

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0604122N / Remote Minehunting System (RMS)							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	-	-	21.110	-	21.110	15.923	15.964	8.360	8.571	Continuing	Continuing
0260: Remote Minehunting Systems	0.000	-	-	21.110	-	21.110	15.923	15.964	8.360	8.571	Continuing	Continuing
MDAP/MAIS Code: Other MDAP/MAIS Code(s): 286												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The AN/WLD-1(V)2 Remote Minehunting System (RMS) is a mine reconnaissance system designed for the detection, classification, identification, and localization of bottom and moored mines in shallow and deep water. The RMS will provide the Navy the capability to keep ships and sailors out of the minefield. The RMS is deployed from the Littoral Combat Ship (LCS) as part of the ships' Mine Countermeasure (MCM) Mission Package (MP). The RMS is a fully integrated system consisting of a semi-submersible Remote Multi-Mission Vehicle (RMMV) towing a variable depth sensor, the AN/AQS-20A. The RMMV is a high-endurance, semi-autonomous, low-observable, unmanned, diesel-powered vehicle, operated and maintained from the LCS. Line-of-sight (LOS) and over-the-horizon (OTH) data links provide real time vehicle command and control and mine reconnaissance sensor data transmission to/from LCS.												
Not a new start. ACAT 1D Transparency requirement realigned program funding from Project Element 0603502N beginning in FY15.												
B. Program Change Summary (\$ in Millions)				FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total				
Previous President's Budget				-	-	-	-	-				
Current President's Budget				-	-	21.110	-	21.110				
Total Adjustments				-	-	21.110	-	21.110				
• Congressional General Reductions				-	-							
• Congressional Directed Reductions				-	-							
• Congressional Rescissions				-	-							
• Congressional Adds				-	-							
• Congressional Directed Transfers				-	-							
• Reprogrammings				-	-							
• SBIR/STTR Transfer				-	-							
• Rate/Misc Adjustments				-	-	21.110	-	21.110				

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 Program Element (Number/Name) PE 0604122N / Remote Minehunting System (RMS)
<div>Change Summary Explanation</div> <div>Technical: Not applicable.</div> <div>Schedule: Not applicable.</div>		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604122N / Remote Minehunting System (RMS)				Project (Number/Name) 0260 / Remote Minehunting Systems			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
0260: Remote Minehunting Systems	-	-	-	21.110	-	21.110	15.923	15.964	8.360	8.571	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 286												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
<p>The AN/WLD-1(V)2 Remote Minehunting System (RMS) is a mine reconnaissance system designed for the detection, classification, identification, and localization of bottom and moored mines in shallow and deep water. The RMS will provide the Navy the capability to keep ships and sailors out of the minefield. The RMS is deployed from the Littoral Combat Ship (LCS) as part of the ships' Mine Countermeasure (MCM) Mission Package (MP). The RMS is a fully integrated system consisting of a semi-submersible Remote Multi-Mission Vehicle (RMMV) towing a variable depth sensor, the AN/AQS-20A. The RMMV is a high-endurance, semi-autonomous, low-observable, unmanned, diesel-powered vehicle, operated and maintained from the LCS. Line-of-sight (LOS) and over-the-horizon (OTH) data links provide real time vehicle command and control and mine reconnaissance sensor data transmission to/from LCS.</p> <p>The first Low Rate Initial Production (LRIP) units (LRIP 1) were used during the RMMV Reliability Growth Program (RGP) version 4.2 (v4.2) configuration and will be upgraded to the v6.0 configuration to support LCS integration. In FY15 a new start RMMV Competitive (LRIP 2) contract will be awarded to procure the next LRIPs and a RMMV integration/maintenance contract. Additionally, the development of RMMV v6.0 will support integration of the RMMV into LCS MCM MP and testing in FY15.</p> <p>The Initial Operational Capability (IOC) has shifted to 2nd quarter FY16 to align with the LCS MCM MP IOC and will use LRIP 1 units. Primary activities in FY15 include completion of v6.0 upgrades and support for the LCS MCM MP Technical Evaluation (TECHEVAL) and conduct of LCS MCM MP Initial Operational Test and Evaluation (IOT&E).</p> <p>Additionally, the Program will implement hardware and software Engineering Change Proposals (ECPs) for LCS Freedom Class integration and upgrade training assets in support of Ready For Training (RFT) in FY16.</p> <p>Not a new start. ACAT 1D Transparency requirement realigned program funding from Project Element 0603502N beginning in FY15.</p>												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Product Development									-	-	15.572	
									Articles: -	-	-	
FY 2013 Accomplishments:												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014		
Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0604122N / <i>Remote Minehunting System (RMS)</i>		Project (Number/Name) 0260 / <i>Remote Minehunting Systems</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
- Cited in PE 0603502N FY 2014 Plans: - Cited in PE 0603502N FY 2015 Plans: - Implement hardware/software improvements identified during RMS Developmental Test (DT). - Prepare vehicles for LCS MCM MP test events. - Complete RMMV v6.0 Physical Configuration Audit (PCA), TDP, and Interactive Electronic Technical Manual (IETM). - Incorporate v6.0 Engineering Change Proposals (ECPs) on additional v4.2 RMMVs for delivery to the LCS MCM MP. - Incorporate RMMV v6.0 ECPs on RMMV training assets to support Ready For Training (RFT) in FY16. - Design and implement hardware/software changes to support integration of RMMV with LCS discovered during LCS MCM MP IOT&E. - Award a RMMV LRIP 1 Integration/Maintenance contract. - Implement Operational Availability (Ao) hardware/software improvements.					
Title: Support FY 2013 Accomplishments: - Cited in PE 0603502N FY 2014 Plans: - Cited in PE 0603502N FY 2015 Plans: - Provide support for RMMV v6.0 PCA, TDP, and IETM. - Provide engineering, logistics, and programmatic support for v6.0 efforts. - Provide engineering, logistics, and programmatic support for RMMV Integration/Maintenance contract. - Conduct quality assurance audits at contractor facility. - Provide on-site engineering support for RMMVs at contractor facility. - Conduct RMMV RFI Inspections.			Articles: - -	- -	2.550 -
Title: Test and Evaluation (T&E) FY 2013 Accomplishments:			Articles: - -	- -	2.300 -

