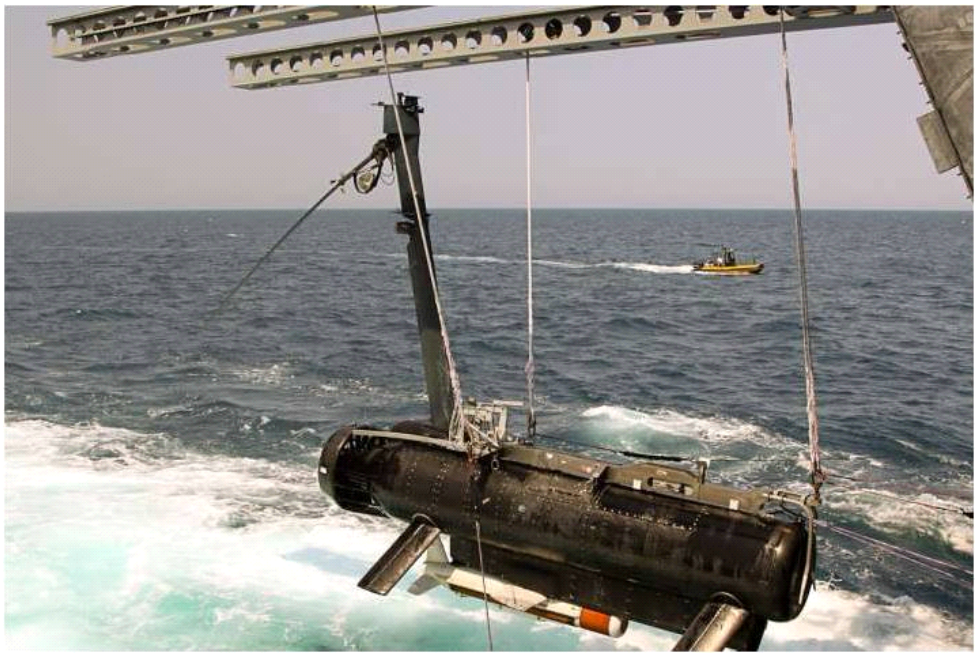
Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-286



RMS

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

Remote Minehunting System (RMS)

DoD Component

Navy

Responsible Office

Responsible Office

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Date Assigned August 16, 2010

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 7, 2010.

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 7, 2010

Mission and Description

The AN/WLD-1(V) Remote Minehunting System (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 Littoral Combat Ship (LCS). RMS will provide the Navy the capability to keep ships and sailors out of the minefield.

The RMMV is a high-endurance, semi-autonomous, low-observable unmanned vehicle operated and maintained from the LCS. The RMMV tows a variable depth sensor body to the operations area where mine reconnaissance data will be collected, recorded, and transmitted to the host ship. The RMMV provides propulsion, electrical and hydraulic power, communications, navigation, and a cable connection for exchanging tactical data with the towed body and the Navy ship. Data are continuously exchanged between the host platform and the RMMV for command and control and sensor data. The RMMV uses a AN/AQS-20A Variable Depth Sonar (VDS) for detection, classification, and localization of mine-like contacts and mine identification. The RMMV is capable of real-time communications of mine reconnaissance sensor data as well as automatic search and recording modes.

RMS will be installed on the LCS as part of the ships Mine Warfare (MIW) Mission Package.

Executive Summary

The Remote Minehunting System (RMS) program has participated in several integration stage tests in preparation for the Littoral Combat Ship (LCS) Mission Package (MP) Developmental Test (DT). From March 2011 to May 2011, an RMS participated in shipboard network integration events, which validated interfaces with shipboard systems. An RMS also participated in launch, recovery and handling events that demonstrated required capability. The RMS program provided one RMS system for Mine Countermeasures (MCM) MP DT Phase I held July 2011 to September 2011. A total of 20 Launches and Recoveries were successfully conducted, and 88 hours of in-water Remote Multi-Mission Vehicle (RMMV) operation time were completed. LCS MP DT Phase I resumed in January 2012. The RMS program is currently providing two RMS systems to support LCS MP DT through March 2012.

As of September 28, 2011, all 2366b documentation, with the exception of the Independent Cost Estimate, has been completed. Five Statutory and ten Regulatory documents were approved, including a Capabilities Development Document, a Systems Engineering Plan, and an Acquisition Strategy.

