#### **CLASSIFICATION:**

EXHIBIT R-2, RDT&E Budget Item Justification	n						DATE:			
								Febru	uary 2004	
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NO	MENCLATURE				
RESEARCH DEVELOPMENT TEST & EVALU	JATION, NAVY /	BA-4			0603654N/Joi	nt Service EOD	Development			
	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		12.360	16.868	18.047	17.445	17.749	19.823	19.348	Continuing	Continuing
0377/Joint Service EOD Systems		5.734	4.528	7.339	7.520	8.508	9.348	10.531	Continuing	Continuing
1317/EOD Diving System		6.626	7.665	2.456	2.296	2.771	2.823	2.819	Continuing	Continuing
4023/VSW MCM/ Force Protection UUV		0.000	4.675	6.458	6.565	4.705	4.130	4.025	Continuing	Continuing
4024/SMCM Shallow and Deep Water UUV		0.000	0.000	1.794	1.064	1.765	3.522	1.973	Continuing	Continuing
Quantity of RDT&E Articles		Various	Various	Various	Various	Various	Various	Various		0

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

This is a Joint Service Program. This program provides for the development of Explosive Ordnance Disposal tools and equipment for use by all military services. The responsibility is assigned to the Navy as single service manager, by Department of Defense Directive 5160.62 of 26 April 1989, for management of the Joint Service Explosive Ordnance Disposal Research and Development Program. Proliferation of sophisticated types of foreign and domestic ordnance necessitate a continuing development program to provide Explosive Ordnance Disposal personnel of all military services with the special equipment and tools required to support this mission. This program also provides life support related equipment necessary to support the performance of Navy Explosive Ordnance Disposal tasks underwater. This equipment must have inherently low acoustic and magnetic signatures in order to allow the Explosive Ordnance Disposal technician to safely approach, render-safe and dispose of sea mines and other underwater ordnance.

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER ANI	O NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N / BA-4	0603654N/Joint Se	ervice EOD Develop	oment		0377/Joint Service	EOD Systems		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	5.734	4.528	7.339	7.520	8.508	9.348	10.531	
RDT&E Articles Qty	Various	Various	Various	Various	Various	Various	Various	

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Provides Explosive Ordnance personnel of all military services with the specialized equipment and tools required to support their mission of detection/location, identification, render-safe, recovery, field and laboratory evaluation, and disposal of unexploded ordnance (UXO) that is a threat to military operations, installations, personnel, or material. UXO includes foreign and domestic, both conventional and non-conventional, including improvised explosive devices (IEDs).

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justifica	ation			DATE: February 2004
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	BER AND NAME	PROJECT NUMBER AND	•
T&E, N / BA-4	0603654N/Joint Service EOI	Development	0377/Joint Service EOD S	ystems
B. Accomplishments/Planned Program	·	•	·	
	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	1.323	0.915	1.354	
RDT&E Articles Quantity	Various	Various	Various	
Develop EOD detection, identification and kild Demonstration Advanced Concept Technolog Developmental Item (C/NDI EOD tools/equipr	y Demonstration (JEOD-KTOD ACTI			EOD Knowledge Technology Operational onduct evaluations of Commercial/Non-
Demonstration Advanced Concept Technolog	yy Demonstration (JEOD-KTOD ACTI ment).	D) project. Also, conduc	t Analysis of Alternatives and c	
Demonstration Advanced Concept Technolog Developmental Item (C/NDI EOD tools/equipr	y Demonstration (JEOD-KTOD ACTI		t Analysis of Alternatives and c	
Demonstration Advanced Concept Technolog Developmental Item (C/NDI EOD tools/equipr  Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	py Demonstration (JEOD-KTOD ACTIment).  FY 03 2.531 Various	FY 04 2.295 Various	FY 05 3.850 Various	onduct evaluations of Commercial/Non-
Demonstration Advanced Concept Technolog Developmental Item (C/NDI EOD tools/equipr  Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity  Develop access, disruption and neutralization	Py Demonstration (JEOD-KTOD ACTION (JEOD-KTOD AC	FY 04 2.295 Various  ccess and Disruption pratives and conduct eva	FY 05 3.850 Various  oject, the Submunition Clearance autions of Commercial/Non-De	
Demonstration Advanced Concept Technolog Developmental Item (C/NDI EOD tools/equipr  Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity  Develop access, disruption and neutralization Laser Ordnance Neutralization System (JLON	Py Demonstration (JEOD-KTOD ACTION NET COMMENT).  FY 03 2.531 Various  Systems to include, the Large IED ACTION NES). Also, conduct Analysis of Altern FY 03	FY 04 2.295 Various  ccess and Disruption pratives and conduct eva	FY 05 3.850 Various  oject, the Submunition Clearance partions of Commercial/Non-December 1970 1970 1970 1970 1970 1970 1970 1970	e project, the Low Order Tools project, and the Joint
Demonstration Advanced Concept Technolog Developmental Item (C/NDI EOD tools/equipr  Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity  Develop access, disruption and neutralization	Py Demonstration (JEOD-KTOD ACTION (JEOD-KTOD AC	FY 04 2.295 Various  ccess and Disruption pratives and conduct eva	FY 05 3.850 Various  oject, the Submunition Clearance autions of Commercial/Non-De	e project, the Low Order Tools project, and the Joint

#### **CLASSIFICATION:**

	tion			DATE: February 2004	
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	BER AND NAME	PROJECT NUMBER AN		
T&E, N /BA-4	0603654N/Joint Service EOI		0377/Joint Service EOD	Systems	
B. Accomplishments/Planned Program		•	<u> </u>	,	
B. Accomplishments/Planned Program					
	FY 03	FY 04	FY 05		
Accomplishments/Effort/Subtotal Cost	0.580	0.500	1.300		
RDT&E Articles Quantity	Various	Various	Various		
Develop Classified Project II and Classified Pro	oiect III.				
Total of the control					
	FY 03	FY 04	FY 05		
Accomplishments/Effort/Subtotal Cost	FY 03 0.000	FY 04 0.000	FY 05 0.000		
Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 03 0.000 Various				
	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		
	0.000 Various	0.000 Various	0.000 Various		
RDT&E Articles Quantity	0.000 Various	0.000 Various	0.000 Various		
	0.000 Various	0.000 Various	0.000 Various		

#### **CLASSIFICATION:**

			DATE:	
				February 2004
PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AI	ND NAME	
0603654N/Joint Service EOD Development		0377/Joint Service EOD	Systems	
FY 2003	FY 2004	FY 2005		
5.981	4.579	6.602		
5.734	4.528	7.339		
-0.247	-0.051	0.737		
-0.247	-0.051	-0.063		
0.000	0.000	0.800		
-0.247	-0.051	0.737		
	0603654N/Joint Service EOD Development  FY 2003  5.981  5.734  -0.247  -0.000	0603654N/Joint Service EOD Development  FY 2003 FY 2004  5.981 4.579  5.734 4.528  -0.247 -0.051  -0.247 -0.051  0.000 0.000	D603654N/Joint Service EOD Development   D377/Joint Service EOD	PROGRAM ELEMENT NUMBER AND NAME 0603654N/Joint Service EOD Development  PROJECT NUMBER AND NAME 0377/Joint Service EOD Systems  FY 2003 FY 2004 FY 2005  5.981 4.579 6.602  5.734 4.528 7.339 -0.247 -0.051 0.737  -0.247 -0.051 -0.063 0.000 0.000 0.800

#### (U) Schedule:

The R&D contract award for the Non-Invasive Filler ID was delayed by 2 Qtrs. The testing and production decision wil only be delayed 1 Qtr. Due to the maturity of the commercial systems being evaluated for the EOD Man Portable Robotic System, more testing will be performed during the preliminary stage shortening the final test phase since very few design changes are anticipated. Production Decision for the EOD Man Portable Robotic System will remain unchanged. The Submunitions Clearance System is ahead of schedule due to the identification of an interim solution for sub-munitions clearance which partially meets the need and can be fielded quickly. In order to satisfy the full need, the JLONS program will be initiated in FY 05.

#### (U) Technical:

Not applicable.

