

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:		
APPROPRIATION/BUDGET ACTIVITY							February 2007		
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5							R-1 ITEM NOMENCLATURE		
							0604727N, JOINT STANDOFF WEAPON SYSTEMS		
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	14.179	27.410	24.851	5.708	.611	.658	.670	.680	
2068 JSOW	14.179	27.410	24.851	5.708	.611	.658	.670	.680	

(U) 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 (INS/GPS) 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 (UXO) 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 (ATA) 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 (IOC) was achieved in February 2005.

FY 2006-2007 included funding to integrate a Selective Availability Anti-Spoofing Module (SAASM) based GPS receiver per the Joint Chiefs of Staff mandate. Concurrent with the SAASM integration, a new computer processor was integrated to replace the existing obsolete 486 processor. The effort focused on concurrent cost reduction opportunities (termed Block II). FY 2006-2013 includes funding to integrate new functionality into the Joint Mission Planning Systems (JMPS) and Common Unique Planning Component (CUPC). FY 2006-2009 also includes funding for development, integration, qualification and follow-on developmental/operational test and evaluation of a moving/relocatable target (MRT) capability into the JSOW Unitary weapon (termed Block III/AGM-154C-1). The MRT capability will be inserted as an engineering change proposal beginning with FY09 procured JSOW-C weapons. The new AGM-154C-1 capability will enable the weapon to attack sea moving targets via real-time pre- and post-launch targeting updates.

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.

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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5	R-1 ITEM NOMENCLATURE 0604727N, JOINT STANDOFF WEAPON SYSTEMS	

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget:	13.314	27.524	24.710	5.650
Current President's Budget:	<u>14.179</u>	<u>27.410</u>	<u>24.851</u>	<u>5.708</u>
Total Adjustments	0.865	-0.114	0.141	0.058

Summary of Adjustments

Congressional Reductions	-0.145	-0.114		
Congressional Rescissions				
Congressional Increases	0.010			
Economic Assumptions			0.141	0.058
Miscellaneous Adjustments	<u>1.000</u>		<u>0.000</u>	<u>0.000</u>
Subtotal	0.865	-0.114	0.141	0.058

Schedule:

- 1) Selective Availability Anti-Spoofing Module (SAASM) Design/Integration extended from 2Q FY2006 to 1Q FY2007 as a result of technical issues (now resolved) encountered during SAASM Guidance Electronics Unit (GEU) hardware/software integration and flight testing.
- 2) SAASM developmental test (DT-III) revised to incorporate a combined DT/OT test program and to extend the test period from 3Q FY2006 to 4Q FY2007.
- 3) The scope of SAASM operational test (OT-III) revised to recognize combined DT/OT strategy and to defer the start of OT-III period from 3Q FY2006 to 3Q FY2007 and the completion of OT-III from 4Q FY2006 to 1Q FY2008 to reflect COMOPTEVFOR's requirement for a 6-month long Block II OT-III test program and to account for delays in hardware/software integration test.
- 4) The FRP-3 JSOW Production Contract award delayed from 1Q FY2007 to 2Q FY2007.

Technical: N/A

EXHIBIT R-2a, RDT&E Project Justification						DATE:			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E,N / BA-5		0604727N, JOINT STANDOFF WEAPON SYSTEMS			2068, JSOW				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
2068 JSOW		14.179	27.410	24.851	5.708	.611	.658	.670	.680
RDT&E Articles Qty									

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604727N, JOINT STANDOFF WEAPON SYSTEMS	PROJECT NUMBER AND NAME 2068, JSOW
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B. ACCOMPLISHMENTS / PLANNED PROGRAM:

JSOW Common Unique Planning Component (CUPC)	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.371	1.242	.849	.534
RDT&E Articles Qty				

Plan new functions into JSOW Common Unique Planning Component (CUPC) and develop new software releases of CUPC. The FY2006-FY2007 efforts will address new mission planning functionality related to the incorporation of moving/relocatable target capability into the JSOW-C weapon. The FY2008-2009 efforts will address follow-on mission planning updates to incorporate new imagery architectures and formats.

SAASM	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	12.451	.500		
RDT&E Articles Qty				

Insert a Selective Availability Anti-Spoofing Module (SAASM) based Guidance Electronics Unit (GEU) into the weapon and demonstrate compatibility with currently integrated aircraft. Effort will complete with the FY2006-2007 funding for qualification and Development Test/Operational Test program, which was delayed as a result of contractor integration issues that have now been resolved.

Moving/relocatable target (MRT)/AGM-154C-1	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	1.357	25.668	24.002	5.174
RDT&E Articles Qty				

Develop and integrate the moving/relocatable target (MRT) capability into JSOW-C, termed AGM-154C-1. The FY 2006-2009 effort will involve seeker software updates to enable receipt of revised target coordinates after missile launch, the integration of a weapon datalink, and the update of the F/A-18 Operational Flight Program (OFP) to incorporate the AGM-154C-1 changes. The FY08/09 budget includes funding to complete follow-on developmental test and operational test efforts.

