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Exhibit R-2, RDT&E Budget Item Justification	Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA 4	R-1 ITEM NOMENCLATURE Joint Service Explosive Ordnance Disposal (EOD) Development 0603654N

COST (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total P.E. Cost	10.1	10.5	11.2	10.9	9.3	9.2	9.4	9.6	Continuing	Continuing
JT Service Explosive Ordnance Disposal Systems/Q0377	4.5	5.1	6.1	6.1	6.3	6.4	6.5	6.7	Continuing	Continuing
EOD Diving Systems/Q1317	5.7	5.3	5.1	4.7	3.0	2.8	2.9	2.9	Continuing	Continuing
Quantity of RDT&E Articles & cost	Various									

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. Increasing types of foreign and domestic weapons necessitate a continuing development program to provide Explosive Ordnance Disposal personnel of all military service 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.

B. Program Change Summary:

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
FY 1999 President's Budget:	10.301	10.756	11.200
Appropriated Value:	10.701		
Adjustment to FY 1998 Appropriated Value/			
FY 1999 President's Budget:	-.559	-298	+.32
FY 2000 DON Budget Submit:	10.142	10.458	11.168
Funding: Decreases are due to general adjustments.			

Schedule: Not applicable for Q0377. Q1317-The Acoustic Firing System (AFS) Acquisition Program Baseline references the technical difficulties experienced during recent developmental testing that has subsequently resulted in additional testing requirements. As a result, modifications to key hardware components and corrections to software have extended the schedule by six months.

Technical: Not applicable.

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Exhibit R-2a, RDT&E Project Justification		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA 4	Program Element Name & No. JT Service EOD Development 0603654N	Project Name and Number. JT Service EOD Systems/Q0377

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	4.5	5.1	6.1	6.1	6.3	6.4	6.5	6.7	Continuing	Continuing
RDT&E Articles Qty	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, rendering-safe, recovery, field and laboratory evaluation, and final disposal of nuclear, conventional, chemical, and biological munitions, including improvised explosive devices.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS :

- (\$1.460) Obtained Milestone III decision for Advanced Radiographic System (ARS) project and Classified Project I and Milestone II decision for Lightweight Disposable Disrupter (LIDD).
- (\$2.524) Continued development of the Remote Ordnance Neutralization System (RONS) and Main Charge Disrupter (MCD) projects.
- (\$.506) Initiated the Classified Project II project.

2. FY 1999 PLAN:

- (\$1.924) Obtain Milestone III decision for RONS and MCD projects.
- (\$2.038) Continue development of the Classified Project II and LIDD projects.
- (\$1.159) Conduct Analysis of Alternatives studies of the Explosive Safe/Arm Monitor, and Large Improvised Explosive Device (IED) Neutralization projects. Initiate the Improved (Standoff) Disrupter Tools (Small Caliber Dearmer and Standoff Disrupter) projects.

3. FY2000 PLAN:

- (\$.900) Obtain Milestone III decision for LIDD project.
- (\$3.273) Continue development of the Classified Project II, Small Caliber Dearmer (SCD) and Standoff Disrupter (SD) projects.
- (\$1.500) Initiate the Large IED Neutralization project.
- (\$.400) Conduct Analysis of Alternative studies for the Explosive Safe/Arm (ESA) Monitor and EOD Incident C2I System projects.

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B. Other Program Funding Summary:

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN Line Item										
5509	.200	1.476	1.568	1.568	.621	.950	1.575	1.200	Cont.	Cont.
3400			.234	.510					0	.744

