWC, PC:Panama City FL	11.808	2.770	Nov 2010	2.845	Nov 2011	-		2.845	0.000	17.423	
Hardware/Software Development	C/FP	Northrop Grumman:Melbourne, FL	4.572	-		-		-		-	0.000	4.572	
Subtotal			107.650	2.770		2.845		-		2.845	0.000	113.265	

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Engineering Services	WR	NSWC, PC:Panama City, FL	30.641	0.377	Nov 2010	0.208	Nov 2011	-		0.208	Continuing	Continuing	Continuing
Engineering Services	C/CPFF	Raytheon:Portsmouth, RI	3.686	-		-		-		-	Continuing	Continuing	Continuing
Engineering Services	Various	Various:Various	54.018	-		-		-		-	0.000	54.018	
Engineering Services 2	SS/CPIF	Raytheon:Portsmouth, RI	3.464	-		-		-		-	0.000	3.464	
ILS Function	WR	NSWC, PC:Panama City FL	6.287	0.052	Nov 2010	0.029	Nov 2011	-		0.029	Continuing	Continuing	Continuing
ILS Function	SS/CPIF	Raytheon:Portsmouth, RI	1.546	-		-		-		-	Continuing	Continuing	Continuing
ILS Function	Various	Various:Various	0.981	-		-		-		-	0.000	0.981	
Subtotal			100.623	0.429		0.237		-		0.237			

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 0529: <i>ABN Mine Hunt System</i>

--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 0529: <i>ABN Mine Hunt System</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 0529				
Acquisition Milestones: IOC	4	2011	4	2011
Acquisition Milestones: Full Rate Production (FRP) Decision	4	2011	4	2011
Development Phase: AN/AQS-20A P3I	1	2010	4	2016
Test & Evaluation Milestones: AN/AQS-20A/MH-60S DT	1	2010	4	2010
Test & Evaluation Milestones: Operational Test: Shorebased AN/AQS-20A/MH-60S OT	2	2011	3	2011
Test & Evaluation Milestones: Operational Test: Littoral Combat Ship Based AN/AQS-20A/MH-60S OT	4	2011	4	2011
Production Milestones: Low Rate Intial Production I, II, & IIa	1	2010	2	2011
Production Milestones: AN/AQS-20A Full Rate Production	2	2012	4	2016
Production Milestones: Initial Delivery	3	2014	3	2014
Contract Award: FRP Contract Award	2	2012	2	2012

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2047: <i>ALMDS</i>
---	--	--------------------------------------

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2047: <i>ALMDS</i>	10.630	13.413	11.379	-	11.379	13.611	20.764	24.422	17.618	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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 floating and 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 first spiral development phase, very shallow water capability, begins in FY2016.

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

	FY 2010	FY 2011	FY 2012
<p>Title: Hardware and Software technology development and demonstration/Engineering Services:</p> <p align="right">Articles:</p> <p>Description: TDA Engineering/oversight/support of engineering efforts to meet baseline performance and full performance.</p> <p>FY 2010 Accomplishments: FY10 Implement Increment 1 Software fix, model and analyze fix.</p> <p>FY 2011 Plans: FY11 Implement Increment 1 Software fix, model and analyze fix.</p> <p>FY 2012 Plans: FY12 Increment II design and development. Initial Operation Capability (IOC) of Increment I to the fleet.</p>	<p>8.865</p> <p>0</p>	<p>3.054</p> <p>0</p>	<p>8.394</p> <p>0</p>
<p>Title: Integrated Logistics Support:</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: All TDA support of ILS Program, to include operator training, NATOPS documentation updates, and tech/maintenance manual updates.</p> <p>FY 2011 Plans: Upgrades to all training and logistics documentation.</p> <p>FY 2012 Plans:</p>	<p>0.423</p> <p>0</p>	<p>0.673</p> <p>0</p>	<p>1.140</p> <p>0</p>

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2047: <i>ALMDS</i>
---	--	--------------------------------------

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Provides initial operating capability for increment I.			
Title: Testing and Evaluation:	-	7.957	-
Articles:		0	
FY 2011 Plans: Completion of DT-IIE and OT-IIA OPEVAL.			
Title: Project Management:	1.342	1.729	1.845
Articles:	0	0	0
FY 2010 Accomplishments: TDA Program Management, Financial Management and Contractor support.			
FY 2011 Plans: TDA Program Management, Financial Management and Contractor support.			
FY 2012 Plans: TDA Program Management, Financial Management and Contractor support.			
Accomplishments/Planned Programs Subtotals	10.630	13.413	11.379

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>						
• OPN 4248: <i>Airborne MCM</i>	22.300	14.800	0.000	0.000	0.000	31.276	7.951	0.000	0.000	0.000	76.327
• OPN 1600: <i>LCS Mission Modules</i>	7.421	7.100	0.000	0.000	0.000	7.819	7.951	16.173	16.448	0.000	62.912

D. Acquisition Strategy

The first LRIP lot of two units was awarded as a new sole-source contract to the SD&D contractor in FY05. This is a Fixed-Price Incentive (FPI) contract with cost and schedule incentives. The March 2006 Program Review decision memorandum approved the ALMDS Program for LRIP 2 procurement of two units for FY07 pending successful demonstration of Engineering Change Proposal (ECP) I performance during DT-IIID; DT-IIID Phase B was conducted on an SH-60F helicopter and DT-IIID phase C will be conducted on an MH-60S helicopter.