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604727N, JOINT STANDOFF WEAPON SYSTEMS	PROJECT NUMBER AND NAME 2068, JSOW
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C. OTHER PROGRAM FUNDING SUMMARY:	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
USN WP,N BLI 223000 JSOW*	144.189	124.051	131.324	151.505	160.500	164.390	168.307	171.238	1,179.982	2,395.486
Qty*s*	420	390	421	504	521	541	530	552	3,610	7,489

* Does not include Spares

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, Block III) efforts. Firm fixed price contracts are utilized for production.

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604727N, JOINT STANDOFF WEAPON SYSTEMS				PROJECT NUMBER AND NAME 2068, JSOW						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Primary Hdw Development-MRT	SS-CPFF	RAYTHEON MISSILE SYSTEMS COMPANY, T	1.094	19.888	Feb 2007	16.619	Dec 2007	1.087	Dec 2008		38.688	38.688
Primary Hdw Development-SAASM	SS-CPFF	VARIOUS	20.182								20.182	20.182
Systems Eng	WX	TBD	107.823	.450	Nov 2006	.230	Nov 2007	.330	Nov 2008		108.833	
All Product Development costs from program implementation through FY06 not reflected above.	Various	Various	579.188								579.188	
SUBTOTAL PRODUCT DEVELOPMENT			708.287	20.338		16.849		1.417			746.891	

Remarks: The budgeted amount exceeds the target value of the contract due to increased contractor costs for Selective Availability Anti-Spoofing Module (SAASM) Guidance Electronics Unit (GEU) hardware/software integration and flight testing.

SUPPORT												
Software Development - JMPS	SS-CPFF	RAYTHEON MISSILE SYSTEMS COMPANY, T	4.248	1.242	Feb 2007	.849	Nov 2007	.534	Nov 2008	2.619	9.492	9.492
Software Development - MRT	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		3.720	Nov 2006	5.683	Nov 2007	.697	Nov 2008		10.100	10.100
SUBTOTAL SUPPORT			4.248	4.962		6.532		1.231		2.619	19.592	

Remarks: Target value of contracts for JMPS and MRT software development are not definitized and values are based on program manager's latest estimate.

TEST & EVALUATION												
Dev Test & Eval	WX	NAWCWD, CHINA LAKE CA	27.510	1.460	Oct 2006	1.450	Nov 2007	.550	Nov 2008		30.970	
Oper Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA	9.172	.500	Jan 2007			2.490	Nov 2008		12.162	
SUBTOTAL TEST & EVALUATION			36.682	1.960		1.450		3.040			43.132	

Remarks: Operational test program costs increased in FY2007 to account for revised F/A-18 flight hour costs, analysis support cost growth, and increased range costs.

MANAGEMENT												
Travel		NAVAIR, Patuxent River, MD	7.242	.150	Nov 2006	.020	Nov 2007	.020	Nov 2008		7.432	
All Management costs from program implementation through FY06 not reflected above.	Various	Various	18.156								18.156	
SUBTOTAL MANAGEMENT			25.398	.150		.020		.020			25.588	

Remarks:

Total Cost			774.615	27.410		24.851		5.708		2.619	835.203	
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Remarks:

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail

DATE:
February 2007

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME			
RDT&E, N /BA-5	0604727N Joint Standoff Weapon System				2068 Joint Standoff Weapon (JSOW)			
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Full Rate Production (FRP)/AGM-154C	2Q	2Q	1Q	1Q	1Q	1Q	1Q	1Q
LRIP-2 Deliveries-AGM-154C	1Q-2Q							
FRP-1 Deliveries-AGM-154C	2Q-4Q	1Q-2Q						
FRP-2 Deliveries-AGM-154C		2Q-4Q	1Q-2Q					
FRP-3 Deliveries-AGM-154C			2Q-4Q	1Q-2Q				
FRP-4 Deliveries-AGM-154C				2Q-4Q	1Q-2Q			
FRP-5 Deliveries-AGM-154C-1					2Q-4Q	1Q-2Q		
FRP-6 Deliveries-AGM-154C-1						2Q-4Q	1Q-2Q	
FRP-7 Deliveries-AGM-154C-1							2Q-4Q	1Q-2Q
FRP-8 Deliveries-AGM-154C-1								2Q-4Q
FY03 Supplemental-AGM-154A	1Q-2Q							
FRP-5 Deliveries-AGM-154A	2Q-4Q	1Q						
FRP-6 Deliveries-AGM-154A		2Q-4Q						
SAASM								
Design/Development/Integration	1Q-4Q	1Q						
Development Test (DT)	1Q-4Q	1Q-3Q						
Development Test/Operational Test (DT/OT)		3Q-4Q						
Operational Test (OT)		3Q-4Q	1Q					
Moving/Relocatable Target / AGM-154C-1								
Engineering Study/Requirements Definition	1Q-4Q							
Design/Integration/Qual		1Q-4Q	1Q-4Q					
Development Test (DT)			3Q-4Q	1Q				
Operational Test (OT)				2Q-3Q				