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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	94.539	127.757	190.622	-	190.622	147.397	121.349	80.049	69.970	Continuing	Continuing
0260: Remote Minehunting Systems	23.941	41.143	39.094	-	39.094	32.004	23.862	18.739	18.759	Continuing	Continuing
1233: Surface MCM Mid-life Upgrade	28.397	25.593	33.690	-	33.690	26.995	22.675	19.524	19.851	Continuing	Continuing
2094.: Unmanned Underwater Vehicle	-	-	36.773	-	36.773	8.816	13.736	1.825	0.835	Continuing	Continuing
2131: Assault Breaching System	29.884	49.200	59.648	-	59.648	65.565	46.874	33.631	24.448	Continuing	Continuing
3123: SMCM UUV	12.269	11.821	21.417	-	21.417	14.017	14.202	6.330	6.077	Continuing	Continuing
4025: Expendable Mine Neutralization System	0.048	-	-	-	-	-	-	-	-	0.000	0.048
A. Mission Description and Budget Item Justification											
The program provides for developments to combat the threat of known and projected foreign mines against U.S. Naval and merchant shipping in harbors, channels, choke points, sea lines of communications and amphibious and other fleet operating areas. It develops: (1) organic remote minehunting capability for surface platforms; (2) the integration and improvement of systems and support for systems which will detect, localize, classify, and neutralize moored, bottom, and close-tethered mines for use in Mine Countermeasure (MCM) MCM-1 Class and other surface ships; (3) systems for neutralizing mines and light obstacles from shallow water, very shallow water, surf zones, and beach landing craft zones in support of amphibious operations; (4) the integration of Unmanned Undersea Vehicles (UUVs) to provide undersea surveillance capability.											
JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under DEMONSTRATION AND VALIDATION because it develops and integrates hardware for experimental testing related to specific ship or aircraft applications.											

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>
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B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	81.347	142.657	150.032	-	150.032
Current President's Budget	94.539	127.757	190.622	-	190.622
Total Adjustments	13.192	-14.900	40.590	-	40.590
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-14.900			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	18.400	-			
• SBIR/STTR Transfer	-2.705	-			
• Program Adjustments	-	-	40.871	-	40.871
• Rate/Misc Adjustments	-	-	-0.281	-	-0.281
• Congressional General Reductions	-0.403	-	-	-	-
Adjustments					
• Congressional Directed Reductions	-2.100	-	-	-	-
Adjustments					

Change Summary Explanation

Program Adjustments:

FY12 -\$14,900 in Congressional Reductions for Program Execution (-\$8,900) and UUV program delay (-\$6,000).

FY13 \$40,590K in Total Program Adjustments for Mine Neutralization System (MNS)(\$7,600K), MEDAL EA/Improved Interoperability (\$2,000K), Persistent Littoral Undersea Surveillance (PLUS) (\$22,000K), Assault Breaching System (ABS) funding (\$3,000K), LDUUV Realignment (\$7,000K), Speed to Fleet R&D Initiatives (\$8,000), Mine Neutralization Replacement (-\$4,000) and Under Execution of R&D Programs (-4,188K). Miscellaneous Adjustments: FY13 -\$822K in total adjustments.

FY12 Congressional reduction for Program Execution (\$8.9M) is shown as a reduction to project 0260, Remote Minehunting System. After further review of the Congressional action, the Navy has determined that Congressional intent was to apply the reduction to project 1233, Surface MCM Mid-life Upgrade (-\$3.045M) and project 2131, Assault Breathing System (-\$5.855M). The Navy will make this adjustment during FY12 execution and the change will be reflected in future budget submissions.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 0260: Remote Minehunting Systems			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0260: Remote Minehunting Systems	23.941	41.143	39.094	-	39.094	32.004	23.862	18.739	18.759	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Under Secretary of Defense, (USD, AT&L) Nunn-McCurdy Certification Acquisition Decision Memorandum (ADM) for the Remote Minehunting Systems (RMS) dated 1 June, 2010 recertified and restructured the RMS Program. The Director, Cost Assessment and Program Evaluation (D, CAPE) approved the acquisition cost estimate for the restructured RMS program support and Remote Multi-Mission Vehicle (RMMV) Reliability Growth Program (RGP).

The AN/WLD-1(V)2 RMS is a mine reconnaissance system designed for the detection, classification, identification, and localization of bottom and moored targets in shallow and deep water. RMS is a fully integrated system consisting of a semi-submersible Remote Multi-Mission Vehicle (RMMV) carrying a towed variable depth sensor. Line-Of-Sight (LOS) and Over-The-Horizon (OTH) telemetry provides vehicle Command and Control and mine reconnaissance sensor data transmission to/from a system aboard a Navy ship. RMS will provide the Navy the capability to keep ships and sailors out of the minefield. Current intentions call for the RMS to be deployed on the Littoral Combat Ship as part of the ships' Mine Countermeasures (MCM) Mission Package. As part of the MCM Mission Package, the current configuration of the RMS calls for the RMMV to be combined with the AN/AQS-20A Sonar, Mine Detecting Set. For the purposes of Initial Operational Testing & Evaluation (IOT&E) for this program the AN/AQS-20A and other items will be provided as Government Furnished Equipment (GFE) to allow testing of the RMMV in its deployed state.

Footnote: FY12 Congressional reduction for Program Execution (\$8.9M) is shown as a reduction to project 0260, Remote Minehunting System. After further review of the Congressional action, the Navy has determined that Congressional intent was to apply the reduction to project 1233, Surface MCM Mid-life Upgrade (-\$3.045M) and project 2131, Assault Breathing System (-\$5.855M). The Navy will make this adjustment during FY12 execution and the change will be reflected in future budget submissions.

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

	FY 2011	FY 2012	FY 2013
Title: Product Development:	13.191	15.087	17.888
Articles:	0	0	0
FY 2011 Accomplishments: Conducted system testing, as part of the RMMV Reliability Growth Program. Conducted Critical System Reviews (CSR) I and II and Design Review I. Defined modifications to system design to improve reliability. Completed initial RGP V4.2 failure modes review. Commenced V4.1 Offshore Testing.			
FY 2012 Plans:			

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 0260: Remote Minehunting Systems		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Complete V4.1 system testing, as part of the RMMV Reliability Growth Program, including CSR Phase II, V4.2 implementation, supply support and certification. Conduct Design Review II. Continue with hardware and software failure mode resolutions. Define and implement additional modifications for reliability. Develop an updated Technical Data Package (TDP) for V4.2. FY 2013 Plans: Complete V4.2 system testing, as part of the RMMV Reliability Growth Program, including CSR Phase II and V4.3 implementation, supply support and certification. Continue with hardware and software failure mode resolutions. Define and implement additional modifications for reliability. Develop an updated Technical Data Package (TDP) for V4.3.				
Title: Support: Articles:		3.000 0	7.840 0	7.215 0
FY 2011 Accomplishments: Provided engineering, logistic and programmatic support for RMMV RGP and confidence testing. Commenced comprehensive review of RMMV support aboard LCS 1 and 2. FY 2012 Plans: Provide engineering, logistic and programmatic support for RMMV RGP and confidence testing, as well as reliability modeling. Define maintenance and support improvements to better maintain the RMS onboard LCS. Sandia National Labs providing reliability engineering support, modeling reliability, and reliability test support. FY 2013 Plans: Provide engineering, logistic and programmatic support for RMMV RGP and confidence testing, as well as reliability modeling. Conduct Physical Configuration Audit (PCA). Sandia National Labs providing reliability engineering support, modeling reliability, and reliability test support.				
Title: T&E: Articles:		7.250 0	17.171 0	13.093 0
FY 2011 Accomplishments: Conducted component and system testing in support of the RGP. Conducted dockside and offshore testing for first increment of system upgrades/modification. FY 2012 Plans: Conduct component and system testing in support of the RGP, including reliability confidence and performance testing. Perform integration testing and certification of software changes. Complete dockside and offshore testing for V4.1 of system upgrades/modification. FY 2013 Plans:				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2011	FY 2012	FY 2013
Conduct component and system testing in support of the RGP, including reliability confidence and performance testing. Perform integration testing and certification of software changes. Complete dockside and offshore testing for V4.2 increments of system upgrades/modification. Prepare for and conduct Developmental Testing (DT) and prepare for Operational Assessment (OA).											
Title: Management: <div>Articles:</div>									0.500 0	1.045 0	0.898 0
FY 2011 Accomplishments: Provided program management and travel for RMMV RGP Basic Ordering Agreement (BOA). Delivery Order 03 awarded. Integrated Baseline Review completed with LM. Established high level IPTs to provide program guidance and direction. Updated and modified management processes to better focus programmatic efforts. Complete 2366B Certification documentation.											
FY 2012 Plans: Provide program management and travel for RMMV V4.1 and V4.2 testing. Conduct a Business Case Analysis for Full and Open Competition for the RMS Program Full Rate Production. Prepare for and conduct the Overarching Integrated Product Team (OIPT) and Defense Acquisition Board (DAB) In-Process Review (IPR) currently planned for 2nd QTR FY12. Maintain oversight of the RGP and RMMV vehicle upgrades and testing.											
FY 2013 Plans: Provide program management and travel for RMMV V4.2 testing. Prepare for and conduct the OIPT/V4.2 Gate Review currently planned for 2nd QTR FY13. Maintain oversight of the RGP and RMMV vehicle upgrades and testing. Develop documentation in support of Milestone C.											
Accomplishments/Planned Programs Subtotals									23.941	41.143	39.094
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• OPN/2622: Minesweeping System Replacement	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• OPN/1600: LCS Modules	0.000	0.000	0.000	0.000	0.000	0.000	33.299	61.050	58.605	Continuing	Continuing
D. Acquisition Strategy											
At the conclusion of the Nunn-McCurdy certification process, an Acquisition Decision Memorandum (ADM) dated 01 Jun 2010 was issued by USD (AT&L) rescinding Milestone (MS) C and declaring the program as being post-MS B. A Reliability Growth Program is currently being conducted in accordance with the Acquisition Strategy that was approved September 2011. A DAB IPR will be conducted in 2nd QTR FY12. Acquisition Strategy for the program is to conduct DT in FY13 and an OA in FY14 based on the RGP. The remaining RMMV vehicles will be upgraded by a separate contract action. MS C will be conducted in 3rd QTR FY14. A Low Rate Initial											

