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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604653N: JT Cntr Radio Controlled IED Elec War (JCREW)

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

,	, , , , , , , , , , , , , , , , , , , ,										
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	68.421	62.044	71.300	-	71.300	27.600	-	-	-	0.000	229.365
3177: Joint Counter Radio- Controlled IED Elec Warfare	56.621	62.044	71.300	-	71.300	27.600	-	-	-	0.000	217.565
9999: Congressional Adds	11.800	-	-	-	-	-	-	-	-	0.000	11.800

#### Note

A Memorandum of Understanding (MOU) will be developed to detail the transition of JCREW Executive Agent responsibilities to the Army.

### A. Mission Description and Budget Item Justification

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

UNCLASSIFIED

PE 0604653N: JT Cntr Radio Controlled IED Elec War (JCREW)

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 0604653N: JT Cntr Radio Controlled IED Elec War (JCREW)

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	56.542	62.044	71.284	-	71.284
Current President's Budget	68.421	62.044	71.300	-	71.300
Total Adjustments	11.879	-	0.016	-	0.016
Congressional General Reductions	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
Congressional Directed Transfers	-	-			
<ul> <li>Reprogrammings</li> </ul>	8.500	-			
SBIR/STTR Transfer	-1.865	-			
Program Adjustments	11.800	-	0.014	-	0.014
Rate/Misc Adjustments	-	-	0.002	-	0.002
Congressional General Reductions	-0.256	-	-	-	-
Adjustments					
Congressional Directed Reductions     Adjustments	-6.300	-	-	-	-

## Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: Congressional Adds

Congressional Add: Joint Counter Radio-Controlled IED Elec Warfare - Cong

	FY 2011	FY 2012
	11.800	-
Congressional Add Subtotals for Project: 9999	11.800	-
Congressional Add Totals for all Projects	11.800	-

**Change Summary Explanation** 

Technical: Not applicable.

Schedule: Not applicable.

**UNCLASSIFIED** 

Page 2 of 9

R-1 Line #78

Exhibit R-2A, RDT&E Project Just	stification: Pl	3 2013 Navy	,				DATE: February 2012				
APPROPRIATION/BUDGET ACT 1319: Research, Development, Te BA 4: Advanced Component Deve			<b>TURE</b> Radio Contro	PROJECT 3177: Joint Warfare	3177: Joint Counter Radio-Controlled IED Elec						
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	56.621	62.044	71.300	-	71.300	27.600	-	-	-	0.000	217.565
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

## A. Mission Description and Budget Item Justification

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

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Joint Counter Radio-Controlled IED Elec Warfare	56.621	62.044	71.300
Articles:	0	0	0
<b>Description:</b> Defines the effort required for the design, engineering, development, fabrication and test of contractor's development models for in-house verification and validation for governmental developmental testing for JCREW System of Systems (SoS) to include the System Development and Demonstration (SD&D) Phase. The JCREW SoS approach includes three distinct capabilities that shall be developed and will utilize common component, software, and hardware solutions for an open, flexible, and compatible system design approach that is modular. These capabilities are: mobile dismounted operations, mobile ground, and waterborne transport and combat systems (mounted) and semi-permanent geographical area (fixed) systems. All capabilities will have coalition sharing capabilities. Multiple awards will be made for all capabilities.			
FY 2011 Accomplishments: Fabrication and testing of Engineering Development Models (EDMs) for the Joint Counter Radio Controlled IED Electronic Warfare (JCREW) program.			
FY 2012 Plans: Successfully complete MS C ILA; successful Limited User Test and MS C decision.			
FY 2013 Plans:			
	. '		

UNCLASSIFIED
Page 3 of 9

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 0604653N: JT Cntr Radio Controlled IED	3177: Joint Counter Radio-Controlled IED Elec
BA 4: Advanced Component Development & Prototypes (ACD&P)	Elec War (JCREW)	Warfare

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Government developmental test; Initial Operational Test and Evaluation (IOT&E); Full Rate Production Decision; start of Engineering Manufacturing Development (EDM) contract to develop I1B2.			
Accomplishments/Planned Programs Subtotals	56.621	62.044	71.300

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

PE 0604653N: JT Cntr Radio Controlled IED Elec War (JCREW)

			FY 2013	FY 2013	FY 2013					Cost To	
<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: Explosive Ordnance	0.000	61.134	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	61.134
Disposal Equip											

### **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. At significant decision points, the AOA will be re-validated or updated to reflect changes in technology and threat. 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. Procurements across the services may be combined to gain quantity discounts.