A Reliability Growth Program (RGP) is fully underway in accordance with the Under Secretary of Defense for Acquisition, Technology & Logistics Acquisition Decision Memorandum dated June 1, 2010. The objective of the RGP is to obtain a minimum of 75 hours Mean Time Between Operational Mission Failure (MTBOMF) for the RMMV in order to meet the overall system's Operational Availability Key Performance Parameter (KPP). The RGP utilizes a two-pronged approach for achieving reliability and Test-Analyze-Fix and Design for Reliability and includes Critical Systems Reviews (CSRs) and subsequent Design Reviews (DRs), use of predictive reliability tools, and a three-phase in-water testing program. V4.1 (Phase I) of the RGP completed on November 17, 2011 with 509 Mission Hours. The Navy determined that there were eight observed Operational Mission Failures (OMFs) during the testing period. The Director, Operational Test & Evaluation assessment of test data is ongoing. There were five known issues and one new issue. Three of the eight OMFs were recurrence of the same issue. Based upon the Navy's assessment, the MTBOMF for V4.1 test events is 63.6 hours. CSR Phase II is complete, with 15 recommendations planned for implementation in either V4.2 or V4.3 (11 Process and four Design). DR II is planned for June 2012.

Following the final approval of the Acquisition Strategy, there was insufficient time for Request For Proposal (RFP) release to the contractor, negotiations, definitization, agreement to the Incentive Fee Plan that includes negative incentives, and contract award by the end of FY 2011. Due to these timing constraints, the RGP Completion Contract was not awarded by October 1, 2011, creating a potential for an unacceptable gap in services. The Program Office mitigated this gap through an Advance Agreement for Pre-Contract Costs to Lockheed Martin. The RGP Completion Contract RFP was released to Lockheed Martin on October 7, 2011. An Undefinitized Contract Action (Letter Contract) was awarded on December 16, 2011. Negotiation and definitization of the final RGP Completion contract is planned for May 2012.

Approval of the Test and Evaluation Master Plan is expected by May 2012.