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0604122N / <i>Remote Minehunting System (RMS)</i>				Project (Number/Name) 0260 / <i>Remote Minehunting Systems</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
N/A												
FY 2014 Plans: N/A												
FY 2015 Plans: - Prepare for and support LCS MCM MP TECHEVAL. - Prepare for and support LCS MCM MP IOT&E.												
Title: Management										-	-	0.688
Articles:										-	-	-
FY 2013 Accomplishments: N/A												
FY 2014 Plans: N/A												
FY 2015 Plans: - Provide program management and oversight of RMMV v6.0 upgrades. - Award LRIP 1 RMMV Integration/Maintenance contract. - Award LRIP 2 contract. - Provide program management support for and oversight of LRIP 1 Integration/Maintenance contract.												
Accomplishments/Planned Programs Subtotals										-	-	21.110
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• OPN/1605: <i>Remote Minehunting System</i>	-	-	42.276	-	42.276	70.976	67.471	67.708	68.343	432.174	748.948	
• RDT&E/0603502N: <i>Remote Minehunting System</i>	37.069	31.837	-	-	-	-	-	-	-	-	522.226	
Remarks FYDP funding includes: funding for the RMMV units, RMMV Cradle Pallet Assembly, and production engineering support. The 1605 OPN line item is to award the RMS Competitive LRIP 2/Full Rate Production (FRP) contract in FY15.												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604122N / <i>Remote Minehunting System (RMS)</i>	Project (Number/Name) 0260 / <i>Remote Minehunting Systems</i>	

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

<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
The LRIP 2/FRP procurement profile is quantity (2) in FY15 and (4) in each ensuing FY through FY25 and (2) in FY26. The first (10) units are LRIPs and the remaining are FRP units.											

D. Acquisition Strategy

In FY15, an LRIP 1 Integration/Maintenance Contract will be awarded to support the integration and maintenance activities of LRIP 1 systems on LCS Freedom Variant, incorporate Ao improvements, and address obsolescence changes. Award the RMS Competitive LRIP 2/FRP contract in FY15. A Full Rate Production Decision Review (FRPDR) in FY17.

