Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy											Date: February 2015	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604727N *I Joint Standoff Weapon Systems*							
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	892.257	0.434	4.400	0.405	-	0.405	0.429	0.433	0.442	0.451	3.417	902.668
2068: *Joint Standoff Weapon (JSOW)*	892.257	0.434	4.400	0.405	-	0.405	0.429	0.433	0.442	0.451	3.417	902.668
Program MDAP/MAIS Code: 766												

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 Future Years Defense Plan 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 2014-2016 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. JSOW funding will provide enhancements to include the analysis of extended range and future improvements to the JSOW-C configuration to improve capability. In addition, FY 2014-2016 includes funding to integrate new functionality of the Common Unique Planning Component into the joint mission planning systems and precision guided munitions planning system. In FY 2016, the program will transition to software improvement/integration and interoperability following the completion of efforts associated with Operational Testing in FY 2015.

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 North Atlantic Treaty Organization aircraft.

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy	Date: February 2015
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604727N *I Joint Standoff Weapon Systems*

This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

Note: Cost To Complete should be 3.943; Total Cost should be 903.194.

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	0.442	4.400	0.409	-	0.409
Current President's Budget	0.434	4.400	0.405	-	0.405
Total Adjustments	-0.008	-	-0.004	-	-0.004
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.008	-			
• Rate/Misc Adjustments	-	-	-0.004	-	-0.004

Change Summary Explanation

Integrated Test IT-V and IT-VI were changed from 2QFY14 to 3QFY14 and 4QFY14 , respectively, in order to align the JSOW C-1 with the F/A-18 H10 Operational Flight Program.

JSOW C-1 IOC was moved from 3QFY15 to 2QFY16.

JSOW C-1 OTRR was changed from 4QFY14 to 2QFY15.

JSOW Software Development: Integration and Interoperability was changed from 2QFY16 to 1QFY16.

FRP10 delivery was updated from 3QFY15 to 4QFY15 to reflect contractual delivery schedule.

FRP11 award was changed from 1QFY15 to 2QFY15; first delivery was changed accordingly, from 3QFY16 to 4QFY16.

FRP12 award was removed as a result of production deferral following FY15 procurement.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604727N / *Joint Standoff Weapon Systems*	Project (Number/Name) 2068 / *Joint Standoff Weapon (JSOW)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
2068: *Joint Standoff Weapon (JSOW)*	892.257	0.434	4.400	0.405	-	0.405	0.429	0.433	0.442	0.451	3.417	902.668
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Provides funds for the development of a weapon to be employed by aircraft to attack targets during day, night, and adverse weather conditions. The 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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Network Enabled Weapon (NEW)	0.434	4.199	0.218	-	0.218
Articles:	-	-	-	-	-
Description: Develop and integrate the NEW moving maritime target capability into JSOW-C, termed AGM-154C-1. ***FY 2014 Accomplishments:*** Continued weapon qualification and follow-on OT efforts and continue support for software integration associated with future obsolescence, software improvements, and regression testing on NEW moving maritime target capability. ***FY 2015 Plans:*** Complete weapon qualification and follow-on OT efforts and continue support for software integration associated with future obsolescence, software improvements, and regression testing on NEW moving maritime target capability. ***FY 2016 Base Plans:*** Continue support for software integration associated with future obsolescence, software improvements, and regression testing on NEW moving maritime target capability. ***FY 2016 OCO Plans:*** N/A					
Title: JSOW Common Unique Planning Component (CUPC)	-	0.201	0.187	-	0.187

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604727N / *Joint Standoff Weapon Systems*	**Project (Number/Name)** 2068 / *Joint Standoff Weapon (JSOW)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Articles:	-	-	-	-	-
Description: Incorporates mission planning 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 2014 Accomplishments:*** Continued interoperability efforts for JSOW C-1. ***FY 2015 Plans:*** Continue interoperability efforts for JSOW C-1. ***FY 2016 Base Plans:*** Continue interoperability efforts for JSOW C-1. ***FY 2016 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	0.434	4.400	0.405	-	0.405

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• USN WP,N BLI 223000: *JSOW*	117.594	108.159	21.419	-	21.419	2.800	6.400	1.200	-	1,935.627	4,222.110

Remarks

FY15 Office of the Secretary of Defense Minimum Sustaining Rate production deferral beginning FY16 assumes substantial FMS JSOW C buy.

