Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

APPROPRIATION/BUDGET ACTIVITY

PE 0603654N: JT Service Explosive Ordn Dev

BA 4: Advanced Component Development & Prototypes (ACD&P)

•	1	<i>,</i> ,	,								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	31.354	35.154	52.331	4.600	56.931	41.181	28.632	32.915	33.595	Continuing	Continuing
0377: JT Service Expl Ord Disp System	22.554	19.435	27.536	-	27.536	21.520	13.772	13.026	13.289	Continuing	Continuing
1317: EOD Diving System	3.536	3.234	4.340	-	4.340	2.690	2.691	4.647	4.742	Continuing	Continuing
3177: Joint Counter Radio- Controlled IED Elec Warfare	0.467	-	-	4.600	4.600	-	-	-	-	0.000	5.067
4023: VSW MCM/Force Protection UUV	4.797	12.485	20.455	-	20.455	16.971	12.169	15.242	15.564	Continuing	Continuing

#### 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 and Improvised Explosive Devices 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. This program also provides force protection of all military services against Radio Controlled Improvised Explosive Devices (RCIED) to prevent initiation. The Navy has been designated as DOD Executive Agent and Single Manager for Military Ground-Based Counter Radio-Controlled Improvised Explosive Electronic Warfare (CREW) Technology by DOD Directive 5101.14 of 11 June 2007, requiring RDT&E to develop capabilities that meet joint requirements.

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R-1 Line #56

**DATE:** February 2012

Navy

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603654N: JT Service Explosive Ordn Dev

BA 4: Advanced Component Development & Prototypes (ACD&P)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	25.873	33.654	50.659	-	50.659
Current President's Budget	31.354	35.154	52.331	4.600	56.931
Total Adjustments	5.481	1.500	1.672	4.600	6.272
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	4.775	-			
SBIR/STTR Transfer	-0.163	-			
<ul> <li>Program Adjustments</li> </ul>	1.000	1.500	2.135	4.600	6.735
<ul> <li>Rate/Misc Adjustments</li> </ul>	-	-	-0.463	-	-0.463
<ul> <li>Congressional General Reductions</li> </ul>	-0.131	-	-	-	-
Adjustments					

### **Change Summary Explanation**

Program Adjustments: FY13 \$6,272K in Total Adjustments: Increase Joint Crew OCO (\$4,600K) and decrease for MISC Adjustments (\$1,672K).

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Exhibit R-2A, RDT&E Project Just	tification: P	B 2013 Navy	'					DATE: February 2012					
APPROPRIATION/BUDGET ACTIV	/ITY			R-1 ITEM N	OMENCLAT	ΓURE		PROJECT					
1319: Research, Development, Test		PE 0603654	4N: <i>JT Servi</i>	ce Explosive	Ordn Dev	0377: JT Se	ervice Expl C	Ord Disp Sys	tem				
BA 4: Advanced Component Develo	BA 4: Advanced Component Development & Prototypes (ACD&P)												
COST (\$ in Millions)	FY 2013	FY 2013	FY 2013					Cost To					

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0377: JT Service Expl Ord Disp System	22.554	19.435	27.536	-	27.536	21.520	13.772	13.026	13.289	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

Provides Explosive Ordnance Disposal 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). High Fidelity Weapons Mass Destruction performs detection and identification of hazardous materials contained in devices using radiological and biological means. Advanced EOD Robot System (AEODRS) consists of multiple interoperable robot systems. The first class of robot and the architecture for the system will be developed first, then the other classes of robots will be developed. Project Unit 0377: FY11-FY12 OCO Request: Continuous Improvement for the MK1 & MK2 Joint Service EOD robots used by EOD technicians when responding to IED incidents in OIF and OEF.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	oco	Total
Title: EOD FUTURE RADIOGRAPHIC SYSTEMS (FRS) AND EOD DECISION SUPPORT SYSTEMS (DSS)	4.657	4.389	6.150	-	6.150
Articles:	0	0	0		0
FY 2011 Accomplishments: Conducted development of incremental capabilities for the JEOD Decision Support System (DSS) and Future Radiographic System (FRS).					
FY 2012 Plans: Develop Continuous Improvements of incremental capabilities for JEOD Decision Support System (DSS) and continue development of Future Radiographic Systems (FRS).					
FY 2013 Base Plans: Continue development of increment one capabilities for Future Radiographic System (FRS) and incremental improvements to capability for the Decision Support System (DSS).					
Title: HIGH FIDELITY WEAPONS MASS DESTRUCTION (WMD) IDENTIFICATION AND DETECTION	3.144	5.700	7.702	-	7.702
Articles:	0	0	0		0
FY 2011 Accomplishments:					