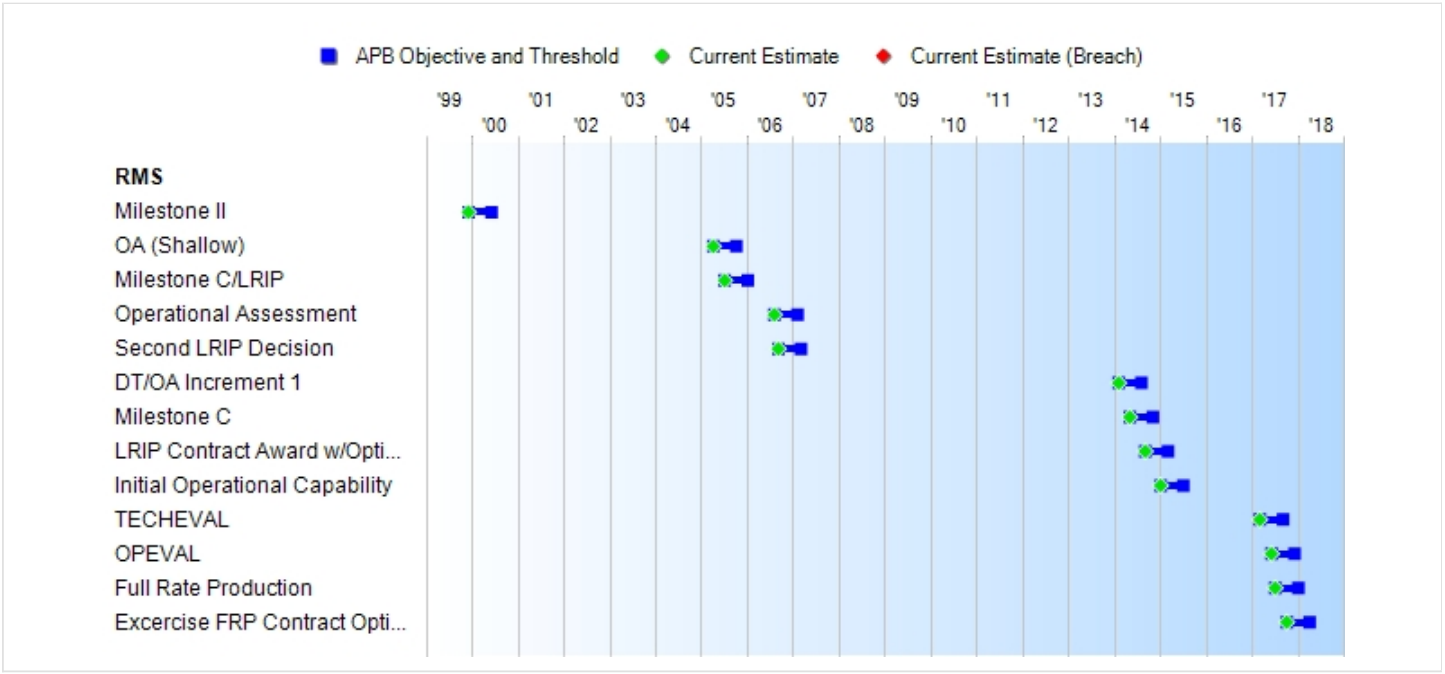
There are no significant software-related issues with this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate
Milestone II	DEC 1999	DEC 1999	JUN 2000	DEC 1999
OA (Shallow)	APR 2005	APR 2005	OCT 2005	APR 2005
Milestone C/LRIP	JUL 2005	JUL 2005	JAN 2006	JUL 2005
Operational Assessment	AUG 2006	AUG 2006	FEB 2007	AUG 2006
Second LRIP Decision	SEP 2006	SEP 2006	MAR 2007	SEP 2006
DT/OA Increment 1	FEB 2014	FEB 2014	AUG 2014	FEB 2014
Milestone C	MAY 2014	MAY 2014	NOV 2014	MAY 2014
LRIP Contract Award w/Options for FRP	SEP 2014	SEP 2014	MAR 2015	SEP 2014
Initial Operational Capability	JAN 2015	JAN 2015	JUL 2015	JAN 2015
TECHEVAL	MAR 2017	MAR 2017	SEP 2017	MAR 2017
OPEVAL	JUN 2017	JUN 2017	DEC 2017	JUN 2017
Full Rate Production	JUL 2017	JUL 2017	JAN 2018	JUL 2017
Excercise FRP Contract Options under LRIP Contract	OCT 2017	OCT 2017	APR 2018	OCT 2017

Acronyms And Abbreviations

DT - Developmental Testing
FRP - Full Rate Production
LRIP - Low Rate Initial Production

OA - Operational Assessment
OPEVAL - Operational Evaluation
TECHEVAL - Technical Evaluation

Change Explanations

None

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
Transit Speed (kts)	20	20	12	TBD	16
Operational Availability	.85	.85	0.80	TBD	0.8
Water Depth -Shallow					
Mine Type	Bottom, CCT, CT, IV	Bottom, CCT, CT, IV	Bottom, CCT, CT, IV	TBD	Bottom, CCT, CT, IV
Water Depth - Deep					
Mine Type	CCT, CT, IV	CCT, CT, IV	CCT, CT, IV	TBD	CCT, CT, IV

Requirements Source:
Operational Requirements Document (ORD), Rev. 2, #670-75-05, dated May 27, 2005. Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) Memorandum, Subject: Nunn-McCurdy Certification Acquisition Decision Memorandum (ADM) for the Remote Minehunting System (RMS) Program, dated June 1, 2010

Acronyms And Abbreviations

CCT - Close-Close Tethered
CT - Close Tethered
IV - In-Volume
kts - knots

Change Explanations

None

Memo

A RMS Acquisition Program Baseline (APB) was approved on October 7, 2010. The RMS Capability Development Document (CDD), #842-85-11, was approved on May 31, 2011. The Program Office plans to submit an updated Acquisition Program Baseline to reflect revised milestones and performance parameters approved by the latest CDD from May 2011 that will also include updated values for Shallow Water High-Level Reconnaissance, Deep Water High-Level Reconnaissance, Material Availability, Operational Availability and Net Ready. These revised KPPs and current estimate values will be included in the next SAR submission for the program.

Classified Performance information is provided in the classified annex to this submission.