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604727N / *Joint Standoff Weapon Systems*	**Project (Number/Name)** 2068 / *Joint Standoff Weapon (JSOW)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	MIPR	National Security Agency : Fort Meade, MD	0.995	0.062	Apr 2014	0.109	Jan 2015	0.137	Dec 2015	-		0.137	-	1.303	-
Prior year Prod Dev cost no longer funded in the FYDP	Various	Various : Various	802.617	-		-		-		-		-	-	802.617	-
		Subtotal	803.612	0.062		0.109		0.137		-		0.137	-	803.920	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development - JMPS	SS/CPFF	Lockheed Martin Systems Integration : King of Prussia, PA	5.718	-		0.201	Feb 2015	0.187	Dec 2015	-		0.187	5.698	11.804	11.804
Prior year Support cost no longer funded in the FYDP	Various	Various : Various	8.007	-		-		-		-		-	-	8.007	-
		Subtotal	13.725	-		0.201		0.187		-		0.187	5.698	19.811	-

Remarks

(1) Funding in previous years was sent to Raytheon Systems. In FY13 a new contract was awarded with Lockheed Martin Systems Integration.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Int Test and Evaluation	WR	NAWCWD : China Lake, CA	33.662	0.372	Nov 2013	-		-		-		-	-	34.034	-
Oper Test and Evaluation	WR	COMOPTEVFOR : Norfolk, VA	15.754	-		4.090	Oct 2014	0.081	Oct 2015	-		0.081	-	19.925	-
		Subtotal	49.416	0.372		4.090		0.081		-		0.081	-	53.959	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604727N / *Joint Standoff Weapon Systems*	**Project (Number/Name)** 2068 / *Joint Standoff Weapon (JSOW)*