PE 0603654N: JT Service Explosive Ordn Dev

Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603654N: JT Service Explosive Ord	PROJECT  e Ordn Dev 0377: JT Service Expl Ord Disp System						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quan	ntities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total		
Initiated project to expand EOD's capability to detect and/or identify pote (WMD) threats.	ential Weapons Mass Destruction							
FY 2012 Plans: Continue to develop a family of systems to address the capabilities gap: Weapons Mass Destruction (WMD) threats.	s in detection and identification of							
FY 2013 Base Plans: Continue development and testing of systems within a family of systems with identification and detection of WMD.	s addressing capability gaps associated							
Title: EOD ROBOTICS	Articles:	4.00	5.063 0 0	11.547 0	-	11.547 0		
FY 2011 Accomplishments: Continued development of Advanced EOD Robot System and develop i robot configurations.	improved capabilities for existing EOD							
FY 2012 Plans: Continue development of Advanced EOD Robot System and develop in robot configurations.	nproved capabilities for existing EOD							
FY 2013 Base Plans: Continue development of a family of Advanced EOD Robotic of System improved capabilities for existing EOD Robotic platforms.	s to fill capability gaps and develop							
Title: TCM AN/PLT-XXX SYSTEMS/ELECTRONIC SAFE/ARM FUZES	Articles:	3.16	4 1.741 0 0	2.137 0	-	2.137 0		
FY 2011 Accomplishments: Initiated project to develop capability to determine the state of (or neutral purpose.	alize) Electronic Safe/Arm Fuzes for EOD							
FY 2012 Plans: Continue project development capabilities to determine the state of (or rEOD purpose.	neutralize) Electronic Safe/Arm Fuzes for							
FY 2013 Base Plans:								

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY  1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603654N: JT Service Explosive Ord		ROJECT 377: JT Service Expl Ord Disp System			
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	antities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continue improvements to loadsets for fielded EOD TCM systems bar monitoring and development of capabilities to determine the state of a						
Title: JUONS 0412 and JUONS 0315	Articles:	4.77	5 - 0	-	-	-
FY 2011 Accomplishments:  Develop alternative solutions for the MTRS MK-2 Robot and developr to the Standoff Suicide Bomber Detection System (SSBDS) upgrades IED attacks.						
Title: UNMANNED AERIAL SYSTEMS	Articles:	1.814	1.042 0 0	-	-	-
FY 2011 Accomplishments: Continued development of Unmanned Aerial Systems Capabilities for	the EOD community.					
FY 2012 Plans: Continue development of Unmanned Aerial Systems Capabilities for t	he EOD community.					
Title: EOD ROBOTICS OCO	Articles:	1.000	1.500	-	-	-
FY 2011 Accomplishments: Planned Program OCO (\$1M): Continued Improvements for the MK1 used by EOD technicians when responding to IED incidents in OIF and development of these theater specific tools.						

#### FY 2012 Plans:

OCO:

Joint Service EOD Robot Continuous Improvement - The MK 1 and MK 2 EOD robots are the primary tool used by EOD technicians when responding to IED incidents in OEF-A. There are unique tools for robot uses that need to be developed to counter emergent threats in both theaters (OED-A and OND) that are not part of the current program of record. Funding is required to provide for development of these theater specific tools. **Accomplishments/Planned Programs Subtotals** 

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22.554

19.435

27.536

27.536

PE 0603654N: JT Service Explosive Ordn Dev Navy Page 5 of 30 R-1 Line #56

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0603654N: JT Service Explosive Ordn Dev 0377: JT Service Expl Ord Disp System

BA 4: Advanced Component Development & Prototypes (ACD&P)

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

		•	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
OPN/5509: EOD Equipment	2.000	13.200	0.000	0.000	0.000	16.700	14.242	12.676	8.531	0.000	72.652
(VN075)											

#### **D. 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.

#### **E. Performance Metrics**

Conducted Full Rate Production Decision Review for JEOD Decision Support System (DSS), initiating production. Conducted Interim Progress Review for EOD Future Radiographic System (FRS).