E. Performance Metrics

Successfully complete DT-IIE 3 and Operational Test (OT) and receive full rate production decision approval.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2047: <i>ALMDS</i>
---	--	--------------------------------------

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware/Software Development	WR	NSWC PC:Panama City FL	0.942	-		-		-		-	0.000	0.942	
Hardware/Software Development	C/CPAF	Northrop Grumman:Melbourne, FL	29.061	-		-	Oct 2011	-		-	0.000	29.061	
Hardware/Software Development	MIPR	Metron:VA	1.083	-		-		-		-	0.000	1.083	
Hardware/Software Development	C/CPAF	SAIC:VA	0.200	-		-		-		-	0.000	0.200	
Engineering Services1	WR	NSWC PC:Panama City FL	11.702	0.563	Nov 2010	1.184	Nov 2011	-		1.184	Continuing	Continuing	Continuing
Engineering Services2	C/CPAF	Northrop Grumman:Melbourne, FI	16.172	0.126	Nov 2010	4.645	Nov 2011	-		4.645	0.000	20.943	
Engineering Services3	SS/CPIF	Various:Various	12.915	2.203	Nov 2010	1.725	Nov 2011	-		1.725	Continuing	Continuing	Continuing
Engineering Services4	MIPR	Various:Various	3.922	-		-	Nov 2011	-		-	Continuing	Continuing	Continuing
Engineering Services5	C/CPAF	Metron/Arete:Various	0.862	0.162	Nov 2010	0.840	Nov 2011	-		0.840	0.000	1.864	
Subtotal			76.859	3.054		8.394		-		8.394			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
ILS Functions1	WR	NSWC PC:Panama City FL	2.421	0.673	Nov 2010	0.600	Nov 2011	-		0.600	Continuing	Continuing	Continuing
ILS Functions2	WR	NSWC PC:Panama City FL	5.725	-		0.540	Nov 2011	-		0.540	Continuing	Continuing	Continuing
ILS Functions3	C/CPAF	Various/NRL Stennins:Various	1.062	-		-	Nov 2011	-		-	0.000	1.062	
ILS Functions4	WR	NSWC PC:Panama City FL	0.300	-		-		-		-	0.000	0.300	

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				PE 0604373N: Airborne Mine Countermeasures (AMCM)				2047: ALMDS					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Subtotal			9.508	0.673		1.140		-		1.140			
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Testing and Evaluation1	WR	NSWC PC:Panama City FL	12.917	1.650	Nov 2010	-		-		-	Continuing	Continuing	Continuing
Testing and Evaluation2	WR	NSWC PC:Panama City FL	14.359	3.671	Nov 2010	-		-		-	Continuing	Continuing	Continuing
Testing and Evaluation	C/CPAF	Various:Various	0.992	0.902	Nov 2010	-		-		-	0.000	1.894	
Testing and Evaluation	WR	NAWC AD PAX:Panama City FL	0.376	1.734	Nov 2010	-		-		-	0.000	2.110	
Subtotal			28.644	7.957		-		-		-			
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Management Support1	Various	Various:Various	2.043	0.050	Nov 2010	0.050	Nov 2011	-		0.050	0.000	2.143	
Management Support2	WR	NSWC PC:Panama City FL	3.588	1.679	Nov 2010	1.620	Nov 2011	-		1.620	0.000	6.887	
Management Support3	WR	NSWC PC:Panama City FL	1.559	-		-		-		-	0.000	1.559	
DAWDF	Various	Various:Various	0.031	-		0.175	Nov 2011	-		0.175	0.000	0.206	
Subtotal			7.221	1.729		1.845		-		1.845	0.000	10.795	
Project Cost Totals			122.232	13.413		11.379		-		11.379			

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2047: <i>ALMDS</i>

--	--	--

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2047: <i>ALMDS</i>

--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2047: <i>ALMDS</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 2047</i>				
Acquisition Milestones: Full Rate Production Decision Review: Full Rate Production Decision Review	2	2012	2	2012
Acquisition Milestones: Initial Operating Capability: Initial Operating Capability	3	2012	3	2012
Acquisition Milestones: Initial Operating Capability: Full Rate Production Decision	1	2013	1	2013
System Development: Increment I Development: Increment I Development	1	2010	4	2013
System Development: Increment II Development: Increment II Development	1	2014	4	2016
System Development: DT-IIE: DT-IIE	3	2010	1	2011
System Development: DT/IT (TECHEVAL IT): DT/IT (TECHEVAL IT)	2	2011	3	2011
System Development: OT-IIA OPERATIONAL TESTING (OPEVAL): OT-IIA OPERATIONAL TESTING (OPEVAL)	3	2011	1	2012
<i>Production Milestones</i>				
LRIP 3 Units start	4	2010	4	2010
LRIP 4 Units start	4	2011	4	2011
Full Rate Production (FRP) Start (FRP 1)	1	2013	1	2013
Full Rate Production (FRP) Start (FRP 2)	2	2014	2	2014
Full Rate Production (FRP) Start (FRP 3)	2	2015	2	2015
Full Rate Production (FRP) Start (FRP 4)	2	2016	2	2016
Production Deliveries: LRIP 2 Units Deliveries	2	2011	3	2011
Production Deliveries: LRIP 3 Units Deliveries	3	2012	4	2012
Production Deliveries: LRIP 4 Units Deliveries	3	2013	4	2013
Production Deliveries: Full Rate Production Delivery Start (FRP 1)	4	2014	1	2015
Production Deliveries: Full Rate Production Delivery Start (FRP 2)	1	2016	2	2016

