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

R-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy

PE 0604727N: Joint Standoff Weapon Systems

BA 5: Development & Demonstration (SDD)

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	12.503	7.506	5.518	-	5.518	0.444	0.426	0.428	0.451	3.000	30.276
2068: Joint Standoff Weapon (JSOW)	12.503	7.506	5.518	-	5.518	0.444	0.426	0.428	0.451	3.000	30.276

A. Mission Description and Budget Item Justification

The Joint Standoff Weapon (JSOW) is an air-to-ground weapon designed to attack a variety of targets during day, night and adverse weather conditions. JSOW will enhance aircraft survivability as compared to current interdiction weapon systems by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems. The JSOW launch-and-leave capability will allow several target kills per aircraft sortie. The JSOW program first developed a baseline weapon for use against fixed area targets. JSOW is a Navy-led joint Navy/Air Force program.

The JSOW Baseline (AGM-154A) variant includes a kinematically efficient airframe, an integrated Inertial/Global Positioning System navigation capability, and a BLU-97/B or BLU-111 payload. This weapon was designed up front for pre-planned product improvements. Procurement of JSOW-A in the FYDP is deferred pending a fix to the Unexploded Ordnance issue or a change in the inventory levels. The JSOW BLU-108 (AGM-154B) variant incorporates the Sensor Fuze Weapon submunition (BLU-108) into the baseline vehicle. Planned production of the JSOW/BLU-108 is deferred pending a change in the threat. The JSOW Unitary (AGM-154C) variant has a terminal seeker, Autonomous Target Acquisition capability, and a Broach lethal package to enable the attack of blast/fragmentation and penetration type targets. The JSOW Unitary provides increased accuracy and lethality and the capability for aimpoint selection. Operational Testing of the JSOW-C was successfully completed in December 2004. Approval for Milestone-III/Full Rate Production was granted on 20 December 2004. JSOW-C Initial Operational Capability was achieved in February 2005.

FY 2011-2013 includes funding for development, integration, qualification and follow-on developmental and operational test and evaluation of a Network Enabled Weapon moving maritime target capability into the JSOW Unitary weapon (AGM-154C-1). The moving maritime target capability is currently being integrated as an Engineering Change Proposal beginning with FY 2009 procured JSOW-C weapons. The new AGM-154C-1 capability will enable the weapon to be integrated with the network and attack sea moving maritime targets via real-time pre-and post-launch targeting updates. JSOW will continue to conduct analysis and development of solutions to system integration challenges, and continual enhancement of warfighter effectiveness in the employment of the JSOW weapon system. In addition, FY 2011-2013 includes funding to integrate new functionality of the Common Unique Planning Component into the Joint Mission Planning Systems and Precision Guided Munitions Planning System.

JSOW utilizes a "common truck" for both AGM-154A and AGM-154C variants. Through adherence to international standards for weapons interfaces, weight, and dimension considerations, JSOW is compatible with Air Force and NATO aircraft.

Navy

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DATE: February 2012

PE 0604727N: Joint Standoff Weapon Systems

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

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604727N: Joint Standoff Weapon Systems

DATE: February 2012

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	12.567	7.506	0.498	-	0.498
Current President's Budget	12.503	7.506	5.518	-	5.518
Total Adjustments	-0.064	-	5.020	-	5.020
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	_			
 Congressional Rescissions 	-	_			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
 Program Adjustments 	-	-	4.996	-	4.996
 Rate/Misc Adjustments 	-	-	0.024	-	0.024
 Congressional General Reductions 	-0.064	_	-	-	-
Adjustments					

Change Summary Explanation

Technical: Not applicable.

Schedule:

- (1) JSOW FRP-6 deliveries changed from starting 4Q FY 2011 to 1Q FY 2011 due to change in delivery schedule of GFE materials to prime contractor.
- (2) JSOW FRP-7 deliveries changed from starting 3Q FY 2012 to 4Q FY 2012 due to change in delivery schedule of GFE materials to prime contractor.
- (3) JSOW FRP-8 deliveries changed from starting 3Q FY 2013 to 4Q FY 2013 due to change in delivery schedule of GFE materials to prime contractor.