PE 0603654N: JT Service Explosive Ordn Dev

Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

PROJECT

0377: JT Service Expl Ord Disp System

**DATE:** February 2012

Product Development	roduct Development (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	EODTD:Indian Head, MD	124.334	11.041	Oct 2011	16.886	Oct 2012	-		16.886	Continuing	Continuing	Continuing
Software Development	WR	EODTD:Indian Head, MD	20.234	2.500	Oct 2011	3.600	Oct 2012	-		3.600	Continuing	Continuing	Continuing
ILS	WR	EODTD:Indiah Head, MD	44.670	1.850	Oct 2011	1.000	Oct 2012	-		1.000	Continuing	Continuing	Continuing
		Subtotal	189.238	15.391		21.486		-		21.486			

Support (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/CPFF	ITT:Arlington, VA	6.271	0.176	Oct 2011	0.550	Oct 2012	-		0.550	Continuing	Continuing	Continuing
		Subtotal	6.271	0.176		0.550		-		0.550			

Test and Evaluation (\$ i	in Millions	)		FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	EODTD:Indian Head, MD	70.647	2.302	Oct 2011	4.000	Oct 2012	-		4.000	Continuing	Continuing	Continuing
Operation Test & Evaluation	WR	EODTD:Indian Head, MD	9.933	0.300	Oct 2011	0.500	Oct 2012	-		0.500	Continuing	Continuing	Continuing
		Subtotal	80.580	2.602		4.500		-		4.500			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

PROJECT

**DATE:** February 2012

0377: JT Service Expl Ord Disp System

Management Services	anagement Services (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Manangement Support	WR	EODTD:Indian Head, MD	8.278	0.500	Oct 2011	0.675	Oct 2012	-		0.675	Continuing	Continuing	Continuing
Miscellaneous	WR	EODTD:Indian Head, MD	16.052	0.766	Oct 2011	0.325	Oct 2012	-		0.325	Continuing	Continuing	Continuing
		Subtotal	24.330	1.266		1.000		-		1.000			
Yea			Total Prior Years Cost	FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	300 419	19 435		27 536		_		27 536			

Remarks

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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	Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
1319: Research, Development, Test & Evaluation, Navy PE 0603654N: JT Service Explosive Ordn Dev 0377: JT Service Expl Ord Disp System	APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
AA 4: Advanced Component Development & Prototypes (ACD&P)	1319: Research, Development, Test & Evaluation, Navy		
	BA 4: Advanced Component Development & Prototypes (ACD&P)		

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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	Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
1319: Research, Development, Test & Evaluation, Navy PE 0603654N: JT Service Explosive Ordn Dev 0377: JT Service Expl Ord Disp System	APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
AA 4: Advanced Component Development & Prototypes (ACD&P)	1319: Research, Development, Test & Evaluation, Navy		
	BA 4: Advanced Component Development & Prototypes (ACD&P)		

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0603654N: JT Service Explosive Ordn Dev

0377: JT Service Expl Ord Disp System BA 4: Advanced Component Development & Prototypes (ACD&P)

### Schedule Details

	Sta	End		
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 0377				
Title: EOD DECISION SUPPORT SYSTEM	1	2011	4	2017
Development Phase 1	1	2011	4	2011
Deployment 1	3	2011	4	2011
Continous Improvement 1	1	2012	4	2017
Title: ELECTRONIC SAFE/ARE FUZE -IED/UXO	1	2011	4	2017
Program Initiation 1	2	2011	2	2011
Technology Development 3	2	2011	4	2015
Testing 1	1	2014	2	2016
Interim Progress Review 1	2	2016	2	2016
EDM Fabrication 1	3	2016	1	2017
Final Testing 1	1	2017	3	2017
Production Decision 1	1	2017	1	2017
Title: TCM, AN/PLT-XXX (CLASSIFIED III)	1	2011	4	2017
Continous Improvement 2	1	2011	4	2017
Title: EOD FUTURE RADIOGRAPHIC SYSTEM	1	2011	4	2017
Final Testing 2	1	2011	3	2011
Production Decision 2	3	2011	3	2011
Production 2	1	2012	4	2013
Increment I (DEV)	2	2011	2	2012
Increment I (TEST)	2	2012	4	2012
Increment I (PROD DEV)	3	2012	2	2014

PE 0603654N: JT Service Explosive Ordn Dev Navy

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R-1 Line #56

**DATE:** February 2012

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P) PE 0603654N: JT Service Explosive Ordn Dev

0377: JT Service Expl Ord Disp System

	Sta	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Increment I (PROD)	3	2014	4	2017
Title: EOD UNMANNED AERIAL SYSTEM	1	2011	4	2012
Development 5	1	2011	2	2012
Testing 3	2	2012	4	2012
Title: JS EOD WMD	1	2011	4	2017
Program Initiation 3	1	2011	1	2011
Research	2	2011	4	2013
Testing 4	4	2011	2	2013
Procurement	3	2012	2	2016
Increment I (RESEARCH)	1	2013	4	2016
Increment I (TESTING)	4	2013	1	2015
Increment I (PROD DECISION)	2	2015	2	2015
Increment II (RESEARCH)	2	2015	4	2017
Title: ADVANCED EOD ROBOT SYSTEM	1	2011	4	2017
Development # 1	1	2011	2	2012
Program Review 1	3	2012	3	2012
Testing (#1)	2	2012	2	2013
Production Decision (#1)	2	2013	2	2013
Development (# 2 & 3)	1	2013	3	2015
Program Review 2	2	2014	2	2014
Testing (# 2 & 3)	4	2014	4	2015
Limited Production Decision (# 2 & 3)	4	2015	4	2015
Production 3 (INC 1, 2 & 3)	1	2014	4	2017
Continous Improvement 3	1	2015	4	2017