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2427: <i>OASIS</i>
---	--	--------------------------------------

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2427: OASIS	9.411	6.029	8.160	-	8.160	3.057	2.251	-	-	0.000	28.908
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Organic Airborne and Surface Influence Sweep (OASIS) system is a towed Minesweeping System to be deployed from specially configured MH-60S helicopters. The system provides a rapid response sweeping capability against bottom and moored, buried, acoustic and magnetic, or combination acoustic/magnetic influence mines in support of mine clearance operations where mine hunting is ineffective. The system consists of a towed body, tow and sweep cable systems, power inverter, power distribution unit and storage/shipping containers. System interfaces with the MH-60S helicopter via the carriage, stream, tow and recovery system and the common console. The program is currently in the SD&D phase where three Engineering Development Models (EDMs) are being developed for test and evaluation. Areas of interest for program enhancement include but are not limited to the following: A) Real-time Mission Planning B) Threat Emulation Jamming C) Improved Power Inverter D) Light weight winch drive-train E) Improved magnetic performance.

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

	FY 2010	FY 2011	FY 2012
<p>Title: Product Development:</p> <p style="text-align: right;">Articles:</p> <p>FY 2010 Accomplishments: Continue EDM development including BME design and Sweep Cable improvements.</p> <p>FY 2011 Plans: Prepare EDMs for Airworthiness, WSIT CT and OA Testing.</p> <p>FY 2012 Plans: Investigate and begin FY12 changes to EDM based upon testing results.</p>	<p>1.867</p> <p>0</p>	<p>0.441</p> <p>0</p>	<p>2.224</p> <p>0</p>
<p>Title: Engineering and ILS:</p> <p style="text-align: right;">Articles:</p> <p>FY 2010 Accomplishments: Office of Naval Research program support Engineering and ILS BME Design and Development, drawing updates</p> <p>FY 2011 Plans: Office of Naval Research program support Engineering and ILS support for CT and preparation for OA Testing.</p> <p>FY 2012 Plans:</p>	<p>6.243</p> <p>0</p>	<p>3.050</p> <p>0</p>	<p>2.900</p> <p>0</p>

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2427: <i>OASIS</i>
---	--	--------------------------------------

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Support OA and DT events.			
Title: Testing: <div style="text-align: right;">Articles:</div>	0.839 0	2.093 0	2.596 0
FY 2010 Accomplishments: Prepare for Airworthiness and CT. FY 2011 Plans: Conduct Training for WSIT CT and begin OA. FY 2012 Plans: Conduct OA and DT events.			
Title: Program Management <div style="text-align: right;">Articles:</div>	0.462 0	0.445 0	0.440 0
FY 2010 Accomplishments: Monitor contractor progress with regard to schedule, cost, and technical status management Monitor contractor CDRL and other deliverables FY 2011 Plans: Monitor contractor progress with regard to schedule, cost, and technical status management Monitor contractor CDRL and other deliverables FY 2012 Plans: Monitor contractor progress with regard to schedule, cost, and technical status management and prepare for FRP decision.			
Accomplishments/Planned Programs Subtotals	9.411	6.029	8.160

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>						
• OPN 4248: <i>Airborne MCM - OASIS</i>	0.000	0.000	0.000	0.000	0.000	9.200	11.300	19.400	8.500	5.268	53.668

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy	DATE: February 2011
--	----------------------------

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2427: <i>OASIS</i>
---	--	--------------------------------------

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN 1600: <i>LCS Mission Modules</i>	0.000	0.000	0.000	0.000	0.000	2.548	2.583	5.402	5.166	81.715	97.414

D. Acquisition Strategy

After Milestone B review in FY02, a SD&D contract was awarded. In FY07, the program successfully completed MH-53 CT and Tower Testing. MH-60 CT is planned for FY11. DT in FY12 and OPEVAL in FY13.

E. Performance Metrics

Successfully complete contractor test on the Body Mounted Electrode (BME) design and receive Milestone C approval.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2427: <i>OASIS</i>
---	--	--------------------------------------

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware/Software Development	C/CPFF	ITT Corp.:Panama City FI	2.249	0.030	Nov 2010	0.800	Nov 2011	-		0.800	0.000	3.079	
Hardware/Software Development for BME	C/CPFF	EDO Corp.:NY	12.689	-		-		-		-	0.000	12.689	
Hardware/Software Development	SS/CPFF	Aeptec Microsystems Inc.:AZ	5.898	-		-		-		-	0.000	5.898	
Hardware/Software Development	WR	NSWC PC:Panama City FI	0.765	0.411	Nov 2010	1.424	Nov 2011	-		1.424	1.473	4.073	
Subtotal			21.601	0.441		2.224		-		2.224	1.473	25.739	

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Engineering Services	WR	NUWC Keyport:Keyport, WA	0.659	-		-		-		-	0.000	0.659	
Engineering Services	C/CPFF	EDO/ITT Corp.:Panama City FI	16.464	0.811	Nov 2010	0.350	Nov 2011	-		0.350	0.000	17.625	
Engineering Services	WR	NSWC PC:Panama City FI	17.787	1.123	Nov 2010	-		-		-	0.000	18.910	
Engineering Services	WR	NSWC Carderock MD:Bethesda, MD	0.300	-		1.363	Nov 2011	-		1.363	0.000	1.663	
Engineer Services/ILS	WR	Various:Various	0.548	-		-		-		-	0.000	0.548	
Engineering Services	WR	ONR:Wash DC	9.520	0.440	Nov 2010	0.437	Nov 2011	-		0.437	0.499	10.896	
ILS Functions	C/CPFF	EDO Corp.:NY	4.725	1.047	Nov 2010	0.500	Nov 2011	-		0.500	0.195	6.467	
ILS Functions	WR	NSWC, PC:Panama City FI	3.186	0.427	Nov 2010	0.250	Nov 2011	-		0.250	0.412	4.275	
Subtotal			53.189	3.848		2.900		-		2.900	1.106	61.043	

