

EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY /

BA 5

R-1 ITEM NOMENCLATURE

0604727N, JOINT STANDOFF WEAPON SYSTEMS

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Total PE Cost	10.588	13.314	27.524	24.710	5.650	.592	.640	
2068 JSOW	10.588	13.314	27.524	24.710	5.650	.592	.640	

(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 is 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 2005-2006 includes 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 will be integrated to replace the existing obsolete 486 processor. The effort will focus on concurrent cost reduction opportunities (termed Block II). FY 2005-2011 includes funding to integrate new functionality into the Joint Mission Planning Systems (JMPS) and Common Unique Planning Component (CUPC). FY 2006-2009 includes funding for development, integration, qualification and follow-on developmental/operational test and evaluation of a moving/relocatable target capability into the JSOW-C (AGM-154C) variant (termed Block III). Funding is included in FY07-FY09 to complete the moving/relocatable target integration and testing effort and to support insertion of this capability as an engineering change proposal beginning with FY09 procured JSOW-C weapons. The new Block III capability will enable the weapon to attack moving targets (ashore and afloat) 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.

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /			PROGRAM ELEMENT NUMBER AND NAME BA 5 0604727N, JOINT STANDOFF WEAPON SYSTEMS				PROJECT NUMBER AND NAME 2068, JSOW		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
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RDT&E Articles Qty									

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	FY 2005	FY 2006	FY 2007
Accomplishments / Effort / Sub-total Cost		1.207	26.282
RDT&E Articles Qty			

Develop and integrate the moving/relocatable target (MRT) capability into AGM-154C. The FY 2006-2007 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 JSOW-C changes.

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDTE, N /	BA 5	PROGRAM ELEMENT NUMBER AND NAME 0604727N, JOINT STANDOFF WEAPON SYSTEMS	PROJECT NUMBER AND NAME 2068, JSOW
	FY 2005	FY 2006	FY 2007
Accomplishments / Effort / Sub-total Cost	.742	.371	1.242
RDTE Articles Qty			
<p>Perform baseline JMPS Migration; plan new functions into JSOW Common Unique Planning Component (CUPC) and develop new software releases of CUPC. The FY05 effort resulted in the final release of CUPC Software version 1.1. The FY2005-FY2007 efforts will address compliance with new imagery architectures and new mission planning functionality related to the incorporation of moving/relocatable target capability into the JSOW-C weapon.</p>			
	FY 2005	FY 2006	FY 2007
Accomplishments / Effort / Sub-total Cost	9.846	11.736	
RDTE Articles Qty			
<p>Insert a Selective Availability Anti-Spoofing Module (SAASM) based Guidance Electronics Unit (GEU) into the weapon and demonstrate compatability with currently integrated aircraft. Effort will complete with the FY06 qualification and Development Test/Operational Test program.</p>			

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 5 0604727N, JOINT STANDOFF WEAPON SYSTEMS			PROJECT NUMBER AND NAME 2068, JSOW				
C. PROGRAM CHANGE SUMMARY									
Funding:		FY 2005	FY 2006	FY 2007					
Previous President's Budget:		10.874	13.517	13.009					
Current BES / President's Budget:		10.588	13.314	27.524					
Total Adjustments		-0.286	-0.203	14.515					
Summary of Adjustments									
Congressional Reductions			-0.141						
Congressional Rescissions									
Congressional Undistributed Reductions		-0.292							
Congressional Increases									
Programmatic Adjustments				14.384					
Economic Assumptions			-0.062						
Miscellaneous Adjustments		0.006		0.131					
Subtotal		-0.286	-0.203	14.515					
Schedule:									
1) AGM-154C LRIP I deliveries complete 3Q FY05, AGM-154C LRIP II deliveries begin 3Q FY05.									
2) Moving/relocatable target development test 3Q FY08 through 1Q FY09, operational tests 2Q - 3Q FY09.									
3) FY06 AGM-154C contract option exercise moved one month to 2Q FY06.									
Technical: N/A									
D. OTHER PROGRAM FUNDING SUMMARY:									
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
USN WP,N BLI 223000 JSOW*	141.314	144.246	125.551	131.402	155.152	164.484	169.061	1,643.291	2,674.501
Qtys*	405	420	397	421	504	521	546	4,680	7,894
*Does not include Spares.									
E. ACQUISITION STRATEGY: The contracting strategy for JSOW is planned to be sole source for the life of the program. Cost type contracts were used for the Engineering and Manufacturing Development and follow-on development program (i.e., Block II, Block III) efforts. Fixed price type contracts will be used for production.									

