CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:				
								Febru	ıary 2004		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NO	MENCLATURI	Ē				
RESEARCH DEVELOPMENT TEST & EVALUA	ATION, NAVY /	BA-4			0603502N/Surface and Shallow Water Mine Countermeasure						
	Prior									Total	
COST (\$ in Millions)	Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program	
Total PE Cost	625.375	140.512	145.678	103.308	100.114	89.286	80.617	90.396	Continuing	Continuing	
Remote Minehunting System/0260/2387	211.854	58.433	58.458	14.424	0.010	0.000	0.000	0.000	0.000	343.179	
Integrated Combat Weapons System/1233/2388	61.558	8.314	3.716	3.850	3.822	4.033	3.934	3.882	Continuing	Continuing	
Unmanned Underwater Vehicle/2094/2852	168.982	69.185	80.537	65.580	55.566	47.654	47.870	57.673	Continuing	Continuing	
Assault Breaching Systems /2131	182.981	4.580	2.967	17.277	29.273	37.599	28.813	28.841	Continuing	Continuing	
Expendable Mine Neutralization System/4025	0.000	0.000	0.000	2.177	11.443	0.000	0.000	0.000	0.000	13.620	
										0.000	
Quantity of RDT&E Articles										0.000	

(U) 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 and classify moored, bottom, and close-tethered mines for use in Mine Countermeasure (MCM) MCM-1 Class, Mine Hunter Coastal (MHC) MHC-51 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) Unmanned Undersea Vehicle (UUV) systems for clandestine mine reconnaissance.

(U) B. JUSTIFICATION FOR BUDGET ACTIVITY:

This program is funded under DEMONSTRATION AND VALIDATION because it develops and integrates hardware for experimental test related to specific ship or aircraft applications.

Congressional adds received in FY 2004 for the venom penetrator and risk reduction for RMS associated with LCS mission modules for Mine Warfare.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Febru	uary 2004	
PROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND								AME			
RDT&E, N / BA-4	0603502N, Su	03502N, Surface and Shallow Water MCM 02				0260/2387, Re	mote Minehunt	ting Systems			
	Prior										Total
COST (\$ in Millions)	Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Project Cost	211.854		58.433	58.458	14.424	0.010	0.000	0.000	0.000	0.000	343.179
RDT&E Articles Qty	2		1	1	0	0					4

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Remote Minehunting System (RMS), AN/WLD-1(V)1, program develops a new remotely operated minehunting system for surface ships. This effort includes development and integration of a remote minehunting vehicle, minehunting sensors, mission command and control, and installation into the DDG-51 Class Flight IIA Baseline 7 and AN/SQQ-89(V)15 Undersea Warfare Combat System.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME	
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	0260/2387, Remote Minehu	nting Systems	
				•

(U) B. Accomplishments/Planned Program

Product Development	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	37.955	44.717	8.281
RDT&E Articles Quantity	1	1	

Continue engineering and fabrication of Engineering Development Models (EDMs) for the RMS. Conduct Functional/Physical Configuration Audit of Data Link Subsystem and Launch and Recovery Subsystem. Continue with the fabrication of Engineering Development Models (EDMs) for the RMS and begin Pilot Line Proofing of system hardware. Complete fabrication of Engineering Development Models (EDMs) for the RMS including Physical Configuration Audit (PCA) and continue Pilot Line Proofing of system hardware. Completion of the Engineering Manufacturing and Development Phase, of pilot line proofing, and Engineering Change Proposals (ECPs) resulting from OPEVAL.

Support	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	10.645	5.476	3.619
RDT&E Articles Quantity	1	1	

Continue software Design/Code/Test for the RMS. Continue Integrated Logistics Support (ILS) Planning and Integrated Electronic Technical Manual (IETM) Development for RMS. Continue Integration Support for the RMS.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justificat	ion	DATE:
		February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	0260/2387, Remote Minehunting Systems
(U) B. Accomplishments/Planned Program		

T&E	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	8.606	7.032	2.009
RDT&E Articles Quantity	1	1	

Conducted DT Assist of the Datalink Subsystem for the RMS Shipboard Equipment. Begin test preparation for TECHEVAL Phase I on ship of opportunity. Complete test preparation and conduct TECHEVAL Phase I and II for the RMS. Conduct and complete OPEVAL.

Management	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.227	1.233	0.515
RDT&E Articles Quantity	1	1	

Funds provided for Program Management Support and Travel.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE:	
					February 2004
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	P	ROJECT NUMBER AN	ND NAME	
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	0:	260/2387, Remote Mir	ehunting Systems	
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:	FY 2003	FY 2004	FY 2005		
FY04 President's Controls:	60.792	55.516	14.677		
FY05 President's Controls:	58.433	58.458	14.424		
Total Adjustments	-2.359	2.942	-0.253		
Summary of Adjustments					
Economic Assumptions	-0.345				
FY03 SBIR	-1.497				
Congressional Plus-Up		3.600			
Misc Adjustments	-0.517	-0.658	-0.253		
Subtotal	-2.359	2.942	-0.253		
(U) Schedule:					
Plan is to procure four production syste	ms in FY05 and FY06 and deliver in FY06 and FY07.				
(U) Technical:					
Not Applicable					

CLASSIFICATION:

EXHIBIT R-2a, RDT&	kE Project Justification		DATE:	
				February 2004
APPROPRIATION/BUDGI	ET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N /	BA-4	0603502N, Surface and Shallow Water MCM	0260/2387, Remote Minehunting Systems	
(U) D. OTHER PRO	OGRAM FUNDING SUMMARY	:		
				To Total

Line Item No. & Name Line 262200, OPN	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	<u>Complete</u>	<u>Cost</u>
RMS	0	0	46.708	50.840	0	0	0		
Support	0	0	1.854	4.267	0	0	0		
Total	0	0	48.562	55.107	0.000	0.000	0.000		
(U) RDT&E, Line 0604373, 0529	16.508	18.461	4.798	0	0	0	0		

(U) E. ACQUISITION STRATEGY:

The government issued a series of contract modifications to Lockheed Martin to complete efforts through the System Design Review. Based upon the approved Milestone II decision the program office issued the contract modification to complete the Critical Design Review (CDR); upon completion of CDR a CPIF sole source contract was awarded to Lockheed Martin to complete the development, fabrication, and testing of the engineering development models, initial pilot line/tooling, and timed phased procurement of initial systems to meet ship delivery schedules. The government has worked with the contractor in an IPT environment to refine the specification and Statement of Work for the overall development effort. The IPT pricing process was used to generate the cost estimates against Navy requirements. The government will pursue commonality between the AN/AQS-20A airborne minehunting system and the AN/WLD-1(V)1. The AN/WLD-1(V)1 contract plan is for the development of EDMs, system interactive electronic technical manual (IETM), provisioning data, technical drawings and data, and engineering services. The AN/WLD-1(V)1 program plans to update the acquisition strategy in accordance with the new POM 04 guidance, that includes integration of the AN/WLD-1(V)1 on DDG-51 Class Flight IIA ships beginning with DDG 91. The 4 EDM remote minehunting vehicles are required to meet ship schedules for DDG ship deliveries prior to receiving follow-on production units and to support the stand-up of the maintenance and training facilities.

(U) F. MAJOR PERFORMERS:

- Lockheed Martin, Syracuse, NY: Primary hardware development and integration, system engineering, software development, ship integration, and integrated logistic support.
- NSWC, CSS, Panama City, FLA: Hardware development and integration, system engineering, software development, integrated logistic support, and ship integration.

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag	e 1)										February	2004	
APPROPRIATION/BUDGET ACTIVI	TY	F	PROGRAM E	LEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			603502N, St	Surface and Shallow Water MCM 0260/2387, Remo					unting Systems				
Cost Categories	Method	Performing Activity & Location		Total PY s Cost	FY 03	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Hardware Development & Integration	CPIF	Lockheed Martii	n	97.283								97.283	
Hardware Development & Integration		Lockheed Martii	n	9.041	33.404	11/02	40.545	11/03	6.342	11/04		89.332	
Hardware Development & Integration	WR	NWSC, CSS		2.594	1.781	10/02	1.935	10/03	0.969	10/04		7.279	
Systems Engineering	CPIF	Lockheed Martii	n	5.465								5.465	
Systems Engineering	CPIF	Lockheed Martin	n	1.775	2.473	11/02	1.753	11/03	0.485	11/04		6.486	
Systems Engineering	WR	NWSC, CSS		0.649	0.297	10/02	0.484	10/03	0.485	10/04		1.915	
Award Fees				5.485								5.485	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal Product Development				122.292	37.955		44.717	1	8.281			213.245	

Remarks

GFE - AN/AQS-20 systems provided to RMS program were funded under PE 0604373/Q0529

Lockheed Martin, Syracuse, NY, contracts: (1) N00024-96-C-6322 was competitive CPAF/CPIF and (2) N00024-02-C-6309 was sole source CPIF.

CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis (pag	je 1)									February :	2004	
APPROPRIATION/BUDGET ACTIV	ITY	PROGRAM E				PROJECT NU						
RDT&E, N / BA-4			urface and Sha			0260/2387, Re						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Software Development	CPIF	Lockheed Martin	7.092							,	7.092	
Software Development	CPIF	Lockheed Martin	2.400	3.759	11/02	0.414	11/03	0.388	11/04		6.961	
Software Development	WR	NSWC, CSS	1.363	0.198	10/02	0.290	10/03	0.291	10/04		2.142	
ILS	CPIF	Lockheed Martin	5.682								5.682	2
ILS	CPIF	Lockheed Martin	2.296	3.636	11/02	3.009	11/03	1.163	11/04		10.104	ļ
ILS	WR	NSWC, CSS	1.394	0.099	10/02	0.290	10/03	0.291	10/04		2.074	
Ship Integration	CPIF	Lockheed Martin	1.258								1.258	3
Ship Integration	CPIF	Lockheed Martin	0.428	1.385	11/02	0.677	11/03	0.388	11/04		2.878	3
Ship Integration**	Various	Various	9.989	1.568	12/02	0.796	12/03	1.098	12/04		13.451	
											0.000)
											0.000)
											0.000)
											0.000	
											0.000)
											0.000)
											0.000	+
											0.000	1
											0.000	+
											0.000	1
	1					ļ					0.000	-
	1					-					0.000	+
											0.000	+
	1					1					0.000	
Subtotal Support			31.902	10.645		5.476		3.619			51.642	<u>' </u>

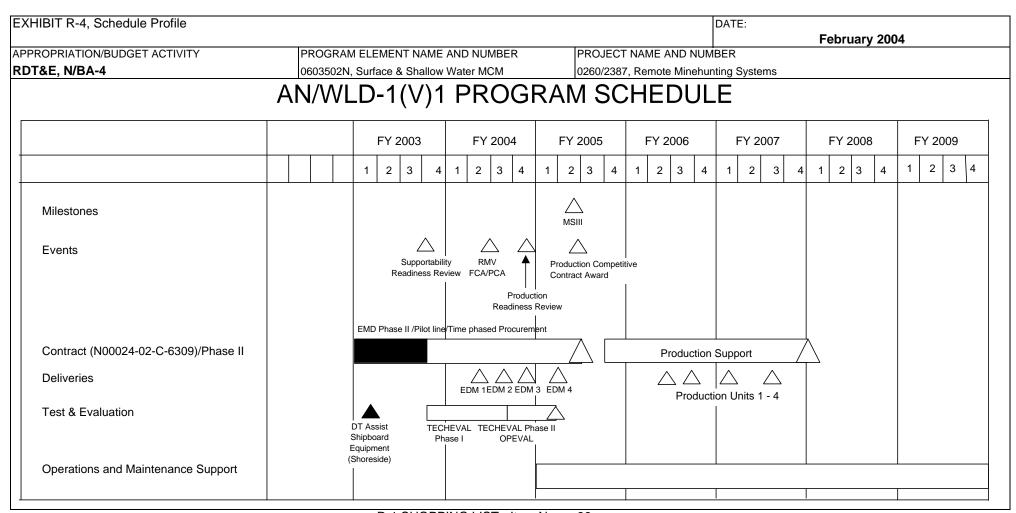
Remarks

Various in Ship Integration provides funding to support AN/SQQ-89(V)15 ECP effort for RMS and PMS400 RMS DDG ship class integration efforts.

CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis (pa	ge 2)									February 2	004	
APPROPRIATION/BUDGET ACTI		PROGRAM E	LEMENT			PROJECT NU	JMBER AND I	NAME		_		
RDT&E, N / BA-4		0603502N, St	urface and Sha	llow Water M		0260/2387, Re	emote Minehu	inting Systems				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	CPIF	Lockheed Martin	18.470)							18.470	,
Developmental Test & Evaluation	CPIF	Lockheed Martin	3.985	7.12	22 11/02	2.513	11/03	0.590	11/04		14.210	,
Developmental Test & Evaluation	WR	NSWC, CSS	1.621	1.48	10/02	4.519	11/03	1.419	10/04		9.043	,
											0.000	ı
											0.000	ı
											0.000	ı
											0.000	ı
Subtotal T&E			24.076	8.60)6	7.032		2.009			41.723	;
	T	T , , , ,					T		T	1		Т
Contractor Engineering Support	CPIF	Lockheed Martin	2.919			_				_	2.919	+
Government Engineering Support	WR	NSWC, CSS	22.393	1	11/00	1.110	44/00	0.400	11/01	+	22.393	
Program Management Support	CPFF	Vredenburg	1.736			1.146		0.428	11/04	+	4.448	+
Travel	Various	NAVSEA	0.175		39 Various	0.087	Various	0.087	Various	1	0.438	
SBIR Assessment	Various	Various	6.361	 	+			-			6.361	
O thirty Management		 	22.504	1 1.22	77	1.233		0.545		+	0.000 36.559	+
Subtotal Management Remarks: Award dates for management are	various bed	:ause multiple activities are re	33.584	•	•			0.515			30.559	
Total Cost			211.854	58.43	33	58.458		14.424			343.169)
Remarks:	•	,				,	1	,		,	,	,

CLASSIFICATION:



CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:		
							February 20	04
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT			PROJECT NU	MBER AND NA	AME	
RDT&BA-4	0603502N, Su	rface & Shallov	v Water MCM		0260/2387, Re	emote Minehun	ting Systems	
Schedule Profile: AN/WLD-1 (V)1		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Milestone III (MSIII)				2Q				
Supportability Readiness Review		4Q						
Functional & Physical Configuration Audit (FCA)/(PCA)			2Q-3Q					
Production Readiness Review (PRR)			4Q					
Production Competitive Contract Award				2Q				
Engineering Manufacturing & Development(EMD) Phase	[]	1Q-4Q	1Q-4Q	1Q-2Q				
Production Start				3Q-4Q	1Q-4Q	1Q-4Q		
EDM 1 Delivery			2Q					
EDM 2 Delivery			3Q					
EDM 3 Delivery			4Q					
EDM 4 Delivery				1Q-2Q				
Production Unit 1-4 Delivery					2Q-3Q	1Q-3Q		
Developmental Testing (DT) Shipboard Equip (shoreside))	1Q						
Technical Evaluation (TECHEVAL), Phase I		4Q	1Q-3Q					
Technical Evaluation (TECHEVAL), Phase II			3Q-4Q	1Q				
Operational Evaluation (OPEVAL)			3Q-4Q	1Q				
Operations and Maintenance Support Start					1Q	1Q-4Q	1Q-4Q	1Q-4Q

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Febru	ıary 2004	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EL	EMENT NUM	BER AND NAM	E	PROJECT NU	MBER AND NA	AME			
RDT&E, N / BA-4	0603502N, Su	rface and Shall	low Water MCN	Л		1233, Mine Co	unter Measure	s Mid-Life Upgr	rades*		
	Prior										Total
COST (\$ in Millions)	Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Project Cost	61.558		8.314	3.716	3.850	3.822	4.033	3.934	3.882	Continuing	Continuing
RDT&E Articles Qty											0

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(1) Integrated Combat Weapon System (ICWS) is an open architecture system which will demonstrate common control of multiple unmanned systems with optimal manning and provide a foundation for future improvement modernization of Combat Systems on MCM and MHC class ships and future mine warfare platforms. (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) MCM Command Control, Communication, Computers and Intelligence (C4I) connectivity to the rest of the fleet is provided through GCCS-M; design and implement Mine Warfare (MIW) C4I Surveillance and Reconnaissance (C4ISR) architecture fully integrates and optimizes organic and dedicated systems within the Navy's C4ISR architecture.

*former title was Integrated Combat Weapons System

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	1233, Mine Counter Measur	es Mid-Life Upgrades

(U) B. Accomplishments/Planned Program

Product Development	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.220	0.360	0.600
RDT&E Articles Quantity			

Product Development:

ICWS

Continue / complete hardware design for ICWS.

MIW C4ISR

Continue MIW information system engineering effort; continue and complete C4ISR architecture Rev 1; continue MIW C4ISR assessment; continue MCM/MHC LAN integration; continue and complete MEDAL/TEDS integration. Continue MIW information system engineering effort; initiate and continue MIW C4ISR architecture Rev 2; continue and complete MIW C4ISR assessment; initiate MIW C4ISR dynamic assessment; initiate MUW Network Centric Warfare Info system network; continue and complete MCM/MHC LAN integration. Continue MIW information system engineering effort; continue and complete MIW C4ISR architecture Rev 2; initiate MIW C4ISR Rev 3; continue MIW C4ISR Dynamic Assessment; continue MUW Network Centric Warfare Info system network.