PE 0603654N: JT Service Explosive Ordn Dev Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

FY 2013 FY 2013 FY 2013 FY 2013

DATE: February 2012

PROJECT
1317: EOD Diving System

Cost To

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1317: EOD Diving System	3.536	3.234	4.340	-	4.340	2.690	2.691	4.647	4.742	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### A. Mission Description and Budget Item Justification

Navy

Provides for development of Diver Safety/Life Support Equipment, Advanced Diver Integrated Sensors and Advanced Firing Systems to support Navy Explosive Ordnance Disposal (EOD) underwater operations. The equipment must have inherently low acoustic and magnetic signatures in order to allow the EOD divers to safely approach, render-safe, recover, exploit, and dispose of underwater explosive threats to include sea mines, limpet mines and unexploded ordnance. This project supports the Naval Mine Warfare Certification Plan.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	OCO	Total
Title: DIVER SAFETY & LIFE SUPPORT SYSTEMS	0.879	1.759	2.118	-	2.118
Articles:	0	0	0		0
<b>Description:</b> Diver Safety & Life Support Systems: Develop diver safety tools to include more capable life support systems for EOD, and Mobile Diving & Salvage Units (MDSU) operations. Specific tools include but are not limited to Underwater Breathing Apparatus (UBA), specialized dive masks, heads-up displays, and emergency life support systems.					
FY 2011 Accomplishments: Completed testing and gained approval for use for the VSW/MCM UBA. Completed METRES testing.					
FY 2012 Plans: Initiate a VSW/MCM UBA program to develop modern and safer UBA. Develop and test UW Lift System for EOD and VSW/MCM missions.					
FY 2013 Base Plans: Continue acquisition efforts to develop, test and field future EOD and Underwater Mine Countermeasures (UMCM) UBA in accordance with OPNAV approved requirements.					
Title: ADVANCED DIVER INTEGRATED SENSORS	2.207	1.225	1.461	-	1.461
Articles:	0	0	0		0

PE 0603654N: JT Service Explosive Ordn Dev UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	<b>DATE:</b> February 2012								
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603654N: JT Service Explosive Ord	PROJECT  1317: EOD Diving System							
B. Accomplishments/Planned Programs (\$ in Millions, Article Quan	tities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total			
<b>Description:</b> Develop Advanced Diver Integrated Sensors equipment to detect, neutralize and gather intelligence on underwater targets of interest Inspection Navigation System (DHINS) and improvements to the Under	est. Requirements include Diver Hull								
FY 2011 Accomplishments:  Developed and inserted mature technologies to the DHINS and UIS as program (CIP) to enhance performance in harsh environments.	part of a continuous improvement								
FY 2012 Plans: Conduct testing of diver held sensors. As part of a Continuous Improve technologies for integration into DHINS and UIS.	ment Program (CIP) develop and test								
FY 2013 Base Plans: Initiate an acquisition initiative to field the next generation EOD and UM system. Continue to upgrade DHINS with fleet recommended engineer									
Title: ADVANCED FIRING SYSTEM	Articles:	0.450 (		0.761 0	-	0.761 0			
<b>Description:</b> Develops new acquisitions and product improvements to water neutralization of underwater threats to support EOD and MDSU of									
<b>FY 2011 Accomplishments:</b> Tested improvements to the AFS to enhance system effectiveness. Initi Review.	ated Weapons System Explosives Safety								
FY 2012 Plans: Conduct Analysis Of Alternative (AOA). Develop improvements to AFS capabilities.	to increase system performance and								
FY 2013 Base Plans: Continue implementing upgrades in accordance with OPNAV approved performance.	requirements and validate system								
Accompl	ishments/Planned Programs Subtotals	3.536	3.234	4.340	-	4.340			

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0603654N: JT Service Explosive Ordn Dev 1317: EOD Diving System

BA 4: Advanced Component Development & Prototypes (ACD&P)

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

		<b>-</b>	FY 2013	FY 2013	FY 2013					Cost To	
Line Item	FY 2011	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
OPN/0977a: Underwater EOD	8.900	4.800	5.000	0.000	5.000	6.230	6.154	4.000	2.710	0.000	39.994
Program (Cost Code UQ034)											
• 0340: PANMC	0.000	0.679	0.000	0.000	0.000	0.000	0.000	1.593	0.106	0.000	2.594
• OPN/0977b: <i>UW EOD (UQ036)</i>	0.000	1.200	0.000	0.000	0.000	2.000	1.200	1.700	2.400	0.000	8.500

#### D. Acquisition Strategy

Analysis of Alternatives (AOA) studies are always conducted prior to the initiation of new sub-projects. The AOA addresses and emphasizes acquisition strategies of the most cost-effective solution over the sub-projects 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.

