Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy												Date: May 2017
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 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	897.931	0.394	0.412	0.435	-	0.435	0.445	0.453	0.462	0.471	3.005	904.008
2068: *Joint Standoff Weapon (JSOW)*	897.931	0.394	0.412	0.435	-	0.435	0.445	0.453	0.462	0.471	3.005	904.008
Program MDAP/MAIS Code: **Project MDAP/MAIS Code(s):** 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. 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.

The JSOW Baseline (AGM-154A) variant includes a kinematically efficient airframe, an integrated Inertial/Global Positioning System navigation capability, and a BLU-97/B payload. This weapon was designed up front for pre-planned product improvements. The JSOW BLU-108 (AGM-154B) variant incorporates the sensor fuze weapon submunition (BLU-108) into the baseline vehicle. 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.

The JSOW Unitary (AGM-154C-1) variant includes a Network Enabled Weapon moving maritime target capability. The AGM-154C-1 capability enables 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. The FY 2018 funding includes the integration of new functionality into the joint mission planning systems and precision guided munitions planning system. JSOW C-1 Initial Operational Capability was achieved in June 2016.

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.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy					Date: May 2017
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*		
B. Program Change Summary ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
Previous President's Budget	0.405	0.412	0.433	-	0.433
Current President's Budget	0.394	0.412	0.435	-	0.435
Total Adjustments	-0.011	0.000	0.002	-	0.002
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.011	0.000			
• Program Adjustments	0.000	0.000	-0.001	-	-0.001
• Rate/Misc Adjustments	0.000	0.000	0.003	-	0.003

Change Summary Explanation

Schedule:

OT final report moved from 4QFY 2016 to 3QFY 2017 to reflect test report completion delays.

Production shutdown activities start date moved from 1QFY 2017 to 4QFY 2017 to reflect additional time required to assess production shutdown requirements.

Technical: N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
2068: *Joint Standoff Weapon (JSOW)*	897.931	0.394	0.412	0.435	-	0.435	0.445	0.453	0.462	0.471	3.005	904.008
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 766

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Network Enabled Weapon (NEW)	0.093	0.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
Description: Develop and integrate the NEW moving maritime target capability into JSOW-C, termed AGM-154C-1. ***FY 2016 Accomplishments:*** Continued support for software integration associated with future obsolescence, software improvements, and regression testing on NEW moving maritime target capability. ***FY 2017 Plans:*** N/A ***FY 2018 Base Plans:*** N/A ***FY 2018 OCO Plans:*** N/A					
Title: JSOW Mission Planning Systems	0.301	0.412	0.435	0.000	0.435
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Description: Incorporates mission planning into the JSOW and develops 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 2016 Accomplishments:*** Continue interoperability efforts for JSOW C-1. ***FY 2017 Plans:*** Continue interoperability efforts for JSOW C-1. ***FY 2018 Base Plans:*** Continue interoperability efforts for JSOW C-1. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	0.394	0.412	0.435	0.000	0.435

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• USN WP,N BLI 223000: *JSOW*	12.919	2.232	5.487	-	5.487	1.227	0.000	0.000	0.000	0.000	2,276.475

Remarks

FY18-19 funding is required for Telemetry Instrumentation Kit (TIK) efforts.

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: FY 2018 Navy			Date: May 2017
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 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	MIPR	National Security Agency : Fort Meade, MD	1.166	0.093	Apr 2016	0.000		0.000		-		0.000	0.000	1.259	-
Prior year Prod Dev no longer funded in the FYDP	Various	Various : Various	802.617	0.000		0.000		0.000		-		0.000	0.000	802.617	-
		Subtotal	803.783	0.093		0.000		0.000		-		0.000	0.000	803.876	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	SS/CPFF	Various : Various	5.717	0.301	May 2016	0.412	Apr 2017	0.435	Feb 2018	-		0.435	4.823	11.688	11.688
Prior year Support no longer funded in the FYDP	Various	Various : Various	8.007	0.000		0.000		0.000		-		0.000	0.000	8.007	-
		Subtotal	13.724	0.301		0.412		0.435		-		0.435	4.823	19.695	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Oper Test and Evaluation	WR	COMOPTEVFOR : Norfolk, VA	20.886	0.000		0.000		0.000		-		0.000	0.000	20.886	-
Prior year T&E no longer funded in the FYDP	WR	NAWCWD : China Lake, CA	34.034	0.000		0.000		0.000		-		0.000	0.000	34.034	-
		Subtotal	54.920	0.000		0.000		0.000		-		0.000	0.000	54.920	-

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy		Date: May 2017
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)*