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2427: <i>OASIS</i>

--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2427: <i>OASIS</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2427				
Acquisition Milestones: Initial Operational Capability (IOC): Initial Operational Capability (IOC)	4	2013	4	2013
Acquisition Milestones: Milestone C: Milestone C	2	2012	2	2012
Acquisition Milestones: Post Milestone PRR: Post Milestone PRR	3	2012	3	2012
System Development: Body Mounted Electrode (BME Design): Body Mounted Electrode (BME Design)	1	2010	4	2012
Test & Evaluation: CT MH-60s Testing: CT MH-60s Testing	4	2011	4	2011
Test & Evaluation: Airworthiness MH-60: AW MH-60	2	2011	4	2011
Test & Evaluation: OA MH-60: DT OA MH-60	1	2012	3	2012
Test & Evaluation: DT Testing: DT Testing	4	2012	4	2012
Test & Evaluation: OPEVAL: OPEVAL	1	2013	2	2013
Test & Evaluation: LRIP Contract Award: LRIP Contract Award	2	2013	2	2013
FRP Contract Award: FRP Contract Award	2	2014	2	2014

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>
---	--	--

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2473: <i>Airborne Mine Neutralization System</i>	14.000	16.597	15.153	-	15.153	16.061	12.831	-	-	0.000	74.642
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

AMNS will provide the MH-60S helicopter with the capability to neutralize bottom, near surface and moored mines using an expendable mine neutralization device. The AMNS is being tested on the MH-53E helicopter to prove out the neutralization effectiveness. The system will be deployed from the MH-60S helicopter as part of the Littoral Combat Ship (LCS) Mine Warfare Mission Module. This capability will be of critical importance in littoral zones, confined straits, choke points, near surface and the Amphibious Objective Area (AOA). Development of an Untethered Launch and Handling System (LHS) for AMNS will occur in FY12-FY14.

The AN/AWS-2 Rapid Airborne Mine Clearance System (RAMICS) MIW program began Concept & Technology Development phase in FY00. RAMICS will satisfy the U.S. Navy's need for a rapid mine clearance capability required to neutralize near-surface and surface (floating) moored sea mines. RAMICS will use geo-location data provided by other mine hunting and mine reconnaissance systems, use a laser system to reacquire targets and to direct the fire of supercavitating projectiles that will render the mines inoperable. RAMICS includes the following major subsystems:

- (a) Gun Subsystem (including gun and turret)
- (b) Munition Subsystem - MK258 Mod 1 Armor Piercing, Fin Stabilized, Discarding Sabot-Tracer (APFSDS-T)
- (c) Targeting Sensor Subsystem.
- (d) Fire Control Subsystem.

The system will be deployed from the MH-60S helicopter and will provide organic airborne mine defense 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).

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

	FY 2010	FY 2011	FY 2012
Title: AMNS: Support	2.515	1.986	2.661
Articles:	0	0	0
FY 2010 Accomplishments: Develop logistics products, including training materials and interactive technical manual. Provide engineering support, including review for product development and integration.			
FY 2011 Plans:			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
Develop logistics products, including training materials and interactive technical manual. Provide engineering support, including review for product development and integration. FY 2012 Plans: Develop logistics products, including training materials and interactive technical manual. Provide engineering support, including review for product development and integration. Develop Logistics products for untethered Launch and Handling System (LHS). Provide engineering support for untethered LHS.				
Title: AMNS: Test and Evaluation FY 2010 Accomplishments: Start MH-60S TECHEVAL. FY 2011 Plans: Complete MH-60s TECHEVAL. Start MH-60s OPEVAL. FY 2012 Plans: Complete MH-60s OPEVAL. Support testing on untethered LHS.		Articles: 4.621 0	4.038 0	3.150 0
Title: AMNS: Management Services FY 2010 Accomplishments: Provide Program Management support and travel for AMNS. FY 2011 Plans: Provide Program Management support and travel for AMNS. FY 2012 Plans: Provide program management support and travel for AMNS and untethered LHS.		Articles: 0.229 0	0.280 0	0.311 0
Title: AMNS: Product Development FY 2012 Plans: Develop hardware and software for near surface neutralization capability and untethered LHS.		Articles: -	-	9.031 0
Title: RAMICS: Hardware/Software Development		Articles: 3.990 0	5.925 0	-