#### **E. Performance Metrics**

Research and Develop technologies for the design of Diver Safety Systems, Advanced Diver Integrated Sensors and Advanced Underwater Firing Systems used to render safe, recover, exploit, and dispose of sea limpet mines and unexploded ordnance.

PE 0603654N: JT Service Explosive Ordn Dev

Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

PROJECT

1317: EOD Diving System

**DATE:** February 2012

Product Development	(\$ in Millio	ns)		FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	EODTECHDIV:IH, MD	39.202	0.795	Oct 2011	1.079	Oct 2012	-		1.079	Continuing	Continuing	Continuing
Software Development	WR	EODTECHDIV:IH MD	3.792	0.264	Oct 2011	0.359	Oct 2012	-		0.359	Continuing	Continuing	Continuing
Systems Engineering	WR	EODTECHDIV:IH MD	8.228	-		-		-		-	0.000	8.228	
ILS	WR	EODTECHDIV:IH MD	11.916	-		-		-		-	0.000	11.916	
Systems Engineering	WR	NSWC:Panama City	1.070	0.231	Oct 2011	0.315	Oct 2012	-		0.315	Continuing	Continuing	Continuing
Systems Engineering	WR	SPAWAR:San Diego	2.000	0.461	Oct 2011	0.629	Oct 2012	-		0.629	Continuing	Continuing	Continuing
	Subtotal 66.208			1.751		2.382		-		2.382			

Support (\$ in Millions)		FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support1	C/CPFF	ITT:Arlington VA	3.537	-		-		-		-	0.000	3.537	
Program Management Support2	C/CPFF	ITT:Arlington VA	2.481	0.405	Oct 2011	0.364	Oct 2012	-		0.364	Continuing	Continuing	Continuing
Integrated Logistics Support	WR	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
Configuration Management	WR	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
Technical Data	WR	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
GFE	WR	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
Award Fees	WR	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
		Subtotal	6.018	0.405		0.364		-		0.364			

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev | 1317: EOD Diving System

PROJECT

**DATE:** February 2012

Test and Evaluation (\$ i	Test and Evaluation (\$ in Millions)					FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation	WR	EODTECHDIV:IH MD	5.688	0.692	Oct 2011	0.944	Oct 2012	-		0.944	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	EODTECHDIV:IH MD	1.560	-		-		-		-	0.000	1.560	
		Subtotal	7.248	0.692		0.944		-		0.944			

Management Services	anagement Services (\$ in Millions)					FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	EODTECHDIV:IH MD	8.763	0.312	Oct 2011	0.450	Oct 2012	-		0.450	0.000	9.525	
Miscellaneous	WR	NSWC, Activities:Not Specified	6.773	0.074	Oct 2011	0.200	Oct 2012	-		0.200	0.000	7.047	
Acquisition Workforce Fund	Various	Various:Various	0.013	-		-		-		-	0.000	0.013	
		Subtotal	15.549	0.386		0.650		-		0.650	0.000	16.585	

	Total Prior										Target
	Years			FY	2013	FY:	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	ase	0	CO	Total	Complete	Total Cost	Contract
Project Cost Totals	95.023	3.234		4.340		_		4.340			

Remarks

PE 0603654N: JT Service Explosive Ordn Dev Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	PE 0603654N: JT Service Explosive Ordn Dev	1317: EOD Diving System