Track To Budget

RDT&E

APPN 1319	BA 04	PE 0603502N	(Navy)	
	Project 0260	Surface and Shallow Water Mine Countermeasures	(Shared)	
	Project 9999	RMS Prog - Cong	(Shared)	
	Congressional Add to continue development of RMS during the RMS reliability growth program.			
APPN 1319	BA 04	PE 0603581N	(Navy)	
	Project 3129A	MIW Modules Prog - Cong	(Shared)	(Sunk)
	Funding is provided to research and study methods to employ mine warfare mission modules independently of the Littoral Combat Ship (LCS) platform.			

Procurement

APPN 1810	BA 01	PE 0204230N	(Navy)
	ICN 34160000	LCS Modules	(Shared)
APPN 1810	BA 02	PE 0204302N	(Navy)
	ICN 34262200	Minesweeping System Replacement	(Shared)
APPN 1810	BA 08	PE 0204228N	(Navy)
	ICN 34902000	Spares and Repair Parts	(Shared)

For the shared PE0204302N, Minesweeping System Replacement, the RMS budget is all the elements of cost listed under Cost Code LV064, RMS.

For the shared PE0204230N, Littoral Combat Ship (LCS) Modules, the RMS budget is only the Remote Multi-Mission Vehicle element of cost under the Cost Code LM001.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2006 $M			BY2006 $M	TY $M		
Appropriation	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	649.6	649.6	714.2	644.0	654.4	654.4	654.4
Procurement	630.0	630.0	693.0	621.5	795.0	795.0	795.0
Flyaway	518.8	--	--	511.5	653.6	--	653.6
Recurring	518.8	--	--	511.5	653.6	--	653.6
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	111.2	--	--	110.0	141.4	--	141.4
Other Support	78.2	--	--	77.5	98.3	--	98.3
Initial Spares	33.0	--	--	32.5	43.1	--	43.1
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	1279.6	1279.6	N/A	1265.5	1449.4	1449.4	1449.4

CONFIDENCE LEVEL for current APB cost is 50% - On June 1, 2010, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) issued a Nunn-McCurdy Certification Acquisition Decision Memorandum (ADM) that certified the restructured the RMS program in accordance with section 2433a of Title 10, United States Code (USC). The USD(AT&L) ADM provided a cost estimate performed by the Director, Cost Assessment and Performance Evaluation (CAPE). The Weapons Systems Acquisition Reform Act (WSARA) of 2009 (Public Law 111-23) requires a justification for selecting a confidence level less than 80 percent. In accordance with the WSARA Act of 2009 and as directed by the USD(AT&L) ADM, the Director, CAPE cost estimate, upon which the Nunn-McCurdy certification was made, was based on a confidence level lower than 80 percent.

Per the Director, CAPE, the Confidence Level is 50%. The Independent Cost Estimate to support the RMS Nunn McCurdy certification, like all life-cycle cost estimates previously performed by the CAPE, is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition Programs. Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	2	2	2
Procurement	52	52	52
Total	54	54	54

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2013 President's Budget / December 2011 SAR (TY$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	434.9	41.1	39.1	32.0	23.9	18.7	18.8	45.9	654.4
Procurement	109.3	0.0	0.0	0.0	33.3	61.1	58.6	532.7	795.0
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2013 Total	544.2	41.1	39.1	32.0	57.2	79.8	77.4	578.6	1449.4
PB 2012 Total	545.0	50.0	39.3	32.3	57.5	80.1	91.8	553.4	1449.4
Delta	-0.8	-8.9	-0.2	-0.3	-0.3	-0.3	-14.4	25.2	0.0