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<p>Production (LRIP) contract is planned to be awarded based on full and open competition in 4th QTR FY14. This contract will have an option for full rate production planned to be awarded in 4th QTR FY17. DT/Operational Testing (OT) will be conducted on the LRIP systems in early FY17. Exercise of that full rate production option will be based on a Full Rate Production Decision Review (FRPDR) planned for 4th QTR FY17.</p> <p><u>E. Performance Metrics</u></p> <ul style="list-style-type: none"> Obtained Final Nunn-McCurdy/2366b Certification Award RGP Completion Contract Conduct DAB IPR Award RMMV Upgrade Contract Complete RGP Complete DT /OA based on RGP FY14 Award LRIP contract with Option for Full Rate Production MS C FY14 Complete DT/OT based on LRIP early FY17 FRPDR FY17 		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 0260: Remote Minehunting Systems					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware Development & Integration 1	SS/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	97.283	12.344	Oct 2011	15.601	Oct 2012	-		15.601	Continuing	Continuing	Continuing
Hardware Development & Integration 2	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	95.993	-		-		-		-	0.000	95.993	
Hardware Development & Integration	WR	NSWC, PC: PANAMA CITY, FL	7.140	2.743	Oct 2011	2.287	Oct 2012	-		2.287	Continuing	Continuing	Continuing
Systems Engineering 1	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	5.465	-		-		-		-	0.000	5.465	
Systems Engineering 2	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	16.211	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering 3	WR	NSWC, PC: PANAMA CITY, FL	5.294	-		-		-		-	Continuing	Continuing	Continuing
Award Fees	SS/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	5.485	-		-		-		-	0.000	5.485	
Subtotal			232.871	15.087		17.888		-		17.888			
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development 1	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	7.092	-		-		-		-	0.000	7.092	
Software Development 2	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	6.961	-		-		-		-	0.000	6.961	
Software Development 3	WR	NSWC, PC:RIVIERA BEACH, FL	2.142	-		-		-		-	0.000	2.142	

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Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ILS 1	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	17.836	-		-		-		-	0.000	17.836	
ILS 2	SS/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	2.000	-		-		-		-	Continuing	Continuing	Continuing
Engineeing Support/ILS 3	WR	NSWC, PC:PANAMA CITY, FL	5.057	3.350	Oct 2011	3.800	Oct 2012	-		3.800	Continuing	Continuing	Continuing
ILS 4	WR	VARIOUS:VARIOUS	1.125	-		-		-		-	0.000	1.125	
Ship Integration 1	SS/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	1.258	-		-		-		-	0.000	1.258	
Ship Integration 2	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	11.938	-		-		-		-	0.000	11.938	
Ship Integration 3	Various	VARIOUS:VARIOUS	13.714	-		-		-		-	0.000	13.714	
Engineering Support	WR	NSWC Corona:Corona, CA	-	0.110	Oct 2011	0.110	Oct 2012	-		0.110	Continuing	Continuing	Continuing
Engineering Support	WR	NUWC, NPT:Newport, RI	-	1.789	Oct 2011	0.680	Oct 2012	-		0.680	Continuing	Continuing	Continuing
Engineering Support	WR	NUWC, KPT:Keyport, WA	-	0.615	Oct 2011	0.623	Oct 2012	-		0.623	Continuing	Continuing	Continuing
ILS Support	WR	NAWCAD:Patuxent, MD	-	0.312	Oct 2011	0.316	Oct 2012	-		0.316	Continuing	Continuing	Continuing
Engineering Support	WR	NSWC Carderock:Carderock, MD	-	0.453	Oct 2011	0.459	Oct 2012	-		0.459	Continuing	Continuing	Continuing
Sandia labs - Reliability Engineering	WR	NSWC, PC:PANAMA CITY, FL	-	1.211	Oct 2011	1.227	Oct 2012	-		1.227	Continuing	Continuing	Continuing
Subtotal			69.123	7.840		7.215		-		7.215			

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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation 1	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	18.470	-		-		-		-	0.000	18.470	
Developmental Test & Evaluation 2	SS/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	27.671	16.867	Oct 2011	12.785	Oct 2012	-		12.785	Continuing	Continuing	Continuing
Developmental Test & Evaluation 3	WR	NSWC, PC: PANAMA CITY, FL	13.994	-		-		-		-	0.000	13.994	
Developmental Test & Evaluation 4	WR	COTF: NORFOLK, VA	0.300	0.304	Oct 2011	0.308	Oct 2012	-		0.308	Continuing	Continuing	Continuing
Developmental Test & Evaluation 5	WR	VARIOUS: VARIOUS	5.298	-		-		-		-	0.000	5.298	
Subtotal			65.733	17.171		13.093		-		13.093			
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	C/CPIF	LOCKHEED MARTIN:RIVIERA BEACH, FL	6.569	-		-		-		-	0.000	6.569	
Government Engineering Support1	WR	NSWC, PC: PANAMA CITY, FL	22.996	-		-		-		-	0.000	22.996	
Government Engineering Support2	WR	NSWC, PC: PANAMA CITY, FL	0.237	-		-		-		-	0.000	0.237	
Program Management Support	C/CPFF	CACI: WASHINGTON, DC	4.358	1.000	Oct 2011	0.853	Oct 2012	-		0.853	Continuing	Continuing	Continuing
Travel	WR	NAVSEA: WNY, DC	0.666	0.045	Oct 2011	0.045	Oct 2012	-		0.045	Continuing	Continuing	Continuing
SBIR Assessment	WR	VARIOUS: VARIOUS	7.161	-		-		-		-	0.000	7.161	
Subtotal			41.987	1.045		0.898		-		0.898			

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	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	409.714	41.143		39.094		-		39.094			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 0260: <i>Remote Minehunting Systems</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 0260: <i>Remote Minehunting Systems</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 0260				
Milestones: Milestone C	3	2014	3	2014
Milestones: Full Rate Production Decision	4	2017	4	2017
Events: Technical Evaluation (TECHEVAL)	2	2017	2	2017
Events: Operational Evaluation (OPEVAL)	3	2017	3	2017
Events: Design Review I	2	2011	2	2011
Events: Design Review II	3	2012	3	2012
Events: Initial Operating Capability (IOC)	2	2015	2	2015
Events: Contract Awards: RGP Continuation Contract	1	2012	1	2012
Events: Contract Awards: LRIP Award with FRP options	1	2015	1	2015
Events: Reliability Growth Program: Reliability Growth Program	1	2011	3	2014
Events: Reliability Growth Program: OA (OT-B1)	2	2014	2	2014
Events: Reliability Growth Program: DT (DT-IIG)	4	2013	4	2013
Deliveries: 2 LRIPs	4	2016	4	2016
Deliveries: 4 LRIPS	4	2017	4	2017

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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1233: Surface MCM Mid-life Upgrade	28.397	25.593	33.690	-	33.690	26.995	22.675	19.524	19.851	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

(1) AN/SQQ-32(V)4 High-Frequency, Wide Band (HFWB) is a technology upgrade to the AN/SQQ-32 Towed Body which will incorporate HFWB technology into the detection sonar to address performance deficiencies against new mine threats in the littorals. This upgrade will be installed on MCM-1 Class ships with the AN/SQQ-32(V)3 and will develop new transducer modules, fiber optic cable and modify topside processing and display software. 2) Mine Warfare and Environmental Decision Aids Library (MEDAL) is a software segment on the Global Command and Control System - Maritime (GCCS-M). MEDAL provides mine and mine warfare planning and evaluation tools and databases to the MCM Commander. 3) Develop and implement Mine Countermeasures Commander's Estimate of the Situation (MCM CES). 4) Unmanned Surface Sweep System (US3) is a magnetic/acoustic sweep system developed to sweep acoustic/magnetic influence mines, and when integrated with an unmanned surface vehicle (USV) becomes the Unmanned Influence Sweep System (UISS) deployed from the Littoral Combat Ship (LCS).

FY12 Congressional reduction for Program Execution (\$8.9M) is shown as a reduction to project 0260, Remote Minehunting System. After further review of the Congressional action, the Navy has determined that Congressional intent was to apply the reduction to project 1233, Surface MCM Mid-life Upgrade (-\$3.045M) and project 2131, Assault Breathing System (-\$5.855M). The Navy will make this adjustment during FY12 execution and the change will be reflected in future budget submissions."