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E P	roject Justification			DATE:
				February 2004
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N /	BA-4	0603654N/Joint Service EOD Development	0377/Joint Service EOD Sys	tems

#### (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>	l otal <u>Cost</u>
OPN 5509	293	152	1574	6600	4850	5200	5100	Continuing	Continuing

#### (U) E. ACQUISITION STRATEGY: \*

Analysis of Alternatives (AOA) studies are always conducted prior to the initiation of new subprojects. The AOA addresses and emphasizes acquisition strategies of the most cost-effective solution over the subprojects' life-cycle. The acquisition strategies observe the following hierarchy of alternatives: commercial item (including modification), non-developmental item (including modification), and lastly, developmental programs. Contracting for RDT&E, if required, is always competitive and when feasible, production options are included.

For the Large IED Access & Disruption there is a dual acquisition strategy; an acquisition sub-project for commercially available Large IED tools and a full-scale development sub-project. Within each of these sub-projects there will be two tools pursued.

#### (U) F. MAJOR PERFORMERS: \*\*

The majority of funding in this line is executed by Naval Explosive Ordnance Disposal Technology Division located in Indian Head, MD in FY03 through FY05. The funding is used for develop Joint Service EOD tools/equipment. The funding document will be issued as follows: FY03-10/02; FY04-10/03; FY05-10/04.

<sup>\*</sup> Not required for Budget Activities 1,2,3, and 6

<sup>\*\*</sup> Required for DON and OSD submit only.

#### **CLASSIFICATION:**

Cost Categories   Contract   Method   Method   Method   Method   Activity & PY s   FY 03   Cost   Cost   Date   FY 04   Award   FY 05   Date   Cost   Cost   Cost   Cost   Cost   Date   Cost   Date   Cost   Cost   Cost   Cost   Cost   Date   Cost   Date   Cost   Cost   Cost   Cost   Cost   Cost   Cost   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Cost									DATE:				
Cost Categories	Exhibit R-3 Cost Analysis (pag	ge 1)									February 200	)4	
Cost Categories		'ITY											
Method   Activity &   PY s   FY s   FY s   Date   Cost   Date					Development		0377/Joint Se		stems				
Styles	Cost Categories		Performing										
Primary Hardware Development   WR   EODTD, IH, MD   79.412   1.644   1.0022   0.769   1.003   2.392   1.004   Continuing   Continuing													Target Value
Software Development   WR   EODTD, IH, MD   3.379   0.150   10/02   0.150   10/03   0.200   10/04   Continuing   Continuing	D: 11 1 D 1										•		
ILS									_				
Comparison   Com													
Company   Country   Coun	ILS	WR	EODTD, IH, MD	36.020	0.900	10/02	0.750	10/03	1.00	00 10/04	Continuing		
Continuing   Con													
Company   Comp													
Comparison   Com												0.000	
Continuing   Con												0.000	
Comparison   Com												0.000	
Subtotal Product Development												0.000	
Subtotal Product Development         118.811         2.694         1.669         3.592         0.000         126.766           Remarks:             Program Management Support         C/CPFF         Dynamic Systems, Alex, VA         3.190         0.270         10/02         Image: Continuity of the c												0.000	
Subtotal Product Development         118.811         2.694         1.669         3.592         0.000         126.766           Remarks:             Program Management Support         C/CPFF         Dynamic Systems, Alex, VA         3.190         0.270         10/02         Image: Continuity of the c												0.000	
Remarks:    Program Management Support   C/CPFF   Dynamic Systems, Alex, VA   3.190   0.270   10/02	Subtotal Product Development			118.811	2.694	1	1,669		3.5	92	0.000		
Program Management Support   C/CPFF   TBD													
Program Management Support   C/CPFF   TBD	Program Management Support	C/CPFF	Dynamic Systems, Alex, VA	3.190	0.270	10/02						3.460	
Company							0.300	10/03	0.3	00 10/04	Continuing		
Company	<u> </u>										Ĭ		
Company   Comp													
Subtotal Support         3.190         0.270         0.300         0.300         0.300         0.300         0.000         4.060													
Subtotal Support         3.190         0.270         0.300         0.300         0.300         0.300         0.000         4.060													
Subtotal Support         3.190         0.270         0.300         0.300         0.300         0.000         4.060													
Subtotal Support         3.190         0.270         0.300         0.300         0.000         4.060													
	Subtotal Support			3.190	0.270	)	0.300		0.3	00	0.000		
Remarks:	- Самана Сарран	ı	l			1		ı					L
R-1 SHOPPING LIST - Item No. 59	Remarks:												

#### **CLASSIFICATION:**

								DATE:				
Exhibit R-3 Cost Analysis (pa	ge 2)									February 200	)4	
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM E				PROJECT NU						
RDT&E, N / BA-4			int Service EOD	Development		0377/Joint Se		stems				
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	Total	Target Value
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation	WR	EODTD, IH, MD	54.703	1.870	10/02	1.574	10/03	2.000	10/04	Continuing	Continuing	N/A
Operational Test & Evaluation	WR	EODTD, IH, MD	8.245								8.245	
											0.000	
								-			0.000	
											0.000	
											0.000	
Subtotal T&E			62.948	1.870		1.574		2.000		0.000	0.000 68.392	
Subtotal T&L		<u> </u>	02.340	1.070	'!	1.574	`	2.000	'!	0.000	00.532	
		1		T	1		1		1		T	Г
Program Management Support	WR	EODTD, IH, MD	3.920		1	0.350		0.400	1	Continuing	Continuing	N/A
Miscellaneous	Various	Various	3.586	0.650	02/03	0.635	10/03	1.047	10/04	Continuing	Continuing	N/A
											0.000	
											0.000	
											0.000	
Subtotal Management			7.506	0.900	)	0.985	;	1.447		Continuing	1	
									1			l
Remarks:												
Total Cost			192.455	5.734		4.528	3	7.339	)	Continuing	Continuing	
Remarks:												

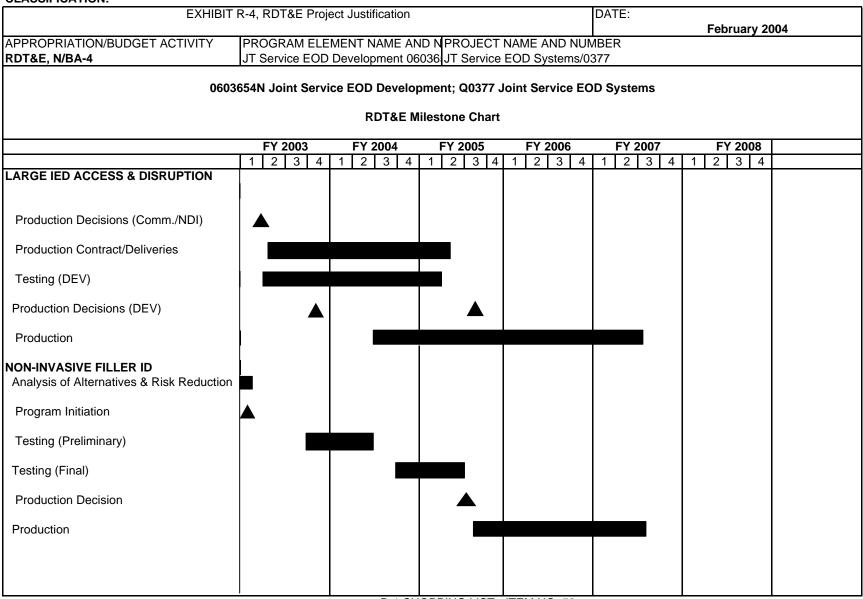
### **CLASSIFICATION:**

# **UNCLASSIFIED**

APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-4	JT Service EOD	MENT NAME AND Development 06	ND N PROJECT N		BFR	February 20	04
	JT Service EOD				B⊢R		
RDT&E, N/BA-4		Development 06	30364.IT Service F				
			0000010100110001	OD Systems/03	77		
066	3654N Joint Ser	vice EOD Devel	opment; Q0377 J	Joint Service EO	D Systems		
		RDT&E	Milestone Chart				
	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	
CLASSIFIED PROJECT II	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
EDM Fabrication							
Testing (DT-II)							
Production Decision							
Production/Deliveries							