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>		PROJECT 2473: <i>Airborne Mine Neutralization System</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010
Description: Hardware and Software technology development and demonstration/Engineering Services.				FY 2011
FY 2010 Accomplishments: Continue engineering associated development and demonstration/Engineering Services				FY 2012
FY 2011 Plans: Continue engineering and software development associated with Gun Qualification test, Pod Data Collection Testing and the near surface neutralization capability.				
Title: RAMICS: ILS and Engineering				-
Description: Integrated Logistics Support				0.119
FY 2011 Plans: TDA support of ILS Program, to include training, documentation updates, and tech/maintenance updates.				0
Title: RAMICS: Engineering and Test Events				-
Description: Test and Evaluation of Gun Fire on the MH-60S and impacts on the airframe.				1.981
FY 2010 Accomplishments: Conduct Initial Gun Fire and Static LIDAR Data Collection.				1.372
FY 2011 Plans: Final Engineering analysis of MH-60S Helicopter impact from Gun Fire Test. NSWC Crane, NSWC PC and NAVAIR Structures engineers coordination and analysis.				0
Title: RAMICS: Program Management				0
Description: Project Management				2.877
FY 2010 Accomplishments: TDA Program Management, Financial Management, Contract Management, Test and Contractor Support				0
FY 2011 Plans:				-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>
---	--	--

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
TDA Program Management, Financial Management, Contract Management, Test and Contractor Support			
Accomplishments/Planned Programs Subtotals	14.000	16.597	15.153

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

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• OPN 4248 : <i>Airborne MCM - AMNS</i>	7.300	11.100	3.100	0.000	3.100	2.800	3.000	0.000	0.000	0.000	27.300
• WPN 4225/1: <i>Airborne MCM - AMNS</i>	12.271	18.936	12.203	0.000	12.203	16.918	26.374	27.744	23.387	0.000	137.833
• OPN 1600: <i>LCS Mission Modules</i>	0.000	2.822	3.060	0.000	3.060	2.800	3.000	6.000	3.051	0.000	20.733
• WPN 4225/2: <i>Airborne MCM - RAMICS</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PANMC 0196: <i>MK 258 MOD - RAMICS</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• WPN 4221: <i>LCS MODULE WEAPONS-RAMICS</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D. Acquisition Strategy

AMNS: The Navy awarded six (6) LRIP's to Raytheon in September 2010. Following successful completion of Developmental Testing on MH-60S, the Navy will award four (4) additional LRIP units to Raytheon.

Following a successful OT on an MH-60S, FRP is planned for FY12. The Navy has awarded a sole source contract to BAE for Common Neutralizer procurements.

RAMICS: Achieved MS B in July 2002 and awarded SD&D contract in August 2002 based on a full and open competition. RAMICS LRIP Award will follow MS C and an FRP Award will follow FRPDR.

E. Performance Metrics

Successfully complete Operational Test (OT) and receive Full Rate Production Decision approval.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>
---	--	--

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware/Software Development1	SS/CPIF	Lockheed Martin:Syracuse, NY	3.331	-		-		-		-	0.000	3.331	
Hardware/Software Development2	C/CPAF	Various:Various	3.359	-		-		-		-	0.000	3.359	
Hardware/Software Development3	WR	NSWC PC:Panama City FL	2.275	-		1.898	Nov 2011	-		1.898	0.462	4.635	
Hardware/Software Development4	C/CPAF	Raytheon:Portsmouth RI	16.354	-		4.053	Nov 2011	-		4.053	2.061	22.468	
Untethered Hardware Development	C/CPAF	TBD:TBD	-	-		2.587	Jan 2012	-		2.587	5.366	7.953	
Untethered Hardware Development	WR	NSWC PC:Panama City FL	-	-		0.493	Jan 2012	-		0.493	1.076	1.569	
Hardware/Software Development5	C/CPFF	Northrop Grumman, FL:Melbourne, FL	34.882	4.780	Nov 2010	-		-		-	1.000	40.662	
Hardware/Software Development6	WR	NSWC PC:Panama City FL	2.892	0.012	Nov 2010	-		-		-	1.010	3.914	
Hardware/Software Development7	WR	NSWC Crane:Crane IN	2.470	-		-		-		-	0.000	2.470	
Subtotal			65.563	4.792		9.031		-		9.031	10.975	90.361	

Remarks
BOTH AMNS and RAMICS

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Engineering Services	WR	NSWC:Panama City FL	22.122	0.920	Nov 2010	0.750	Nov 2011	-		0.750	0.643	24.435	
Engineering Services	C/CPIF	Raytheon:Portsmouth RI	10.367	0.416	Nov 2010	-		-		-	0.472	11.255	
Untethered Engineering Services	C/CPIF	TBD:TBD	-	-		0.507	Jan 2012	-		0.507	0.995	1.502	

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>
---	--	--

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Untethered Engineering Services	WR	NSWC PC:Panama City FL	-	-		0.675	Jan 2012	-		0.675	1.499	2.174	
ILS Functions1	WR	NSWC PC:Panama City FL	4.991	-		0.250	Nov 2011	-		0.250	0.392	5.633	
ILS Functions2	SS/CPFF	Lockheed:Syracuse NY	0.227	-		-		-		-	0.000	0.227	
ILS Functions3	C/CPIF	Raytheon,:Portsmouth RI	2.196	-		-		-		-	0.112	2.308	
Untethered ILS Functions	C/CPIF	TBD:TBD	-	-		0.192	Jan 2012	-		0.192	0.229	0.421	
Untethered ILS Functions	WR	NSWC PC:Panama City FL	-	-		0.287	Jan 2012	-		0.287	1.052	1.339	
Engineering Services	C/CPIF	Northrop Grumman:Melbourne FL	14.801	1.090	Nov 2010	-		-		-	1.500	17.391	
Engineering Services	WR	NSWC PC:Panama City FL	9.977	0.043	Nov 2010	-		-		-	1.500	11.520	
Engineering Services	WR	NSWC, Crane:Crane, IN	2.777	0.650	Dec 2010	-		-		-	0.100	3.527	
Engineering Services	C/CPAF	Various:Various	5.857	-		-		-		-	0.100	5.957	
ILS Functions4	SS/CPIF	Northrop Grumman:Melbourne FL	6.370	-		-		-		-	0.500	6.870	
ILS Functions5	WR	NSWC PC:Panama City FL	1.603	0.119	Nov 2010	-		-		-	1.000	2.722	
ILS Functions6	C/CPAF	Various:Various	2.255	-		-		-		-	0.100	2.355	
Subtotal			83.543	3.238		2.661		-		2.661	10.194	99.636	