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	1233, Mine Counter Measur	es Mid-Life Upgrades
	•	•	

(U) B. Accomplishments/Planned Program

Support	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.931	2.595	2.656
RDT&E Articles Quantity			

Support:

ICWS

Complete software/hardware design/code/test for ICWS; begin and complete EDM 1 integration and testing in the laboratory; and begin install and testing on ship of opportunity. Continue and complete testing on ship of opportunity.

MEDAL

Continue and complete development and test of Build 9; initiate and complete integration and test of Build 9; initiate development and test of Build 10. Initiate and complete IOC Build 9; continue and complete development and test Build 10; initiate and continue and complete development and test Build 11. Continue and complete development and test Build 11; initiate and continue integration and test Build 11; initiate development and test Build 12.

MIW C4I

Continue and complete Network Centric Warfare database phase I. Initiate Network Centric Warfare database phase II. Continue and complete Network Centric Warfare database phase III. Continue and complete Network Centric Warfare database phase III. Initiate and continue Network Centric Warfare Database maintenance/update/redesign.

Test and Evaluation	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000
RDT&E Articles Quantity			

1	Tact	and	Eval	luation	

N/A

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT8	E Project Justificati	on			DATE: February	2004
PROPRIATION/BUDGET	ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND N		2004
DT&E, N / BA-4		0603502N, Surface and Sha		1233, Mine Counter Measure		
B. Accomplishments/P	lanned Program	•				
Management			FY 03	FY 04	FY 05	
Accomplishments/Effort	Subtotal Cost		2.163	0.761	0.594	
RDT&E Articles Quantity				91. 91	3130	

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

XHIBIT R-2a, RDT&E Project Justificatio	n				DATE:
					February 2004
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER A	AND NAME		PROJECT NUMBER AND N	AME
RDT&E, N / BA-4	0603502N, Surface and Shallow V	ater MCM		1233, Mine Counter Measure	es Mid-Life Upgrades
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:	FY 2003	FY 2004	FY 2005		
FY04 President's Controls:	12.477	3.758	2.823		
FY05 President's Controls:	8.314	3.716	3.850		
Total Adjustments	-4.163	-0.042	1.027		
Summary of Adjustments					
FY03 SBIR	-0.101				
Misc Adjustments	-4.062	0.042	1.027		
Subtotal	-4.163	0.042	1.027		
(U) Schedule:					
ICWS final at sea test has slipped two	quarters due to ship availability.				
(U) Technical:					
MIW C4ISR program has been restruc	ctured to reflect recently revised MIW C4I mast	er nlan			
mirr o non program has been restruc	stared to remote recordly revised with O41 mast	or plan.			

CLASSIFICATION:

IIBIT R-2a, RDT&I	E Project Justification							DATE:		0004	
ROPRIATION/BUDGE	T ACTIVITY	IPROGRAM E	LEMENT NUM	IBER AND NAM	ИΕ	PROJECT NU	MBER AND N	AME	Februa	ary 2004	
Γ&E, N /	BA-4		0603502N, Surface and Shallow Water MCM				1233, Mine Counter Measures Mid-Life Upgrades				
(II) D. OTHER PRO											
(U) D. OTHER PROGRAM FUNDING SUMMARY: <u>Line Item No. & Name</u>		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To <u>Complete</u>	Total <u>Cost</u>	
	onstrate common control of mult										
ICWS will demo	onstrate common control of mult anges. Contract was awarded ir										
ICWS will demidevelop the characteristics (U) F. MAJOR PERF	onstrate common control of mult anges. Contract was awarded in DRMERS:	i FY00. MEDAL is an evolu									
ICWS will demodevelop the characteristics (U) F. MAJOR PERFO	onstrate common control of multanges. Contract was awarded in ORMERS:	NFY00. MEDAL is an evolu									
ICWS will demodevelop the characteristics (U) F. MAJOR PERFO	onstrate common control of mult anges. Contract was awarded in DRMERS:	NFY00. MEDAL is an evolu									

CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis (pa	ige 1)									February 200	04	
APPROPRIATION/BUDGET ACTI	VITY	PROGRAM	I ELEMENT			PROJECT NU	JMBER AND	NAME				
RDT&E, N / BA-4		0603502N,	Surface and Sha	low Water MCN	Л	1233, Mine Co	1233, Mine Counter Measures Mid-Life Upgrades					
Cost Categories	Method	Performing Activity & Location	Total PY s Cost	FY 03	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	SS/CPIF	Raytheon, RI	2.960								2.960	
Primary Hardware Development	SS/FFP	Lockheed Martin	3.484								3.484	N/A
Primary Hardware Development	WR/RCP	NSWC, CSS/NAWC	2.705	0.701	11/02						3.406	N/A
Systems Engineering	Various	NSWC, CSS/NAVAIR	10.777	1.519	11/02	0.360	11/03	0.600	11/04	Continuing	Continuing	N/A
Award Fees	SS/CPIF	Raytheon, RI	0.439								0.439	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
-											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			20.365	2.220		0.360		0.600		0.000	23.545	

Remarks:

Due to a large projected cost overrun on ICWS, all work contracted to Raytheon on the CPIF contract was transferred to Lockheed Martin FP contract and NSWC, CSS Panama City, Florida.

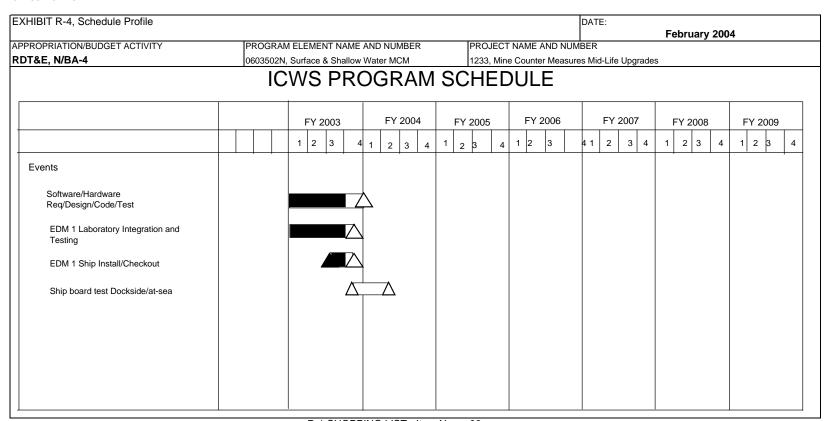
CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis	s (page 1)							571121		February 200)4	
APPROPRIATION/BUDGET	ACTIVITY	PROGRAM I	LEMENT			PROJECT NU	JMBER AND	NAME		-		
RDT&E, N / BA			urface and Shal	low Water MCI		1233, Mine Co		res Mid-Life Upg				
Cost Categories	Contract Method		Total PY s	FY 03	FY 03 Award	FY 04	FY 04 Award	FY 05	FY 05	0	Total	T()/-1
	& Type	Activity & Location	Cost	Cost	Date	Cost	Date	Cost	Award Date	Cost to Complete	Cost	Target Value of Contract
Software Development	WR	NSWC	12.296	1.890		0.511		0001	Duto	Continuing		
Software Development	SS/FFP	Lockheed Martin	5.815		11,02	0.011	1 1700				5.815	
Software Development	WR/PD	NSWC/CD, ARL/UT, ONR	14.817	2.041	11/02						16.858	
Software Development	SS/FFP	SAIC	0.100			2.084	11/03	2.656	11/04	Continuing		
,										Ö	0.000	
											0.000)
											0.000)
											0.000)
											0.000)
											0.000	j
											0.000	j
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Support			33.028	3.931		2.595	5	2.656		0.000	42.210)
Remarks:												