Exhibit R-2A, RD I &E Project Justif	rication: PE	3 2013 Navy	•					DATE: February 2012					
APPROPRIATION/BUDGET ACTIVIT 1319: Research, Development, Test & BA 5: Development & Demonstration	ment, Test & Evaluation, Navy monstration (SDD)				IOMENCLA 7N: Joint Sta		on Systems	PROJECT 2068: Joint Standoff Weapon (JSOW)					
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	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
2068: Joint Standoff Weapon (JSOW)	12.503	7.506	5.518	-	5.518	0.444	0.426	0.428	0.451	3.000	30.276
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Fullibit D.O.A. DDTOF Businest bustifications DD 0040 Name

Includes RDT&E funds for the development of a weapon to be employed by aircraft to attack targets during day, night, and adverse weather conditions. The Joint Standoff Weapon System (JSOW) design will capitalize on aircraft sensor capabilities and minimize individual weapon sophistication, reducing unit cost and provides a significant increase in strike warfare capability. Excludes civilian and military manpower and their related costs and military construction costs which are included in appropriate management and support elements in this program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Network Enabled Weapon (NEW)	12.328	7.337	5.420
Artic	les:	0	0
Description: Develop and integrate the NEW moving maritime target capability into JSOW-C, termed AGM-154C-1.			
FY 2011 Accomplishments:			
Continued weapon qualification and follow-on Developmental/Operational Test (DT/OT) efforts.			
FY 2012 Plans:			
Includes funding to continue weapon qualification and follow-on DT/OT efforts.			
FY 2013 Plans:			
Includes funding to complete weapon qualification and follow-on Operational Test efforts.			_
Title: JSOW Common Unique Planning Component (CUPC)	0.175	0.169	0.098
Artic	les:	0	0
Description: Plan new functions into the JSOW maritime CUPC and develop new software releases. Address new mission			
planning functionality related to the incorporation of the NEW moving target capability into the JSOW-C-1 weapons.			
FY 2011 Accomplishments:			
Began interoperability efforts for JSOW C-1.			
FY 2012 Plans:			
	ı	1	

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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 0604727N: Joint Standoff Weapon Systems	2068: Joint	Standoff Weapon (JSOW)						
BA 5: Development & Demonstration (SDD)									

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) Continue interoperability efforts for JSOW C-1.	FY 2011	FY 2012	FY 2013
FY 2013 Plans:			
Continue interoperability efforts for JSOW C-1.			
Accomplishments/Planned Programs Subtotals	12.503	7.506	5.518

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

			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	Complete	Total Cost
 USN WP,N BLI 223000: JSOW 	128.946	131.722	127.609	0.000	127.609	150.439	169.781	172.185	175.188	1,229.756	3,938.276

D. Acquisition Strategy

The contracting strategy for JSOW is planned to be sole source for the life of the program. Cost type contracts are utilized for the Engineering and Manufacturing Development and follow-on modification program (i.e., Block II (AGM-154C), AGM-154C-1) efforts. Component breakout is used, when possible, to promote full and open competition.

Fixed price type contracts are utilized for production.

E. Performance Metrics

The JSOW C-1 program is meeting the cost schedule, performance, funding and life cycle sustainment in accordance with the Acquisition Program Baseline.

PE 0604727N: Joint Standoff Weapon Systems 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 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604727N: Joint Standoff Weapon Systems 2068: Joint Standoff Weapon (JSOW)

PROJECT

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-NEW	SS/CPFF	Raytheon Systems:Tucson, AZ	76.904	3.338	Nov 2011	-		-		-	0.000	80.242	83.730
System Engineering	MIPR	National Security Agency:Maryland	0.699	0.359	Jun 2012	0.111	Jun 2013	-		0.111	0.000	1.169	1.169
System Engineering	WR	Naval Research Lab:Maryland	0.945	0.140	May 2012	0.143	May 2013	-		0.143	0.000	1.228	
System Engineering	WR	NAWCWD:China Lake, CA	109.068	1.000	Nov 2011	0.322	Nov 2012	-		0.322	0.000	110.390	
Prior year cost no longer funded in the FYDP	Various	Various:Various	601.305	-		-		-		-	0.000	601.305	
		Subtotal	788.921	4.837		0.576		-		0.576	0.000	794.334	

Remarks

- (1) The target value of the contract exceeds the JSOW funding because the Harpoon Block III (PE0604227N PU1843) program shares a portion of the Strike Common Weapons Data Link (SCWDL) development costs.
- (2) National Security Agency (NSA) funding was added for systems engineering support in FY13 as a result of the continued support that is needed for the integration of cryptographic keys through JSOW C-1 IOC.
- (3) National Research Laboratory (NRL) funding was added for systems engineering in FY13 as a result of the need for continued JSOW C-1 Network Enabled Weapon support through the OT phase of the program.