Remarks
BOTH AMNS and RAMICS

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>
---	--	--

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Development Test & Evaluation	Various	Various:Various	0.300	-		-		-		-	0.000	0.300	
Development Test & Evaluation	WR	NSWC, PC:Panama City FL	26.683	2.950	Nov 2010	-		-		-	0.000	29.633	
Development Test & Evaluation	SS/CPFF	Lockheed Martin:Syracuse, NY	1.254	-		-		-		-	0.000	1.254	
Development Test & Evaluation	C/CPIF	Raytheon:Portsmouth RI	7.831	0.588	Nov 2010	-		-		-	0.000	8.419	
Operational Test & Evaluation	WR	COTF:Norfolk VA	1.388	0.500	Nov 2010	2.000	Nov 2011	-		2.000	0.000	3.888	
Operational Test & Evaluation	SS/CPFF	Lockheed:Syracuse NY	0.767	-		-		-		-	0.000	0.767	
Test Assets	C/CPIF	Raytheon:Portsmouth RI	3.065	-		-		-		-	0.000	3.065	
Untethered Test and Evaluation	C/CPIF	TBD:TBD	-	-		0.383	Jan 2012	-		0.383	0.559	0.942	
Untethered Test and Evaluation	WR	NSWC PC:Panama City FL	-	-		0.767	Jan 2012	-		0.767	2.798	3.565	
Test & Evaluation	C/CPIF	Northrop Grumman:Melbourne FL	14.051	0.726	Dec 2010	-		-		-	0.750	15.527	
Test & Evaluation	WR	NSWC PC:Panama City FL	7.926	0.646	Dec 2010	-		-		-	0.750	9.322	
Test & Evaluation	WR	NSWC, Crane:Crane IN	1.230	-		-		-		-	1.000	2.230	
Test & Evaluation	C/CPAF	Various:Various	7.360	-		-		-		-	0.750	8.110	
Test & Evaluation	C/FFP	QinetiQ,:UK	-	-		-		-		-	0.000	0.000	
Subtotal			71.855	5.410		3.150		-		3.150	6.607	87.022	

Remarks
BOTH AMNS and RAMICS

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>
---	--	--

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/CPFF	Various:VAR	5.049	0.240	Nov 2010	0.100	Nov 2011	-		0.100	0.158	5.547	
Travel	Various	NAVSEA:PD	0.424	0.040	Nov 2010	0.020	Nov 2011	-		0.020	0.040	0.524	
Untethered Program Management	C/CPIF	TBD:VAR	-	-		0.191	Jan 2012	-		0.191	0.368	0.559	
Management Support	C/CPIF	Various:Various	6.002	2.877	Nov 2010	-		-		-	0.800	9.679	
Management Support	Various	Travel:PD	0.340	-		-		-		-	0.100	0.440	
DAWDF	Various	Various:Various	0.098	-		-		-		-	0.000	0.098	
Subtotal			11.913	3.157		0.311		-		0.311	1.466	16.847	

Remarks
BOTH AMNS and RAMICS

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	232.874	16.597		15.153		-		15.153	29.242	293.866	

Remarks
BOTH AMNS and RAMICS

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>

--	--	--

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>

--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 2473: <i>Airborne Mine Neutralization System</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AMNS				
Acquisition Milestones: AMNS FRPDR: AMNS FRPDR	4	2012	4	2012
Acquisition Milestones: AMNS FRPDR: Initial Operational Capability	4	2012	4	2012
Acquisition Milestones: AMNS System Development: AMNS System Development	1	2010	3	2011
Acquisition Milestones: AMNS System Development: AMNS P3I Development	2	2012	4	2014
Acquisition Milestones: AMNS Development Testing (MH-60s): AMNS Development Testing (MH-60s)	2	2011	4	2011
Acquisition Milestones: AMNS Operational Testing (MH-60s) Start: AMNS Operational Testing (MH-60s) Start	1	2012	3	2012
Production Milestones: AMNS LRIP (FY09)	4	2010	4	2010
Production Milestones: AMNS LRIP (FY10)	4	2010	4	2010
Production Milestones: AMNS LRIP (FY11)	3	2011	3	2011
Deliveries: AMNS LRIP Deliveries Start FY09	2	2012	1	2013
Deliveries: AMNS LRIP Deliveries Start FY10	2	2012	1	2013
Deliveries: AMNS LRIP Deliveries Start FY11	1	2013	3	2013
RAMICS				
Acquisition Milestones: System Development: RAMICS Modeling/STIM/SIM	1	2010	4	2011
Acquisition Milestones: System Development: RAMICS GLS Software	1	2011	4	2011
Acquisition Milestones: System Development: Software Requirements Verification	1	2010	2	2010
Acquisition Milestones: System Development: RAMICS Engineering Development	1	2010	4	2011
Test & Evaluation: Aberdeen LIDAR Test	2	2011	3	2011
Test & Evaluation: Aberporth LIDAR Test	3	2011	4	2011

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>
---	--	---

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>	1.862	1.798	1.757	-	1.757	4.562	4.773	7.450	7.417	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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. Additionally, the program began to develop MEDAL modules for each "Next Generation" system; and plans to develop "Next Generation" tactics; provide threat data and system requirements and capabilities to the MEDAL software development effort; and develop a common post-mission analysis tool for "Next Generation" systems.