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

Gate 6 Milestone B complete 10 Jul 2009; Contract for Preliminary Design Review (PDR) awarded 01 Oct 2009; achieved successful Preliminary Design Reviews (PDRs) April 2010; achieved successful Critical Design Review (CDR) Oct 2010; Milestone C anticipated in Q3 FY12.

UNCLASSIFIED

R-1 Line #78

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 0604653N: JT Cntr Radio Controlled IED

Elec War (JCREW)

**DATE:** February 2012

PROJECT

3177: Joint Counter Radio-Controlled IED Elec Warfare

Product Development	Product Development (\$ in Millions)				FY 2012		FY 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
Primary Hardware Development	Various	ITT:New Jersey	19.992	4.219	Oct 2011	6.500	Nov 2012	-		6.500	0.000	30.711	Continuing
Software Development	Various	ITT:New Jersey	18.216	2.810	Oct 2011	7.994	Nov 2012	-		7.994	0.000	29.020	Continuing
Systems Engineering	Various	ITT:New Jersey	13.300	1.100	Nov 2011	1.800	Nov 2012	-		1.800	0.000	16.200	Continuing
ILS	Various	ITT:New Jersey	4.410	1.200	Nov 2011	1.500	Nov 2012	-		1.500	0.000	7.110	Continuing
System Integration	Various	ITT:New Jersey	5.530	2.400	Nov 2011	2.800	Nov 2012	-		2.800	0.000	10.730	Continuing
Loadset Development	Various	ITT:New Jersey	3.700	0.500	Nov 2011	1.000	Nov 2012	-		1.000	0.000	5.200	Continuing
		Subtotal	65.148	12.229		21.594		-		21.594	0.000	98.971	

#### Remarks

Contract type is hybrid CPIF and CPAF.

Support (\$ in Millions)	upport (\$ 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
Loadset Development	FFRDC	JHU/APL:Laurel, MD	0.030	2.998	Nov 2011	1.200	Nov 2012	-		1.200	0.000	4.228	Continuing
Systems Engineering	WR	NSWC:Various	-	2.424	Nov 2011	8.000	Nov 2012	-		8.000	0.000	10.424	Continuing
Program Management Support	WR	NAVEODTECHDIV:India Head, MD	n 7.710	3.720	Nov 2011	3.000	Nov 2012	-		3.000	0.000	14.430	Continuing
System Integration	WR	NSWC:Various	-	1.938	Nov 2011	2.200	Nov 2012	-		2.200	0.000	4.138	Continuing
Training Development	C/CPFF	SDI, GOV'T SOLUTIONS:LaPlata, MD	1.370	3.033	Nov 2011	1.300	Nov 2012	-		1.300	0.000	5.703	Continuing
Integrated Logistics Support	WR	NSWC:Various	1.000	8.383	Nov 2011	1.200	Nov 2012	-		1.200	0.000	10.583	Continuing
Techniques Development	WR	NSWC:Various	-	-		-	Nov 2012	-		-	0.000	0.000	4.600
Configuration Management	WR	NSWC:Various	2.200	1.446	Nov 2011	1.500	Nov 2012	-		1.500	0.000	5.146	Continuing
Technical Data	WR	NSWC:Various	2.750	2.831	Nov 2011	1.200	Nov 2012	-		1.200	0.000	6.781	Continuing
		Subtotal	15.060	26.773		19.600		-		19.600	0.000	61.433	

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 0604653N: JT Cntr Radio Controlled IED

Elec War (JCREW)