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	2	0	0	0	0	0	0	0	0	2
Production	0	8	0	0	0	2	4	4	34	52
PB 2013 Total	2	8	0	0	0	2	4	4	34	54
PB 2012 Total	2	8	0	0	0	2	4	4	34	54
Delta	0	0	0	0	0	0	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
1996	--	--	--	--	--	--	11.9
1997	--	--	--	--	--	--	24.6
1998	--	--	--	--	--	--	16.4
1999	--	--	--	--	--	--	17.4
2000	--	--	--	--	--	--	47.5
2001	--	--	--	--	--	--	42.9
2002	--	--	--	--	--	--	55.4
2003	--	--	--	--	--	--	59.0
2004	--	--	--	--	--	--	56.7
2005	--	--	--	--	--	--	17.3
2006	--	--	--	--	--	--	20.1
2007	--	--	--	--	--	--	5.7
2008	--	--	--	--	--	--	8.5
2009	--	--	--	--	--	--	6.0
2010	--	--	--	--	--	--	21.6
2011	--	--	--	--	--	--	23.9
2012	--	--	--	--	--	--	41.1
2013	--	--	--	--	--	--	39.1
2014	--	--	--	--	--	--	32.0
2015	--	--	--	--	--	--	23.9
2016	--	--	--	--	--	--	18.7
2017	--	--	--	--	--	--	18.8
2018	--	--	--	--	--	--	45.9
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**654.4**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2006 $M	Non End Item Recurring Flyaway BY 2006 $M	Non Recurring Flyaway BY 2006 $M	Total Flyaway BY 2006 $M	Total Support BY 2006 $M	Total Program BY 2006 $M
1996	--	--	--	--	--	--	13.8
1997	--	--	--	--	--	--	28.2
1998	--	--	--	--	--	--	18.7
1999	--	--	--	--	--	--	19.6
2000	--	--	--	--	--	--	52.7
2001	--	--	--	--	--	--	46.9
2002	--	--	--	--	--	--	60.0
2003	--	--	--	--	--	--	63.0
2004	--	--	--	--	--	--	58.9
2005	--	--	--	--	--	--	17.5
2006	--	--	--	--	--	--	19.7
2007	--	--	--	--	--	--	5.5
2008	--	--	--	--	--	--	8.0
2009	--	--	--	--	--	--	5.6
2010	--	--	--	--	--	--	19.8
2011	--	--	--	--	--	--	21.5
2012	--	--	--	--	--	--	36.3
2013	--	--	--	--	--	--	33.9
2014	--	--	--	--	--	--	27.3
2015	--	--	--	--	--	--	20.0
2016	--	--	--	--	--	--	15.4
2017	--	--	--	--	--	--	15.2
2018	--	--	--	--	--	--	36.5
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**644.0**

Annual Funding TY$
1810 | Procurement | Other Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2005	3	32.1	--	--	32.1	2.1	34.2
2006	4	46.3	--	--	46.3	11.7	58.0
2007	--	--	--	--	--	--	--
2008	1	10.8	--	--	10.8	3.6	14.4
2009	--	--	--	--	--	2.7	2.7
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	--
2015	2	26.0	3.7	--	29.7	3.6	33.3
2016	4	44.2	6.3	--	50.5	10.6	61.1
2017	4	42.1	6.1	--	48.2	10.4	58.6
2018	4	42.2	6.0	--	48.2	10.4	58.6
2019	4	42.5	6.1	--	48.6	10.6	59.2
2020	4	43.2	6.2	--	49.4	10.7	60.1
2021	4	44.0	6.3	--	50.3	10.9	61.2
2022	4	44.8	6.4	--	51.2	11.1	62.3
2023	4	45.8	6.5	--	52.3	11.3	63.6
2024	4	46.7	6.7	--	53.4	11.5	64.9
2025	4	47.7	6.9	--	54.6	11.7	66.3
2026	2	24.5	3.5	--	28.0	8.5	36.5
Subtotal	**52**	**582.9**	**70.7**	**--**	**653.6**	**141.4**	**795.0**

Annual Funding BY$
1810 | Procurement | Other Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2006 $M	Non End Item Recurring Flyaway BY 2006 $M	Non Recurring Flyaway BY 2006 $M	Total Flyaway BY 2006 $M	Total Support BY 2006 $M	Total Program BY 2006 $M
2005	3	32.1	--	--	32.1	2.1	34.2
2006	4	44.8	--	--	44.8	11.3	56.1
2007	--	--	--	--	--	--	--
2008	1	10.1	--	--	10.1	3.3	13.4
2009	--	--	--	--	--	2.5	2.5
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--
2014	--	--	--	--	--	--	--
2015	2	21.6	3.0	--	24.6	3.0	27.6
2016	4	36.0	5.1	--	41.1	8.7	49.8
2017	4	33.7	4.9	--	38.6	8.3	46.9
2018	4	33.2	4.7	--	37.9	8.2	46.1
2019	4	32.8	4.7	--	37.5	8.2	45.7
2020	4	32.8	4.7	--	37.5	8.1	45.6
2021	4	32.8	4.7	--	37.5	8.1	45.6
2022	4	32.8	4.7	--	37.5	8.1	45.6
2023	4	32.9	4.7	--	37.6	8.1	45.7
2024	4	33.0	4.7	--	37.7	8.1	45.8
2025	4	33.1	4.8	--	37.9	8.1	46.0
2026	2	16.7	2.4	--	19.1	5.8	24.9
Subtotal	**52**	**458.4**	**53.1**	**--**	**511.5**	**110.0**	**621.5**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	7/1/2005	4/2/2008
Approved Quantity	3	8
Reference	ADM	ADM
Start Year	2005	2005
End Year	2007	2010