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

	FY 2010	FY 2011	FY 2012
<p>Title: Hardware/Software Development</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: Code system-specific OPMA Modules</p> <p>FY 2011 Plans: Code system-specific OPMA Modules</p> <p>FY 2012 Plans: Code system-specific OPMA Modules</p>	0.816 0	0.844 0	0.825 0
<p>Title: Engineering Services/ILS:</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: Incorporate tactics lessons learned into TACMEMOs</p> <p>FY 2011 Plans: ILS planning for OPMA</p> <p>FY 2012 Plans: ILS planning for OPMA</p>	0.931 0	0.849 0	0.827 0
<p>Title: T&E Support Support for MEDAL/PMA</p> <p align="right">Articles:</p>	0.115 0	-	-

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>
---	--	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
<i>FY 2010 Accomplishments:</i> T&E Support for MEDAL/PMA integration during WSIT CT and DT			
<i>Title:</i> Management Support	-	0.105	0.105
		0	0
<i>FY 2011 Plans:</i> MEDAL management support to CTMP			
<i>FY 2012 Plans:</i> MEDAL management support to CTMP			
Accomplishments/Planned Programs Subtotals	1.862	1.798	1.757

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	
• OPN 4248: <i>Airborne MCM - OPMA</i>	0.256	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.256

D. Acquisition Strategy
 The Organic Post-Mission Analysis (OPMA) capability for the OAMCM systems will be developed by NSWC PC, Panama City, FL. The OPMA project will leverage existing system-specific developmental PMA software, maximize commonality, and host the software on a common shipboard computer. OPN funding will be used to procure ruggedized portable OPMA computers for ship of opportunity deployments, land basing, and training. Development of OAMCM-system-specific MEDAL modules will be performed by SAIC, McLean, VA. This effort will include post-test updates for the system-specific MEDAL modules to allow transition to a Fleet release. NSWC-PC will contract for this work on a time and materials basis. The tactics development, tactics training, and tactics algorithms/database efforts are performed by NSWC-PC. 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.

E. Performance Metrics
 Successfully integrate CTMP into the fleet.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>
---	--	---

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware/Software Development	C/CPAF	SAIC:VA	1.067	0.844	Dec 2010	0.825	Nov 2011	-		0.825	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC PC:Panama City FL	2.585	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			3.652	0.844		0.825		-		0.825			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Engineering Services	WR	NAVO:Various	-	-		-		-		-	Continuing	Continuing	Continuing
Engineering Services	C/CPAF	Various:Various	0.877	0.304	Nov 2010	0.282	Nov 2011	-		0.282	Continuing	Continuing	Continuing
Engineering Services	WR	NSWC PC:Panama City FL	2.583	0.456	Nov 2010	0.456	Nov 2011	-		0.456	Continuing	Continuing	Continuing
Engineering Services	C/CPAF	BAE:VA	0.609	-		-		-		-	Continuing	Continuing	Continuing
Engineering Services	C/CPAF	SAIC:VA	0.331	0.089	Nov 2010	0.089	Nov 2011	-		0.089	Continuing	Continuing	Continuing
ILS	WR	NSWC PC:Panama City FL	0.910	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			5.310	0.849		0.827		-		0.827			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Test and Evaluation	WR	NSWC PC:Panama City FL	0.040	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			0.040	-		-		-		-			

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>

--	--	--

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>

--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>
---	--	---

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 4026				
System Development: MEDAL: MEDAL: OAMCM Medal Curriculum Development	1	2010	1	2011
System Development: MEDAL: MEDAL: RAMICS Post FAT Bug Fixes	3	2014	3	2014
System Development: OPMA: OPMA: Ongoing Development for P3I; Software	1	2010	4	2016
System Development: OPMA: OPMA: RAMICS S/W	1	2013	2	2014
System Development: OPMA: OPMA: OASIS S/W	1	2010	2	2011
System Development: OPMA: OPMA: Tech Refresh	1	2014	4	2015
System Development: OPMA: OPMA: IA Recertification	4	2014	3	2015
System Development: OPMA: OPMA: ILS Products Dev for Q24 & RMS	1	2010	4	2012
System Development: OPMA: MCM PMA: Q-24A S/W Development	1	2010	2	2011
System Development: OPMA: MCM PMA: Q-24A Develop Module	1	2010	4	2011
System Development: OPMA: MCM PMA: Q-24A Complete	4	2011	4	2011
System Development: OPMA: Integrated T&E: Q-24A	4	2011	2	2012
System Development: NSAM: NSAM: NSAM EDM s/w	3	2010	4	2011
System Development: NSAM: NSAM: NSAM S/W Development	4	2012	4	2016
System Development: NSAM: NSAM: NSAM Pubs	2	2013	4	2013
System Development: Tactics: Develop CONOE for Integrated MCM	1	2014	4	2016
System Development: Tactics: TACMEMO AN/AQS-20A	1	2012	3	2012
System Development: Tactics: Develop NTTP 3.15.22 VOL II	1	2010	4	2010
System Development: Tactics: TACMEMO ALMDS	2	2012	4	2012
System Development: Tactics: Gear & Mine Database for OAMCM	2	2012	4	2016
System Development: Tactics: TACMEMO AMNS	4	2012	3	2013