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

	FY 2011	FY 2012	FY 2013
Title: MCM CES/PRODUCT DEVELOPMENT:	0.100	0.110	0.125
Articles:	0	0	0
FY 2011 Accomplishments: MEDAL EA: Completed development of Iteration 5. Initiated (software specifications) for Iteration 6. Updated curriculum to combine MEDAL Operator and Supervisor courseware for a single NEC course per MCM Task Force guidance.			
FY 2012 Plans: Conduct Contractor Testing of MEDAL EA Iteration 5 and MCM CES software. Participate in Trident warrior 12 exercise with MEDAL EA Iteration 5 and MCM CES software (limited fielding). Complete Iteration 6 software development. Initiate (software specifications) for Iteration 7. Conduct CANES/ISNS and LCS Mission Package integration activities. Develop MEDAL EA training job aids.			
FY 2013 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
Complete development of MEDAL EA Iteration 7. Conduct integration activities with CANES/ISNS and LCS Mission Package. Initiate Information Assurance documentation for Authority to Operate on Navy networks. Conduct series of Development Tests (DT). Conduct OA planning for FY14. Develop MEDAL EA training job aids.			FY 2013
Title: MCM CES/SUPPORT: FY 2011 Accomplishments: Oversee technical integration of developed algorithms and models that have demonstrated their effectiveness in reducing the complexity of the MCM planning problem into a manageable set of options depending on the operational objective. Support effort to include communication with activities such as ONR and NSWPC to coordinate the incorporation of validated algorithms and models into MEDAL with the CES framework in order to effectively simplify the MCM planning problem for CSG and ESG staffs and therefore provide the speed, agility, adaptability, and flexibility required for modern MCM operations. Validate Fleet usability of Planning on Risk (PoR) module. FY 2012 Plans: Continue introduction of capability and Planning on Risk (PoR) functionality via a limited fielding to Fleet Users including Mine Counter Measures Squadrons (MCMRONS) and Naval Mine and Anti Submarine Warfare Command (NMAWC). FY 2013 Plans: Continue introduction of capability and Planning on Risk (PoR) functionality via a limited fielding to Fleet Users including Mine Counter Measures Squadrons (MCMRONS) and Naval Mine and Anti Submarine Warfare Command (NMAWC).		Articles: 0.069 0	0.063 0
			0.095 0
Title: MCM CES/TEST AND EVALUATION: FY 2011 Accomplishments: Complete Integration testing with MEDAL WA V1. FY 2012 Plans: Test planning and initial user evaluation during Trident Warrior 12. FY 2013 Plans: Test Planning for MEDAL EA DT/OA in FY14.		Articles: 0.126 0	0.139 0
			0.159 0
Title: MCM CES/MANAGEMENT: FY 2011 Accomplishments:		Articles: 0.026 0	0.031 0
			-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 1233: Surface MCM Mid-life Upgrade		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Program management shall include overall technical guidance and leadership for the program. Other ongoing PM support includes oversight of financial and logistics efforts and adequate coordination with MEDAL. Other PM tasking to include briefings, demonstrations, and project planning as required. FY 2012 Plans: Program management shall include overall technical guidance and leadership for the program. Other ongoing PM support includes oversight of financial and logistics efforts and adequate coordination with MEDAL. Other PM tasking will include briefings, demonstrations, and project planning as required.				
Title: HFWB/PRODUCT DEVELOPMENT: FY 2011 Accomplishments: FY11 continue system engineering, requirements analysis, design and development for AN/SQQ-32(V)4 HFWB P3I through the sensor effort. FY 2012 Plans: FY12 continue system engineering, requirements analysis, design and development for AN/SQQ-32(V)4 HFWB P3I effort. FY 2013 Plans: Continue System engineer, requirements analysis and design for AN/SQQ-32(V)4 HFWB P3I through the Sensor effort.		1.563 0 Articles:	1.289 0	1.378 0
Title: HFWB/SUPPORT: FY 2011 Accomplishments: FY11 continue system engineering and requirements analysis for AN/SQQ-32(V)4 HFWB P3I effort. FY 2012 Plans: FY12 continue software requirements, configuration and software integraton for AN/SQQ-32(V)4 HFWB P3I effort. FY 2013 Plans: Continue software requirements, configuration, and software integration for AN.SQQ-32(V)4 HFWB P3I through the sensor.		0.300 0 Articles:	0.342 0	0.370 0
Title: HFWB/TEST AND EVALUATION: FY 2011 Accomplishments: FY11 perform lab testing for AN/SQQ-32(V)4 HFWB P3I through the sensor effort. FY 2012 Plans:		0.100 0 Articles:	0.100 0	0.350 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 1233: Surface MCM Mid-life Upgrade		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
FY12 continue to perform lab testing for AN/SQQ-32(V)4 HFWB P3I through the sensor effort.				
FY 2013 Plans: Perform Lab and at sea testing for AN/SQQ-32(V)4 HFWB P3I effort.				
Title: HFWB/MANAGEMENT: Articles:		0.100 0	0.120 0	0.117 0
FY 2011 Accomplishments: FY11 provide program management support and travel for AN/SQQ-32(V)4 HFWB Upgrade program.				
FY 2012 Plans: FY12 provide program management support and travel for AN/SQQ-32(V)4 HFWB Upgrade program.				
FY 2013 Plans: FY13 provide program management support and travel for AN/SQQ-32(V)4 HFWB Upgrade program				
Title: MEDAL/PRODUCT DEVELOPMENT: Articles:		3.677 0	5.648 0	5.839 0
FY 2011 Accomplishments: Completed development of Iteration 5. Initiated (software specifications) for Iteration 6. Updated curriculum to combine MEDAL Operator and Supervisor courseware for a single NEC course per MCM Task Force guidance.				
FY 2012 Plans: Conduct Contractor Testing of MEDAL EA Iteration 5 and MCM CES software. Participate in Trident Warrior 12 exercise with MEDAL EA Iteration 5 and MCM CES software (limited fielding). Complete Iteration 6 software development. Initiate (software specifications) for Iteration 7. Conduct CANES/ISNS and LCS Mission Package integration activities. Develop MEDAL EA training job aids.				
FY 2013 Plans: Complete development of MEDAL EA Iteration 7. Conduct integration activities with CANES/ISNs and LCS Mission Package. Initiate Information Assurance documentation for Authority to operate on navy networks. Conduct series of Development tests (DTs). Conduct OA planning for FY14. Develop MEDAL EA training aids.				
Title: MEDAL/SUPPORT: Articles:		0.435 0	1.156 0	0.550 0
FY 2011 Accomplishments:				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 1233: Surface MCM Mid-life Upgrade		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Oversee technical integration of developed algorithms and models that have demonstrated their effectiveness with respect to their objectives. Support effort to include communication with activities such as applied labs, government activities, and designated contractors. Assist in providing the speed, agility, adaptability, and flexibility required for modern MCM operations. FY 2012 Plans: Oversee technical integration of developed algorithms and models that have demonstrated their effectiveness with respect to their objectives. Support effort to include communication with activities such as applied labs, government activities, and designated contractors. Assist in providing the speed, agility, adaptability, and flexibility required for modern MCM operations. FY 2013 Plans: Oversee technical integration of developed algorithms and models that have demonstrated their effectiveness with respect to their objectives. Support effort to include communication with activities such as applied labs, government activities, and designated contractors. Assist in providing the speed, agility, adaptability, and flexibility required for modern MCM operations.				
Title: MEDAL/TEST AND EVALUATION: Articles: FY 2011 Accomplishments: Completed Contractor testing Iteration 4. Developed MEDAL EA test strategy. DevelopedTest Planning for trident Warrior 12. FY 2012 Plans: Complete Iteration 5 Contractor testing. Participate in Trident Warrior 12 (Contractor Test) for initial user evaluation. Develop DT test plans for FY13. FY 2013 Plans: Continue planning and conduct DT for Surface MCM. Continue System Integration testing activities wih CANES and ISNS. Continue planning for subsequent FY14 DT and OA events.		1.965 0	1.650 0	2.000 0
Title: MEDAL/MANAGEMENT: Articles: FY 2011 Accomplishments: Provide program management support and travel for MEDAL program. Program management shall include overall technical guidance and leadership for the program. Oversight of financial and logistics efforts and coordination with Navy and other DoD organizations and contractors as required to ensure successful execution of the program. As part of the systems engineering element of PM, communicate and coordinate with MIW C4ISR, ICWS, Organic MCM, Mainstreaming MIW, Expeditionary Warfare C4ISR, tactics development, long term planning, Naval Special Clearance Team (NSCT)-1, Assault Breaching Systems of		0.406 0	0.768 0	0.768 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM		PROJECT 1233: Surface MCM Mid-life Upgrade
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				
Systems (ABSoS), LCS, and other programs as they relate to MEDAL and MIW Mission Planning, Evaluation, and C4ISR. Other PM tasking to include briefings, demonstrations, and project planning as required. FY 2012 Plans: Provide program management support and travel for MEDAL program. Program management shall include overall technical guidance and leadership for the program. Oversight of financial and logistics efforts and coordination with Navy and other DoD organizations and contractors as required to ensure successful execution of the program. As part of the systems engineering element of PM, communicate and coordinate with MIW C4ISR, ICWS, Organic MCM, Mainstreaming MIEW, Expeditionary Warfare C4ISR, tactics development, long term planning, Naval Special Clearance Team (NSCT-1) Assault Breaching Systems of Systems (ABSoS), LCS, and other programs as they relate to MEDAL and MIW Mission Planning, Evaluation, and C4ISR. Other PM tasking to include briefings, demonstrations, and project planning as required. FY 2013 Plans: Provide program management support and travel for MEDAL program. Program management shall include overall technical guidance and leadership for the program. Oversight of financial and logistics efforts and coordination with Navy and other DoD organizations and contractors as required to ensure successful execution of the program. As part of the systems engineering element of PM, communicate and coordinate with MIW C4ISR, ICWS, Organic MCM, Mainstreaming MIEW, Expeditionary Warfare C4ISR, tactics development, long term planning, Naval Special Clearance Team (NSCT-1) Assault Breaching Systems of Systems (ABSoS), LCS, and other programs as they relate to MEDAL and MIW Mission Planning, Evaluation, and C4ISR. Other PM tasking to include briefings, demonstrations, and project planning as required.		FY 2011	FY 2012	FY 2013
Title: US3/PRODUCT DEVELOPMENT: Articles: FY 2011 Accomplishments: Continue Milestone B documentation. Continue risk reduction tasks. FY 2012 Plans: Continue Milestone B documentation. Complete Risk Reduction efforts. FY 2013 Plans: Begin Engineering and Development Phase. Design and build Engineering Development Model (EDM). Develop software and hardware interfaces. Conduct MS B. Conduct Preliminary Design Review (PDR) and Critical Design Review (CDR)		0.780 0	7.877 0	10.488 0
Title: US3/SUPPORT: Articles: FY 2011 Accomplishments:		0.647 0	1.273 0	4.339 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 1233: Surface MCM Mid-life Upgrade		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Engineering and Integrated Logistic Suppport (ILS) support for Milestone B documentation. FY 2012 Plans: Completion of Milestone B documentation. FY 2013 Plans: Engineering and ILS for E&MD phase efforts.				
Title: US3/TEST AND EVALUATION: FY 2011 Accomplishments: Sweep Power Subsystem (SPS) final test. Continue TEMP development. FY 2012 Plans: Complete TEMP. Technology Development testing. UISS Demonstration Testing. FY 2013 Plans: EDM Integrated system testing.		Articles: 0.317 0	3.487 0	1.972 0