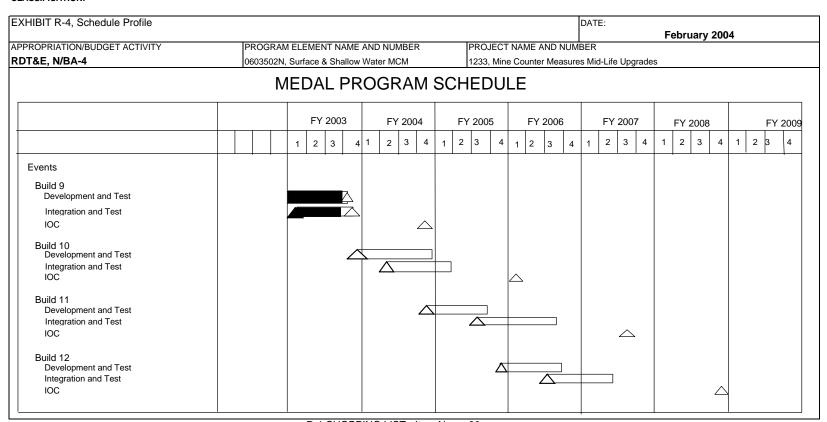
CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag											February 200	04	
APPROPRIATION/BUDGET ACTIV	'ITY		PROGRAM ELEI				PROJECT NU						
RDT&E, N / BA-4			0603502N, Surfa		llow Water MCN		1233, Mine Counter Measures Mid-Life Upgrades						
Cost Categories	Contract	Performing		otal		FY 03		FY 04		FY 05			L
	Method	Activity &	PY		FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value of Contract
D	& Type	Location	Co		Cost	Date	Cost	Date	Cost	Date	Complete	Cost	
Developmental Test & Evaluation	CPIF	Lockheed Mar		0.200					-			0.200	
Operational Test & Evaluation	CPIF	Lockheed Mar	tin	1.592	2				-			1.592	1
									+			0.000	
									+			0.000	
												0.000	
												0.000	
												0.000	
Subtotal T&E				1.792	0.000		0.000)	0.000)	0.000	1.792	
Contractor Engineering Support				0.153	3							0.153	N/A
Government Engineering Support				0.500	D							0.500	N/A
Program Management Support	Various	NAVSEA		4.858	1.844	11/02	0.352	11/03	0.330	11/04	Continuing	Continuing	N/A
Program Management Support	CPFF	Vredenburg		0.506	0.254	11/02	0.306	11/03	0.164	11/04	Continuing	Continuing	N/A
Travel				0.160	0.065	11/02	0.103	11/03	0.100	11/04	Continuing	Continuing	N/A
SBIR Assessment				0.196	6							0.196	N/A
Subtotal Management				6.373	2.163		0.761		0.594	l	0.000	9.891	
Remarks:													
Total Cost				61.558	8.314		3.716	3	3.850		0.000	77.438	,
Remarks:													

CLASSIFICATION:



CLASSIFICATION:

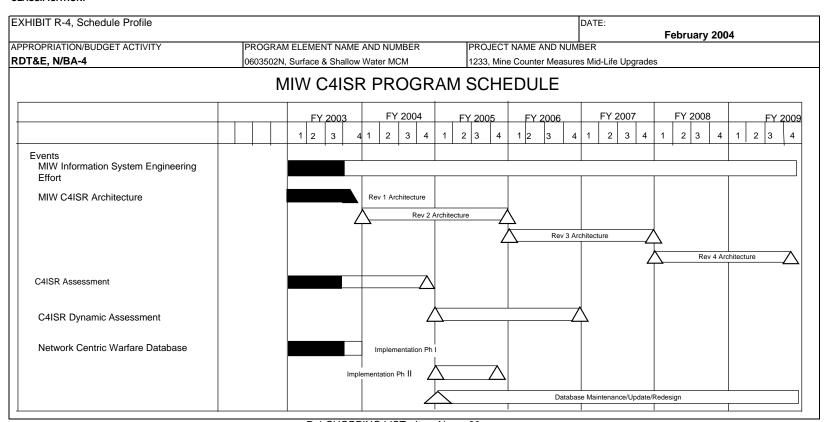


R-1 SHOPPING LIST - Item No. 36

CLASSIFICATION:

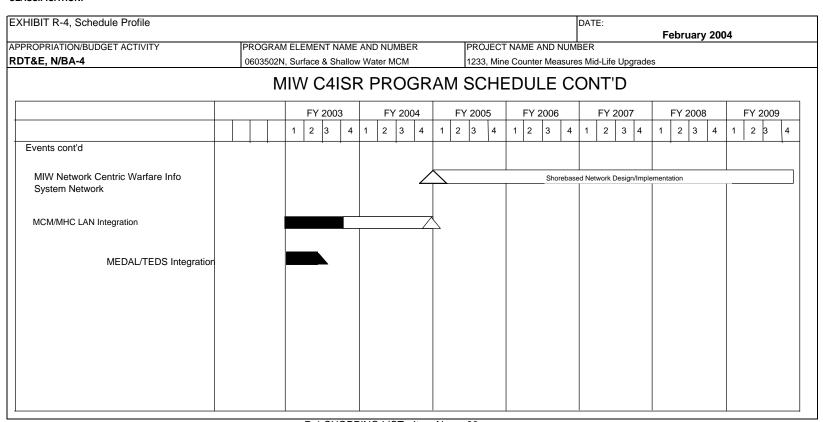
XHIBIT R-4, Schedule Profile				DATE:	February 200)4	
PPROPRIATION/BUDGET ACTIVITY DT&E, N/BA-4	MELEMENT NAME A		PROJECT NAME AND NUMBER 1233, Mine Counter Measures Mid-Life Upgrades				
			HEDULE CO				
	FY 2003	FY 2004	FY 2005 FY 20	06 FY 2007	FY 2008	FY 2009	
	1 2 3 4	1 2 3 4 1	2 3 4 1 2 3	4 1 2 3 4	1 2 3 4	1 2 3 4	
Events Build 13 Development and Test Integration and Test Build 14 Development and Test							

CLASSIFICATION:



R-1 SHOPPING LIST - Item No. 36

CLASSIFICATION:



CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:			
						ı	February 20	04	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NU	PROJECT NUMBER AND NAME			
RDT&BA-4	0603502N, S	urface & Shallo	w Water MCM	1233, Mine Counter Measures Mid-Life Upgrades					
Schedule Profile: ICWS		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Software/Hardware Reg/Design/Code/Test		1Q-4Q							
EDM 1 Laboratory Integration and Testing		1Q-4Q							
EDM 1 Ship Install/Checkout		3Q-4Q							
EDM 1 Laboratory Integration and Testing EDM 1 Ship Install/Checkout Shipboard Test Dockside/At-Sea		4Q	1Q-2Q						

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

Exhibit R-4a, Schedule Detail	<u> </u>					DATE:			
*						l I	February 20	04	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NU	UMBER AND NAME			
RDT&BA-4	0603502N, S	Surface & Shallo	w Water MCM		1233, Mine Counter Measures Mid-Life Upgrades				
Schedule Profile: MEDAL		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Build 9 Development and Test		1Q-4Q							
Build 9 Integration and Test		1Q-4Q							
Build 9 IOC			4Q						
Build 10 Development and Test		4Q	1Q-4Q						
Build 10 Integration and Tests			2Q-4Q	1Q					
Build 10 Integration and Tests Build 10 IOC					1Q				
Build 11 Development and Test			4Q	1Q-3Q					
Build 11 Integration and Tests				3Q-4Q	1Q-3Q				
Build 11 IOC						3Q			
Build 12 Development and Test				4Q	1Q-3Q				
Build 12 Integration and Tests					3Q-4Q	1Q-2Q			
Build 12 IOC							4Q		
Build 13 Development and Test						3Q-4Q	1Q-3Q		
Build 13 Integration and Test							3Q-4Q	1Q-3Q	
Build 14 Development and Test								3Q-4Q	
•									
	<u> </u>								

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:	Eobruary 20	04		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	EMENT			DDO IECT NII I	MBER AND NA	February 20	04		
RDT&BA-4			\\/ \\/				unter Measures Mid-Life Upgrades			
	0603502N, S	urface & Shallov					<u> </u>			
Schedule Profile: MUW C4ISR		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
MUW Information System Engineering Effort		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
MUW C4ISR Architecture:										
Rev 1 Architecture		1Q-4Q								
Rev 2 Architecture			1Q-4Q	1Q-4Q						
Rev 3 Architecture					1Q-4Q	1Q-4Q				
Rev 4 Architecture							1Q-4Q	1Q-4Q		
MUW C4ISR Assessment		1Q-4Q	1Q-4Q							
MUW C4ISR Dynamic Assessment				1Q-4Q	1Q-4Q					
MUW Network Centric Warfare Database:										
Implementation Ph I		1Q-4Q								
Implementation Ph II				1Q-4Q						
Database Maintenance/Update/Redesign	1			1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
MUW Network Centric Warfare Info System Network				1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
MCM/MHC LAN Integration		1Q-4Q	1Q-4Q							
MEDAL/TEDS Integration		1Q-2Q								
		DDING LIGT		00						

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Febru	uary 2004	
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND N						MBER AND NA	AME				
RDT&E, N / BA-4	0603502N, Su	rface and Shallow Wate	er MCM	1		2131, Assault I	Breaching Syst	ems			
	Prior										Total
COST (\$ in Millions)	Years Cost	FY 20	003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Project Cost	182.981		4.580	2.967	17.277	29.273	37.599	28.813	28.841	Continuing	Continuing
RDT&E Articles Qty											0

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides for a combination of joint US Marine Corps and US Navy projects planned to counter the threat to amphibious landing forces from known and projected foreign land/sea mines and obstacles in the beach zone and surf zone approaches to amphibious assault areas. It develops a system of systems (Countermine/Counter Obstacle, Intelligence/Surveillance/Reconnaissance/Targeting (ISR/T), Navigation/Virtual Marking/Integration, C4I/Data Fusion) to provide a full assault breaching capability. Funding in Fiscal Year 2004 is a Congressional Plus-Up for Venom Penetrator.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justific	ation		DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	2131, Assault Breaching Systems	
(U) B. Accomplishments/Planned Program			

Product Development	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.550	0.651	10.521
RDT&E Articles Quantity			

Product Development:

Primary Hardware Development \$11.722: ISR/Targeting Development (\$5.500 FY05). Government Furnished Equipment (GFE): Mine Threat Procurement for Development (\$0.550 FY03), \$ 1.000 FY05), Nav System/marking development (\$2.500 FY05). Far term technology maturity (\$1.521 FY05); Venom Penetrator (\$0.651 FY04).