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 4026: <i>Strat Into Medal, Tactics & Trng Organic Force</i>

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
System Development: Tactics: Serve as TDA fo NSAM Development	1	2010	3	2012
System Development: Tactics: TACMEMO OASIS	3	2013	2	2014
System Development: Tactics: Tactics Techniques	1	2014	4	2016
System Development: Tactics: P3I Support Development	4	2011	3	2013
System Development: Tactics: RAMICS Develop Module	4	2013	4	2015
System Development: Tactics: Reachback Support OAMCM	1	2012	4	2016

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 9179: <i>Surf Navy Integ Undersea Tactical Tech</i>
---	--	---

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9179: <i>Surf Navy Integ Undersea Tactical Tech</i>	0.922	0.909	0.895	-	0.895	0.898	0.911	0.929	0.939	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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-14, AN/AQS-24, AN/AQS-20A and future OAMCM sensor training modules.

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

	FY 2010	FY 2011	FY 2012
<p>Title: Hardware and Software Development</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: Development of an AN/AQQ-32, AN/AQS-14, AN/AQS-20A sonar training module. Also development of a Scenario Generator software system for REMUS for mine like contact recognition training and ALMDS training modules.</p> <p>FY 2011 Plans: Development of an AN/AQQ-32, AN/AQS-14, AN/AQS-20A sonar training module. Also development of a Scenario Generator software system for REMUS for mine like contact recognition training and ALMDS training modules.</p> <p>FY 2012 Plans: Development of an AN/AQQ-32, AN/AQS-14, AN/AQS-20A sonar training module. Also development of a Scenario Generator software system for REMUS for mine like contact recognition training and ALMDS training modules.</p>	0.793 0	0.773 0	0.768 0
<p>Title: Engineering and ILS Services</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: SNIUTT In-Service Engineering Agent (ISEA) and development support is provided by Naval Surface Warfare Center, Panama City (NSWC PC).</p> <p>FY 2011 Plans:</p>	0.129 0	0.136 0	0.127 0

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 9179: <i>Surf Navy Integ Undersea Tactical Tech</i>
---	--	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
SNIUTT In-Service Engineering Agent (ISEA) and development support is provided by Naval Surface Warfare Center, Panama City (NSWC PC).			
<i>FY 2012 Plans:</i> SNIUTT In-Service Engineering Agent (ISEA) and development support is provided by Naval Surface Warfare Center, Panama City (NSWC PC).			
Accomplishments/Planned Programs Subtotals	0.922	0.909	0.895

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

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• OPN 4248: <i>Airborne MCM - SNIUTT</i>	0.120	0.120	0.300	0.000	0.300	0.300	0.306	0.312	0.312	0.000	1.770

D. Acquisition Strategy

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) has been used to develop an AN/SQQ-32, AN/AQS-14, AN/AQS-24 and AN/AQS-20A sensor training modules. Funds will continue to support training for these four 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 PC, Panama City, FL, in association with Advanced Acoustic Concepts (AAC), Ronkonkoma, NY. NSWC PC will contract with AAC for this work under a Cost Plus Fixed-Fee (CPFF) scenario. 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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 9179: <i>Surf Navy Integ Undersea Tactical Tech</i>
---	--	---

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware Software Development	WR	NSWC PC:Panama City FI	1.379	0.773	Oct 2010	0.768	Nov 2011	-		0.768	Continuing	Continuing	Continuing
Subtotal			1.379	0.773		0.768		-		0.768			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
ISEA	WR	NSWC, PC:Panama City FL	0.239	0.136	Oct 2010	0.127	Nov 2011	-		0.127	0.000	0.502	
Subtotal			0.239	0.136		0.127		-		0.127	0.000	0.502	

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
DAWDF	Various	Various:Various	0.003	-		-		-		-	0.000	0.003	
Subtotal			0.003	-		-		-		-	0.000	0.003	

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1.621	0.909		0.895		-		0.895			

Remarks

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604373N: <i>Airborne Mine Countermeasures (AMCM)</i>	PROJECT 9999: <i>Congressional Adds</i>
---	--	---

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	2.390	-	-	-	-	-	-	-	-	0.000	2.390
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

9A39A - AMCM Open Architecture Technology Insertion Congressional Add - In support of Airborne Mine Countermeasure (AMCM) systems, this initiative will provide open systems migration of unique military standard sensors, electronics, and software system components to lower cost/higher performance commercial equivalent capabilities. This effort will develop and accelerate an Open Architecture Multi-static Technology Insertion solution for the Navy's Airborne Mine Countermeasures Program. The anticipated result is lower cost/higher performance equivalent capabilities based on open architecture software and hardware components.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2010	FY 2011
Congressional Add: Common Air Mine Countermeasures Tow Cable	2.390	-
FY 2010 Accomplishments: Common Air Mine Countermeasures Tow Cable - (Congressional Add); In support of Airborne Mine Countermeasure (AMCM) systems, this initiative will design/develop a common tow cable for the Airborne Mine Counter Mine (AMCM) Systems to the unique military standard sensors, electronics, and software system components for a lower cost/higher performance commercial equivalent capabilities.		
Congressional Adds Subtotals	2.390	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Congressional adds.