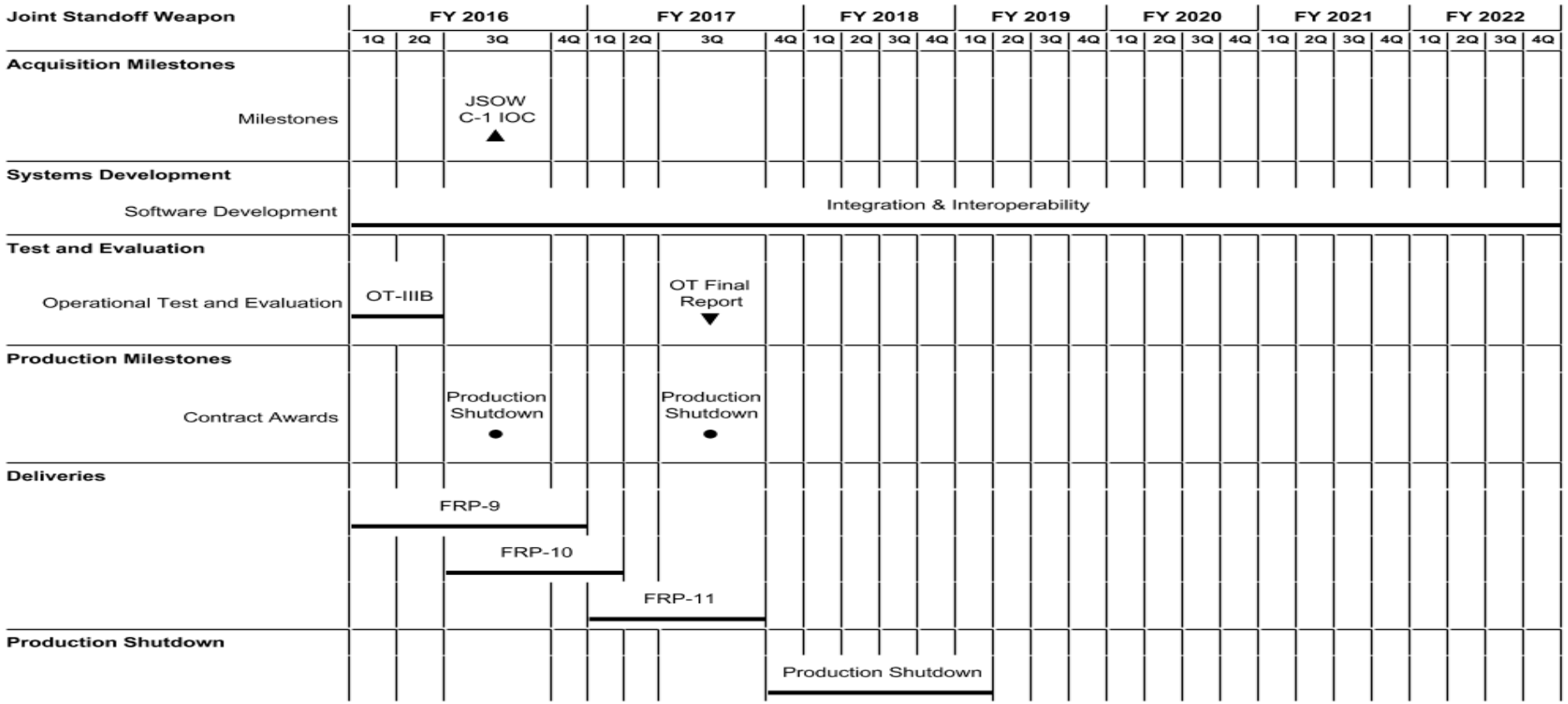
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior year Mgmt no longer funded in the FYDP	Various	Various : Various	25.504	0.000		0.000		0.000		-		0.000	0.000	25.504	-
		Subtotal	25.504	0.000		0.000		0.000		-		0.000	0.000	25.504	-

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	897.931	0.394		0.412		0.435		-		0.435	4.823	903.995	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
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)*



2018OSD - 0604727N - 2068 OT Final Report refers to AGM-154C-1 Operational Test Agency Follow On Evaluation OT-IIIB Final Report

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
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	3	2016	3	2016
Systems Development: Software Development: Integration and Interoperability	1	2016	4	2022
Test and Evaluation: Operational Test and Evaluation: Network Enabled Weapon/ Moving Target/AGM-154C-1 Operational Test (OT-IIIB)	1	2016	2	2016
Test and Evaluation: Operational Test and Evaluation: AGM-154C-1 JSOW Operational Test Agency Follow-On Evaluation Report OT-IIIB Final Report	3	2017	3	2017
Production Milestones: Contract Awards: Production Shutdown Awards Phase 1 Raytheon	3	2016	3	2016
Production Milestones: Contract Awards: Production Shutdown Awards Phase 2 Raytheon	3	2017	3	2017
Deliveries: FRP-9 Deliveries- AGM-154C-1	1	2016	4	2016
Deliveries: FRP-10 Deliveries- AGM-154C-1	3	2016	1	2017
Deliveries: FRP-11 Deliveries- AGM-154C-1	1	2017	3	2017
Production Shutdown: Production Shutdown	4	2017	1	2019