R-1 SHOPPING LIST - ITEM NO. 59

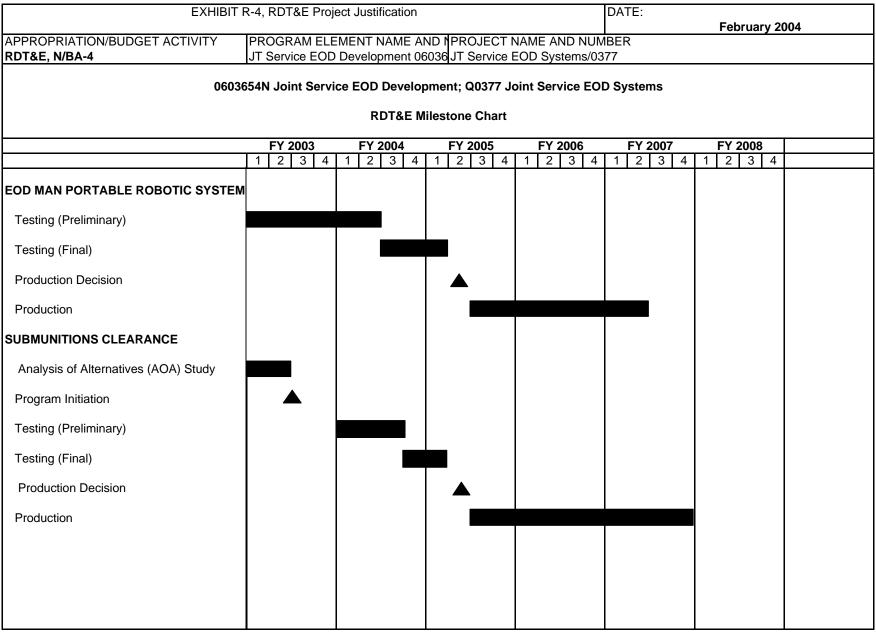
#### **CLASSIFICATION:**



R-1 SHOPPING LIST - ITEM NO. 59

#### **CLASSIFICATION:**

## **UNCLASSIFIED**

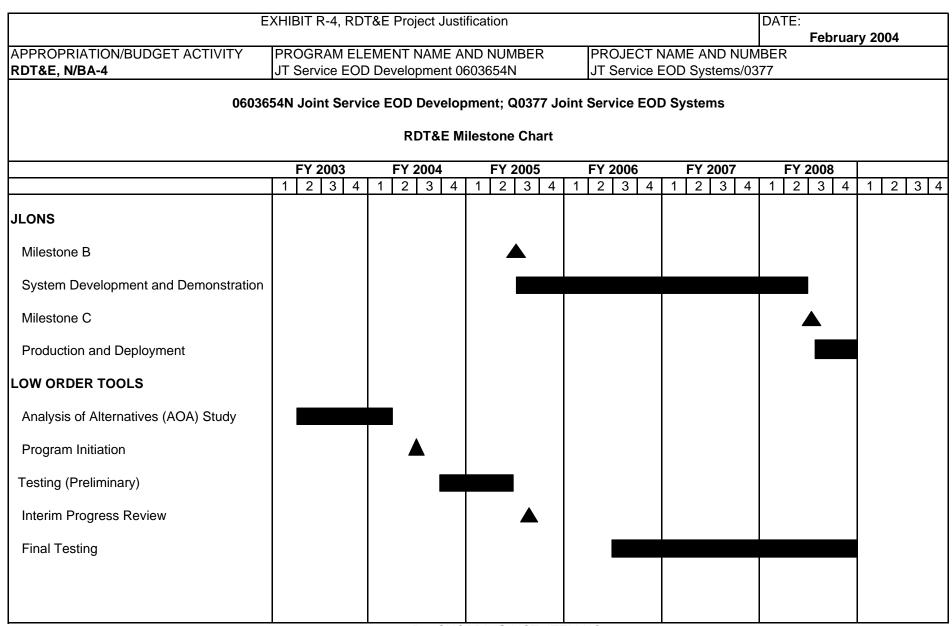


R-1 SHOPPING LIST - ITEM NO. 59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 11 of 42)

#### **CLASSIFICATION:**



R-1 SHOPPING LIST- ITEM NO.59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 12 of 42)

### **CLASSIFICATION:**

# **UNCLASSIFIED**

EXHIBIT R-4, RDT&E Project Justification  APPROPRIATION/BUDGET ACTIVITY   PROGRAM ELEMENT NAME AND   PROJECT NAME AND NUMBER RDT&E, N/BA-4  JT Service EOD Development 06036JJT Service EOD Systems/0377  0603654N Joint Service EOD Development; Q0377 Joint Service EOD Systems  RDT&E Milestone Chart  FY 2003				ACCII IL			
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NAME AND NPROJECT NAME AND NUMBER JT Service EOD Development 06036 JT Service EOD Systems/0377    0603654N Joint Service EOD Development; Q0377 Joint Service EOD Systems   RDT&E Milestone Chart	EXHIBI'	IT R-4, RDT&E Pi	roject Justificatio	n		DATE:	February 2004
CLASSIFIED PROJECT III	APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NAME AN	ND PROJECT N	AME AND NUME	BER	•
RDT&E Milestone Chart    FY 2003	RDT&E, N/BA-4	JT Service EOD	Development 06	036 JT Service E	OD Systems/037	77	
FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008  1 2 3 4 1 1 2 3 4 1	060	03654N Joint Sei		•		OD Systems	
CLASSIFIED PROJECT III  Analysis of Alternatives (AOA) Study  Program Initiation  Testing (Preliminary)  Interim Progress Review  CDM Fabrication			RDT&E	Milestone Char	t		
CLASSIFIED PROJECT III  Analysis of Alternatives (AOA) Study  Program Initiation  Testing (Preliminary)  Interim Progress Review  CDM Fabrication		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Analysis of Alternatives (AOA) Study Program Initiation Testing (Preliminary) Interim Progress Review CDM Fabrication		1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Program Initiation  Testing (Preliminary)  Interim Progress Review  CDM Fabrication	CLASSIFIED PROJECT III						
Testing (Preliminary)  Interim Progress Review  CDM Fabrication	Analysis of Alternatives (AOA) Study	,					
Interim Progress Review  CDM Fabrication	Program Initiation			<b>A</b>			
CDM Fabrication	Testing (Preliminary)						
	Interim Progress Review						
Final Testing	CDM Fabrication						
	Final Testing						

R-1 SHOPPING LIST - ITEM NO.59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 13 of 42)

### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:	February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT			PROJECT NU	MBER AND N	AME
RDT&E,N/ BA-4	0603654N/Joi	nt Service EOD	Development		0377/Joint Sei	rvice EOD Syst	tems
CLASSIFIED PROJECT II	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	
EDM Fabrication	1Q-2Q						
Testing (DT-II)	3Q-4Q	1Q-3Q					
Production Decision			1Q				
Production/Delieveries				1Q-4Q	1Q-4Q		
LARGE IED ACCESS & DISRUPTION							
Production Decision (Comm./NDI)	1Q						
Product Contract/Deliviers	2Q-4Q	1Q-4Q	1Q-2Q				
Testing (DEV)	2Q-4Q	1Q-4Q	1Q				
Production Decision (DEV)	4Q		3Q				
Production		3Q-4Q	1Q-4Q	1Q-4Q	1Q-3Q		
NON-INVASIVE FILLER ID							
Analysis of Alternatives & Risk Reduction	1Q						
Program Initiaion	1Q						
Testing (Preliminary)	4Q	1Q-2Q					
Testing (Final)		3Q-4Q	1Q-2Q				
Production Decision			3Q				
Production			3Q-4Q	1Q-4Q	1Q-2Q		
EOD MAN PORTABLE ROBOTIC SYSTEM							
Testing (Preliminary)	1Q-4Q	1Q-2Q			+		
Testing (Final)		3Q-4Q	1Q				
Production Decision			2Q				
Production			2Q-4Q	1Q-4Q	1Q-2Q		

### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:		
							February 2004	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT PROJECT				PROJECT NU	T NUMBER AND NAME		
RDT&E,N/ BA-4		nt Service EOD	) Development			rvice EOD Sys		
SUBMUNITIONS CLEARANCE	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	<u> </u>	
Analysis of Alternatives (AOA) Study	1Q-2Q	1 1 2004	1 1 2000	1 1 2000	1 1 2007	1 1 2000	<del>                                     </del>	
Program Initation	2Q-3Q						+	
Testing (Preliminary)	2000	1Q-3Q					<del>                                     </del>	
Testing (Final)		4Q	1Q					
Proudtion Decision		. ~	2Q					
Production			2Q-4Q	1Q-4Q	1Q-4Q			
JLONS								
Milestone B			2Q-3Q					
System Development and Demonstration			3Q-4Q	1Q-4Q	1Q-4Q	1Q-2Q		
Milestone C						2Q-3Q		
Production and Deployment						3Q-4Q		
LOW ORDER TOOLS								
Analysis of Alternatives (AOA) Study	2Q-4Q	1Q						
Program Initiation		2Q-3Q						
Testing (Preliminary)		3Q-4Q	1Q-2Q					
Interim Progress Review			3Q					
Final Testing				3Q-4Q	1Q-4Q	1Q-4Q		
CLASSIFIED PROJECT III								
Analysis of Alternatives (AOA) Study		1Q-4Q						
Program Initation			1Q				† †	
Testing (Preliminary)			3Q-4Q	1Q-2Q				
Interim Progress Review				3Q				
CDM Fabrication				3Q-4Q	1Q-2Q			
Final Testing					2Q-4Q	1Q-4Q		
<u> </u>								
						<del> </del>		
					†	<u> </u>		
					1			

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							February 2	2004
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME								
RDT&E, N / BA-4	0603654N/Joint Se	ervice EOD Develop	pment		1317/EOD Diving S	Systems		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	6.626	7.665	2.456	2.296	2.771	2.823	2.819	
RDT&E Articles Qty	Various	Various	Various	Various	Various	Various	Various	ļ

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Provides for development of diving equipment and explosive charges to support Explosive Ordnance Disposal (EOD) underwater operations. The equipment must have inherently low acoustic and magnetic signatures in order to allow the EOD technician to safely approach, render-safe, and dispose of sea mines and other underwater ordnance.

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification	on		DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N / BA-4	0603654N/Joint Service EOD Development	1317/EOD Diving Systems	
(U) B. Accomplishments/Planned Program			

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.237	0.450	0.664	
RDT&E Articles Quantity	Various	Various	Various	

Test and gain approval for Navy use (ANU) of EOD diving, Commercial/Non-Developmental Items (C/NDI).

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	1.686	0.661	0.200	
RDT&E Articles Quantity				

Development of Advanced Underwater Limpet Mine equipment to enhance EOD units' ability to detect neutralize and gather inellligence on underwater limpet and special attach mines and the development of low magnetic Micro Diver Display that provides sonar input from the Underwater Imaging Systems when in dark turbid, low visibility water environments.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.342	0.313	0.000	
RDT&E Articles Quantity				

Develop and test a product improvement Advanced Miniature Mine PIP Sensor for the Underwater Imaging System to allow the system to conduct stand-off identification and computer aided detection and classification.

#### **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	0603654N/Joint Service EOD Development	1317/Joint Service EOD Sys	stems	

#### (U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	4.095	4.254	0.000	
RDT&E Articles Quantity				

Develop, test, and gain approval for fleet use of specialized equipment to support the Very Shallow Water Mine Countermeasures mission and CNO approved VSW MCM Detachment (USN/USMC). This also includes the development of small, affordable MCM Unmanned Underwater Vehicles.

\*Starting in FY05, this effort has been moved to Program Element 0603654N Project Q4023.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.266	0.523	1.592	
RDT&E Articles Quantity				

Conduct market Research for the Active Thermal Protection System to support VSW and EOD MCM diving in cold water environments. Develop an Advanced Underwater Breathing Apparatus (UBA). Develop a diver Hull Navigation System to improve current capabilities in existing hull search operations.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.000	1.464	0.000	
RDT&E Articles Quantity				

Demonstrate operation of a UUV-based capability package for standoff, multiple MCM operations from surface MCM platorms (e.g., MHC, HSV, etc.)

\*Starting in FY05 this effort has been moved to Program Element 0603654N, Project Q4024.

#### **CLASSIFICATION:**

IBIT R-2a, RDT&E Project Justification	•				DATE: February 2004
OPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NU	MBER AND NAME	P	ROJECT NUMBER	R AND NAME
&E, N / BA-4	0603654N/Joint Service EC	OD Development	1:	317/Joint Service E	OD Systems
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:		FY 2003	FY 2004	FY 2005	
Previous President's Budget					
(FY 04 President Controls):		6.608	7.806	9.030	
Current BES/President's Budget					
(FY05 President Controls):		6.626	7.665	2.456	
Total Adjustments		0.018	-0.141	-6.574	
Summary of Adjustments					
New Project, Q4023 establis	S .	0.000	0.000	-6.543	
	hed for SMCM UUV Program	0.000	0.000	-1.797	
Increase to UUV Program		0.166	0.000	1.800	
Moved to Project Q4024 SM	CM UUV Program				
Miscellaneous Adjustment		-0.148	-0.141	-0.034	
Subtotal		0.018	-0.141	-6.574	
(U) Schedule:					
	nced Underwater Limpet Mine Progran	n slipped from FY04 to	FY05. Cond	lucted market resea	arch for the Active Thermal Protection. No suitable
systems exist at mature technology le	vel to continue to production. Advanc	ed Mini Mine project e	extended to inc	clude additional inte	eroperability testing for use with Micro Diver Display.
(U) Technical:					
(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 NAME
RDT&E, N / BA-4	0603654N/Joint Service EOD Development	1317/Joint Service EOD Systems
(U) D. OTHER PROGRAM FUNDING SUMMARY:		To Total

FY 2005

4809

FY 2006

5849

FY 2007

4068

FY 2008

0

FY 2009

Complete

1000 Continuing

Cost

Continuing

FY 2003

0

1006

FY 2004

5056

(U) E. ACQUISITION STRATEGY: \*

Line Item No. & Name

OPN 0975

OPN 5509

Analysis of Alternatives (AOA) studies are always conducted prior to the initiation of new subprojects. The AOA addresses and emphasizes acquisition strategies of the most cost-effective solution over the subprojects' life-cycle. The acquisition strategies observe the following hierarchy of alternatives: commercial item (including modification), non-developmental item (including modification), and lastly, developmental programs. Contracting for RDT&E, if required, is always competitive and when feasible, production options are included.

#### (U) F. MAJOR PERFORMERS: \*\*

The majority of funding in this line is executed by Naval Explosive Ordnance Disposal Technology Division located in Indian Head, MD in FY03 through FY05. The funding is used for development Underwater EOD tools/equipment. The funding document will be issued as follows: FY04-10/03; FY05 10/04.

<sup>\*</sup> Not required for Budget Activities 1,2,3, and 6

<sup>\*\*</sup> Required for DON and OSD submit only.