Title: US3/MANAGEMENT: FY 2011 Accomplishments: Program support for Milestone B documentation. FY 2012 Plans: Program support for Milestone B documentation. FY 2013 Plans: Support the award of the engineering and manufacturing development contract in the 2nd Qtr. EMD contract management. Progam support for Milestone C documentation.		Articles: 0.386 0	1.540 0	1.540 0
Title: MNS Replacement FY 2011 Accomplishments: Implemented MCM Ship Mine Neutralization Replacement program to include proof of concept SMCM ship system, engineering, and testing in support of an Urgent Operational Need (UON). FY 2013 Plans:		Articles: 17.400 0	-	3.600 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy										DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 1233: Surface MCM Mid-life Upgrade				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2011	FY 2012	FY 2013
Continue proof of concept SMCM ship system, engineering and testing for the MCM Ship Mine Neutralization Replacement program.												
Accomplishments/Planned Programs Subtotals										28.397	25.593	33.690
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
• OPN/2622: LV075/LV078/LV080	30.859	10.114	35.906	0.000	35.906	30.013	1.053	1.110	1.231	0.000	151.037	
D. Acquisition Strategy												
HFWB - Naval Surface Warfare Center, Panama City (NSWC, PC) and ARL UT designed and developed the HFWB upgrade to the AN/SQQ-32.												
Mine Warfare and Environmental Decision Aids Library (MEDAL) - requirements for MEDAL Builds are generated through a formal requirements process. Requirements conferences gather a list of candidate functions based on a logical sequence to fully implement the overall software architecture. The fleet is presented with a recommended list of candidate capabilities based on this program plan, doctrine, fleet comments, and technology. These capability items are then prioritized by the fleet representatives (coordinated by Naval Mine Warfare and Anti-Submarine Command (NMAWC).The fleet inputs are then consolidated by COMINELWARCOM into an overall list which is then presented to Navy leadership for pricing and final selection. The selection is based on price, risk, available funding, and possibly by other program factors (e.g., ensure that MEDAL supports other program delivery schedules). Selection balances immediate needs, long term objectives, technical maturity and other programmatic factors. A verification and validation process is applied to any algorithms, tactics, or models to be incorporated in the software. MEDAL development to include integration of data fusion techniques and incorporation of Data Access Layer (DAL) architecture to meet FORCEnet requirements. Acquisition strategy for Mine Countermeasures Commander's Estimate of the situation (MCM CES) is to deliver the software module within MEDAL builds by implementing the CES framework into the MEDAL software.												
US3- Requirements for US3 will be documented in the Unmanned Influence Sweep System (UISS) Capability Development Document (CDD). Two Engineering and Manufacturing Development (EMD) contracts will be awarded in FY13 with an option for Low Rate Initial Production (LRIP).												
E. Performance Metrics												
US3 - Successfully reach Milestone B in FY13; Award EDM contract.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT					
1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603502N: Surface & Shallow Water MCM				1233: Surface MCM Mid-life Upgrade					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
MNS Development	Various	TBD:TBD	17.400	-		3.600	Feb 2013	-		3.600	0.000	21.000		
BSP: Develop Bottom Sediment Classifier	WR	NRL:WASHINGTON, DC	0.258	-		-		-		-	0.000	0.258		
Systems Engineering and Integration	WR	NSWC, PC:PANAMA CITY, FL	0.306	-		-		-		-	0.000	0.306		
System Development 1	WR	NSWC, PC:SAN DIEGO, CA	0.373	-		-		-		-	0.000	0.373		
Systems Engineering 2	WR	NSWC, PC:PANAMA CITY, FL	2.915	-		-		-		-	0.000	2.915		
Systems Engineering 3 MCM CES	WR	NSWC, PC:PANAMA CITY, FL	1.388	0.120	Nov 2011	0.120	Nov 2012	-		0.120	Continuing	Continuing	Continuing	
HFWB: Primary Hardware Development 1	C/CPAF	NSWC, PC/ARL UT:FLORIDA/TEXAS	15.511	-		-		-		-	0.000	15.511		
Primary Hardware Development 2	WR	ARL-UT:AUSTIN, TX	-	-		-		-		-	0.000	0.000		
HFWB: Tow Cable Development	C/CPAF	NSWC, PC/ARL UT:FLORIDA/TEXAS	1.399	-		-		-		-	0.000	1.399		
HFWB: Ship Integration	WR	NSWC, PC:PANAMA CITY, FL	1.697	-		-		-		-	0.000	1.697		
HFWB: SYSTEM ENGINEER	C/CPAF	NSWC/ARL UT:FLORIDA/TEXAS	3.887	1.289	Nov 2011	1.396	Nov 2012	-		1.396	0.000	6.572		
Software Development MEDAL EA	C/CPFF	SAIC:SAN DIEGO, CA	25.843	4.767	Nov 2011	5.839	Nov 2012	-		5.839	0.000	36.449		
US3: Product Development	C/CPIF	ITT:PANAMA CITY, FL	5.198	-		-		-		-	0.000	5.198		
US3: Product Development 2	WR	NSWC, PC:PANAMA CITY, FL	1.810	3.513	Mar 2012	-		-		-	0.000	5.323		
US3: Product Development 3	C/CPIF	Various:Various	0.430	2.840	Apr 2012	-		-		-	0.000	3.270		
US3: Product Development 4	C/CPIF	TBD:TBD	-	-		10.488	Dec 2012	-		10.488	Continuing	Continuing	Continuing	
US3: Product Development 5	WR	NSWC, CD:Carderock, MD	-	1.524	Mar 2012	-		-		-	0.000	1.524		
Subtotal			78.415	14.053		21.443		-		21.443				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 1233: Surface MCM Mid-life Upgrade					
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develop Logistics Products	WR	NSWC, PC:PANAMA CITY, FL	0.160	0.083	Nov 2011	0.080	Nov 2012	-		0.080	0.000	0.323	
Software Development 1	C/CPFF	SAIC:McLean, VA	0.350	-		-		-		-	0.000	0.350	
Software Development 2	C/CPFF	SAIC:McLean, Va	0.914	-		-		-		-	0.000	0.914	
HFWB Software Development	WR	NSWC, PC/ARL-UT:FLORIDA/TEXAS	6.712	0.300	Nov 2011	0.324	Nov 2012	-		0.324	0.000	7.336	
HFWB Integrated Logistics Support	WR	NSWC, PC:PANAMA CITY, FL	2.723	0.042	Nov 2011	0.061	Nov 2012	-		0.061	0.000	2.826	
Software Engineering 1	WR	SPAWAR:SAN DIEGO, CA	0.778	0.644	Nov 2011	-		-		-	0.000	1.422	
Software Engineering 2	WR	NSWC, PC:PANAMA CITY, FL	0.922	-		0.550	Nov 2012	-		0.550	0.000	1.472	
US3: Engineering 1	C/CPAF	ITT:PANAMA CITY, FL	3.018	-		-		-		-	0.000	3.018	
US3: Engineering 2	WR	NSWC, PC:PANAMA CITY, FL	4.612	0.300	Nov 2011	0.539	Dec 2012	-		0.539	Continuing	Continuing	Continuing
US3: Engineering 3	WR	NSWC, CD:Bethesda, MD	-	0.700	Dec 2011	0.800	Dec 2012	-		0.800	Continuing	Continuing	Continuing
US3: Integrated Logistics1	C/CPAF	ITT:PANAMA CITY, FL	1.408	-		-		-		-	0.000	1.408	
US3: Integrated Logistics 2	WR	NSWC, PC:PANAMA CITY, FL	2.545	0.273	Nov 2011	3.000	Dec 2012	-		3.000	Continuing	Continuing	Continuing
Subtotal			24.142	2.342		5.354		-		5.354			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MEDAL Test and Evaluation	C/FP	SAIC:San Diego, CA	-	1.964	Nov 2011	2.000	Nov 2012	-		2.000	0.000	3.964	
Test and Evaluation 1	C/CPAF	VARIOUS:VARIOUS	0.473	1.358	Nov 2011	0.148	Nov 2012	-		0.148	0.000	1.979	
HFWB: Developmental Test and Evaluation	WR	NSWC, PC/ARL-UT:FLORIDA/TEXAS	4.099	0.100	Nov 2011	0.350	Nov 2012	-		0.350	0.000	4.549	
Test and Evaluation 2	C/CPAF	VARIOUS:VARIOUS	3.917	1.687	Jun 2012	-		-		-	0.000	5.604	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 1233: Surface MCM Mid-life Upgrade						
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
US3: Test and Evaluation 1	C/CPIF	ITT:PANAMA CITY, FL	2.118	-		-		-		-	0.000	2.118		
US3: Test and Evaluation 2	WR	NSWC, PC:PANAMA CITY, FL	4.155	1.080	Nov 2011	0.364	Dec 2012	-		0.364	Continuing	Continuing	Continuing	
US3: Test and Evaluation 3	WR	NSWC, CCD:WEST BETHESDA, MD	-	0.720	Nov 2011	0.364	Dec 2012	-		0.364	Continuing	Continuing	Continuing	
US3: Test and Evaluation 4	C/CPIF	TBD:TBD	-	-		1.244	Dec 2012	-		1.244	Continuing	Continuing	Continuing	
Subtotal			14.762	6.909		4.470		-		4.470				
Remarks FY12 Congressional reduction for Program Execution (\$8.9M) is shown as a reduction to project 0260, Remote Minehunting System. After further review of the Congressional action, the Navy has determined that Congressional intent was to apply the reduction to project 1233, Surface MCM Mid-life Upgrade (-\$3.045M) and project 2131, Assault Breathing System (-\$5.855M). The Navy will make this adjustment during FY12 execution and the change will be reflected in future budget submissions."														
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Program Management Support 1	C/CPFF	CACI:WASHINGTON, DC	0.263	-		-		-		-	0.000	0.263		
Travel 1	WR	NAVSEA:WNY, DC	0.084	-		-		-		-	0.000	0.084		
Government Engineering Support1	WR	NSWC, PC:PANAMA CITY, FL	0.271	0.031	Nov 2011	0.031	Nov 2012	-		0.031	0.000	0.333		
MEDAL Program Management Support 2	Various	VARIOUS:VARIOUS	0.157	0.598	Nov 2011	0.745	Nov 2012	-		0.745	0.000	1.500		
SBIR Assessment 2	Various	VARIOUS:VARIOUS	0.019	-		-		-		-	0.000	0.019		
Program Management Support 3	C/CPFF	CACI:WASHINGTON, DC	1.341	-		-		-		-	0.000	1.341		
Program Management Support 4	C/CPFF	CACI:WASHINGTON, DC	0.080	-		-		-		-	0.000	0.080		
Government Engineering Support3	WR	NSWC, PC:PANAMA CITY, FL	0.090	-		-		-		-	0.000	0.090		
Travel 3	C/CPAF	NAVSEA:WNY, DC	0.256	-		-		-		-	0.000	0.256		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 1233: Surface MCM Mid-life Upgrade					
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support 5	C/CPFF	CACI:WASHINGTON, DC	0.167	-		-		-		-	0.000	0.167	
Government Engineering Support4	WR	NSWC, PC: PANAMA CITY, FL	0.010	-		-		-		-	0.000	0.010	
Travel4	C/CPAF	NSWC, PC: PANAMA CITY, FL	0.069	-		-		-		-	0.000	0.069	
HFWB: Program Management Support 6	C/CPAF	VARIOUS:VARIOUS	1.332	0.110	Jan 2012	0.107	Nov 2012	-		0.107	0.000	1.549	
HFWB: Government Engineering Support5	WR	NSWC, PC: PANAMA CITY, FL	0.750	-		-		-		-	0.000	0.750	
HFWB: Travel 5	C/CPAF	NAVSEA:WNY, DC	0.060	0.010	Nov 2011	-		-		-	0.000	0.070	
Government Engineering Support6	WR	NSWC, PC: PANAMA CITY, FL	1.352	-		-		-		-	0.000	1.352	
Travel 6	C/CPAF	NAVSEA:WNY, DC	0.238	-		-		-		-	0.000	0.238	
SBIR Assessment 6	Various	VARIOUS:VARIOUS	0.054	-		-		-		-	0.000	0.054	
Program Management Support 7	C/CPAF	VARIOUS:VARIOUS	0.350	-		-		-		-	0.000	0.350	
Acquisition Workforce Fund	Various	VARIOUS:VARIOUS	0.122	-		-		-		-	0.000	0.122	
US3: Contractor Management 3	WR	ITT: PANAMA CITY, FL	0.776	-		-		-		-	0.000	0.776	
US3: Government Management	WR	VARIOUS:VARIOUS	2.678	1.140	Nov 2011	0.840	Nov 2012	-		0.840	Continuing	Continuing	Continuing
US3: Contractor Management 7	C/CPAF	CACI:WASHINGTON, DC	0.249	-		-		-		-	0.000	0.249	
US3: Contractor Management	C/CPFF	TBD:TBD	-	0.300	Nov 2011	0.580	Nov 2012	-		0.580	Continuing	Continuing	Continuing
US3: Travel	WR	NAVSEA:WNY, DC	0.100	0.100	Nov 2011	0.120	Nov 2012	-		0.120	Continuing	Continuing	Continuing
Subtotal			10.868	2.289		2.423		-		2.423			
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			128.187	25.593		33.690		-		33.690			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy						DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>			R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>			PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>			
	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>
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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
US3				
Acquisition Milestones: Milestones: Milestone B	1	2013	1	2013
Acquisition Milestones: Milestones: Milestone C	1	2015	1	2015
Acquisition Milestones: Milestones: Initial Operational Capability	1	2017	1	2017
System Development: Milestone Documentation: Milestone B Documentation	1	2011	1	2013
System Development: Engineering & Manufacturing Development Phase: E&MD Contract Award	1	2013	1	2013
System Development: Engineering & Manufacturing Development Phase: Engineering & Manufacturing Development phase	1	2013	1	2015
System Development: Reviews: PDR Decision	2	2013	2	2013
System Development: Reviews: CDR Decision	4	2013	4	2013
Test and Evaluation: Test Events: Risk Reduction	1	2011	4	2012
Test and Evaluation: Test Events: DT Testing	4	2014	1	2015
Test and Evaluation: Test Events: Initial Operation Test and Evaluation	4	2016	1	2017
Production Milestones: Low Rate Initial Production: LRIP Contract Award	1	2015	1	2015
Production Milestones: Low Rate Initial Production: LRIP phase	1	2015	4	2017
HFWB				
System Development: P3I: P3I Through Sensor	2	2011	4	2017
Production Milestones: Full Rate Production: FRP	1	2011	4	2013
Deliveries: Installation: Installation	4	2011	2	2015
MEDAL				
System Development: MEDAL EA v.1 Iterations: EA v.1 Iteration 4	1	2011	1	2011
System Development: MEDAL EA v.1 Iterations: EA v.1 Iteration 5	1	2011	4	2011