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

PROJECT

1317: EOD Diving System

**DATE:** February 2012

### Schedule Details

	Sta	End		
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 1317				
Title: ADVANCED FIRING SYSTEMS	1	2011	4	2017
System Integration/Testing 1	1	2011	4	2012
System Integration/Testing (Continue)	1	2014	2	2014
Production Decision/ECP Approval1	4	2012	4	2012
Production Decision/ECP Approval (Continue) 1	2	2014	2	2014
Production/Fleet Retrofit (Continue) 1	1	2013	4	2013
Production/Fleet Retrofit (Continue) 2	2	2014	4	2017
Title: DIVER SAFETY & LIFE SUPPORT	1	2011	4	2017
System Integration/Testing 2	1	2011	2	2014
Systems Integration/Testing (Continue)	1	2015	4	2017
Production Decision/ECP Approval (Continue) 2	1	2011	1	2011
Production Decision/ECP Approval (Continue) 3	4	2013	4	2013
Production Decision/ECP Approval (Continue)	4	2015	4	2015
Production/Fleet Retrofit (Continue) 3	1	2011	4	2012
Production/Fleet Retrofit (Continue) 4	2	2014	4	2016
Title: ADVANCED DIVER INTEGRATED SENSORS	1	2011	4	2017
System Integration/Testing 3	1	2011	4	2017
Production Decision/ECP Approval (Continue) 5	2	2012	2	2012
Production Decision/ECP Approval (Continue) 6	2	2015	2	2015
Production/Fleet Retrofit 3	1	2011	4	2013
Production/Fleet Retrocit (Continue)	2	2015	4	2017

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-2A, RDT&E Project Ju	stification: Pl	3 2013 Navy	1			DATE: February 2012								
										PROJECT 3177: Joint Counter Radio-Controlled IED Elect Warfare				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost			
3177: Joint Counter Radio- Controlled IED Elec Warfare	0.467	-	-	4.600	4.600	-	-	-	-	0.000	5.067			

### A. Mission Description and Budget Item Justification

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Quantity of RDT&E Articles

Provides for the research, development, for all military services against Radio Controlled Improvised Explosive Devices (RCIED) to prevent initiation. The Navy has been designated as DOD Executive Agent and Single Manager for Military Ground-Based Counter Radio-Controlled Improvised Explosive Electronic Warfare (CREW) Technology by DOD Directive 5101.14 of 11 June 2007, requiring RDT&E to develop capabilities that meet joint requirements. Utilize Joint requirements to provide a system approach for a suite of equipment for mounted, dismounted and fixed site operations. CREW development to make rapid improvements to performance, supportability and affordability.

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	oco	Total
Title: Joint Counter Radio-Controlled IED Elec Warfare	0.467	-	-	-	-
Articles:	0				
FY 2011 Accomplishments:					
Provided development, testing, and evaluation of Joint CREW modeling and simulation efforts and upgrades to Joint CREW tactical decision aids.					
Title: JOINT CREW OCO	-	-	-	4.600	4.600
Articles:			0	0	0
FY 2013 Base Plans:					
N/A					
FY 2013 OCO Plans:					
OCO: JOINT CREW - New techniques and threat loads will be needed to support delivered systems in order					
to address in-theater priority threats, including threat analysis, procurement of test assets, building of threat libraries, etc.					
Accomplishments/Planned Programs Subtotals	0.467	-	-	4.600	4.600

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

N/A

Navy

PE 0603654N: JT Service Explosive Ordn Dev

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			<b>DATE:</b> February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0603654N: JT Service Explosive Ordn Dev	3177: Joint	Counter Radio-Controlled IED Elec
BA 4: Advanced Component Development & Prototypes (ACD&P)		Warfare	
D. A amplettian Otmotom.			

#### D. 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 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

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feasible, production options are included. Procurements across the services will be combined to gain quantity discounts.	
. Performance Metrics	

Gate 6 Milestone B complete 10 Jul 2009; Contract for preliminary design review awarded 01 Oct 2009; Milestone C anticipated Q4 FY11.

PE 0603654N: JT Service Explosive Ordn Dev Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

PROJECT

3177: Joint Counter Radio-Controlled IED Elec

**DATE:** February 2012

Warfare

Product Development (\$ in Millions)				FY 2012			2013 ise	FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware Development	WR	EOD/CRANE:Indian Head, MD/Crane, IN	-	-		-		4.600	Oct 2012	4.600	0.000	4.600	
		Subtotal	-	-		-		4.600		4.600	0.000	4.600	
Total Prior Years Cost			FY:	2012		2013 ise	FY 2		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
		Project Cost Totals	-	-		-		4.600		4.600	0.000	4.600	

Remarks

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-2A, RD1&E Project Just	tification: P	B 2013 Navy	•						DAIE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIV	R-1 ITEM N	NOMENCLA'	TURE		PROJECT						
1319: Research, Development, Test BA 4: Advanced Component Develo		•	,					4023: VSW MCM/Force Protection UUV			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Cost To	Total Cost

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
4023: VSW MCM/Force Protection UUV	4.797	12.485	20.455	-	20.455	16.971	12.169	15.242	15.564	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