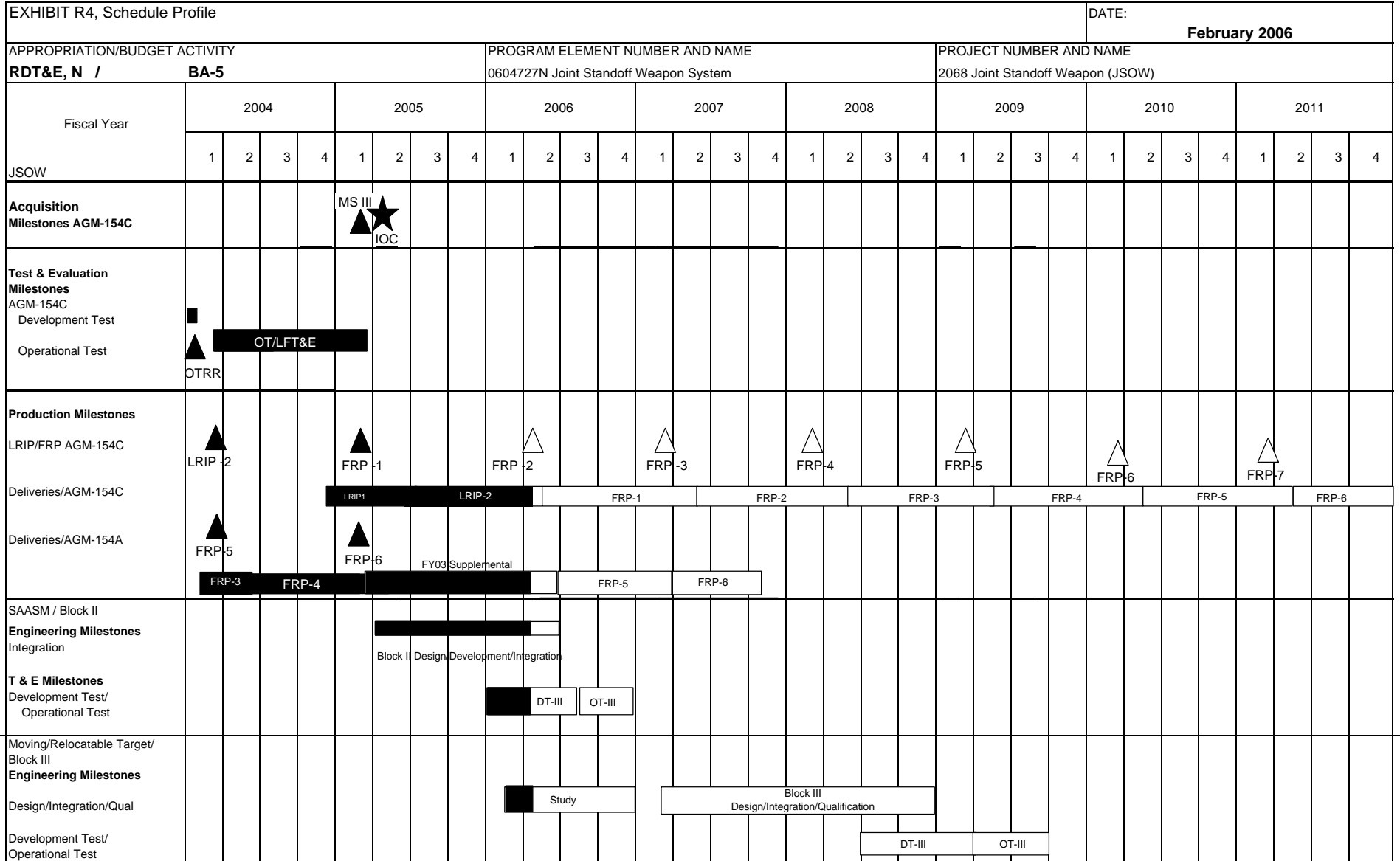
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Exhibit R-3 Cost Analysis (page 1)									DATE:		February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT 0604727N, JOINT STANDOFF WEAPON SYSTEMS				PROJECT NUMBER AND NAME 2068, JSOW						
	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Cost Categories												
PRODUCT DEVELOPMENT												
Primary Hdw Development	C-CPIF	RAYTHEON COMPANY, TUCSON, AZ	272.295								272.295	272.295
Primary Hdw Development	SS-CPIF	RAYTHEON COMPANY, TUCSON, AZ	247.809								247.809	247.809
Primary Hdw Development (MRT)	SS-CPFF	RAYTHEON COMPANY, TUCSON, AZ				1.094	11/30/2005	20.002	12/31/2006	16.691	37.787	37.787
Primary Hdw Development-SAASM	SS-CPFF	RAYTHEON COMPANY, TUCSON, AZ		9.713	11/30/2004	4.499	11/30/2005				14.212	14.212
Ancillary Hdw Development	SS-CPIF	TEXTRON	2.923								2.923	2.923
Ancillary Hdw Development	SS-PPFF	BAE CHORLEY, ENGLAND	12.450								12.450	12.450
Aircraft Integration	SS-CPIF	MTECH / McDONNELL DOUGLAS	21.455								21.455	21.455
Aircraft Integration	WX	NAWCWD CHINA LAKE	15.058								15.058	
Systems Eng	WX	NAWCWD CHINA LAKE	107.710			.113	11/30/2005	.450	11/30/2006	1.250	109.523	
Award Fees	Fee	TEXTRON / RAYTHEON	7.198								7.198	
SUBTOTAL PRODUCT DEVELOPMEN			686.898	9.713		5.706		20.452		17.941	740.710	
Remarks:												
SUPPORT												
Software Development	SS-CPFF	BOEING , ST. LOUIS, MO						4.220	11/30/2006	6.380	10.600	10.600
Software Development	SS-CPFF	RAYTHEON COMPANY, TUCSON, AZ	3.135	.742	11/30/2004	.371	11/30/2005	1.242	11/30/2006	2.781	8.271	8.271
SUBTOTAL SUPPORT			3.135	.742		.371		5.462		9.161	18.871	
Remarks:												
TEST & EVALUATION												
Dev Test & Eval	WX	NAWCWD, CHINA LAKE CA	26.680			3.031	11/30/2005	1.460	11/30/2006	2.000	33.171	
Oper Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA	7.662	.123	11/30/2004	4.056	11/30/2005			2.490	14.331	
SUBTOTAL TEST & EVALUATION			34.342	.123		7.087		1.460		4.490	47.502	
Remarks:												
MANAGEMENT												
Contractor Eng Sup	VARIOUS	VARIOUS	18.136	.010	11/30/2004						18.146	
Travel	WX	VARIOUS	7.092			.150	11/30/2005	.150	11/30/2006		7.392	
SUBTOTAL MANAGEMENT			25.228	.010		.150		.150			25.538	
Remarks:												
Total Cost			749.603	10.588		13.314		27.524		31.592	832.621	
Remarks:												