Support	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.992	1.595	2.075
RDT&E Articles Quantity			

Support:

<u>Development Support Equipment \$0.825:</u> Tactical Decision Aid Development (\$0.825 FY05)

Studies and Analysis \$3.837: ABS Mission Area Analysis (MAA) (\$0.375 FY03). Modeling and Simulation in support of Far-Term Development (\$0.387 FY03, \$0.250 FY05). Mine Migration Studies in support of requirements development (\$0.230 FY03, \$0.200 FY05). Mine Vulnerability Studies (\$0.200 FY05). C4l/Data Fusion (\$0.200 FY05), ABS Scalability study (\$0.400 FY05); Venon Penetrator (\$1.595 FY04).

R-1 SHOPPING LIST - Item No.

^{*} FY04 funding in 0603782N.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	1		DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NA	AME
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	2131, Assault Breaching Sys	tems

(U) B. Accomplishments/Planned Program

Test and Evaluation	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.370	0.159	0.010
RDT&E Articles Quantity			

Test and Evaluation:

Developmental Test and Evaluation, \$1.539: Tests/studies in support of requirements development include: lane width study, mine burial/migration, mine burial effects, mine vulnerability (\$0.736 FY03). Navigation Operational Test Support (\$0.010 FY05). Lethality test matrix (\$0.634 FY03); Venom Penetrator (\$0.159 FY04).

Management	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.668	0.562	4.671
RDT&E Articles Quantity			

Management:

Program Management Support, \$2.640: (\$0.085 FY03, \$0.211 FY04, \$2.344 FY05)

Contractor Engineering Support, \$.932: In-house contractor support (Vredenberg and Northrop Grumman) (\$0.410 FY03, \$0.522 FY05)

Government Engineering Support, \$3.329: Technical Direction Agent/Design Agent (TDA/DA) Engineering Support of Mission Area Analysis, Analysis of Alternatives, Milestone B preparation, contract and acquisition documentation, Requirements Generation - Initial Capabilities Document (ICD), Capability Development Documents (CDO), Capability Production Documents (CPD), Analysis of Material approvals and Functional needs analysis/functional solutions analysis, Mine magazine inventory management and shipping, contract management and tests/studies. (\$1.173 FY03, \$1.805 FY05); Venom Penetrator (\$0.351 FY04)

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE:	February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND NAME	rebidaly 2004
RDT&E, N / BA-4	0603502N, Surface and Shallow V			2131, Assault Breaching Systems	
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding: FY04 President's Budget:	FY 2003 0.662	FY 2004 0.000	FY 2005 17.620		
FY05 President's Budget: Total Adjustments	<u>4.580</u> 3.918	2.967 2.967	17.277 -0.343		
Summary of Adjustments FY03 SBIR Congressional Plus-Up Venon Penetrato Misc Adjustments	-0.110 or 4.028	3.000 -0.033	-0.343		
Subtotal	3.918	2.967	-0.343		
(U) Schedule:					
Not Applicable					
(U) Technical:					
Not Applicable					

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
·			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N / BA-4	0603502N, Surface and Shallow Water MCM	2131, Assault Breaching Sys	stems
(II) D. OTHER RECORAM FUNDING CHAMARY.	•	•	

(U) D. OTHER PROGRAM FUNDING SUMMARY:

 Line Item No. & Name
 FY 2003
 FY 2004
 FY 2005
 FY 2006
 FY 2007
 FY 2008
 FY 2009
 Complete

 BLI 2624000 Shallow Water MCM
 0
 2.294
 2.255
 2.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 3.255
 <

*\$12M is ABS specific. Funding exists across the FYDP in this PE for other mine warfare efforts.

(U) E. ACQUISITION STRATEGY:

The FY03, FY04 and FY05 ICD and CDD tasks specifically complete the requirements generation process for the overarching mission area of Amphibious Operations in a Mined Environment leading to a MS B decision during FY06. The MAA will provide the foundation for the "system of systems ICD/CDD required for Amphibious Operations in a Mined Environment. The FY03, FY04 and FY05 tasks will also allow the Navy to demonstrate the viability of concepts for Far Term System of Systems capabilities and justify the need for future funding. The FY03 and FY04 funding is crucial to maintaining a pool of experienced ABS team members at the government labs and industry and for the program to maintain its inventory of threat mines that will be required for future mine lethality and vulnerability tests. The FY03, FY04 and FY05 tasks will develop ISR/Targeting systems and Navigation systems to support the Assault Breaching Mission.

(U) F. MAJOR PERFORMERS:

- NSWC, IH: Provide system engineering and test and evaluation support.
- NSWC, CSS: Provide Technical Direction Agent, systems engineering and test and evaluation support.
- TBD: Far Term ABS System contractor

R-1 SHOPPING LIST - Item No. 3

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, page 33 of 56)

Total

Cost

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pa							February 200)4					
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT						PROJECT NU	MBER AND	NAME					
RDT&E, N / BA-4			0603502N, St	urface and Sha	llow Water MC	М	2131, Assault	Breaching S					
Cost Categories	Contract Method & Type	Performing Activity & Location		Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	IH, CSS, TBD	1	54.554			0.651	11/03	9.521	11/04	Continuing	Continuing	N,
Ancillary Hardware Development	WR	IH, CSS, TBD	1	8.100							Continuing	Continuing	N,
Aircraft Integration												0.000	
Ship Integration												0.000	
Ship Suitability												0.000	
Systems Engineering	WR	IH, CSS		16.233							Continuing	Continuing	N,
Training Development	WR	IH, CSS		2.000								2.000	N,
Licenses	WR	N/A		0.800								0.800	N,
Tooling	WR	IH, CSS, TBD	1	0.860								0.860	N.
GFE	WR	IH, CSS		3.650	0.550	06/03			1.000	11/04	Continuing	Continuing	N.
Award Fees	N/A	N/A		0.500								0.500	N/
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000)
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal Product Development				86.697	0.550		0.651		10.521		0.000	98.419	

CLASSIFICATION:

Exhibit B 2 Coot Anal	husia (naga 1)					DATE:		Echruary 200	M				
Exhibit R-3 Cost Anal APPROPRIATION/BUDG		Inn	OGRAM ELEMENT			February 2004 PROJECT NUMBER AND NAME							
	BA-??		03502N, Surface and Sha	llow Motor MCI	M		PROJECT NUMBER AND NAME 2131, Assault Breaching Systems						
Cost Categories	Contrac		Total	llow water wich	FY 03	Z131, ASSAUII	FY 04		FY 05			1	
Oost Oatogories	Method		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value	
	& Type		Cost	Cost	Date	Cost	Date	Cost	Date	Complete		of Contract	
Development Support Equip	ment WR	IH, CSS, TBD	11.721					0.825	11/04	Continuing	Continuing	N/A	
Software Development	WR	CSS	8.037								8.037	N/A	
Integrated Logistics Support	WR	IH, CSS	2.712								2.712	N/A	
Configuration Management	WR	IH, CSS	3.744								3.744	N/A	
Technical Data	WR	IH, CSS	2.588								2.588	N/A	
Studies & Analysis	WR	IH,CSS		0.992	01/03	1.595	11/03	1.250	11/04	Continuing	Continuing		
GFE	WR	IH, CSS	0.400								0.400	N/A	
Award Fees											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
											0.000		
Subtotal Support			29.202	0.992		1.595		2.075		0.000	33.864		

CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis (pa		T				T				February 200	04	
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM EL				PROJECT NU						
RDT&E, N / BA-4	10	0603502N, Su		llow Water MC		2131, Assault		ystems	EV 05		T	_
Cost Categories	Contract Method		Total PY s	FY 03	FY 03 Award	FY 04	FY 04 Award	FY 05	FY 05 Award	Cost to	Total	Target Value
	& Type		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation	WR, PD	IH, CSS, ONR, TBD	24.893	1.370	01/03	0.159	11/03	0.010	11/04	Continuing	Continuing	N/A
Operational Test & Evaluation	WR	IH, CSS, TBD	8.655								8.655	N/A
Live Fire Test & Evaluation											0.000)
Test Assets											0.000)
Tooling	WR	IH, CSS, TBD	0.700								0.700	N/A
GFE	WR	IH, CSS, TBD	0.400								0.400	N/A
Award Fees											0.000)
Subtotal T&E			34.648	1.370	0	0.159	9	0.010			36.187	<i>'</i>
Contractor Engineering Support	CPFF	Vredenburg, Northrup Grumn	2.679	1				0.522	1	Continuing		,
Government Engineering Support	WR	IH, CSS	17.564	1.173	3 11/02	0.351	11/03	1.805	11/04	Continuing	Continuing	N/A
Program Management Support	WR	IH, CSS, NAVSEA	11.281	0.045	5	0.211	11/03	2.269	11/04	Continuing		-
Travel	PD	NAVSEA	0.837	0.040	11/02			0.075	11/04	Continuing		·
Transportation											0.000	
SBIR Assessment	Various	Various	0.073	1							0.073	+
Subtotal Management			32.434	1.668	8	0.562	2	4.671			39.335	<u>i</u>
Remarks:												
Total Cost			182.981	4.580	0	2.967	7	17.277		0.000	207.805	;
Remarks:												

CLASSIFICATION:

EXHIBIT R-4, Schedule Profile						DATE:	February 200)4
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT NAME	AND NUMBER	PROJEC	T NAME AND NUM	BER		<u> </u>
RDT&E, N/BA-4		Surface & Shallow		li .	sault Breaching Sys	stems		
	A	BS PRC	OGRAM	SCHED	ULE			
		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
		1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 23 4
Milestones					MS B (CM			
ONR 6.3 Demo Efforts		СМ	and CO Exploration/Tech	nology Demonstration 6.3				
		CM - B	Z CO Demo					
CMCO Acquisition/Development 6.4			Draft C	DD/Approval		CM and CO System D	Development	
CMCO System Design and Test		AA/ICD/Risk Mitigation/			Prep for MS B/Contract Award	CM - BZ CO Contract Award		
	Req	uirements Development				System Design	n/Platform Integration	n
CMCO Technical Reviews					Contract	SRR SFR CS	\diamond	EOA CDR
ISR/Navigation/C4I Development					Kickoff	stem Development	SR PDR	

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:		
							ebruary 20	04
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT			PROJECT NU	IMBER AND N	AME	
RDT&BA-4	Program Ele	ement (PE) No. a	nd Name		2131, Assault	Breaching Sys	tems	
Schedule Profile: ABS		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
CM and CO Exploration/Technology Demonstration 6.3	(ONR)	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-3Q		
CM-BZ CO Demo	`		1Q					
MAA/MNS/Risk Mitigation/Requirements Devel.		1Q-4Q						
Draft CDD/Approval			1Q-4Q	1Q-4Q	1Q			
MS B (CM-BZ CO)					2Q			
Prep for MS B/Contract Award					1Q-3Q			
CM and CO System Development					2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
CM- BZ CO Contract Award					4Q			
System Design/Platform integration					2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Technical Reviews:								
Contract Kickoff					4Q			
SRR - System requirements Review						1Q		
SFR- System Functional Review						3Q		
SSR - System Software Review						4Q		
PDR - Preliminary Design Review							1Q	
EOA - Early Operational Assessment								1Q
CDR- Critical Design Review								2Q
ISR/NAV/C4I Development			2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
	-							
						1		
	R-1 SF	OPPING LIST	- Item No.	36	1			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Februa	ary 2004	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EL	EMENT NUME	BER AND NAM	E	PROJECT NU	MBER AND N	AME		-	
RDT&E, N / BA-4	Surface & Sha	llow Water MCI	M, 0603502N			Unmanned Un	dersea Vehicle	Q2094/Q2852			
	Prior										Total
COST (\$ in Millions)	Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Program
Project Cost	168.982	69.185	80.537	65.580	55.566	47.654	47.870	57.673		Continuing	Continuin
RDT&E Articles Qty				1							1

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project was completely restructured in FY 1994 in response to Congressional direction provided in the FY 1994 DOD Appropriations Act. Specifically, the office of the Secretary of Defense and the Navy were directed to (1) establish priorities among various proposed UUV programs, (2) focus on near-term mine countermeasures issues, and (3) establish affordable, cost-effective programs. The Navy developed an overall UUV Program Plan, which was approved by ASN(RD&A) June 1994, endorsed by USD(A&T) and forwarded to Congress to support FY 1995 budget deliberations. The UUV Program Plan has been ratified in succeeding revisions, the most recent being April 2000.

The UUV Program Plan establishes a clandestine, mine reconnaissance capability as the Navy's top UUV priority; the conduct of surveillance, intelligence and tactical oceanography missions as priority two; and exploring advanced UUV designs for the future as priority three.

The UUV project funds development of the UUV Program Plan. The AN/BLQ-11 Long-Term Mine Reconnaissance System (LMRS) is being developed to provide a robust, long-term Fleet capability to conduct clandestine minefield reconnaissance. A quantity of 10 LMRSs will be procured in the FYDP begining in FY05. The LMRS Inventory Objective is 12. The Navy's second priority is the conduct of surveillance, intelligence and tactical oceanography. To meet this requirement the Navy will develop a Mission Reconfigurable UUV (MRUUV) system that is capable of performing different missions. It is envisioned that this system will adapt elements of the LMRS design to develop a more modular UUV capable of accomodating multiple payload sensors appropriate to meet various mission requirements. ONR will develop technologies for payload sensors and increased autonomy under the Autonomous Operations Future Naval Capability (FNC) programs to support risk mitigation for the MRUUV program. Technologies from these systems will transition to MRUUV during the FNC demonstration year. Technology Transition agreements between the Program office and ONR have been signed. An AOA for the Large Displacement (LD) MRUUV commenced in FY03 and will complete in second quarter FY04.

CLASSIFICATION:

MRUUV

Accomplishments/Effort/Subtotal Cost

RDT&E Articles Quantity

ROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUME	BER AND NAME	PROJECT NUMBER AND	February 2004 NAME	
Г&E, N / ВА-4	Surface & Shallow Water M	CM, 0603502N	Unmanned Undersea Ve	hicle Q2094/Q2852	
. Accomplishments/Planned Program					
MRS	FY 03	FY 04	FY 05	<u> </u>	
Accomplishments/Effort/Subtotal Cost	32.100	30.139	11.467		
RDT&E Articles Quantity	0	0	1		

Awarded contract, to Lockheed Martin Perry LABs, and initiated development of an Advanced Development Unmanned Undersea Vehicle (ADUUV). The ADUUV contract has a priced option for 21" MRUUV development which will be exercised during FY2004.

FY 04

25.400

LMRS P3I	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	21.950	24.998	10.700	
RDT&E Articles Quantity	0	0	0	

UUV P3I Engineering Studies, technology integration, and transition of improved capability into UUV design.

FY 03

15.135

R-1 SHOPPING LIST - Item No.

36

FY 05

43.413

0

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND N	February 2004 AME
RDT&E, N / BA-4	Surface & Shallow Water MCM,			Unmanned Undersea Vehic	
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding: FY04 President's Controls: FY05 President's Controls: Total Adjustments Summary of Adjustments FY03 SBIR	FY 2003 74.425 69.185 -5.240	FY 2004 81.457 80.537 -0.920	FY 2005 65.956 65.580 -0.376		
MISC Adjustments Sponsor Reprogram Subtotal	-0.190 -3.600 -5.240	-0.920	-0.376 -0.376		
(U) Schedule: Not Applicable					
(U) Technical: Not Applicable					

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:			
								Febru	ary 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	EMENT NUM	BER AND NAM	ΛE	PROJECT NU	MBER AND N	AME			
RDT&E, N / BA-4	Surface & Sh	allow Water N	ICM, 06035021	١	Unmanned Un	dersea Vehicle	e Q2094/Q285	2		
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To <u>Complete</u>	Total <u>Cost</u>	
OPN PE 020481N; Line Item 217100	0.000	0.000	61.253	49.006	63.280	63.531	64.369	Continuing	Continuing	

(U) E. ACQUISITION STRATEGY: *

The LMRS acquisition strategy is structured to maximize competition during system development. In FY97 three one year contracts were awarded for development of preliminary design. In early FY98, two of the preliminary design contractors were selected to continue development through a critical design review. Selection of these two contractors was based primarily on the contractor's performance during the preliminary design contract. In early FY00, Boeing was selected to complete the LMRS design, fabricate a prototype system and support in-water testing. Procurement of the LMRS will be sole source to Boeing. A competitive procurement is not cost effective due to the limited number of systems planned for procurement. PBD 130C added \$40M to FY03 to accelerate the development of more advanced UUVs. Funding was used to accelerate the development of Synthetic Aperture Sonar (SAS), LMRS Precision Underwater Mapping (L-PUMA), and Mission Reconfigurable UUV (MRUUV) to address multiple missions. The MRUUV project completed a requirements analysis, acquisition planning and specification development in FY03. A contract was awarded to Lockheed Martin in May 2003 to develop an Advanced Development Unmanned Undersea Vehicle (ADUUV) to reduce technical risk for the MRUUV. The ADUUV contract includes a priced option for the development of the 21" MRUUV which will be exercised following Milestone B, which is expected early 2004.