Provides for development of affordable expeditionary, unmanned underwater systems to support Explosive Ordnance (EOD). Mobile Diving and Salvage Units, and Very Shallow Water (VSW) and Underwater Mine Countermeasures (UMCM) mission operations. The equipment must be highly portable in order to support the Navy EOD technician to safely approach, render safe, recover, exploit and dispose of underwater explosive threats to include sea mines, limpet mines and unexploded ordnance. Provides support for the Navy's high priority missions of Maritime Homeland Defense, MCM, including clandestine reconnaissance and mine clearance in support of amphibious operations. Development of EOD UUV systems to support localization render-safe and detailed intelligence gathering of UXO including Underwater Improvised Explosive Devices. This project supports the Naval Mine Warfare Certification Plan.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	oco	Total
Title: VSW MCM/Force Protection UUV	4.797	12.485	20.455	-	20.455
Articles:	0	0	0		0
<b>Description:</b> This program supports development, testing and Fleet approval for evolving generations of affordable, expenditionary Unmanned Underwater Vehicles (UUV), support equipment, and Common Operator Interface Navy (COIN) systems to address validated requirements in support of Explosive Ordnance Disposal and VSW UMCM mission areas. Mission areas include: open and confined areas, hulls, piers and pilings to search, classify, map, re-acquire, identify, and neutralize sea and limpet mines and underwater improvised explosive devices.					
FY 2011 Accomplishments:  Continued UUV-N User Operational Evaluation System (UOES) testing and re-validate UUV-N AOA requirements document. Inserted mature technologies and validate systems retrofit upgrades to VSW MCM and BULS UUVs CIP to enhance performance in harsh environments in accordance with ONR technology transition agreements (TTAs). Continued UOES testing and validation of Hull Search Underwater Localization System (HULS) to support requirements re-validation and limited production decision for a preliminary operational capability.					
FY 2012 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603654N: JT Service Explosive Ordn Dev

4023: VSW MCM/Force Protection UUV

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Leverage prior UOES testing and ONR Science and Technology (S&T) investments in standoff neutralization capabilities to initiate 1st increment of UUV-Neutralization (UUV-N) program to develop standoff neutralization capabilities to counter naval mines and other underwater explosive threats. Insert mature technologies and validate system retrofit to UMCM UUV systems as incremental capability improvement packages to enhance performance in harsh environments in accordance with CNO/ONR technology transition agreements. Complete HULS validation testing to support fielding of baseline system. Begin development of technology in support of capability upgrades to UUV systems insertion retrofit to HULS and UUV-N systems as the next increment capability improvement package to enhance performance in complex areas of ship hulls, piers and pilings and other certified areas. Continue to develop Common Operator Interface Navy (COIN).					
FY 2013 Base Plans: Continue to enhance both the HULS and UMCM UUV's with pre-planned product improvements to meet approved OPNAV operational requirements. UOES and RDT&E will be used to validate operational capabilities.					
Accomplishments/Planned Programs Subtotals	4.797	12.485	20.455	_	20.455

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

			FY 2013	FY 2013	FY 2013					Cost To	
Line Item	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
OPN/0977: Underwater EOD	1.000	6.271	17.874	0.000	17.874	13.640	12.078	23.786	25.231	0.000	107.230
Program (Cost Code UQ034)											

### **D. Acquisition Strategy**

Navy

Analysis of Alternatives (AOA) studies are always conducted prior to the initiation of new sub-projects. The AOA addresses and emphasizes acquisitions strategies of the most cost-effective solution over the sub-projects' 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 (UOES) effort involving Fleet operators engaged in tactical experimentation with prototype UUVs prior to fielding baseline systems and capability improvement package increments. These UUV operators also participate in detailed requirements analyses and definition. Operational capabilities with UUV have been realized at designated operational units, with a competitive acquisition strategy. The addition of enhanced capabilities through an evolutionary acquisition approach to the UUV toolbox is programmed for delivery in accordance with approved CNO requirements and ONR TTAs. Further improvements to the toolbox to add basic mine and underwater explosive threats neutralization capabilities will be pursued.

PE 0603654N: JT Service Explosive Ordn Dev

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603654N: JT Service Explosive Ordn Dev	PROJECT 4023: VSW MCM/Force Protection UUV		
E. Performance Metrics  Research and Develop technologies for the design of Unmanned Und and unexploded ordnance.	erwater Systems to provide enhanced fleet capab	ilities to locate, classify, and neutralized mines		

