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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604727N / Joint Standoff Weapon Systems							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	898.325	0.396	0.435	0.441	-	0.441	0.439	0.448	0.457	0.465	3.005	904.411
2068: Joint Standoff Weapon (JSOW)	898.325	0.396	0.435	0.441	-	0.441	0.439	0.448	0.457	0.465	3.005	904.411
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 766												
A. Mission Description and Budget Item Justification												
<p>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.</p>												
<p>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.</p>												
<p>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 2019 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. JSOW C-1 Full Operational Capability was achieved in August 2017.</p>												
<p>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.</p>												

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B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.412	0.435	0.445	-	0.445
Current President's Budget	0.396	0.435	0.441	-	0.441
Total Adjustments	-0.016	0.000	-0.004	-	-0.004
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.016	0.000			
• Rate/Misc Adjustments	0.000	0.000	-0.004	-	-0.004

Change Summary Explanation

The FY 2019 funding request was reduced by \$0.001 million to reflect the Department of Navy's effort to support the Office of Management and Budget directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.

Schedule:

Production shutdown costs removed due to line remaining open for FMS requirements.

Technical: N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
2068: Joint Standoff Weapon (JSOW)	898.325	0.396	0.435	0.441	-	0.441	0.439	0.448	0.457	0.465	3.005	904.411
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Title: JSOW Mission Planning Systems Articles: 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 2018 Plans: Continue interoperability efforts for JSOW C-1. FY 2019 Base Plans: Continue interoperability efforts for JSOW C-1. FY 2019 OCO Plans: N/A FY 2018 to FY 2019 Increase/Decrease Statement: Increase is due to inflation of 2%.							0.396	0.435	0.441	0.000	0.441	
							-	-	-	-	-	
Accomplishments/Planned Programs Subtotals							0.396	0.435	0.441	0.000	0.441	

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
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C. Other Program Funding Summary (\$ in Millions)												
	<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u> <u>Base</u>	<u>FY 2019</u> <u>OCO</u>	<u>FY 2019</u> <u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
•	USN WP,N BLI 223000: JSOW	2.232	5.487	1.330	-	1.330	0.000	0.000	0.000	0.000	0.000	2,276.578
Remarks												
FY19 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.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
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)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	MIPR	National Security Agency : Fort Meade, MD	1.259	0.000		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			803.876	0.000		0.000		0.000		-		0.000	0.000	803.876	N/A
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	SS/CPFF	Various : Various	6.018	0.396	Apr 2017	0.435	Feb 2018	0.441	Mar 2019	-		0.441	4.814	12.104	12.165
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			14.025	0.396		0.435		0.441		-		0.441	4.814	20.111	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	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	N/A

UNCLASSIFIED

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Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	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	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			898.325	0.396		0.435		0.441		-		0.441	4.814	904.411	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy			Date: February 2018		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604727N / <i>Joint Standoff Weapon Systems</i>			Project (Number/Name) 2068 / <i>Joint Standoff Weapon (JSOW)</i>

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<i>Joint Standoff Weapon</i>																												
Systems Development: Software Development: Integration and Interoperability																												
Test and Evaluation: Operational Test and Evaluation: AGM-154C-1 JSOW Operational Test Agency Follow-On Evaluation Report OT-IIIB Final Report																												
Production Milestones: Contract Awards: Production Shutdown Awards Phase 2 Raytheon (part 1)																												
Production Milestones: Contract Awards: Production Shutdown Awards Phase 2 Raytheon (part 2)																												
Deliveries: FRP-10 Deliveries- AGM-154C-1																												
Deliveries: FRP-11 Deliveries- AGM-154C-1																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604727N / <i>Joint Standoff Weapon Systems</i>	Project (Number/Name) 2068 / <i>Joint Standoff Weapon (JSOW)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Joint Standoff Weapon</i>				
Systems Development: Software Development: Integration and Interoperability	1	2017	4	2023
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 2 Raytheon (part 1)	3	2017	3	2017
Production Milestones: Contract Awards: Production Shutdown Awards Phase 2 Raytheon (part 2)	4	2017	4	2017
Deliveries: FRP-10 Deliveries- AGM-154C-1	1	2017	1	2017
Deliveries: FRP-11 Deliveries- AGM-154C-1	1	2017	1	2018