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 1233: <i>Surface MCM Mid-life Upgrade</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
System Development: MEDAL EA v.1 Iterations: EA v.1 Iteration 5 Tactical Server	4	2011	4	2011
System Development: MEDAL EA v.1 Iterations: EA v.1 Iteration 6	3	2011	4	2012
System Development: MEDAL EA v.1 Iterations: EA v.1 Iteration 7	4	2012	3	2013
System Development: MEDAL EA v.2 Development: EA v.2 Development	1	2014	4	2016
Test and Evaluation: Enterprise Arch (EA) v.1: Enterprise Arch (EA) v.1 Development and Test	1	2011	3	2013
Test and Evaluation: Enterprise Arch (EA) v.1: EA v.1 Operational Assessment (OA)	4	2013	4	2013
MCM CES				
Acquisition Milestones: Milestones: IOC	4	2014	4	2014
System Development: Future Development: MCM CES Future Development	1	2012	4	2016
Test and Evaluation: Build 1: Build 1 Development and Test	1	2011	1	2011
Test and Evaluation: Build 1: Build 1 Integration and Test (Fleet Trial)	2	2011	3	2011

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2094.: Unmanned Underwater Vehicle			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2094.: Unmanned Underwater Vehicle	-	-	36.773	-	36.773	8.816	13.736	1.825	0.835	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
The Persistent Littoral Undersea Surveillance (PLUS) Innovative Naval Prototype (INP) Program provides Undersea Surveillance capability by employing mobile Unmanned Undersea Vehicle (UUV) technology. PLUS is being developed in response to an Urgent Operational Need (UON) identified by the Fleet. PLUS uses both conventionally powered UUVs with propellers and UUVs propelled by buoyancy engines (commonly called gliders). S&T development planned to transition into a prototype User Operational Evaluation System (UOES). The Large Displacement Unmanned Undersea Vehicle (LDUUV) provides long endurance UUVs operating autonomously in denied littorals with multiple mission payloads to increase the Navy's capacity and capability. Persistent Littoral Undersea Surveillance (PLUS): The Persistent Littoral Undersea Surveillance (PLUS) program provides effective, adaptive and persistent undersea surveillance targets over large littoral areas.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: Product Development <div>Articles:</div> FY 2013 Plans: PLUS - Identify/establish contract vehicle(s) and system specifications. Based on determinations from transition and Concept of Employment (CONEMP) Plans, develop prototype using REMUS 600 UUVs, hydrophone towed arrays, SEAGLIDER communication and navigation vehicles, and other material as determined for integration, Launch and Recovery (L&R) Hardware, Command and Control (C2) Hardware. LDUUV - Develop Performance Specifications to support Preliminary Design phase of LDUUV POR.								-	-	13.250	0
Title: Support <div>Articles:</div> FY 2013 Plans: PLUS - Commence development of tailored UOES technical documentation to support transition from S&T to a UOES project. Develop system & operational classification guidance. Generate system training and support plans. Document appropriate C2 strategy for system operations. Complete requisite Approval to Operate (ATO), Information Assurance/Anti-Tampering (IA/AT) certifications to support Fleet Exercise. Develop Logistics Plan. Obtain requisite Fleet approvals and develop Concept of Employment (CONEMP).								-	-	12.731	0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2094.: <i>Unmanned Underwater Vehicle</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
LDUUV - Conduct Cost Analysis and develop statutory documents for Gate 3 Review. Conduct Milestone A. Develop Technical Data Package for RFP release.			FY 2013
Title: Test and Evaluation	Articles:	-	-
FY 2013 Plans: PLUS - Participate in ONR INP demonstrations and Fleet Exercises			1.000 0
Title: Management	Articles:	-	-
FY 2013 Plans: Provide program management support and travel for PLUS and LDUUV programs. Program management shall include overall technical guidance and leadership for the program. Oversight of financial and logistics efforts and coordination with Navy and other DoD organizations and contractors as required to ensure successful execution of the program. Travel and other PM tasking to include briefings, demonstrations, and project planning as required.			1.810 0
Title: Persistent Littoral Undersea Surveillance (PLUS)	Articles:	-	-
Description: Persistent Littoral Undersea Surveillance (PLUS): The Persistent Littoral Undersea Surveillance (PLUS) program provides effective, adaptive and persistent undersea surveillance targets over large littoral areas.			7.982 0
FY 2013 Plans: -Initiate the User Interface for the Operator consoles for the command and control functions. -Initiate the evaluation and implementation of IA and Anti-Tamper on a test vehicle. -Initiate the construction of the optimized array (s) for the system, test integration with autonomy and signal processing. -Initiate construction of the Revised and Optimized PLUS Sensor Vehicle. -Initiate the testing and evaluation of USBL Navigation and the construction of the CARINA vehicle. -Initiate and complete a Field Test and Evaluation with the Fleet.			
Accomplishments/Planned Programs Subtotals		-	-
			36.773
C. Other Program Funding Summary (\$ in Millions)			
N/A			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2094.: <i>Unmanned Underwater Vehicle</i>
<p><u>D. Acquisition Strategy</u></p> <p>PLUS will develop two prototype User Operational Evaluation System (UOES) in response to an Urgent Operational Need (UON) request from the Fleet. The PLUS UOES will be utilized in fleet experimentation events and fleet exercises to develop Concept of Employment (CONEMP) for a potential follow-on program of record.</p> <p>LDUUV Innovative Naval Prototype (INP) program will transition 2 prototype LDUUVs to PMS406 LDUUV POR as User Operational Evaluation Systems (UOES). The LDUUV UOES will be utilized in Exercises to support requirement development that feeds into LDUUV POR.</p> <p>This effort will transition to PEO-LCS / PMS406 as a User Operational Evaluation System (UOES) in FY 2013.</p> <p><u>E. Performance Metrics</u></p> <p>PLUS - Prototype Delivery LDUUV - Achieve MS A Performance metrics for this effort are classified.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2094.: Unmanned Underwater Vehicle					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
LDUUV Specification	WR	Various:Various	-	-		0.250	Dec 2012	-		0.250	0.000	0.250	
PLUS Prototype Hardware	Various	Various:Various	-	-		13.000	Dec 2012	-		13.000	Continuing	Continuing	Continuing
Arrays	C/CPFF	Ocean Acoustical Services and instrumentation:Lexington, MA	-	-		0.500	Oct 2012	-		0.500	0.000	0.500	
TDA's	C/CPFF	Ocean Acoustical Services and instrumentation:Lexington, MA	-	-		0.300	Oct 2012	-		0.300	0.000	0.300	
SP-Intergration	C/CPFF	Ocean Acoustical Services and instrumentation:Lexington, MA	-	-		0.500	Oct 2012	-		0.500	0.000	0.500	
TDA's	C/CPFF	METRON:Reston, VA	-	-		0.300	Oct 2012	-		0.300	0.000	0.300	
Navigation	C/FPRP	Woods Hole Oceanographic Institution:Woods Hole, MA	-	-		0.400	Oct 2012	-		0.400	0.000	0.400	
SP-Intergration	Reqn	NAVSEA:Baltimore, MD	-	-		0.500	Oct 2012	-		0.500	0.000	0.500	
TDA's	Reqn	NUWC:Newport, RI	-	-		0.300	Oct 2012	-		0.300	0.000	0.300	
SP Intergration	Reqn	NUWC:Newport, RI	-	-		0.200	Oct 2012	-		0.200	0.000	0.200	
Anti-Tamper	Reqn	Sandia Natl Lab:Livermore, CA	-	-		0.500	Oct 2012	-		0.500	0.000	0.500	
Vehicle	C/CPFF	Hydroid Kongsberg Marine:Pocasset, MA	-	-		0.600	Oct 2012	-		0.600	0.000	0.600	
Subtotal			-	-		17.350		-		17.350			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2094.: Unmanned Underwater Vehicle					
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
LDUUV Engineering Support	WR	NUWC Newport:Newport, RI	-	-		2.426	Dec 2012	-		2.426	0.000	2.426	
LDUUV Engineering Support 2	SS/CPFF	APL/JHU:Laurel, MD	-	-		2.335	Jan 2013	-		2.335	0.000	2.335	
LDUUV Engineering Support 3	SS/CPFF	ARL PSU:State College, PA	-	-		0.145	Jan 2013	-		0.145	0.000	0.145	
LDUUV Engineering Support 4	WR	NUWC Keyport:Keyport, WA	-	-		0.333	Dec 2012	-		0.333	0.000	0.333	
LDUUV ILS Support	WR	SSC Lant:Charleston, SC	-	-		0.205	Dec 2012	-		0.205	0.000	0.205	
LDUUV ILS Support 2	WR	VAR:VAR	-	-		0.287	Dec 2012	-		0.287	0.000	0.287	
PLUS ILS Support	WR	NUWC Newport:Newport, RI	-	-		0.500	Nov 2012	-		0.500	Continuing	Continuing	Continuing
PLUS Engineering Support	WR	NUWC Newport:Newport, RI	-	-		1.500	Nov 2012	-		1.500	Continuing	Continuing	Continuing
PLUS Engineering Support 2	TBD	WHOI:Woods Hole, MA	-	-		1.000	Feb 2013	-		1.000	Continuing	Continuing	Continuing
PLUS Engineering Support 3	SS/CPFF	APL/JHU:Laurel, MD	-	-		1.000	Dec 2012	-		1.000	Continuing	Continuing	Continuing
PLUS C2 Support	TBD	TBD:TBD	-	-		3.000	Mar 2013	-		3.000	Continuing	Continuing	Continuing
Test	Reqn	NUWC:Newport, RI	-	-		0.030	Oct 2012	-		0.030	0.000	0.030	
Test	Reqn	NSWD:Dahlgren, VA	-	-		0.060	Oct 2012	-		0.060	0.000	0.060	
Test	Reqn	NUWC:Patuxent, MD	-	-		0.020	Oct 2012	-		0.020	0.000	0.020	
IA	Reqn	NUWC:Newport, RI	-	-		0.150	Oct 2012	-		0.150	0.000	0.150	
Subtotal			-	-		12.991		-		12.991			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PLUS Fleet Experimentation	Various	Various:Various	-	-		1.000	May 2013	-		1.000	Continuing	Continuing	Continuing
Test	C/CPFF	Ocean Acoustical Services and	-	-		0.500	Oct 2012	-		0.500	0.000	0.500	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2094.: Unmanned Underwater Vehicle					
Test and Evaluation (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
		instrumentation:Lexington, MA												
Test	C/FPRP	Woods Hole Oceanographic Institution:Woods Hole, MA	-	-		0.982	Oct 2012	-		0.982	0.000	0.982		
Testing	C/CPFF	Woods Hole Oceanographic Institution:Woods Hole, MA	-	-		0.350	Oct 2012	-		0.350	0.000	0.350		
Testing	Reqn	NUWC:Newport, RI	-	-		0.400	Oct 2012	-		0.400	0.000	0.400		
Testing	Reqn	NPS:Monterey, CA	-	-		0.100	Oct 2012	-		0.100	0.000	0.100		
Testing	Reqn	SPAWAR:San Diego, CA	-	-		0.065	Oct 2012	-		0.065	0.000	0.065		
Subtotal			-	-		3.397		-		3.397				
Management Services (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
LDUUV Program Management	WR	NUWC Newport:Newport, RI	-	-		0.435	Dec 2012	-		0.435	0.000	0.435		
LDUUV Program Management 2	TBD	TBD:TBD	-	-		0.475	Jan 2013	-		0.475	0.000	0.475		
LDUUV Travel	Various	NAVSEA:Washington, DC	-	-		0.050	Dec 2012	-		0.050	0.000	0.050		
PLUS Program Management	Various	VAR:VAR	-	-		0.739	Dec 2012	-		0.739	Continuing	Continuing	Continuing	
PLUS Travel	Various	NAVSEA:Washington, DC	-	-		0.111	Dec 2012	-		0.111	Continuing	Continuing	Continuing	
Program	C/CPFF	Systems Planning & Analysis:Arlington, VA	-	-		0.700	Oct 2012	-		0.700	0.000	0.700		
Program	SS/BA	Kentco:Sterling, VA	-	-		0.475	Oct 2012	-		0.475	0.000	0.475		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>				PROJECT 2094.: <i>Unmanned Underwater Vehicle</i>					