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

**DATE**: February 2012

PROJECT

4023: VSW MCM/Force Protection UUV

Product Development	oduct Development (\$ in Millions)		FY 2012		FY 2 Ba	2013 se	FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	WR	Multiple Activites:Not Specified	-	5.700	Oct 2011	5.159	Oct 2012	-		5.159	0.000	10.859	
Systems Engineering	WR	NSWC, Activities:Not Specified	-	2.153	Oct 2011	4.858	Oct 2012	-		4.858	0.000	7.011	
Primary Hardware Development	WR	EODTECHDIV:IH, MD	16.238	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering	WR	EODTECHDIV:IH, MD	11.026	0.236	Oct 2011	3.500	Oct 2012	-		3.500	Continuing	Continuing	Continuing
		Subtotal	27.264	8.089		13.517		-		13.517			

Support (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Support	C/CPFF	ITT:ARLINGTON, VA	3.641	0.432	Oct 2011	0.450	Oct 2012	-		0.450	Continuing	Continuing	Continuing
		Subtotal	3.641	0.432		0.450		-		0.450			

Test and Evaluation (\$ in Millions)			FY 2012			2013 Base		FY 2013 OCO					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	Multiple Activities:Not Specified	-	2.546	Oct 2011	3.700	Oct 2012	-		3.700	0.000	6.246	
Operational Test & Evaluation	WR	NSWC, Activities:Not Specified	-	0.200	Oct 2011	0.900	Oct 2012	-		0.900	0.000	1.100	
Developmental Test & Evaluation	WR	EODTECHDIV:IH, MD	6.646	0.200	Oct 2011	0.800	Oct 2012	-		0.800	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	EODTECHDIV:IH, MD	1.424	-	Oct 2011	-		-		-	Continuing	Continuing	Continuing
		Subtotal	8.070	2.946		5.400		-		5.400			

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603654N: JT Service Explosive Ordn Dev

PROJECT

4023: VSW MCM/Force Protection UUV

**DATE:** February 2012

Management Services (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	EODTECHDIV:IH, MD	1.843	0.618	Oct 2011	0.555	Oct 2012	-		0.555	Continuing	Continuing	Continuing
Miscellaneous	WR	NSWC, Activities:Not Specified	1.143	0.400	Oct 2011	0.533	Oct 2012	-		0.533	Continuing	Continuing	Continuing
DAWDF	Various	Not Specified:Not Specified	0.018	-		-		-		-	0.000	0.018	
		Subtotal	3.004	1.018		1.088		-		1.088			
			Total Prior Years Cost	FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	41.979	12.485		20.455		-		20.455			

Remarks

PE 0603654N: JT Service Explosive Ordn Dev Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
1319: Research, Development, Test & Evaluation, Navy	PE 0603654N: JT Service Explosive Ordn Dev	4023: VSW MCM/Force Protection UUV		
BA 4: Advanced Component Development & Prototypes (ACD&P)				

PE 0603654N: *JT Service Explosive Ordn Dev* Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

R-1 ITEM NOMENCLATURE PROJECT

**DATE:** February 2012

1319: Research, Development, Test & Evaluation, Navy

4023: VSW MCM/Force Protection UUV PE 0603654N: JT Service Explosive Ordn Dev BA 4: Advanced Component Development & Prototypes (ACD&P)

### Schedule Details

	Sta	End		
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 4023				
3RD GENERATION (NEUTRALIZATION)	1	2011	3	2017
Revalidate AOA	4	2011	4	2011
Requirements Validation	1	2011	2	2012
Development	3	2012	1	2016
Testing Final 1	1	2016	3	2017
Production Decision (Limited) 1	3	2017	3	2017
Title: 4th GENERATION (SEARCH-CLASSIFY & ID)	1	2012	3	2017
Test & Evaluation	1	2012	4	2016
Production/Retrofit Decision1	2	2012	2	2012
Production/Retrofit Decision2	2	2013	2	2013
Production/Retrofit Decision3	2	2014	2	2014
Production/Retrofit Decision4	2	2015	2	2015
Production/Retrofit Decision5	2	2016	2	2016
Production Decision	3	2017	3	2017
Title: HULS	1	2011	4	2017
UOES Operational Eval System	1	2011	4	2017
Revalidate Requirements	4	2011	2	2012
Testing Final	4	2011	2	2013
Production Decision (Limited)	2	2012	2	2012
Preliminary Engineering Change Proposal (PECP) - A	2	2012	2	2014
ECP Approval/Fleet Retrofits - A	3	2014	4	2015

PE 0603654N: JT Service Explosive Ordn Dev Navy

APPROPRIATION/BUDGET ACTIVITY

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0603654N: JT Service Explosive Ordn Dev 4023: VSW MCM/Force Protection UUV

BA 4: Advanced Component Development & Prototypes (ACD&P)

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Preliminary Engineering Change Proposal (PECP) - B	4	2014	4	2016
ECP Approval/Fleet Retrofits - B	1	2017	4	2017
INCREMENTAL CIP	1	2011	4	2017