**DATE:** February 2012

PROJECT

3177: Joint Counter Radio-Controlled IED Elec

Warfare

Test and Evaluation (\$ i	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
Development Test & Evaluation	WR	NSWC:Various	16.160	11.000	Nov 2011	7.492	Oct 2012	-		7.492	0.000	34.652	Continuing
Operational Test & Evaluation	MIPR	ATEC:Arlington, VA	2.190	5.800	Mar 2012	14.250	Oct 2012	-		14.250	0.000	22.240	Continuing
		Subtotal	18.350	16.800		21.742		-		21.742	0.000	56.892	

Management Services (\$ in Millions)					FY 2012		FY 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
Program Management Support	C/CPFF	CACI:Fairfax, VA	8.720	4.470	Nov 2011	4.000	Nov 2012	-		4.000	0.000	17.190	Continuing
Miscellaneous	WR	NSWC:Various	3.010	1.772	Nov 2011	4.364	Nov 2012	-		4.364	0.000	9.146	Continuing
	<b>Subtotal</b> 11.730					8.364		-		8.364	0.000	26.336	

5 33 55 55											
	Total Prior Years Cost	FY 20	12	FY 2 Ba		FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	110.288	62.044		71.300		-		71.300	0.000	243.632	

Remarks

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 0604653N: JT Cntr Radio Controlled IED	3177: Joint Counter Radio-Controlled IED Elec			
BA 4: Advanced Component Development & Prototypes (ACD&P)	Elec War (JCREW)	Warfare			

PE 0604653N: *JT Cntr Radio Controlled IED Elec War (JCREW)* Navy

UNCLASSIFIED
Page 7 of 9

**DATE:** February 2012 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 0604653N: JT Cntr Radio Controlled IED

3177: Joint Counter Radio-Controlled IED Elec BA 4: Advanced Component Development & Prototypes (ACD&P) Elec War (JCREW) Warfare

## Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 3177					
JCREW I1B1	1	2011	1	2013	
System Development & Demonstration (Increment I)	1	2011	2	2012	
JCREW Tactical Decision Aid Development (Increment 1)	1	2011	2	2012	
JCREW System Demonstration, Test and Eval of TDA	1	2011	1	2013	
Developmental Testing/Operational Assessment	2	2011	2	2012	
Developmental Testing/Operational Testing	2	2011	4	2012	
Milestone C (I1B1)	3	2012	3	2012	
LRIP (I1B1) (OPN)	3	2012	2	2014	
JCREW I1B2	1	2012	4	2014	
Technology Development	1	2012	4	2012	
Tech Readiness Assessment and Performance Specification Development	1	2012	3	2013	
System Engineering & Manufacturing Demonstration	1	2013	4	2014	
JCREW Tactical Decision Aid Development (Increment 2)	1	2013	1	2014	
JCREW System Demonstration, Test & Eval of TDA	2	2012	4	2014	

**DATE:** February 2012 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 0604653N: JT Cntr Radio Controlled IED 9999: Congressional Adds BA 4: Advanced Component Development & Prototypes (ACD&P) Elec War (JCREW)

0007 (0: 14:11:			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
9999: Congressional Adds	11.800	-	-	-	-	-	-	-	-	0.000	11.800
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

## A. Mission Description and Budget Item Justification

Congressional Add for Network Enabled Electronic Warfare.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012
Congressional Add: Joint Counter Radio-Controlled IED Elec Warfare - Cong	11.800	-
FY 2011 Accomplishments: Technology development and risk mitigation for multi functional electronic warfare capabilities: Design, develop, and evaluate a system concept for the Network Enabled Electronic Warfare System (NEEWS). The purpose of NEEWS is to collect and analyze information derived from current tactical sensors and electronic warfare systems; distribute it to tactical EWOs, EOD engineer, intelligence, and maneuver units to provide enhanced real time situation awareness for CREW and other electronic warfare systems.		
Congressional Adds Subtotals	11.800	_

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

N/A

# D. Acquisition Strategy

N/A

## **E. Performance Metrics**

N/A

**UNCLASSIFIED** Page 9 of 9