#### CLASSIFICATION:

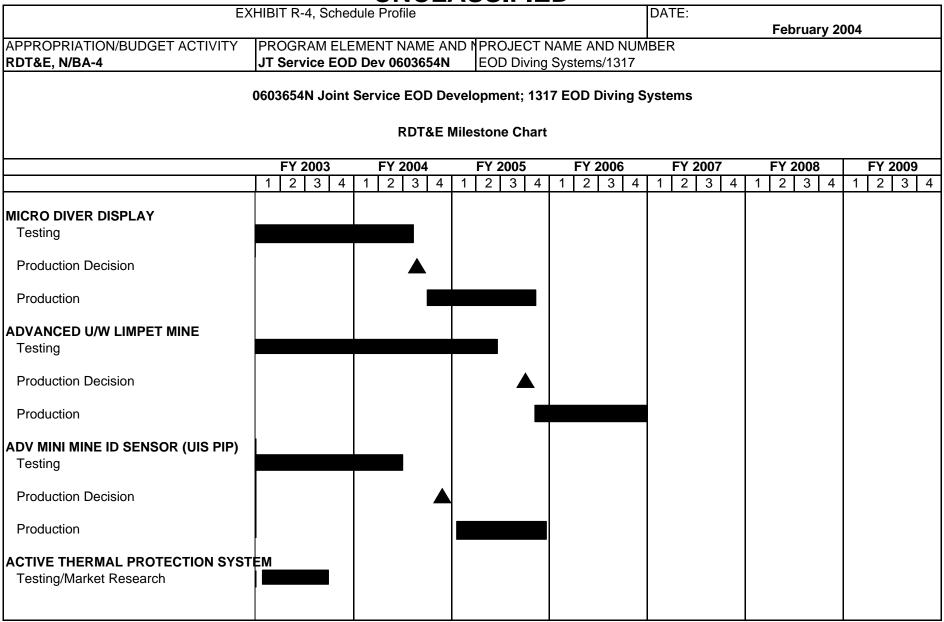
Exhibit R-3 Cost Analysis (pa	go 1)								DATE:		February 200	24	
APPROPRIATION/BUDGET ACTIV			PROGRAM E	LEMENT			PROJECT N	IMPED AND	NAME		repruary 200	J4	
RDT&E, N / BA-4	VIII			int Service EO	Dovolonmon	.+		ervice EOD S					
Cost Categories	Contract	Performing	000303414/30	Total	Developmen	FY 03	1317/301111 36	FY 04	ystems	FY 05	1	1	
Cost Categories	Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development	WR	EODTD, IH, M	1D	26.750	3.38	4 10/02	3.696	10/03	1.450	10/04	Continuing	Continuing	
Software Development	WR	EODTD, IH, M	1D	1.291	0.25	0 10/02	0.250	10/03	0.147	10/04	Continuing		
Systems Engineering	WR	EODTD, IH, M	1D	7.355	0.35	0 10/02	0.400	10/03	0.123	10/04	Continuing	Continuing	1
ILS	WR	EODTD, IH, M	1D	11.317	0.25	0 10/02	0.300	10/03	0.049	10/04	Continuing	Continuing	ı
												0.000	
												0.000	
												0.000	)
												0.000	)
												0.000	
												0.000	
												0.000	)
Subtotal Product Development				46.713	4.23	4	4.646	6	1.769	1	0.000	57.362	2
Program Management Support	C/CPFF	Dynamic System	ms, Alex, VA	3.186	0.35	1 10/02						3.537	•
Program Management Support	C/CPFF	TBD					0.500	10/03	0.123	10/04	Continuing	Continuing	
Training Development												0.000	)
Integrated Logistics Support												0.000	
Configuration Management												0.000	
Technical Data												0.000	
GFE												0.000	)
Award Fees												0.000	
Subtotal Support				3.186	0.35	1	0.500	)	0.123		0.000	4.160	
Remarks:													

#### **CLASSIFICATION:**

								DATE:				
Exhibit R-3 Cost Analysis (pag	je 2)									F	ebruary 2004	
APPROPRIATION/BUDGET ACTIVI	ITY	PROGRAM E				PROJECT NU						
RDT&E, N / BA-4			int Service EOD	) Development		1317/Joint Se		stems				
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			
	Method		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Developmental Test & Evaluation	WR	EODTD, IH, MD	3.120		10/02	0.550	10/03	0.147	10/04	Continuing		
Operational Test & Evaluation	WR	EODTD, IH, MD	1.560								1.560	
				<u> </u>			<u> </u>		<u> </u>		0.000	
			<b></b>	<u> </u>	<b></b>						0.000	
<del> </del>			<b></b>	<u> </u>	<b></b>						0.000	
<del> </del>			<b></b>	<u> </u>	<b></b>						0.000	
<u> </u>	<u> </u>		<u> </u>	<u> </u>	<b>_</b>		<u> </u>		<u> </u>		0.000	
Subtotal T&E			4.680	0.350	)	0.550	<u>,</u>	0.147	<u> </u>	0.000	5.727	<u> </u>
				<u>.                                      </u>			<u>.                                      </u>		·		<del>.</del>	_
Program Management Support	WR	EODTD, IH, MD	5.417			0.800		0.221		Continuing	Continuing	
Miscellaneous	<u> </u>	Various	3.634	0.991	1 02/03	1.169	10/03	0.196	10/04	Continuing	Continuing	
			<b></b>		<del>                                     </del>						0.000	
			<b></b>	<u> </u>	<del>                                     </del>		<u> </u>				0.000	1
<u> </u>	<del> </del>	<del> </del>	<del> </del>	<u> </u>	<del> </del>		<u> </u>		<u> </u>	<del> </del>	0.000	
	+	<del> </del>	<del> </del>	1.00	<del> </del>	+	<del>                                     </del>	+	<del> </del>	+	0.000	
Subtotal Management			9.051	1.691	1	1.969	<u> </u>	0.417		0.000	13.128	<u> </u>
Remarks:												
Total Cost			63.630	6.626	3	7.665	i	2.456	i	0.000	80.377	
Remarks:												

#### **CLASSIFICATION:**

# **UNCLASSIFIED**



R-1 SHOPPING LIST - ITEM NO. 59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 23 of 42)

### **CLASSIFICATION:**

# **UNCLASSIFIED**

	XHIBIT R-4, Sched		COII IL		DATE:		
	Anibii N-4, Sched	idle Fibilie			DATE.	February 20	104
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NAME ANI	) NPROJECT N	JAME AND NUM	I IBFR	1 Columny 2	704
RDT&E, N/BA-4		Dev 0603654N		Systems/1317			
	0.00.000	201 000000	1202 29	Cycleme, 1817			
	0603654N Joint	Service EOD Dev	elopment; 131	7 EOD Diving S	ystems		
		RDT&E M	ilestone Chart				
	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
DIVER HULL NAVIGATION							
Testing							
Production Decision							
Production							
ADVANCED UBA							
Testing							
Production Decision							
Production							
				IO LIOT ITEMA			

R-1 SHOPPING LIST - ITEM NO. 59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 24 of 42)

### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:	February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	EMENT			PROJECT NU	MBER AND N	AME
RDT&E,N/ BA-4	0603654/Joint	Service EOD [	Development		1317/EOD Div	ring Systems	
	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MICRO DIVER DISPLAY							
Testing	1Q-4Q	1Q-3Q					
Production Decision		3Q					
Production		3Q-4Q	1Q-4Q				
ADVANCED U/W LIMPET MINE							
Testing	1Q-4Q	1Q-4Q	1Q-2Q		İ		
Production Decision			3Q				
Production			4Q	1Q-4Q			
ADV MINI MINE ID SENSOR (UIS PIP)							
Testing	1Q-4Q	1Q-2Q					
Production Decision		4Q					
Production			1Q-4Q				
ACTIVE THERMAL PROTECTION SYSTEM							
Testing/Market Research	1Q-3Q						
DIVER HULL NAVIGATION							
Testing			1Q-4Q	1Q-2Q			
Production Decision				3Q			
Production				3Q-4Q	1Q-4Q	1Q	
ADVANCED UBA							
Testing	3Q-4Q	1Q-4Q	1Q-3Q				
Production Decision			3Q				
Production			4Q	1Q-4Q	1Q-3Q		
					+		

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER AND	D NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N / BA-4	0603654N/Joint Se	ervice EOD Develor	pment		4023/EOD VSW M	CM/Force Protection	on UUV	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	0.000	4.675	6.458	6.565	4.705	4.130	4.025	
RDT&E Articles Qty	Various	Various	Various	Various	Various	Various	Various	

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Provides for development of small affordable, Unmanned Underwater Systems to support Explosive Ordnance Disposal (EOD) and Naval Special Clearance missions operations. The equipment must be highly portable in order to support the EOD technician to safely approach, render-safe, and dispose of sea mines and other underwater ordnance. Provides support for the Navy's high priority mission of Very Shallow Water (VSW) mine countermeasures, including clandestine reconnaissance and mine clearance in support of amphibious operations and ships hull search in support of Homeland Defense.