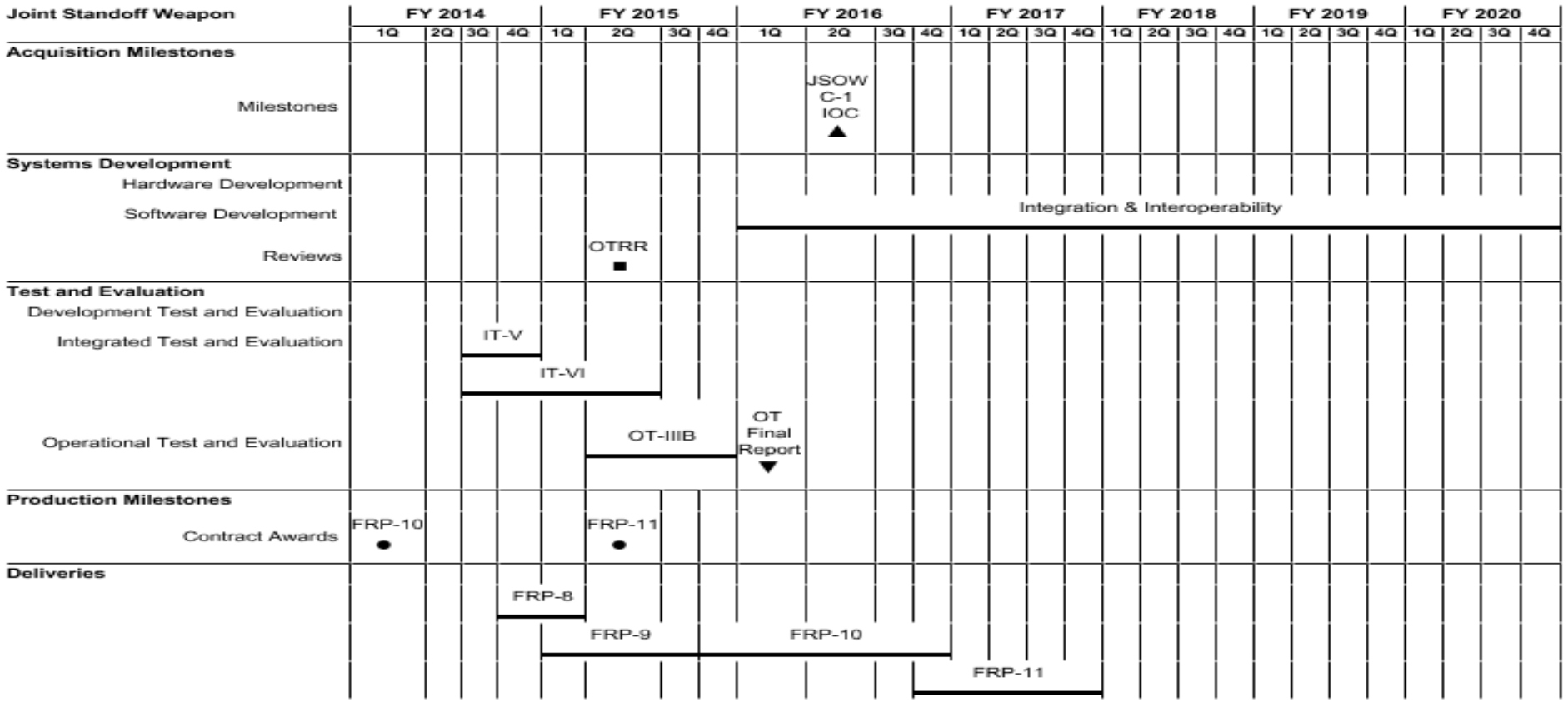
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior year Mgmt cost no longer funded in the FYDP	Various	Various : Various	25.504	-		-		-		-		-	-	25.504	-
		Subtotal	25.504	-		-		-		-		-	-	25.504	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	892.257	0.434		4.400		0.405		-		0.405	5.698	903.194	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604727N / *Joint Standoff Weapon Systems*	**Project (Number/Name)** 2068 / *Joint Standoff Weapon (JSOW)*



2016PB - 0604727N - 2068 OT Final Report refers to AGM-154C-1 Operational Test Agency Follow On Evaluation OT-IIIB Final Report
There is no overlap in deliveries. One FRP ends in 4th Qtr FY14 and the other FRP begins in 1st Qtr FY15.
FRP-9 contract award occurred in June 2013; FRP-10 contract award occurred in December 2013

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604727N / *Joint Standoff Weapon Systems*	**Project (Number/Name)** 2068 / *Joint Standoff Weapon (JSOW)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Joint Standoff Weapon				
Acquisition Milestones: Milestones: Initial Operational Capability C-1	2	2016	2	2016
Systems Development: Software Development: Integration and Interoperability	1	2016	4	2020
Systems Development: Reviews: Operational Test Readiness Review	2	2015	2	2015
Test and Evaluation: Integrated Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Integrated Test (IT-V)	3	2014	4	2014
Test and Evaluation: Integrated Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Integrated Test (IT-VI)	3	2014	2	2015
Test and Evaluation: Operational Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Operational Test (OT-IIIB)	2	2015	4	2015
Test and Evaluation: Operational Test and Evaluation: AGM-154C-1 JSOW Operational Test Agency Follow-On Evaluation Report OT-IIIB Final Report	1	2016	1	2016
Production Milestones: Contract Awards: FRP-10 Award AGM-154C-1	1	2014	1	2014
Production Milestones: Contract Awards: FRP-11 Award AGM-154C-1	2	2015	2	2015
Deliveries: FRP-8 Deliveries- AGM-154C-1	4	2014	1	2015
Deliveries: FRP-9 Deliveries- AGM-154C-1	1	2015	3	2015
Deliveries: FRP-10 Deliveries- AGM-154C-1	4	2015	4	2016
Deliveries: FRP-11 Deliveries- AGM-154C-1	4	2016	4	2017