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
Software Development -JMPS	SS/CPFF	Raytheon Systems:Tucson, AZ	5.620	0.169	Dec 2011	0.098	Dec 2012	-		0.098	5.176	11.063	11.063
Prior year cost no longer funded in the FYDP	Various	Various:Various	8.007	-		-		-		-	0.000	8.007	
		Subtotal	13.627	0.169		0.098		-		0.098	5.176	19.070	

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

APPROPRIATION/BUDGET ACTIVITY

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

DATE: February 2012 PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604727N: Joint Standoff Weapon Systems 2068: Joint Standoff Weapon (JSOW)

Test and Evaluation (\$	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
Int Test and Evaluation	WR	NAWCWD:China Lake, CA	30.646	2.500	Nov 2011	-		-		-	0.000	33.146	
Oper Test and Evaluation	WR	COMOPTEVFOR:Norfoll VA	^{(,} 10.815	-		4.844	Nov 2012	-		4.844	0.000	15.659	
		Subtotal	41.461	2.500		4.844		-		4.844	0.000	48.805	

Management Services	Management Services (\$ in Millions)						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
Prior year cost no longer funded in the FYDP	Various	Various:Various	25.504	-		-		-		-	0.000	25.504	
		Subtotal	25.504	-		-		-		-	0.000	25.504	

	Total Prior										Target
	Years			FY	2013	FY:	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	ise	0	co	Total	Complete	Total Cost	Contract
Project Cost Totals	869.513	7.506		5.518		_		5.518	5.176	887.713	

Remarks

PE 0604727N: Joint Standoff Weapon Systems 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 0604727N: Joint Standoff Weapon Systems	
BA 5: Development & Demonstration (SDD)		

PE 0604727N: Joint Standoff Weapon Systems Navy

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

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604727N: Joint Standoff Weapon Systems | 2068: Joint Standoff Weapon (JSOW)

BA 5: Development & Demonstration (SDD)

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Joint Standoff Weapon					
Acquisition Milestones: Milestones: Inital Operational Capability C-1	3	2013	3	2013	
Systems Development: Software Development: Network Enabled Weapon/Moving Target/AGM-154C-1 Design/Integration/Qual	1	2011	4	2012	
Systems Development: Reviews: Operational Test Readiness Review	4	2012	4	2012	
Test and Evaluation: Development Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Development Test (DT-I)	1	2011	4	2011	
Test and Evaluation: Development Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Development Test Final Qualification Test (DT-1)	3	2011	3	2011	
Test and Evaluation: Development Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Development Test (DT-II)	3	2011	1	2012	
Test and Evaluation: Development Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Development Test Final Qualification Test (DT-II)	1	2012	1	2012	
Test and Evaluation: Integrated Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Integrated Test (IT-I)	1	2012	2	2012	
Test and Evaluation: Integrated Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Integrated Test (IT-II)	1	2012	3	2012	
Test and Evaluation: Integrated Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Integrated Test (IT-III)	2	2012	3	2012	
Test and Evaluation: Integrated Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Integrated Test (IT-IIII)	3	2012	4	2012	
Test and Evaluation: Operational Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Development Test (OT-IIIB)	1	2013	2	2013	
Test and Evaluation: Operational Test and Evaluation: AGM-154C-1 JSOW Operational Test Agency Follow-On Evaluation Report OT-IIIB Final Report	2	2013	2	2013	

PE 0604727N: Joint Standoff Weapon Systems Navy

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

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604727N: Joint Standoff Weapon Systems 2068: Joint Standoff Weapon (JSOW)

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Production Milestones: Contract Awards: FRP Award AGM-154C FRP-7	4	2011	4	2011	
Production Milestones: Contract Awards: FRP Award AGM-154C FRP-8	1	2012	1	2012	
Production Milestones: Contract Awards: FRP Award AGM-154C FRP-9	2	2013	2	2013	
Deliveries: FRP-5 Deliveries- AGM-154C-1	1	2011	4	2011	
Deliveries: FRP-6 Deliveries- AGM-154C-1	1	2012	3	2012	
Deliveries: FRP-7 Deliveries- AGM-154C-1	4	2012	3	2013	
Deliveries: FRP-8 Deliveries- AGM-154C-1	4	2013	2	2014	
Deliveries: FRP-9 Deliveries- AGM-154C-1	3	2014	2	2015	