#### **CLASSIFICATION:**

B. Accomplishments/Planned Program  FY 03 FY 04 FY 00 Accomplishments/Effort/Subtotal Cost 0.000 4.675 6.45 RDT&E Articles Quantity  This program supports development, testing and fleet approval for evolving generations of small, afforadble UUV's to address of Disposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.	roject Justification				DATE: February 2004
B. Accomplishments/Planned Program  FY 03 FY 04 FY 05 Accomplishments/Effort/Subtotal Cost 0.000 4.675 6.45 RDT&E Articles Quantity  This program supports development, testing and fleet approval for evolving generations of small, afforable UUV's to address of Disposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.  FY 03 FY 04 FY 05 Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000	IVITY F	ROGRAM ELEMENT NUME	3ER AND NAME	PROJECT NUMBER AND	
Accomplishments/Effort/Subtotal Cost 0.000 4.675 6.45  RDT&E Articles Quantity  This program supports development, testing and fleet approval for evolving generations of small, afforable UUV's to address bisposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.  FY 03 FY 04 FY 04  Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000				4023/EOD VSW MCM/Fo	orce Protection UUV
Accomplishments/Effort/Subtotal Cost 0.000 4.675 6.45  RDT&E Articles Quantity  This program supports development, testing and fleet approval for evolving generations of small, afforable UUV's to address of Disposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.  FY 03 FY 04 FY 05  Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000	ed Program				
Accomplishments/Effort/Subtotal Cost 0.000 4.675 6.45  RDT&E Articles Quantity  This program supports development, testing and fleet approval for evolving generations of small, afforable UUV's to address of Disposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.  FY 03 FY 04 FY 04  Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000	74 1 10gram				
This program supports development, testing and fleet approval for evolving generations of small, afforable UUV's to address bisposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.    FY 03				FY 05	
This program supports development, testing and fleet approval for evolving generations of small, afforable UUV's to address of Disposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.  FY 03 FY 04 FY 04  Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000	total Cost	0.000	4.675	6.458	
Disposal and Naval Special Clearance missions areas.  *Starting in FY05 effort was moved from Program Element 0603654N, Project Q1317.  FY 03 FY 04 FY 04  Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000					
Accomplishments/Effort/Subtotal Cost 0.000 0.000 0.000		· ,			
			FY 04	FY 05	
RDT&E Articles Quantity	iotal Cost	0.000	0.000	0.000	
				FY 05 0.000	
RDT&E Articles Quantity	total Cost			33333	
	total Cost			· ·	

#### **CLASSIFICATION:**

XHIBIT R-2a, RDT&E Project Justification						DATE: February 2004
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBER	AND NAME		PROJECT NUMBER AND N	
DT&E, N / BA-4		Service EOD Dev			4023/EOD VSW MCM/Force	
JIGE, N / DA-4	000303414/301111	Service LOD Dev	reiopinent		4023/LOD VOVV IVICIVI/I OICE	T Total Clott
(U) C. PROGRAM CHANGE SUMMARY:						
(U) Funding:		FY 2003	FY 2004	FY 2005		
Previous President's Budget						
(FY 04 President Controls):		0.000	0.000	0.000		
Current BES/President's Budget						
(FY05 President Controls):		0.000	4.675	6.458		
Total Adjustments		0.000	4.675	6.458		
Summary of Adjustments						
New Project, Q4023 establish	hed for UUV Program	0.000	0.000	6.540		
Congress add MIFD		0.000	4.675	0.000		
Miscellaneous Adjustment		0.000	0.000	-0.082		
Subtotal		0.000	4.675	6.458		
(U) Schedule:  Not Applicable						
(U) Technical:						
Not applicable.						
			INO LIOT I			

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT	&E Project Justification							DATE:			
									Febr	ruary 2004	
APPROPRIATION/BUDG	GET ACTIVITY	PROGRAM EL	EMENT NUME	BER AND NAM	1E	PROJECT NUM	MBER AND NA	AME			
RDT&E, N /	BA-4	0603654N/Joir	nt Service EOD	Development		4023/EOD VSV	V MCM/Force	Protection Ul	JV		
(U) D. OTHER PF	ROGRAM FUNDING SUMMARY:								-	Tatal	
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 0975		0	0	2305	4120	12482	3496	3628	Continuing	Continuing	

#### (U) E. ACQUISITION STRATEGY: \*

Analysis of Alternatives (AOA) studies are always conducted prior to the initiation of new subprojects. The AOA addresses and emphasizes acquisitions strategies of the most cost-effective solution over the subprojects' life -cycle. The acquisition strategies observe the following hierarchy of alternatives: commercial item (including modifications), non-developmental item (including modifications), and lastly, developmental programs. Contracting for RDT&E, if required is always competitive and when feasible, production options are included.

This ongoing program capitalizes on a user operational evaluation system effort involving Fleet operators engaged in tactical experimentation with prototype UUVs. These UUV operators also participate in detailed requirements analyses and definition. A preliminary operational capability with UUV will be realized at the VSW MCM Detachment, with a competitive acquisition strategy to field a more robust and capable first generation S-C-M system. The addition of mine reacquisition and identification (RI) capabilities to the VSW MCM UUV toolbox is programmed, for delivery. Further improvements to the toolbox to add basic mine neutralization capabilities will then be pursued.

#### (U) F. MAJOR PERFORMERS: \*\*

The majority of funding in this line is executed by Naval Explosive Ordnance Disposal Technology Division located in Indian Head, MD FY05. The funding is used for development of Unmanned Underwater Vehicle. The funding document will be issued as follows: FY04 1/04; FY05 10/04.

<sup>\*</sup> Not required for Budget Activities 1,2,3, and 6

<sup>\*\*</sup> Required for DON and OSD submit only.

#### **CLASSIFICATION:**

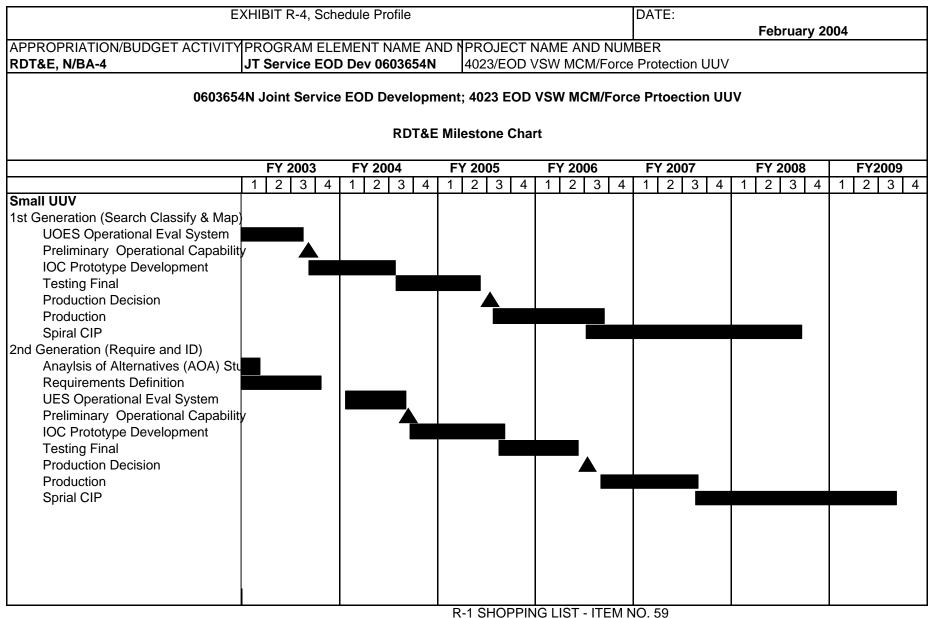
								DATE:				
Exhibit R-3 Cost Analysis (pa	ige 1)									February 200	04	
APPROPRIATION/BUDGET ACTI	VITY	PROGRAM E	LEMENT			PROJECT NU	JMBER AND I	NAME				
RDT&E, N / BA-4			nt Service EOD	Development		4023/EOD VS	SW MCM/Ford	e Protection UU				
Cost Categories	Contract		Total		FY 03		FY 04		FY 05			
	Method	Activity &	PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
D: U I D I	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development	WR	EODTD, IH, MD	0.000	1	1	3.974	1	4.244		Continuing	,	<b>,</b>
Software Development	WR	EODTD, IH, MD	0.000			0.000		0.000		Continuing		
Systems Engineering	WR	EODTD, IH, MD	0.000		1	0.000		0.200		Continuing		
ILS	WR	EODTD, IH, MD	0.000	0.000	)	0.000	)	0.200	10/04	Continuing	Continuing	
											0.000	
											0.000	
											0.000	)
											0.000	)
											0.000	)
											0.000	
											0.000	)
Subtotal Product Development			0.000	0.000	)	3.974	1	4.644		0.000	8.618	3
Program Management Support	C/CPFF	Dynamic Systems, Alex, VA	0.000	0.000							0.000	
Program Management Support	C/CPFF	TBD				0.000	)	0.300	10/04	Continuing	Continuino	1
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000	)	0.300		0.000		
определения в пределения в пред	I	I			1		1	3.555		1	3,555	1
Remarks:												
			$D + CU \cap C$	DINIC LIST	Itam Na	E0.						