The current total Low Rate Initial Production (LRIP) quantity is more than 10% of the total production quantity due to the elimination of the Remote Multi-Mission Vehicles (RMMVs) for the Anti-Submarine Warfare (ASW) Mission Package for the Littoral Combat Ship (LCS) in the FY 2010 President's Budget (PB 2010), which reduced the number of RMMV production units from 106 to 52.

Eight (8) LRIP units have been approved to date and have been delivered.

Foreign Military Sales

None

Nuclear Cost

None

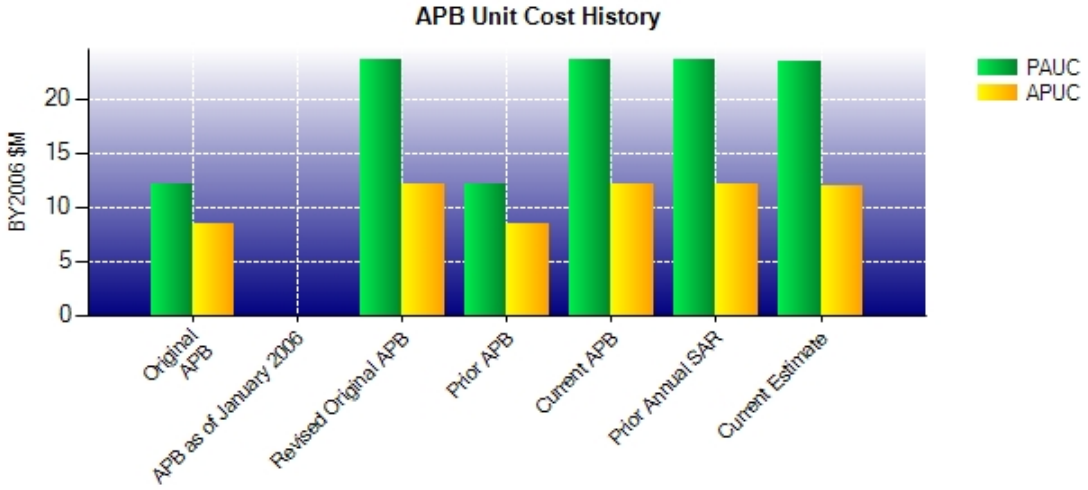
Unit Cost

Unit Cost Report

Unit Cost	BY2006 $M Current UCR Baseline (OCT 2010 APB)	BY2006 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	1279.6	1265.5	
Quantity	54	54	
Unit Cost	23.696	23.435	-1.10
Average Procurement Unit Cost (APUC)			
Cost	630.0	621.5	
Quantity	52	52	
Unit Cost	12.115	11.952	-1.35

Unit Cost	BY2006 $M Revised Original UCR Baseline (OCT 2010 APB)	BY2006 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	1279.6	1265.5	
Quantity	54	54	
Unit Cost	23.696	23.435	-1.10
Average Procurement Unit Cost (APUC)			
Cost	630.0	621.5	
Quantity	52	52	
Unit Cost	12.115	11.952	-1.35

Unit Cost History



		BY2006 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	OCT 2006	12.080	8.364	12.957	9.572
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	OCT 2010	23.696	12.115	26.841	15.288
Prior APB	APR 2008	12.080	8.364	12.957	9.572
Current APB	OCT 2010	23.696	12.115	26.841	15.288
Prior Annual SAR	DEC 2010	23.691	12.152	26.841	15.288
Current Estimate	DEC 2011	23.435	11.952	26.841	15.288