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Exhibit R-4a, Schedule Detail

DATE:

February 2006

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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Low Rate Initial Production (LRIP)/AGM-154C	1Q							
Operational Test Readiness Review (OTRR)/AGM-154C	1Q							
Operational Test/Live Fire Test and Evaluation (cont'd)								
(OT/LFT&E)/AGM-154C	1Q-4Q	1Q						
Milestone III (MS-III)/AGM-154C		1Q						
Initial Operational Capability (IOC)/AGM-154C		2Q						
Full Rate Production (FRP)/AGM-154C		1Q	2Q	1Q	1Q	1Q	1Q	1Q
Full Rate Production (FRP)/AGM-154A	1Q	1Q						
LRIP-1 Deliveries-AGM-154C	4Q	1Q-3Q						
LRIP-2 Deliveries-AGM-154C		3Q-4Q	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							2Q-4Q	1Q-2Q
FRP-6 Deliveries-AGM-154C								2Q-4Q
FRP-3 Deliveries-AGM-154A	1Q-2Q							
FRP-4 Deliveries-AGM-154A	2Q-4Q	1Q						
FY03 Supplemental-AGM-154A		1Q-4Q	1Q-2Q					
FRP-5 Deliveries-AGM-154A			2Q-4Q	1Q				
FRP-6 Deliveries-AGM-154A				2Q-4Q				
SAASM / Block II								
Design/Integration		2Q-4Q	1Q-2Q					
Development Test (DT)			1Q-3Q					
Operational Test (OT)			3Q-4Q					
Moving/Relocatable Target / Block III								
Engineering Study			1Q-4Q					
Design/Integration/Qual				1Q-4Q	1Q-4Q			
Development Test (DT)					3Q-4Q	1Q		
Operational Test (OT)						2Q-3Q		