E. Performance Metrics

- Award LRIP 2 contract with Options for Full Rate Production (FY15)
- Support LCS MCM MP IOT&E (FY15)
- Initial Operational Capability (FY16)
- Complete RMS IOT&E based on LRIP 2 (early FY17)
- FRPDR (FY17)

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604122N / Remote Minehunting System (RMS)				Project (Number/Name) 0260 / Remote Minehunting Systems					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware Development & Integration	SS/CPFF	LOCKHEED MARTIN : West Palm Beach, FL	0.000	-		-		13.894	Oct 2014	-		13.894	Continuing	Continuing	Continuing
SBIR Transition	SS/CPFF	BOSTON ENGINEERING : Waltham, MA	0.000	-		-		0.678	Oct 2014	-		0.678	-	0.678	-
Hardware Improvements/ Integration	SS/CPIF	LOCKHEED MARTIN : West Palm Beach, FL	0.000	-		-		1.000	Oct 2014	-		1.000	-	1.000	-
Subtotal			0.000	-		-		15.572		-		15.572	-	-	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering/ILS	WR	NSWC/PCD : Panama City, FL	0.000	-		-		1.467	Oct 2014	-		1.467	Continuing	Continuing	Continuing
Engineering Support	WR	NUWC/NPT : Newport, RI	0.000	-		-		0.511	Oct 2014	-		0.511	Continuing	Continuing	Continuing
Engineering Support	WR	NUWC.KPT : Keyport, WA	0.000	-		-		0.264	Oct 2014	-		0.264	Continuing	Continuing	Continuing
Engineering Support	WR	PORTSMOUTH NSY : Portsmouth, NH	0.000	-		-		0.308	Oct 2014	-		0.308	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		2.550		-		2.550	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
LCS MCM MP Test Events	WR	NSWC/PCD : Panama City, FL	0.000	-		-		1.537	Oct 2014	-		1.537	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy													Date: March 2014		
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604122N / Remote Minehunting System (RMS)				Project (Number/Name) 0260 / Remote Minehunting Systems					
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
LCS MCM MP Test Events	SS/CPFF	LOCKHEED MARTIN : West Palm Beach, FL	0.000	-		-		0.763	Oct 2014	-		0.763	-	0.763	-
Subtotal			0.000	-		-		2.300		-		2.300	-	-	-
Remarks LCS MCM MP Test Events will require contractor to groom vehicles prior to testing.															
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Pogram Management Support	C/CPFF	TBD : TBD	0.000	-		-		0.647	Oct 2014	-		0.647	Continuing	Continuing	Continuing
Travel	WR	NAVSEA : WNY, DC	0.000	-		-		0.041	Oct 2014	-		0.041	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.688		-		0.688	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		21.110		-		21.110	-	-	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

1319 / 4

R-1 Program Element (Number/Name)

PE 0604122N / Remote Minehunting System (RMS)

Project (Number/Name)

0260 / Remote Minehunting Systems

Proj 0260	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Milestones																												
Product Development																												
RMS Test and Evaluation Milestones																												
LCS MCM MP Test Events																												
Remote Minehunting System (RMS) Test Events																												
RMS Contract Milestones																												
RMS System Deliveries																												

2015PB - 0604122N - 0260

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604122N / <i>Remote Minehunting System (RMS)</i>	Project (Number/Name) 0260 / <i>Remote Minehunting Systems</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 0260				
Milestones: Initial Operating Capability (IOC)	2	2016	2	2016
Milestones: Full Rate Production Decision	4	2017	4	2017
Product Development: RMS/LCS Integration	1	2015	3	2016
Product Development: RMS P3I Upgrade (Ao Improvements & Parts Obsolescence)	1	2017	4	2019
RMS Test and Evaluation Milestones: LCS MCM MP Test Events: DT Phase IV Period 2	1	2015	1	2015
RMS Test and Evaluation Milestones: LCS MCM MP Test Events: LCS MCM MP TECHEVAL	3	2015	3	2015
RMS Test and Evaluation Milestones: LCS MCM MP Test Events: LCS MCM MP IOT&E	4	2015	4	2015
RMS Test and Evaluation Milestones: Remote Minehunting System (RMS) Test Events: RMS Developmental Testing (DT)	2	2017	2	2017
RMS Test and Evaluation Milestones: Remote Minehunting System (RMS) Test Events: RMS IOT&E	3	2017	3	2017
RMS Contract Milestones: Base LRIP 2 Award (2 systems)	2	2015	2	2015
RMS Contract Milestones: Option 1 LRIP 2 Award (4 systems)	1	2016	1	2016
RMS Contract Milestones: Option 2 LRIP 2 Award (4 systems)	1	2017	1	2017
RMS Contract Milestones: Base FRP Award (4 systems)	1	2018	1	2018
RMS Contract Milestones: Option 1 FRP Award (4 systems)	1	2019	1	2019
RMS Contract Milestones: RMMV LRIP 1 Integration/Maintenance (Legacy Configuration) Award	1	2015	1	2015
RMS System Deliveries: 2 LRIPs	3	2017	4	2017
RMS System Deliveries: 4 LRIPs	3	2018	4	2018