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial PAUC Prod Est	Changes								PAUC Dev Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
12.957	-0.752	3.262	2.950	0.454	6.344	0.000	1.626	13.884	26.841

Current SAR Baseline to Current Estimate (TY $M)

PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
26.841	0.276	0.000	0.000	0.000	-0.161	-0.065	-0.050	0.000	26.841

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial APUC Prod Est	Changes								APUC Dev Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
9.572	-0.783	-0.129	3.238	0.000	1.702	0.000	1.688	5.716	15.288

Current SAR Baseline to Current Estimate (TY $M)

APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
15.288	0.225	0.000	0.000	0.000	-0.106	-0.067	-0.052	0.000	15.288

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	N/A	N/A	N/A	N/A
Milestone II	N/A	N/A	DEC 1999	N/A
Milestone C	N/A	MAY 2014	N/A	MAY 2014
IOC	N/A	JAN 2015	SEP 2007	JAN 2015
Total Cost (TY $M)	N/A	1449.4	1399.4	1449.4
Total Quantity	N/A	54	108	54
Prog. Acq. Unit Cost (PAUC)	N/A	26.841	12.957	26.841

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	654.4	795.0	--	1449.4
Previous Changes				
Economic	-0.1	-1.6	--	-1.7
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+0.1	--	--	+0.1
Other	--	-3.5	--	-3.5
Support	--	+5.1	--	+5.1
Subtotal	--	--	--	--
Current Changes				
Economic	+3.3	+13.3	--	+16.6
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-3.3	-5.5	--	-8.8
Other	--	--	--	--
Support	--	-7.8	--	-7.8
Subtotal	--	--	--	--
Total Changes	--	--	--	--
CE - Cost Variance	654.4	795.0	--	1449.4
CE - Cost & Funding	654.4	795.0	--	1449.4

Summary Base Year 2006 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	649.6	630.0	--	1279.6
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-2.2	-3.0	--	-5.2
Other	--	--	--	--
Support	--	+4.9	--	+4.9
Subtotal	-2.2	+1.9	--	-0.3
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-3.4	-4.3	--	-7.7
Other	--	--	--	--
Support	--	-6.1	--	-6.1
Subtotal	-3.4	-10.4	--	-13.8
Total Changes	-5.6	-8.5	--	-14.1
CE - Cost Variance	644.0	621.5	--	1265.5
CE - Cost & Funding	644.0	621.5	--	1265.5

Previous Estimate: December 2010

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+3.3
Adjustment for current and prior escalation. (Estimating)	-0.8	-0.9
Decrease in FY 2011 due to Revised Economic Assumption. (Estimating)	-0.1	-0.1
Increase in FY 2011 due to Funding Realignment. (Estimating)	+4.5	+5.0
Decrease in FY 2011 due to Small Business Innovation Research/Small Business Technology Transfer Assessment. (Estimating)	-0.5	-0.6
Decrease in FY 2012 due to Program Execution. (Estimating)	-7.9	-8.9
Decrease in FY 2013 - FY 2017 due to Strategic Sourcing. (Estimating)	-0.5	-0.5
Decrease in FY 2013 - FY 2017 due to Working Capital Fund Adjustments. (Estimating)	-0.8	-0.8
Decrease in FY 2016 - FY 2017 due to Science & Technology Correction. (Estimating)	-0.2	-0.2
Decrease in FY 2017 per President's Budget (PB) 2013. (Estimating)	-11.6	-14.4
Revised estimate to reflect application of new outyear escalation indices. (Estimating)	-2.1	-2.6
The variance in FY 2018 will be offset by the following actions: FY 2013 President’s Budget (PB 2013) will be updated to correct the total FY 2011 shortfall of $9.047M. Below Threshold Reprogramming is being pursued to eliminate this shortfall in FY 2012. (Estimating)	+16.6	+20.7
RDT&E Subtotal	-3.4	0.0