C. 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.

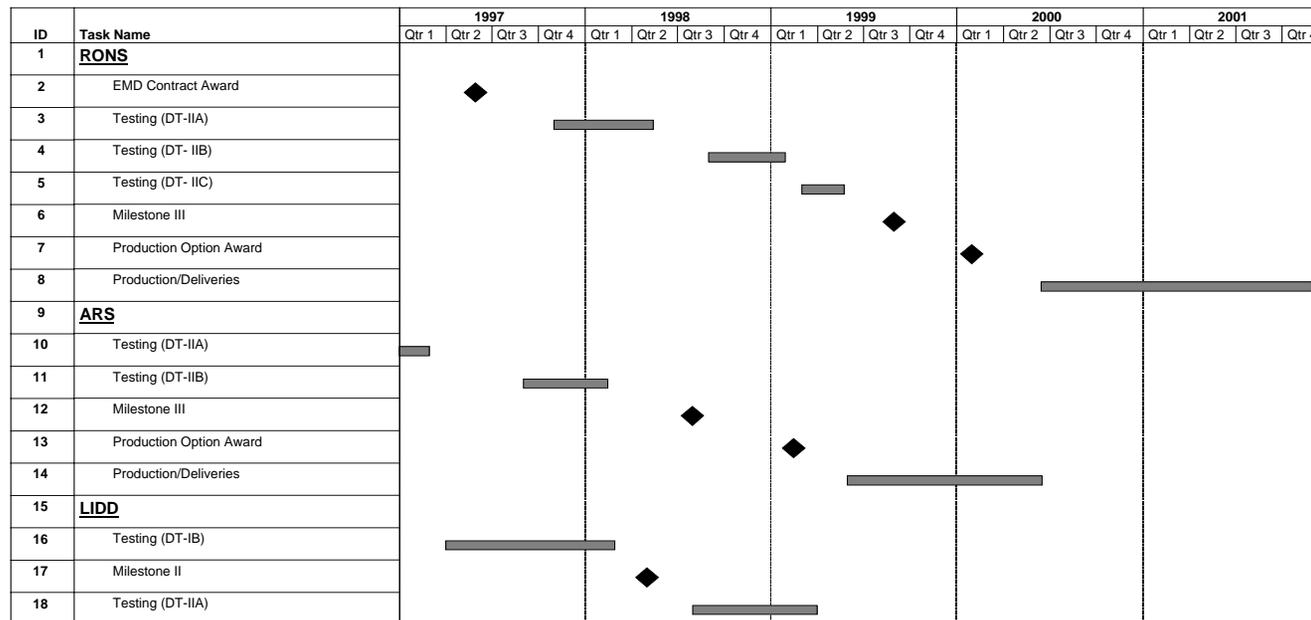
D. Schedule Profile: See Attached.

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PE 0603654N JOINT SERVICE EOD DEVELOPMENT Q0377 JOINT SERVICE EOD SYSTEMS

RDT&E MILESTONE CHART



**This Milestone Chart is in Fiscal Years

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Exhibit R-3 Cost Analysis		Date: February 1999
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA 4	PROGRAM ELEMENT NAME AND NUMBER JT Service EOD Development 0603654N	PROJECT NAME AND NUMBER JT Service EOD Systems/Q0377

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total <u>PYs</u> Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date				Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	EODTD, IH, MD	69.956	1.649	10/98	2.526	10/99				CONT.	CONT.	
Software Development	WR	EODTD, IH, MD	3.254	.050	10/98		10/99				CONT.	CONT.	
ILS	WR	EODTD, IH, MD	32.540	.820	10/98	.910	10/99				CONT.	CONT.	
Subtotal Product Development			105.750	2.519		3.436					CONT.	CONT.	
Remarks:													
Program Management Support	CPFF	Dynamic Systems, Alex, VA	2.020	.320	1/99	.340	1/00				.940	3.980	
Subtotal Support			2.020	.320		.340					.940	3.980	
Remarks:													

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA 4	PROGRAM ELEMENT NAME AND NUMBER JT Service EOD Development 0603654N	PROJECT NAME AND NUMBER JT Service EOD Systems/Q0377

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY's Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date	FY01 Cost	FY01 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	EODTD, IH, MD	48.812		10/98	1.050	10/99			CONT.	CONT.	
Operational Test & Evaluation	WR	EODTD, IH, MD	8.135	1.296	10/98	.110	10/99			CONT.	CONT.	
Subtotal T&E			56.947	1.296		1.160						
Remarks:												
Program Management Personnel	WR	EODTD, IH, MD	3.000	.220	10/98	.225	10/99			CONT.	CONT.	
Miscellaneous	Various	Various	.800	.766	2/99	.912	2/00			CONT.	CONT.	
Subtotal Management			3.800	.986		1.137						
Remarks:												
Total Cost			168.517	5.121		6.073						