(U) F. MAJOR PERFORMERS: **

Boeing - Anaheim, CA - Design and fabrication of prototype LMRS. Lockheed Martin - West Palm Beach, FL - Design and fabrication of prototype MRUUV.

CLASSIFICATION:

M	Contract Method Type PAF/IF Various PIF	Performing Activity & Location Boeing Various Lockheed Martin	LEMENT allow Water MC Total PY's Cost 73.679 5.939 40.611	FY 03 Cost	FY 03 Award Date		MBER AND Nondersea Vehicle FY 04 Award	IAME e Q2094/Q2852 FY 05	FY 05	February 200		
RDT&E, N / BA-4	Contract Method Type PAF/IF Various PIF Various	Surface & Sha Performing Activity & Location Boeing Various Lockheed Martin	Total PY s Cost 73.679 5.939	FY 03 Cost 13.170	Award Date	Unmanned Ur FY 04	ndersea Vehicl FY 04	e Q2094/Q2852	FY 05			
Cost Categories	Tethod Type PAF/IF arious PIF arious	Performing Activity & Location Boeing Various Lockheed Martin	Total PY s Cost 73.679 5.939	FY 03 Cost 13.170	Award Date	FY 04	FY 04		FY 05			
M	Tethod Type PAF/IF arious PIF arious	Activity & Location Boeing Various Lockheed Martin	PY s Cost 73.679 5.939	Cost 13.170	Award Date			FY 05				
& & & & & & & & & &	Type PAF/IF arious PIF	Location Boeing Various Lockheed Martin	73.679 5.939	Cost 13.170	Date		Award	IFY 05				
LMRS C Fees V LMRS V MRUUV C MRUUV V	PAF/IF /arious	Boeing Various Lockheed Martin	73.679 5.939	13.170			Date	Cost	Award Date	Cost to Complete	Total Cost	Target Value of Contract
Fees LMRS V MRUUV C MRUUV V	arious PIF arious	Various Lockheed Martin	5.939		NI/A	8.129		0.842		Continuing	Continuing	95.820
LMRS V MRUUV C MRUUV V	PIF arious	Lockheed Martin				2.210		0.042	N/A	Continuing	Continuing	93.020
MRUUV C	PIF arious	Lockheed Martin	70.011	4.922	1	10.970		6.225	N/A	Continuing	Continuing	
MRUUV V	arious		0.000	6.750		16.226		29.322	N/A	Continuing	Continuing	
		Various	2.100	8.385		9.174		14.091	N/A	Continuing	Continuing	
		Various	9.153			24.998		10.700	N/A	Continuing	Continuing	
	arious	Various	7.502	0.000		0.000		0.000	N/A	N/A	Continuing	
V Tool conten	anouo	Various	7.002	0.000	1071	0.000	1477	0.000	1477	14/7	0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			138.984	58.791		71.707		61.180		0.000	330.662	
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:				PING LIST -		36						

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag	je 2)										February 200)4	
APPROPRIATION/BUDGET ACTIV	ITY		PROGRAM EL	EMENT			PROJECT NU	IMBER AND N	IAME				
RDT&E, N / BA-4			Surface & Sha		M, 0603502N		Unmanned Ur		e Q2094/Q285				
Cost Categories		Performing		Total		FY 03		FY 04		FY 05			
	Method	Activity &			FY 03	Award	FY 04	Award	FY 05	Award	Cost to		Target Value
	& Type	Location			Cost	Date	Cost	Date	Cost	Date	Complete		of Contract
Developmental Test & Evaluation	Various	Various		0.340			1.592		0.000		0.000		
Operational Test & Evaluation	WR	Various		0.000	0.000	N/A	1.120	N/A	0.000	N/A	0.000	1.120	N/A
GFE/GFI	Various	Various		0.644	0.000		0.000		0.000		Continuing	Continuing	
TTLRF	WR	Various		4.476	1.806	N/A	0.799	N/A	0.000	N/A	Continuing	Continuing	
												0.000	
												0.000	
Award Fees												0.000	
Subtotal T&E				5.460	4.197	,	3.511		0.000)	0.000	13.168	
Contractor Engineering Support				4.204	0.820	N/A	1.000	N/A	1.000	N/A	Continuing	Continuing	
Government Engineering Support				16.030	4.47	N/A	3.419	N/A	2.620	N/A	Continuing	Continuing	
Program Management Support				4.304	0.900	N/A	0.900	N/A	0.780	N/A	Continuing	Continuing	
												0.000	
												0.000	
Subtotal Management				24.538	6.197	,	5.319		4.400)	Continuing	Continuing	
Remarks:													
Total Cost				168.982	69.18	5	80.537		65.580		Continuing	Continuing	
Remarks:													

VIRGINIA CLASS FOT&E

CLASSIFICATION:

EXHIBIT R4, Schedule Prof																					DATE		Fe	ebrua	ary 20	04		
APPROPRIATION/BUDGET ACT	ΓΙVΙΤΥ									R AND , 06035		E	1							ER ANI sea Vel			Q2852		1			
Fiscal Year		20	03			20	04			20	05			200	06			20	07			20	08			20	09	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
LMRS Program Milestones			Develo	opment I	Phase				MS III																			
EVENTS									109	Produc	ction co	ntract a	award															
Test & Evaluation Milestones				DVT	DT IIA	DT IIB	TECH	EVAL	OPEV	AL						VIRGI	NIA CL	ASS FO	OT&E									
PRODUCTIION															Brodu	ction ph	1											
P3I															riodu	Suom pr	lase											
SAS/ACOMMS Milestones																												1
Test & Evaluation L-PUMA Milestones					Develo	opment	Phase				Range	Test/F	2~															Ì
SAS/ACOMMS & LPUMA Integration										Develo	pment	Phase					EDM	ntegrat	ion		Range	Testin	FOT&E				Produc Phase	
MRUUV Requirments Definition, Risk Reduction and Pre-design					_	MSB	7																٨					
Development Phase			Design	n Contr	act Awa											Develo	ppment	Phase					<u> </u>	Low R	Rate Init	ial Prod	luction	
Deliveries																							100					
								R-1	SHC	PPIN	G LIS	ST - It	em N	0.	36													

^{*} Not required for Budget Activities 1, 2, 3, and 6

CLASSIFICATION:

February 2004	Exhibit R-4a, Schedule Detail						DATE:	- h	24
RDT8 BA-4 Surface & Shallow Water MCM, 0603502N Unmanned Undersea Vehicle Q2094/Q2852 Schedule Profile FY 2003 FY 2004 FY 2005 FY 2007 FY 2008 FY 2009 LMRS III 1Q III III<	ADDRODDIATION/DUDOFT AOTIVITY	IDDOOD AM E	ENTENT			IDDO IDOT NILI	MDED AND NA	ebruary 200	J4
Schedule Profile									
LMRS Milestone III					1				
Milestone III	Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
IQ									
Production Contract 2Q	Milestone III			1Q					
DVT				1Q					
DT II A DTII B TECHEVAL OPEVAL UMRS P3I SAS ACOMMS FOT&E IOC LPUMA FOT&E IOC MRUUV 21" Design Contract Award 21" MSB 2Q 21"MRS B 21"MRS B 2Q				2Q					
DTI B	DVT	4Q							
TECHEVAL 3Q	DINA		1Q						
OPEVAL 4Q LMRS P3I IMRS P3I SASJACOMMS 3Q-4Q FOT&E 1Q IOC 1Q LPUMA 3Q-4Q FOT&E 3Q-4Q IOC 1Q MRUUV 1Q 21" Design Contract Award 3Q 21" MSB 2Q 21"MRUUV IOC 2Q Low Rate Initial Production Contract 2Q	DIIIB		2Q						
SAS ACOMMS 3Q-4Q 1Q 1Q 1Q 1Q 1Q 1Q 1Q									
SAS ACOMMS FOT&E 10C 1Q 1Q LPUMA FOT&E 10C 1Q MRUUV 21" Design Contract Award 21" MSB 2Q 21"MRUUV IOC Low Rate Initial Production Contract 2Q	OPEVAL		4Q						
FOT&E 3Q-4Q 1Q 1Q 1Q 1Q 1Q 1Q 1Q	LMRS P3I								
FOT&E 3Q-4Q 1Q 1Q 1Q 1Q 1Q 1Q 1Q	SASIACOMMS					<u> </u>			
IQ				30-40					
LPUMA					1Q				
FOT&E									
NRUUV	LPUMA								
MRUUV 21" Design Contract Award 3Q							3Q-4Q		
21" Design Contract Award 3Q 21" MSB 2Q 21"MRUUV IOC 2Q Low Rate Initial Production Contract 2Q	IOC							1Q	
21" Design Contract Award 3Q 21" MSB 2Q 21"MRUUV IOC 2Q Low Rate Initial Production Contract 2Q	MRUUV								
21" MSB 2Q 21"MRUUV IOC Low Rate Initial Production Contract 2Q 2Q 20 20 20 20 20 20 20 20 20 20 20 20 20		3Q							
Low Rate Initial Production Contract	21" MSB		2Q						
Low Rate Initial Production Contract	21"MRUUV IOC								
Large Displacement (LD) MRUUV AOA 2Q	Low Rate Initial Production Contract						2Q		
Large Displacement (LD) MRUUV AOA 2Q									
Large Displacement (LD) MRUUV AOA 2Q									
	Large Displacement (LD) MRUUV AOA		2Q						
						+			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Febru	uary 2004	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EL	EMENT NUMI	BER AND NAM	IE	PROJECT NU	MBER AND N	AME			
RDT&E, N / BA-4	0603502N, Su	rface and Shall	low Water MCN	Л		4025, Expenda	able Mine Neut	ralization Syste	m		
	Prior										Total
COST (\$ in Millions)	Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Project Cost	0.000		0.000	0.000	2.177	11.443	0.000	0.000	0.000	0.000	13.62
RDT&E Articles Qty						1					1