#### **CLASSIFICATION:**

								DATE:				
Exhibit R-3 Cost Analysis (pa	ge 2)									February 200	)4	
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM E				PROJECT N						
RDT&E, N / BA-4			int Service EOI	Developmen		4023/EOD VS		ce Protection UU			•	•
Cost Categories	Contract	Performing	Total	E) / 00	FY 03	E) ( 0 (	FY 04	E) ( 0.5	FY 05	0 11		
	Method & Type	Activity & Location	PY s Cost	FY 03 Cost	Award Date	FY 04 Cost	Award Date	FY 05 Cost	Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	EODTD, IH, MD	0.000	+		0.000		0.403		Complete		
Operational Test & Evaluation	WR	EODTD, IH, MD	0.000			0.000	,	0.403	10/04	Continuing	0.000	
Operational Test & Evaluation	VVIX	EODTD, IN, WID	0.000	'							0.000	
											0.000	
											0.000	+
											0.000	+
											0.000	+
Subtotal T&E			0.000	0.000	0	0.000		0.403		0.000		
Subtotal T&E		1	0.000	0.000	u <u>l</u>	0.000	<u> </u>	0.403	l	0.000	0.400	2
	ı		<u> </u>	_		ı	1	T	T		T	1
Program Management Support	WR	EODTD, IH, MD	0.000	0.000	0	0.000	)	0.400	10/04	Continuing	, ·	
Miscellaneous		Various	0.000	0.000	0	0.701	1	0.711	10/04	Continuing		
											0.000	
											0.000	+
											0.000	
											0.000	
Subtotal Management			0.000	0.000	0	0.701		1.111		0.000	1.812	2
Remarks:												
Total Cost			0.000	0.000	0	4.675	5	6.458		0.000	11.133	3
Remarks:												

#### **CLASSIFICATION:**

## **UNCLASSIFIED**



**UNCLASSIFIED** 

**Exhibit R-2a, RDTEN Project Justification** (Exhibit R-2a, 32 of 42)

### **CLASSIFICATION:**

# **UNCLASSIFIED**

EV	KHIBIT R-4, Sche		COII IL		DATE:		
[	11 11 11-4, OCHE	adie i ionie			DATE.	February 20	004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM FLE	MENT NAME AND	NPROJECT N	AMF AND NUM	BFR	1 Coldary 2	704
RDT&E, N/BA-4		D Dev 0603654N			Protection UUV		
11.01.01.11.01.11	0. 0000 =0.	2 201 000000 III	1020/2021	<u> </u>	11010011011001		
0603654	N Joint Service	EOD Development	t; 4023/EOD VS	SW MCM/Force	Protection UUV		
		RDT&E Mil	lestone Chart				
	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
Ard Generation (Neutralization) Analysis of Alternatives (AOA) Study Requirements Definition UOES Operational Eval System Protype Development Testing Final Production Decision (1st Generation Preliminary Operational Capability Production 4th Generation Small UUV (EOD UUV) Analysis of Alternatives (AOA) Study Requirements Definition UOES Operational Eval System Preliminary Operational Capability IOC Protoype Development Testing Final Production Decision (1st Generation Production		2.1 SHOPPING I IS					

R-1 SHOPPING LIST - ITEM NO. 59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 33 of 42)

### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:	ebruary 200	)4
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	EMENT			IPROJECT NU	MBER AND NA		, .
RDT&E,N/ BA-4		Service EOD [	)evelopment			W MCM/Force		/
1st Generation Small UUV (Search, Classify & Map)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
UOES Operational Eval System	1Q-3Q	1 1 2004	1 1 2003	1 1 2000	1 1 2007	1 1 2000	1 1 2009	
Preliminary Operational Capability	3Q				+			
IOC Prototype Development	3Q-4Q							
Testing Final	00,10	1Q-3Q						
Production Decision		1404	3Q					
Production			3Q-4Q	1Q-3Q				
Spiral CIP				3Q-4Q	1Q-4Q	1Q-3Q		
2nd Generation (Require and ID)				34.4	1			
Anaylsis of Alternatives (AOA) Study	1Q							
Requirements Definition	1Q-4Q				+			
UES Operational Eval System	10-40	1Q-3Q						
Preliminary Operational Capability		3Q						
IOC Prototype Development		3Q-4Q	1Q-3Q					
Testing Final		0Q 1Q	3Q-4Q	1Q-2Q				
Production Decision			<u> </u>	3Q				
Production				3Q-4Q	1Q-3Q			
Sprial CIP					3Q-4Q	1Q-4Q	1Q-3Q	
3rd Generation (Neutralization)								
Analysis of Alternatives (AOA) Study	2Q-4Q	1Q-2Q						
Requirements Definition	3Q-4Q	1Q-3Q						
UOES Operational Eval System		4Q	1Q-4Q	1Q-2Q				
Protype Development				3Q-4Q	1Q			
Testing Final					2Q-3Q			
Production Decision (1st Generation)					3Q			
Preliminary Operational Capability					4Q			
Production					4Q	1Q-3Q		
4th Generation (EOD UUV)								
Analysis of Alternatives (AOA) Study	2Q-4Q	1Q						
Requirements Definition	3Q-4Q	1Q			1			
UOES Operational Eval System	1Q-4Q	1Q-4Q	1Q-4Q		1			
Preliminary Operational Capability			4Q		†			
IOC Protoype Development				1Q-4Q				
Testing Final				4Q	1Q-2Q			
Production Decision (1st Generation)				·	2Q-3Q			
Production					2Q-4Q	1Q		

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2004
APPROPRIATION/BUDGET ACTIVITY								
RDT&E, N / BA-4	er UUV							
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Project Cost	0.000	0.000	1.794	1.064	1.765	3.522	1.973	
RDT&E Articles Qty	Various							

#### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Provides for development of Small Low -Cost Unmanned Underwater Vehicles to support dedicated mine countermeasures operations. The UUV systems must have a small deployment footprint for rapid employment abroad various SMCM platforms. Equipment includes Launch and Recovery Sub-Systems.