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+13.3
Adjustment for current and prior escalation. (Support)	-0.2	-0.2
Revised estimate to reflect application of new outyear escalation indices. (Estimating)	-10.1	-13.1
Increase in FY 2017 - FY 2026 to offset the $5M decrease in FY 2011 in order to maintain funding profile in accordance with Under Secretary of Defense for Acquisitions, Technology & Logistics Nunn-McCurdy Acquisition Decision Memorandum dated June 1, 2010. (Estimating)	+3.8	+5.0
Support cost changes due to integration of inflationary guidance. (Estimating)	+2.0	+2.6
Decrease ($5M) in FY 2011 Other Support due to excess Remote Multi-Mission Vehicle Funding. Support cost changes ($1.5M) due to integration of inflationary guidance. (Support)	-5.4	-6.5
Support cost changes due to integration of inflationary guidance. (Support)	-0.5	-1.1
Procurement Subtotal	-10.4	0.0

Contracts

Appropriation: RDT&E	
Contract Name	**Reliability Growth Program (RGP) Completion Contract**
Contractor	Lockheed Martin Corporation
Contractor Location	100 East 17th Street Riviera Beach, FL 33404
Contract Number, Type	N00024-12-C-6316, CPIF
Award Date	December 16, 2011
Definitization Date	

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
N/A	N/A	N/A	N/A	N/A	N/A	75.0	75.0

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	0.0	0.0
Previous Cumulative Variances	--	--
Net Change	+0.0	+0.0

Cost And Schedule Variance Explanations

None

Contract Comments

An Undefinitized Contract Action (Letter Contract) was awarded on December 16, 2011. Negotiation and definitization of the final Reliability Growth Program Completion contract is planned for May 2012. Earned Value Management System reporting will begin pending completion of Integrated Baseline Review. The not to exceed value is $52,741,962.00 (Base Year of Contract as options have not been definitized).

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	2	2	2	100.00%
Production	8	8	52	15.38%
Total Program Quantities Delivered	10	10	54	18.52%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1449.4	Years Appropriated	17
Expenditures To Date	571.8	Percent Years Appropriated	54.84%
Percent Expended	39.45%	Appropriated to Date	585.3
Total Funding Years	31	Percent Appropriated	40.38%

Deliveries and expenditures as of February 9, 2012.

Operating and Support Cost

Assumptions And Ground Rules

There is no antecedent system to the RMS. The Littoral Combat Ship (LCS), along with the systems onboard, replaces the Avenger Class Mine Countermeasures (MCM) Ship. The RMS alone does not replace the MCM Ship.

Ground Rules:
1. All base year costs are shown in Constant Year FY 2006 dollars.
2. The acquisition approach is as identified by the Cost Assessment and Program Evaluation Office (CAPE).
3. All technical, financial, schedule and programmatic inputs are reviewed, at a minimum, by members of either the RMS Program Office or stakeholders from the Naval Surface Warfare Center, Panama City Division (NSWC-PCD).

4. Actual funded amount was used from FY 1996 to FY 2009.
5. Overhaul period is every three (3) years.

Assumptions:
1. This estimate covers costs for Remote Multi-Mission Vehicle (RMMV).
2. Upon determination of the First Unit Cost, Learning Curve factor was applied to Production & Deployment (95%) Phases. Due to production break, Learning Curve is reset for Full Rate Production (FRP) units.
3. Contractor Costs are assumed to be loaded through Contractor Fee.
4. The RMS System Design & Development effort was 'Cost Plus Incentive Fee'.
5. The Low Rate Initial Production (LRIP) Contract was, and the FRP Contract will be, Firm Fixed Price.
6. The Production & Deployment effort assumes Acquisition Program Baseline quantity of 54 RMMVs (two Engineering Development Models, 18 LRIP Units and 34 production units).
7. The system life is 20 years.
8. Operating & Support costs are estimated through FY 2048.

Costs BY2006 $K		
Cost Element	**RMS Remote Multi-Mission Vehicle**	**No Antecedent System**
Unit-Level Manpower	0.00	--
Unit Operations	12.25	--
Maintenance	444.60	--
Sustaining Support	63.55	--
Continuing System Improvements	80.55	--
Indirect Support	0.00	--
Other	0.00	--
Total Unitized Cost (Base Year 2006 $)	600.95	--

Total O&S Costs $M	RMS	No Antecedent System
Base Year	649.0	--
Then Year	1109.0	--

Per the RMS Service Cost Position, dated November 3, 2010, the estimate for disposal is $4.8M (FY 2010).