(U) 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 Aviation Mine Countermeasures Program (NAVSEA PEO LMW PMS210) to develop an Airborne Mine Neutralization System (AMNS).

CLASSIFICATION:

PROPRIATION/BUDGET ACTIVITY	ation			DATE: February 200	4
1.01 1.01 1.01 1.00 00 00 1.01 1.01 1.0	PROGRAM ELEMENT NUMBI	ER AND NAME	PROJECT NUMBER AND N		-
T&E, N / BA-4	0603502N, Surface and Shallo	w Water MCM	4025, Expendable Mine Neu	ralization System	
B. Accomplishments/Planned Program					
Product Development		FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost		0.000	0.000	1.677	
RDT&E Articles Quantity					
Support		FY 03	FY 04	FY 05	
Support Accomplishments/Effort/Subtotal Cost		FY 03 0.000	FY 04 0.000	FY 05 0.300	

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justif	Callon			DATE: Febr	uary 2004
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUME	BER AND NAME	PROJECT NUMBER AND N		uary 200 :
T&E, N / BA-4	0603502N, Surface and Shall	low Water MCM	4025, Expendable Mine Neut	ralization System	
B. Accomplishments/Planned Program	·		·	•	
Test and Evaluation		FY 03	FY 04	FY 05	1
Accomplishments/Effort/Subtotal Cost		0.000	0.000	0.000	
RDT&E Articles Quantity]
Test and Evaluation: N/A					
Management		FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost		0.000	0.000	0.200	
RDT&E Articles Quantity					
Management: Provide program management support and	d travel for EMNS.				

CLASSIFICATION:

XHIBIT R-2a, RDT&E Project Justification					DATE:	
						February 2004
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND N	IAME	
RDT&E, N / BA-4	0603502N, Surface and Shallow V	Vater MCM		4025, Expendable Mine Neu	tralization System	
(U) C. PROGRAM CHANGE SUMMARY:						
(U) Funding:	FY 2003	FY 2004	FY 2005			
FY04 President's Controls:	0.000	0.000	0.000			
FY05 President's Controls:	0.000	0.000	2.177			
Total Adjustments	0.000	0.000	2.177			
Summary of Adjustments						
Initiation of EMNS			2.177			
Subtotal	0.000	0.000	2.177			
(U) Schedule:						
Not Applicable						
(U) Technical:						
Not Applicable						

CLASSIFICATION:

•			Feb	ruary 2004
APPROPRIATION/BUDGET ACTI	VITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N /	BA-4	0603502N, Surface and Shallow Water MCM	4025, Expendable Mine Neutralization System	

Line Item No. & Name Line 262200, OPN	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	<u>Cost</u>
EMNS	0	0	0	0	13905	10603	10322	18977	53807
Total	0	0	0	0	13905	10603	10322	18977	53807

(U) E. ACQUISITION STRATEGY:

The Aviation Mine Countermeasures Program (NAVSEA PEO LMW PMS 210) is developing two Airborne Mine Neutralization variants for the H-53 heliocopters. Based on Surface Ship requirements one of these two variants will be selected for use on the MCM Avenger Class Ships. The acquisition strategy will be to either compete between the two alternatives, or select the one that best meets fleet needs.

(U) F. MAJOR PERFORMERS:

The Technical Design Agent will be NSWC, Costal Systems Station, Panama City. The installation of the new system will be performed by Puget Sound.

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag	e 1)										February 200	04	
APPROPRIATION/BUDGET ACTIV	ITY		PROGRAM EI	LEMENT			PROJECT NU	MBER AND I	NAME				
RDT&E, N / BA-4			0603502N, Su	ırface and Sha	low Water MC	M	4025, Expend	able Mine Ne	utralization Syste	m			
Cost Categories	Contract	Performing		Total		FY 03		FY 04		FY 05			
	Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to		Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Hardware Development & Integration		TBD		0.000	0.000		0.000		0.500	11/04	Continuing	Continuing	N/A
Hardware Development & Integration	WR	NSWC, CSS		0.000	0.000)	0.000		0.200	10/04	Continuing	Continuing	
Systems Engineering	CPIF	TBD		0.000			0.000		0.250	11/04	Continuing	Continuing	
Systems Engineering	WR	NSWC, CSS		0.000	0.000		0.000		0.727	10/04	Continuing	Continuing	
												0.000	
												0.000	
												0.000	N/A
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal Product Development				0.000	0.000		0.000		1.677		0.000	1.677	
Remarks:													
. tomano													

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Ana APPROPRIATION/BUDG	llysis (page 1)										February 200)4	
	GET ACTIVITY		PROGRAM EL	EMENT			PROJECT NU	JMBER AND	NAME		•		
	BA-4		0603502N, Su	rface and Sha	llow Water MC	M	4025, Expend	able Mine N	leutralization Syster	m			
Cost Categories	Contr		•	Total		FY 03		FY 04		FY 05			
	Metho	d Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
	& Тур	e Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Software Development	CPIF	TBD		0.000	0.000		0.000		0.250	11/04	Continuing	Continuing	N/A
Software Development	WR	NSWC, CSS		0.000	0.000		0.000		0.050	10/04	Continuing	Continuing	N/A
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	N/A
												0.000	N/A
												0.000	N/A
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal Support				0.000	0.000)	0.000		0.300		0.000	0.300	
Remarks:													

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag											February 200	04	
APPROPRIATION/BUDGET ACTIV	ITY		PROGRAM EL				PROJECT NU						
RDT&E, N / BA-4			0603502N, Su		low Water MC		4025, Expend		leutralization Syste				
Cost Categories		Performing		Total		FY 03		FY 04		FY 05			
	Method	Activity &			FY 03	Award	FY 04	Award Date		Award Date	Cost to	Total	Target Value of Contract
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete		
												0.000	
												0.000	
												0.000	
												0.000	
										-		0.000	
												0.000	
												0.000	
Subtotal T&E				0.000	0.000)	0.000)	0.000		0.000	0.000	
						1		1					
Program Mangement Support	CPFF	Vredenburg		0.000	0.000)	0.000)	0.150	10/04	Continuing	Continuing	
Travel	Various	NAVSEA		0.000	0.000)	0.000)	0.050	10/04	Continuing		
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal Management				0.000	0.000)	0.000)	0.200		0.000	0.200	
Remarks:													
Total Cost				0.000	0.000)	0.000)	2.177		0.000	2.177	
Remarks:													

CLASSIFICATION:

EXHIBIT R-4, Schedule Profile						DATE:		
				T			February 200	4
APPROPRIATION/BUDGET ACTIVITY		1 ELEMENT NAME			NAME AND NUM			
RDT&E, N/BA-4		Surface & Shallow			endable Mine Neut	ralization System		
	ΕN	INS PR	OGRAM	SCHEE	DULE			
		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
		1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contract Award				Δ				
HW/SW Design and Development								
Prelminary Design Review				\triangle				
Critical Design Review								
EDM Installation & C/O								
System Testing								

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:		
				February 20	04			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM			T NUMBER AND NAME				
RDT8BA-4	0603502N, S	Surface & Shallov	w Water MCM	4025, Expendable Mine Neutralization System				
Schedule Profile: EMNS		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Contract Aaward				3Q				
HW/SW Design & Development				3Q - 4Q	1Q - 2Q			
Preliminary Design Review				3Q				
Critical Design Review EDM Installation & C/O					1 Q			
EDM Installation & C/O					3Q			
System Testing					4 Q			
								İ