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program	SS/BA	Mandex:Fairfax, VA	-	-		0.050	Oct 2012	-		0.050	0.000	0.050	
Subtotal			-	-		3.035		-		3.035			

	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	36.773	-	36.773			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2094.: <i>Unmanned Underwater Vehicle</i>

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2094.: <i>Unmanned Underwater Vehicle</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2094.: <i>Unmanned Underwater Vehicle</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
PLUS Development				
Prototype Integration: UUV/Arrays Integration	2	2013	2	2014
User Interface for the Operator consoles for the command and control functions: Development A: SRR	1	2013	1	2013
Prototype Integration: Glider Integration	4	2013	2	2014
User Interface for the Operator consoles for the command and control functions: Development A: PDR	3	2013	3	2013
User Interface for the Operator consoles for the command and control functions: Development A: FDR	4	2013	4	2013
Fleet Experimentation: UOES Forward Fleet Exercise: MRR	2	2014	2	2014
User Interface for the Operator consoles for the command and control functions: Development A: T&E	1	2014	1	2014
Fleet Experimentation: UOES Forward Fleet Exercise:	3	2014	3	2014
User Interface for the Operator consoles for the command and control functions: Development A: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.	4	2014	4	2014
Fleet Experimentation: UOES Follow-on Fleet Exercises: MRR	4	2015	4	2015
Fleet Experimentation: UOES Follow-on Fleet Exercises: Schedule Detail	1	2016	4	2017
Evaluation of IA and Anti-Tamper on a test vehicle: Development B: SRR	1	2013	1	2013
Evaluation of IA and Anti-Tamper on a test vehicle: Development B: CDR	3	2013	3	2013
Evaluation of IA and Anti-Tamper on a test vehicle: Development B: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.	2	2014	2	2014
Requirements Development: Transition Plan: Schedule Detail	1	2013	2	2013
Requirements Development: Concept of Employment: Schedule Detail	1	2013	2	2014

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM		PROJECT 2094.: Unmanned Underwater Vehicle	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Implementation of IA and Anti-Tamper on a test vehicle: Build A: FDR		4	2013	4	2013
Implementation of IA and Anti-Tamper on a test vehicle: Build A: T&E		1	2014	1	2014
Implementation of IA and Anti-Tamper on a test vehicle: Build A: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.		2	2014	2	2014
Program Transition: UOES Transition Documentation: Schedule Detail		1	2013	4	2014
Construction of the optimized array (s) for the system: Development C: CDR		1	2013	1	2013
Product Improvement: Product Improvement: Product Improvement Implementation		1	2015	4	2015
Construction of the optimized array (s) for the system: Development C: T&E		4	2013	4	2013
LDUUV Development					
Construction of the optimized array (s) for the system: Build B: CDR		3	2013	3	2013
Construction of the optimized array (s) for the system: Build B: T&E		4	2013	4	2013
Acquisition Milestones: Milestones: Milestone A		3	2013	3	2013
Construction of the optimized array (s) for the system: Build B: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.		1	2014	1	2014
Acquisition Milestones: Milestone Documentation: Milestone Documentation		1	2013	3	2013
Testing and integration of the array with autonomy and signal processing: Development D: ICD		1	2013	1	2013
Testing and integration of the array with autonomy and signal processing: Development D: TRR		3	2013	3	2013
System Development: Engineering & manufacturing Development Phase: Draft Request for Proposal		1	2014	1	2014
Testing and integration of the array with autonomy and signal processing: Development D: T&E		4	2013	4	2013
Testing and integration of the array with autonomy and signal processing: Development D: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.		1	2014	1	2014
Pg 2 PE 0603502N PLUS SPEED TO FLEET R&D Initiative R-4					

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM		PROJECT 2094.: Unmanned Underwater Vehicle	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Testing and evaluation of USBL Navigation: Development E: ICD	1	2013	1	2013
Testing and evaluation of USBL Navigation: Development E: TRR	2	2013	2	2013
Testing and evaluation of USBL Navigation: Development E: T&E	4	2013	4	2013
Testing and evaluation of USBL Navigation: Development E: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.	1	2014	1	2014
Testing of the CARINA vehicle: Build C: CDR	1	2013	1	2013
Testing of the CARINA vehicle: Build C: TRR	2	2013	2	2013
Testing of the CARINA vehicle: Build C: T&E	4	2013	4	2013
Testing of the CARINA vehicle: Build C: PLUS is headed to a User Operated Evaluation System,this sets the specifications of the system.	4	2014	4	2014
Fleet Field Test and Evaluation: Development F: IPC	1	2013	1	2013
Fleet Field Test and Evaluation: Development F: MPC	3	2013	3	2013
Fleet Field Test and Evaluation: Development F: FPC	4	2013	4	2013
Construction of the Revised and Optimized PLUS Sensor Vehicle: Build D: CDR	1	2013	1	2013
Construction of the Revised and Optimized PLUS Sensor Vehicle: Build D: TRR	4	2013	4	2013
Construction of the Revised and Optimized PLUS Sensor Vehicle: Build D: T&E	1	2014	1	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2131: <i>Assault Breaching System</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2131: <i>Assault Breaching System</i>	29.884	49.200	59.648	-	59.648	65.565	46.874	33.631	24.448	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program provides for a combination of U.S. Navy projects planned to counter the threat to amphibious landing forces from known and projected foreign land/sea mines, obstacles in the beach zone and surf zone approaches to amphibious assault areas. The Assault Breaching System (ABS) of Systems (Countermines/Counter Obstacle, Intelligence/Surveillance/Reconnaissance/Targeting (ISR/T), Precision Navigation/Virtual Marking/Integration, C4I/Data Fusion) provides a full assault breaching capability which is an essential element to the Ship To Objective Maneuver (STOM) Concept of Operations.

Countermines/Counter Obstacle (CM/CO) - Far term - Counter Mine System (CMS) - transitioned from a 6.3 S&T Concept Demonstration effort to a 6.4 development program after a concept decision/AoA in FY06. CMS provides a near surface neutralization capability to the Navy.

ISR/T - Coastal Battlefield Reconnaissance and Analysis (COBRA) is the ISR/T part of the ABS of systems. This system provides Airborne Mine Countermeasures (AMCM) capability and one system consists of two Airborne Payloads and one Post Mission Analysis Station. Under the umbrella of evolutionary acquisition, three increments of development are planned; Block I introduces a daytime, surface laid minefield and obstacle detection capability for the Beach Zone. Blocks II and III will incorporate technology being developed by 6.3.

S&T. Block II adds a surfzone and night (darkness) detection capability. Block III adds a buried mine detection capability and on-board Near-Real-Time processing of Multi Spectral Imagery data.

COBRA will be a modular payload architecture of and integrated with the MQ-8B Fire Scout Vertical Takeoff and Landing Unmanned Aerial Vehicle (VTUAV) and will serve as the "detect" mission module of the Littoral Combat Ship (LCS) Mine Warfare mission package, providing AMCM capability.

Precision Navigation/Virtual Marking (PN/M)- The navigation effort involves requirements development and program planning to choose the navigational upgrades for the Landing Craft, Air Cushion (LCAC) and Landing Craft, Utility (LCU), and Amphibious Assault Vehicle (AAV) to enable the craft to safely navigate the neutralized assault lanes. A system of virtual or physical lane marking is to be developed to guide the assault craft through the neutralized assault lanes. OPN will fund the CRAFTALTS to upgrade the navigation systems.

LCU Navigation Upgrade: Modernized the navigation system to enable safe transit through the breached lane.

LCAC Autopilot Upgrade: An integrated improvement to the LCAC (Service Life Extension Program (SLEP) navigation system for craft control that allows precise navigation and hovering within the breached lane. These software upgrades and backfits will occur during scheduled LCAC SLEPs.

AAV Navigation Upgrade : Modernize the navigation system to enable precise transit through the breached lane.

Command, Control, Computers, Communications and Intelligence (C4I) - System will tie all of the above systems together under an integrated ABS architecture and also tie in with the integrated Mine Warfare architecture.