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA 4	Program Element Name & No. JT Service EOD Development 0603654N	Project Name and Number. EOD Diving Systems/Q1317

Cost (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost	5.7	5.3	5.1	4.7	3.0	2.9	2.9	2.9	Continuing	Continuing
RDT&E Articles Qty	Various									

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. Provides support for the Navy's high priority mission of Very Shallow Water (VSW) mine countermeasures, including clandestine reconnaissance, in support of amphibious operations.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 PLAN:

- (\$.813) Continued to develop equipment which improves diver capability and endurance.
- (\$.604) Continued to develop a non-magnetic acoustic firing system.
- (\$.475) Developed non-magnetic diver held underwater equipment to detect objects in the water column.
- (\$.245) Developed non-magnetic diver underwater navigation system compatible with Global Positioning System (GPS).
- (3.515) Developed, test and gained approval for fleet use of specialized equipment to support the Very Shallow Water Mine Countermeasures mission and CNO approved VSW MCM Detachment (USN/USMC).

2. FY 1999 PLAN:

- (\$.323) Continue developing equipment which improves diver capability and endurance.
- (\$.400) Continue developing a non-magnetic acoustic firing system.
- (\$.796) Continue developing non-magnetic diver held underwater equipment to detect objects in the water column.
- (\$.300) Continue developing non-magnetic diver underwater navigation system compatible with GPS.
- (\$.309) Develop low influence underwater diver mounted display which will provide video interface with other EOD systems (Underwater Imaging System, Underwater Navigation System and MK 16 UBA).
- (\$.385) Develop non-magnetic underwater vehicles to transport divers and associated equipment in support of MCM operations.
- (2.824) 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).

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3. FY2000 PLAN:

- (\$.380) Continue developing equipment which improves diver capability and endurance.
- (\$.853) Continue developing a non-magnetic acoustic firing system.
- (\$.923) Continue developing non-magnetic diver held underwater equipment to detect objects in the water column.
- (\$.434) Develop 1.3 ata HeO2 diving tables for the MK 16 MOD 0 underwater breathing apparatus.
- (\$2.510) Continue to 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).

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B. Other Program Funding Summary

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN Line Item										
5509	4.726	4.080	2.219	.840	3.306	3.472	4.778	4.951	CONT.	CONT.
3400		2.914	1.960						4.874	4.874