### CLASSIFICATION:

XHIBIT R-2a, RDT&E Project Justifica	tion			DATE: February 2004	
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	BER AND NAME	PROJECT NUMBER AN		
T&E, N / BA-4	0603654N/Joint Service EOD	Development Development	4024 SMCM Shallow ar	d Deep Water UUV	
B. Accomplishments/Planned Program					
	FY 03	FY 04	FY 05		
Accomplishments/Effort/Subtotal Cost	0.000	0.000	1.794		
RDT&E Articles Quantity	0.000	0.000			
*Starting in FY05 effort was moved from Progr	am Element 0603654N, Project Q13	17.			
	Ev.oo				
A   -   -     -   -     -	FY 03	FY 04	FY 05		
Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	0.000	0.000	0.000		
RDT&E Afficies Quantity					
Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 03 0.000	FY 04 0.000	FY 05 0.000		
THE FALL PHANTON QUARTER					

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification				DATE:
APPROPRIATION/BUDGET ACTIVITY PF	ROGRAM ELEMENT NUMBER	AND NAME		February 2004 PROJECT NUMBER AND NAME
	03654N/Joint Service EOD Dev			4024 SMCM Shallow and Deep Water UUV
ND I GL, IV I DA 4	0000-14/00lift OctVice LOD De	velopment		4024 Giviolivi Grianow and Deep water GGV
(U) C. PROGRAM CHANGE SUMMARY:				
(U) Funding:	FY 2003	FY 2004	FY 2005	5
Previous President's Budget				
(FY 04 President Controls):	0.000	0.000	0.000	0
Current BES/President's Budget		0.000	. 70.	
(FY05 President Controls):	0.000	0.000	1.794	
Total Adjustments Summary of Adjustments	0.000	0.000	1.794	4
New Project, Q4024 established for UUV I	Program 0.000	0.000	1.800	0
Miscellaneous Adjustment	0.000	0.000	-0.006	
Subtotal	0.000	0.000	1.794	<u>0</u> 4
(U) Schedule:				
Not Applicable				
(U) Technical:				
Not applicable.				

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project J	ustification							DATE:			
									Febr	uary 2004	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM EI	LEMENT NUM	BER AND NAN	ΛE	PROJECT NU	MBER AND N	IAME			
RDT&E, N / B	A-4	0603654N/Joi	nt Service EOD	Development		4024 SMCM S	Shallow and De	eep Water UU\	/		
(U) D. OTHER PROGRAM FUN	IDING SUMMARY:								То	Total	
Line Item No. & Name		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Cost	
OPN 5509								4381	Continuing	Continuing	

#### (U) E. ACQUISITION STRATEGY: \*

Analysis of Alternatives (AOA) studies are always conducted prior to the initiation of new projects. The AOA addresses and emphasizes acquisition strategies of the most cost-effective solution over the subprojects' life-cycle. The acquisition strategies observe the following hierarchy of alternatives: commercial item (including modification), non-developmental item (including modifications), and lastly, developmental programs. Contracting for RDT&E, if required, is always competitive and when feasible, production options are included.

The Surface Mine Countermeasures (SMCM) UUV program will begin in FY04 with a two-year experimentation phase involving Fleet Mine Warfare operators engaged in tactical experimentation with prototype UUVs operating from Surface MCM platforms. The focus of this program is to increase the current capabilities of Surface MCM ships while reducing the overall risk to MCM forces. During this two-year initiatives, these UUV Fleet operators will develop tactics for employing UUV systems from SMCM platforms along with operational requirements. Upon completion of the two-year experimentation phase, a competitive acquisition strategy will begin to field a more capable and robust first generation system.

#### (U) F. MAJOR PERFORMERS: \*\*

The majority of funding in this line is executed by Naval Explosive Ordnance Disposal Technology Division located in Indian Head, MD in FY05. The funding is used to develop an Unmanned Underwater Vehicle. The funding document will be issued as follows: FY05 10/04.

<sup>\*</sup> Not required for Budget Activities 1,2,3, and 6

<sup>\*\*</sup> Required for DON and OSD submit only.

#### **CLASSIFICATION:**

								DATE:				
Exhibit R-3 Cost Analysis (page	ge 1)									F	ebruary 2004	
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM E				PROJECT NU						
RDT&E, N / BA-4			nt Service EO	Developmen		4024 SMCM S		eep Water UUV				
Cost Categories	Contract	Performing	Total		FY 03		FY 04		FY 05			L
	Method	Activity & Location	PY s Cost	FY 03 Cost	Award Date	FY 04 Cost	Award Date	FY 05 Cost	Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	& Type WR	EODTD, IH, MD	0.000			0.000		1.529		Continuing		+
Software Development	VVIC	EODTD, IR, MD	0.000			0.000		0.000		Continuing		
Systems Engineering	+		0.000			0.000		0.000		Continuing	·	1
ILS	+		0.000			0.000		0.000		Continuing	Continuing	1
illo			0.000		) 	0.000		0.000		Continuing	0.000	-
	+		0.000	1							0.000	
											0.000	
											0.000	
	+										0.000	
											0.000	
											0.000	
Subtotal Product Development			0.000	0.00	n	0.000		1.529		0.000		
Subtotal Froduct Development			0.000	0.000	J	0.000	'1	1.528		0.000	1.023	7
Program Management Support			0.000	0.00	0			0.000			0.000	
Program Management Support								0.000		Continuing	Continuing	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	)
Award Fees											0.000	)
Subtotal Support			0.000	0.000	0	0.000		0.000		0.000	0.000	)
								•				
Remarks:												
			R-1 SHOP	PING LIST	- Item No	59	<u> </u>		<u> </u>			

#### **CLASSIFICATION:**

								DATE:				
Exhibit R-3 Cost Analysis (pa	ge 2)									February 200	)4	
APPROPRIATION/BUDGET ACTIV	/ITY		PROGRAM ELEMENT			PROJECT NU						
RDT&E, N / BA-4			0603654N/Joint Service EOD	) Development	i	4024 SMCM S		Deep Water UU'				
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		Total Cost	Target Value of Contract
Developmental Test & Evaluation	71		0.000			0.000		0.00		, , , , , , , , , , , , , , , , , , ,	0.000	
Operational Test & Evaluation		1	0.000		1						0.000	
					1						0.000	
		1									0.000	
											0.000	
											0.000	
											0.000	
Subtotal T&E			0.000	0.000	)	0.000		0.00	0	0.000	0.000	
					<del></del>		T				I	I
Program Management Support	WR	EODTD, IH, M	D 0.000			0.000		0.00	-		0.000	
Miscellaneous		Various	0.000	0.000	)	0.000		0.26	5		0.265	
				<u> </u>							0.000	
	1	<del> </del>		<del> </del>	<del>                                     </del>						0.000	
		+			+						0.000 0.000	
Subtotal Management		+	0.000	0.000	+	0.000		0.26	5	0.000	0.265	
Remarks:				0.000	1	, 0.000		0.20	<u> </u>	0.000	0.200	
Total Cost			0.000	0.000	)	0.000		1.79	4	0.000	1.794	
Remarks:												

### **CLASSIFICATION:**

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APPROPRIATION/BUDGET ACTIVITY	PRO	OGF	RAM	ELE	MEI	NT N	NAM	E AN	ND N	PRO	OJEC	ΤN	AME	E ANI	D NUN	ИВІ	ΞR				J. u.u.	·			
RDT&E, N/BA-4	DT&E, N/BA-4 JT Service EOD Dev 0603654N 4024 SMCM Shallow and Deep Water UUV																								
•																									
0603654N Joint Service EOD Development; 4024 SMCM Shallow and Deept Water UUV																									
DDT0 F Millerdama OL and																									
RDT&E Milestone Chart																									
FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009															009										
															3 4										
SMCM Shallow & Deept Water UUV														-											
Notional CONOPS (AOA) Study													ا 	_											
Requirements Definition													Ļ												
UOES Operational Eval Systems																١,									
POC																									
IOC Prototype Development																									
Testing Final Production Decision																							г.		
Production Pecision																							•		
Floduction																									_
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R-1 SHOPPING LIST - ITEM NO. 59

**UNCLASSIFIED** 

Exhibit R-2a, RDTEN Project Justification (Exhibit R-2a, 41 of 42)

### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:	ebruary 20	04						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT			PROJECT NU	NUMBER AND NAME								
RDT&E.N/ BA-4		Service EOD	Development			Shallow and Deep Water UUV								
Small Shallow and Deept Water UUV Notinal CONOPS (AOA) Study Requirments Definiton UOES Operational Eval System POC	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009							
Notinal CONOPS (AOA) Study		1Q-4Q	1Q-4Q	1Q										
Requirments Definiton				1Q-4Q										
UOES Operational Eval System				2Q-4Q										
POC					1Q-4Q									
IIOC Protoytpe Development						1Q								
Testing Final						1Q-4Q	1Q							
Production Decision														
Production							4Q							
					1									
					1									
				<del>                                     </del>	+	<del>                                     </del>								
					1									
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			]				]							