FY12 Congressional reduction for Program Execution (\$8.9M) is shown as a reduction to project 0260, Remote Minehunting System. After further review of the Congressional action, the Navy has determined that Congressional intent was to apply the reduction to project 1233, Surface MCM Mid-life Upgrade (-\$3.045M) and

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 2131: Assault Breaching System		
project 2131, Assault Breathing System (-\$5.855M). The Navy will make this adjustment during FY12 execution and the change will be reflected in future budget submissions."					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2011	FY 2012	FY 2013
Title: Product Development:			24.286	38.579	47.642
Articles:			0	0	0
FY 2011 Accomplishments: CMS - Continue live dart/neutralizer testing with emphasis on aero-dynamics and structures. Begin CMS neutralizer lethality design and testing (100 darts). COBRA - Complete BLK I integration Flight Tests with VTUAV. Begin COBRA Blk II design and development capability. Precision Navigation/Marking (PN/M) - Continue evaluation/assessment of EDMs supporting PN/M efforts.					
FY 2012 Plans: CMS - Continue live dart/neutralizer testing with emphasis on aero-dynamics and structures. Begin CMS neutralizer lethality design and testing (100 darts). COBRA - Complete BLK I integration Flight Tests with VTUAV. Begin COBRA Blk II design and development capability. Precision Navigation/Marking (PN/M) - Continue evaluation/assessment of EDMs supporting PN/M efforts.					
FY 2013 Plans: CMS - Continue the design and development and conduct CMS neutralizer formal down selection between high explosive (HE) neutralizer and solid reactive material neutralizer. Conduct Critical Design Review (CDR), final dart down select. COBRA - Continue design and development of COBRA Block II capability.					
Title: Technical Support:			0.926	0.644	0.926
Articles:			0	0	0
FY 2011 Accomplishments: CMS/COBRA - Provide mine magazine inventory management and shipping, contract management and test/studies, C4I/Data Fusion. Provide technical/acquisition support and documentation (ILS, training, data, drawings). Achieve Blk II Milestone B decision.					
FY 2012 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 2131: Assault Breaching System		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
CMS/COBRA - Provide mine magazine inventory management and shipping, contract management and test/studies, C4I/Data Fusion. Provide technical/acquisition support and documentation (ILS, training, data, drawings).				
FY 2013 Plans: CMS/COBRA - Provide mine magazine inventory management and shipping, contract management and test/studies, C4I/Data Fusion. Provide technical/acquisition support and documentation (ILS, training, data, drawings).				
Title: Test and Evaluation: Articles:		3.235 0	8.599 0	9.695 0
FY 2011 Accomplishments: CMS - Begin CMS Lethality Testing in support of Neutralizer Down-Select between the two darts. PN/M - Continue to test the Precision Navigation and Marking design capability.				
FY 2012 Plans: CMS - Continue CMS Lethality Testing in support of Neutralizer Down-Select between the two darts. Tests against different mines in different conditions to determine the final dart design and lethality. COBRA - Conduct Blk I Initial Operational Test and Evaluation (IOT&E) and flight test on the VTUAV.				
FY 2013 Plans: CMS - Complete 100 shot for neutralizers testing, payload modular. Accomplish CDR. COBRA - Initial developemnt testing of Block II.				
Title: Management: Articles:		1.437 0	1.378 0	1.385 0
FY 2011 Accomplishments: Mine magazine inventory management and shipping, contract management and tests/studies, C4I/Data fusion.				
FY 2012 Plans: Mine magazine inventory management and shipping, contract management and tests/studies, C4I/Data fusion.				
FY 2013 Plans: Mine magazine inventory management and shipping, contract management and tests/studies, C4I/Data fusion.				
Accomplishments/Planned Programs Subtotals		29.884	49.200	59.648

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2131: Assault Breaching System			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• OPN/2624: SHALLOW WATER MCM SHIP	1.254	1.048	6.950	0.000	6.950	6.452	7.099	27.231	27.778	0.000	85.623
• OPN/1600: LCS MODULES	0.000	7.500	7.600	0.000	7.600	7.600	15.300	15.450	15.550	0.000	76.775
• WPN/4225: AIRBORNE MCM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25.400	0.000	25.400
D. Acquisition Strategy											
<p>Countermine/Counter Obstacle (CM/CO) is a two phased approach, near term and far term solutions. The near term approach for CM/CO is JDAM Assault Breaching System (JABS) and ABS Tactical Decision Aid and this effort has been completed. The far term solution is CMS, which transitioned from ONR in 2nd QTR 07 followed by MS B decision in 3rd QTR 07 and SD&D contract in 4th QTR 08.</p> <p>Intelligence/Surveillance/Reconnaissance/Targeting (ISR/T) - COBRA Block I achieved MS C in 3rd QTR FY09. COBRA Block II technology will transfer from ONR and achieve MS B in 3rd QTR FY11. COBRA Block III technology will transition in FY16.</p> <p>Precision Navigation/Virtual Marking (PN/M) - The navigation upgrades for the Landing Craft, Air Cushion (LCAC) and Landing Craft, Utility (LCU) are in progress. AAV enhancements will be achieved through an ECP (PMA AAV (Marine Corps)) in 4th QTR FY11.</p>											
E. Performance Metrics											
<p>Successful COBRA integration, flight tests and Operational Assessment (OA) into the Vertical Take-off Unmanned Arial Vehicle (VTUAV). CMS successful design analysis with the down selection of the dart and provide a near surface neutralization capability to the fleet.</p>											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM	PROJECT 2131: Assault Breaching System
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Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Dev, COBRA	C/CPAF	Arete:MELBOURNE, FL	120.307	7.045	Nov 2011	7.045	Nov 2012	-		7.045	0.000	134.397	
Primary Hardware Dev, CMS	C/CPAF	Boeing:St. Louis, MO	67.591	22.255	Nov 2011	31.288	Oct 2012	-		31.288	0.000	121.134	
Ancillary Hardware Dev, JABS	C/CPAF	Unknown:Unknown	12.436	3.214	Feb 2012	3.214	Nov 2012	-		3.214	0.000	18.864	
Systems Engineering, COBRA	WR	NSWC, PC: PANAMA CITY, FL	20.860	-		-		-		-	0.000	20.860	
Software Dev, COBRA	WR	NAVAIR: PANAMA CITY, FL	12.958	-		-		-		-	0.000	12.958	
Systems Engineering, CMS	WR	NSWC, PC: PANAMA CITY, FL	27.199	1.703	Nov 2011	1.703	Nov 2012	-		1.703	Continuing	Continuing	Continuing
Training Dev, COBRA	WR	NSWC, PC: PANAMA CITY, FL	6.801	0.845	Nov 2011	0.845	Nov 2012	-		0.845	0.000	8.491	
Tooling	WR	NSWC, PC: PANAMA CITY, FL	0.860	-		-		-		-	0.000	0.860	
ABS IPT/Test Assets/Proj Eng	WR	NSWC, PC: PANAMA CITY, FL	7.212	0.417	Nov 2011	0.417	Nov 2012	-		0.417	0.000	8.046	
Precision Navigation & Marking	WR	NSWC, PC: PANAMA CITY, FL	8.041	3.100	Nov 2011	3.100	Nov 2012	-		3.100	0.000	14.241	
Subtotal			284.265	38.579		47.612		-		47.612			

Remarks

FY12 Congressional reduction for Program Execution (\$8.9M) is shown as a reduction to project 0260, Remote Minehunting System. After further review of the Congressional action, the Navy has determined that Congressional intent was to apply the reduction to project 1233, Surface MCM Mid-life Upgrade (-\$3.045M) and project 2131, Assault Breaching System (-\$5.855M). The Navy will make this adjustment during FY12 execution and the change will be reflected in future budget submissions.

Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support Equipment	WR	NSWC, PC: PANAMA CITY, FL	16.767	1.153	Nov 2011	1.123	Oct 2012	-		1.123	0.000	19.043	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2131: Assault Breaching System						
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Software Development	WR	NSWC, PC: PANAMA CITY, FL	8.037	-		-		-		-	0.000	8.037		
Integrated Logistics Support	WR	NSWC, IH: NDIAN HEAD, MD	2.712	-		-		-		-	0.000	2.712		
Configuration Management	WR	NSWC, PC: PANAMA CITY, FL	3.744	-		-		-		-	0.000	3.744		
Technical Data	WR	NSWC, PC: PANAMA CITY, FL	2.588	-		-		-		-	0.000	2.588		
Studies & Analysis	WR	NSWC, PC: PANAMA CITY, FL	5.195	0.225	Nov 2011	0.222	Oct 2012	-		0.222	0.000	5.642		
GFE	WR	NSWC, PC: PANAMA CITY, FL	0.400	-		-		-		-	0.000	0.400		
Subtotal			39.443	1.378		1.345		-		1.345	0.000	42.166		
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Development Test & Evaluation	WR	NSWC, IH: NDIAN HEAD, MD	36.680	6.207	Nov 2011	6.207	Oct 2012	-		6.207	0.000	49.094		
Operational Test & Evaluation	WR	NSWC/ IH, PC: NDIAN HEAD, PANAMA CITY	8.655	-		-		-		-	0.000	8.655		
Tooling	WR	NSWC/ IH, PC: NDIAN HEAD, PANAMA CITY	0.700	-		-		-		-	0.000	0.700		
GFE	WR	NSWC/ IH, PC: NDIAN HEAD, PANAMA CITY	0.400	-		-	Oct 2012	-		-	0.000	0.400		
Development Test	C/FP	NSWC PC: Panama City, FL	2.392	2.392	Nov 2011	3.558	Oct 2012	-		3.558	0.000	8.342		
Subtotal			48.827	8.599		9.765		-		9.765	0.000	67.191		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 2131: Assault Breaching System					
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	C/CPFF	CACI, Norhtrup Grumman:DC, FL	10,355.000	0.100	Nov 2011	0.120	Oct 2012	-		0.120	0.000	10,355.220	
Government Engineering Support	WR	NSWC, IH:NDIAN HEAD, MD	32.135	0.220	Nov 2011	0.482	Oct 2012	-		0.482	0.000	32.837	
Program Management Support	WR	NSWC/ IH, PC:NDIAN HEAD, PANAMA CITY	24.025	0.250	Nov 2011	0.250	Oct 2012	-		0.250	0.000	24.525	
Travel	WR	NAVSEA:WNY, DC	1.361	0.074	Nov 2011	0.074	Oct 2012	-		0.074	0.000	1.509	
Assessment/BTR	C/CPAF	VARIOUS:VARIOUS	1.434	-		-		-		-	0.000	1.434	
Acquisition Workforce	Various	VARIOUS:VARIOUS	0.211	-		-		-		-	0.000	0.211	
Subtotal			10,414.166	0.644		0.926		-		0.926	0.000	10,415.736	
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			10,786.701	49.200		59.648		-		59.648			
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2131: <i>Assault Breaching System</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 2131: <i>Assault Breaching System</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Assault Breaching System</i>				
Acquisition Milestones: CMS: CDR - Critical Design Review	1	2014	1	2014
Acquisition Milestones: COBRA: COBRA Block II Milestone B	4	2011	4	2011
Acquisition Milestones: COBRA: COBRA Block III Milestone B	4	2016	4	2016
Acquisition Milestones: COBRA: LRIP Decision Review Block II	4	2016	4	2016
Acquisition Milestones: COBRA: FRP Decision Review Block II	4	2016	4	2016
System Development: CMS: CMS System Development 6.4	1	2011	4	2016
System Development: CMS: CMS System Design/Platform Integration	1	2011	4	2016
System Development: COBRA Block II SD&D: COBRA Block II SD&D	4	2011	4	2017
System Development: ISR/Navigation/C4I System Development: ISR/Navigation/C4I System Development	1	2011	4	2017
Deliveries: COBRA: Schedule Detail	2	2013	4	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 3123: SMCM UUV			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3123: SMCM UUV	12.269	11.821	21.417	-	21.417	14.017	14.202	6.330	6.077	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
The Surface Mine Countermeasure Unmanned Undersea Vehicle (SMCM UUV) develops Unmanned Underwater Vehicles to support dedicated mine countermeasure operations, including buried mine detection. Equipment includes vehicles and associated systems support equipment. Potential P3I candidates include communications upgrades, on-board sonar processing and target recognition, command and control improvements, and other smaller tasks.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: SMCM UUV LFBB Articles:								11.669	11.266	21.417	
								2	0	0	
FY 2011 Accomplishments: Conducted Milestone B. Awarded Development Contract.											
FY 2012 Plans: Conduct Preliminary Design Review (PDR). Continue E&MD contract efforts.											
FY 2013 Plans: Conduct Critical Design Review (CDR). Commence vehicle fabrication.											
Title: SMCM UOES Articles:								0.600	0.555	-	
								0	0		
FY 2011 Accomplishments: Fleet training. Continue support of fleet exercises.											
FY 2012 Plans: Support fleet exercises.											
Accomplishments/Planned Programs Subtotals								12.269	11.821	21.417	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• OPN/2622: Minesweeping Sys Replacement, LV079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	21.114	21.122	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 3123: SMCM UUV			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• OPN/1600: LCS MODULES, LM001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	21.114	21.122	Continuing	Continuing
D. Acquisition Strategy											
An acquisition program was initiated in FY11 to develop Surface Mine Countermeasure Unmanned Undersea Vehicles (SMCM UUV) equipped with Low Frequency Broadband (LFBB) sonar that provides buried mine detection capability. Initial procurement of the SMCM UUV with LFBB begins in FY16.											
E. Performance Metrics											
Successful Milestone C in Q1 FY16. Reach Full Rate Production Decision in Q2 FY17.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 3123: SMCM UUV						
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
SMCM UOES Development	C/CPAF	BLUEFIN:CAMBRIDGE, MA	14.844	0.555	Dec 2011	-		-		-	Continuing	Continuing	Continuing	
SMCM UUV Development	C/CPIF	Various:Various	17.033	-		-		-		-	0.000	17.033		
SMCM UUV Development 2	C/CPIF	General Dynamics AIS:McLeansville, NC	9.800	6.822	Dec 2011	16.719	Dec 2012	-		16.719	Continuing	Continuing	Continuing	
Software Development	WR	NSWC, PC:PANAMA CITY, FL	0.805	-		-		-		-	Continuing	Continuing	Continuing	
Subtotal			42.482	7.377		16.719		-		16.719				
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Engineering Support 1	WR	NSWC, PC:PANAMA CITY, FL	8.599	2.421	Dec 2011	2.471	Dec 2012	-		2.471	Continuing	Continuing	Continuing	
Engineering Support 2	WR	NUWC, Newport:NEWPORT, RI	2.415	0.649	Dec 2011	0.777	Dec 2012	-		0.777	Continuing	Continuing	Continuing	
Engineering Support 3	WR	VARIOUS:VARIOUS	1.158	0.401	Dec 2011	0.764	Dec 2012	-		0.764	Continuing	Continuing	Continuing	
Subtotal			12.172	3.471		4.012		-		4.012				
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Developmental Test & Evaluation	WR	NOMWC:STENNIS, MI	0.456	0.070	Dec 2011	-		-		-	Continuing	Continuing	Continuing	
Government T&E Support	WR	VARIOUS:VARIOUS	0.985	0.228	Dec 2011	-		-		-	Continuing	Continuing	Continuing	
Test and Evaluation	WR	COMOPTEVFOR:NORFOLK, VA	0.266	0.125	Dec 2011	0.125	Dec 2012	-		0.125	Continuing	Continuing	Continuing	
Subtotal			1.707	0.423		0.125		-		0.125				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>				PROJECT 3123: <i>SMCM UUV</i>					