C. 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.

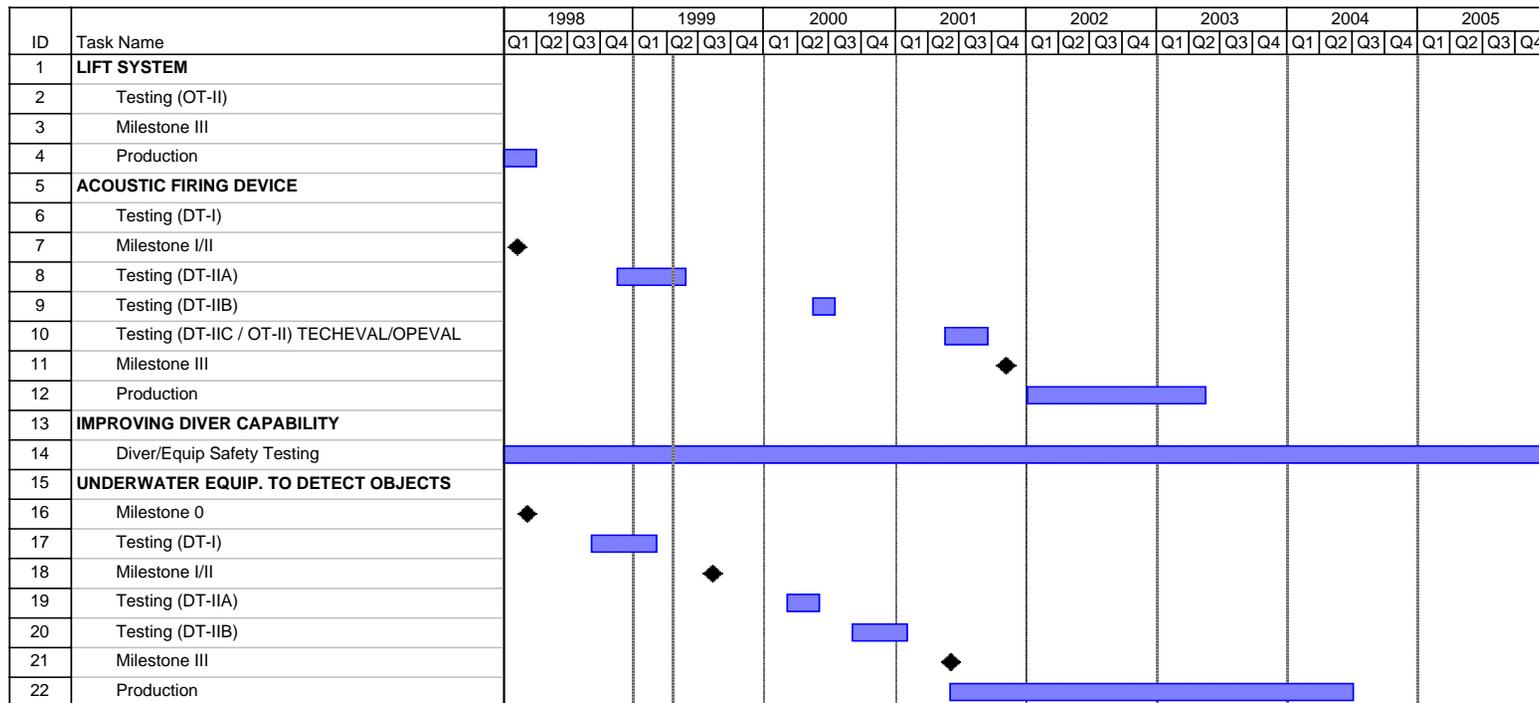
D. Schedule Profile: See Attached.

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Q1317 EOD Divina Svstems MS



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Exhibit R-3 Cost Analysis		Date: February 1999
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Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total <u>PYs</u> Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date			Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	SPAWAR,SD, CA	1.500	1.130	10/98	1.000	10/99			CONT.	CONT.	
Primary Hardware Development	WR	VARIOUS	14.273	1.339	10/98	.885	10/99			CONT.	CONT.	
Software Development	WR	VARIOUS	.600	.133	10/98	.158	10/99			CONT.	CONT.	
Systems Engineering	WR	VARIOUS	6.000	.400	10/98	.350	10/99			CONT.	CONT.	
ILS	WR	VARIOUS	10.192	.500	10/98	.200	10/99			CONT.	CONT.	
Subtotal Product Development			32.565	3.502		2.593						

Remarks:

Program Management Support	CPFF	Dynamic Sys, Alex, VA	1.418	.428	1/99	.440	1/99			1.150	3.886	
Subtotal Support			1.418	.428		.440				1.150	3.886	

Remarks:

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Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date	FY01 Cost	FY01 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	VARIOUS	1.200	.720	10/98	.400	10/99			CONT.	CONT.	
Operational Test & Evaluation	WR	VARIOUS	.450	.150	10/98	.320	10/99			CONT.	CONT.	
Subtotal T&E			1.650	.870		.720						
Remarks:												
Program Management Personnel	WR	EODTD, IH, MD	3.000	.467	10/98	.650	10/99			CONT.	CONT.	
Miscellaneous	Various	Various	1.000	.070	2/99	.692	2/00			CONT.	CONT.	
Subtotal Management			4.000	.537		1.342						
Remarks:												
Total Cost			39.633	5.337		5.095						
Remarks:												

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Exhibit R-3 Project Cost Analysis
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