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/CPFF	VARIOUS:WASHINGTON, DC	1.543	0.500	Dec 2011	0.511	Dec 2012	-		0.511	Continuing	Continuing	Continuing
Travel	WR	NAVSEA:WNY, DC	0.150	0.050	Dec 2011	0.050	Dec 2012	-		0.050	Continuing	Continuing	Continuing
Acquisition Workforce	WR	VARIOUS:VARIOUS	0.047	-		-		-		-	0.000	0.047	
Subtotal			1.740	0.550		0.561		-		0.561			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	58.101	11.821		21.417		-		21.417			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 3123: <i>SMCM UUV</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 3123: <i>SMCM UUV</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
SMCM UUV				
SMCM UUV UOES: Dual Frequency SAS Development:	1	2011	4	2011
SMCM UUV UOES: Dual Freq SAS Fleet Experimentation:	4	2011	4	2012
SMCM UUV Acquisition Program: SMCM UUV Milestones: Milestone B	4	2011	4	2011
SMCM UUV Acquisition Program: SMCM UUV Milestones: Milestone C	1	2016	1	2016
SMCM UUV Acquisition Program: SMCM UUV Contract Award:	4	2011	4	2011
SMCM UUV Acquisition Program: SMCM UUV/SMCM Development:	4	2011	4	2015
SMCM UUV Acquisition Program: SMCM UUV Design Reviews: Preliminary Design Review	3	2012	3	2012
SMCM UUV Acquisition Program: SMCM UUV Design Reviews: Critical Design Review	2	2013	2	2013
SMCM UUV Acquisition Program: SMCM UUV Test Events: DT/OA	1	2015	3	2015
SMCM UUV Acquisition Program: SMCM UUV Test Events: OT	3	2016	1	2017
SMCM UUV Acquisition Program: SMCM UUV LRIP:	2	2016	2	2017
SMCM UUV Acquisition Program: SMCM UUV Full Rate Production Decision:	2	2017	2	2017
SMCM UUV Acquisition Program: SMCM UUV Full Rate Production:	3	2017	4	2017
SMCM UUV Acquisition Program: P3I:	1	2016	4	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>				PROJECT 4025: <i>Expendable Mine Neutralization System</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
4025: <i>Expendable Mine Neutralization System</i>	0.048	-	-	-	-	-	-	-	-	0.000	0.048
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification
 Expendable Mine Neutralization System (EMNS) is a replacement to the existing AN/SLQ-48 Mine Neutralization System (MNS). The current program replaces the MNS with EMNS on the 14 MCM Avenger Class Ships. EMNS will leverage off of on-going efforts in the Airborne Mine Countermeasures Program to develop an Airborne Mine Neutralization System (AMNS).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Title: Management	Articles:	0.048 0	-	-
FY 2011 Accomplishments: Provide program management support				
Accomplishments/Planned Programs Subtotals		0.048	-	-

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

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• OPN/2622: <i>MINESWEEPING SYS REPLACEMENT, LV076 (EMNS)</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• WPN/4225: <i>AIRBORNE MCM, AM080 (EMNS)</i>	3.949	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.949

D. Acquisition Strategy
 Based on the approved Common Neutralizer Strategy, the Archerfish neutralizer will be integrated on the MCM-1 Avenger Class Ships. The acquisition strategy will be full and open competition for non-neutralizer hardware development and system integration with a directed contractual relationship with VCT (flight control software). The Navy awarded a sole source contract to BAE Systems for Common Neutralizer support, integration, and hardware manufacturing/delivery. All EMNS neutralizer equipment and support will be provided by BAE Systems to the Navy. The Navy will provide these assets as GFE to the integration contractor.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603502N: <i>Surface & Shallow Water MCM</i>	PROJECT 4025: <i>Expendable Mine Neutralization System</i>

E. Performance Metrics

Neutralization Capability

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 4025: Expendable Mine Neutralization System					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develop Technical and Aquisition Documentation	WR	NSWC, PC:Panama City, FL	2.056	-		-		-		-	0.000	2.056	
Hardware/Software Development	C/CPIF	Lockheed Martin:Syracuse, NY	10.185	-		-		-		-	0.000	10.185	
Common Neutralizer Development	C/CPIF	Raytheon:Portsmouth, RI	2.431	-		-		-		-	0.000	2.431	
Deep Water Neutralizer Development	WR	NSWC, PC:Panama City, FL	-	-		-		-		-	0.300	0.300	
Deep Water Neutralizer Development	C/CPIF	BAE Systems:UK	-	-		-		-		-	3.000	3.000	
Subtotal			14.672	-		-		-		-	3.300	17.972	
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develop Logistics Products	C/CPIF	Lockheed Martin:Syracuse, NY	3.078	-		-		-		-	0.000	3.078	
Develop Logistics Products	WR	NSWC:Panama City, FL	1.202	-		-		-		-	0.000	1.202	
Engineering Support	C/CPIF	Lockheed Martin:Syracuse, NY	3.222	-		-		-		-	0.000	3.222	
Engineering Support	C/CPIF	NSWC:Panama City, FL	8.208	-		-		-		-	0.000	8.208	
Deep Water Neutralizr ILS	C/CPIF	BAE Systems:UK	-	-		-		-		-	0.252	0.252	
Deep Water Neutralizr ILS	C/FP	NSWC, PC:Panama City, FL	-	-		-		-		-	0.186	0.186	
Deep Water Neutralizer Engineering	C/CPIF	BAE Systems:UK	-	-		-		-		-	2.200	2.200	
Deep Water Neutralizer Engineering	WR	NSWC, PC:Panama City, FL	-	-		-		-		-	0.860	0.860	

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603502N: Surface & Shallow Water MCM				PROJECT 4025: Expendable Mine Neutralization System					
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			15.710	-		-		-		-	3.498	19.208	
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develop TEMP	WR	NSWC, PC:Panama City, FL	0.100	-		-		-		-	0.000	0.100	
CT/DT	C/CPIF	Lockheed Martin:Syracuse, NY	1.772	-		-		-		-	0.000	1.772	
CT/DT	WR	NSWC, PC:Panama City, FL	2.604	-		-		-		-	0.000	2.604	
Operational Test & Evaluation	WR	COTF:Norfolk, VA	-	-		-		-		-	0.000	0.000	
Common Neutralizer Testing	C/CPIF	Raytheon:Portsmouth, RI	-	-		-		-		-	0.000	0.000	
Common Neutralizer Test Sets	C/CPIF	Raytheon:Portsmouth, RI	-	-		-		-		-	0.000	0.000	
Deep Water Neutralizer T&E	C/CPIF	BAE System:UK	-	-		-		-		-	0.995	0.995	
Deep Water Neutralizer T&E	WR	NSWC, PC:Panama City, FL	-	-		-		-		-	2.295	2.295	
Subtotal			4.476	-		-		-		-	3.290	7.766	
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/CPFF	CACI:Arlington, VA	1.671	-		-		-		-	0.000	1.671	
Travel	WR	NAVSEA:Washington, DC	0.290	-		-		-		-	0.000	0.290	
Subtotal			1.961	-		-		-		-	0.000	1.961	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy									DATE: February 2012					
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				Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals				36.819	-		-		-		-	10.088	46.907	

Remarks