

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE					
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						0604727N Joint Standoff Weapon System					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002							
Total PE Cost	646.151	28.920	27.694	26.852							
A2068 (formallyE2068) Joint Standoff Weapon (JSOW)	646.151	28.920	27.694	26.852							
Quantity of RDT&E Articles		3	3	19							

(Formerly managed under PEO(T) and Project Unit E2068, this program was transferred to PEO(W). Beginning with FY 01, it will be executed under Project Unit A2068.

(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. 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 submunition payload. This weapon is 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/BLU-108 variant will provide a standoff delivery capability against massed armor and land combat vehicles. The JSOW Unitary (AGM-154C) variant has a terminal seeker, Autonomous Target Acquisition (ATA) capability, and a unitary warhead to enable the attack of blast/fragmentation targets. The JSOW/BLU-108 MOT&E is scheduled to begin in FY03 after an 18 month LCCS ECP effort. The JSOW Unitary will provide increased accuracy and lethality and the capability for aimpoint selection. The Unitary E&MD phase of the program concludes with the completion of Operational Evaluation (OPEVAL). A Low Rate Initial Production Contract Award is planned for FY-03. Through adherence to international standards for weapons interfaces and weight and dimension considerations, JSOW will be compatible with Air Force and NATO aircraft. JSOW is a joint Navy/Air Force program.

The Unitary E&MD program phase incorporates a 500 lb class "Unitary" warhead that includes the integration of the Broach Multiple Warhead System (MWS) into the JSOW AGM-154C variant. This is an FY01 Congressionally approved New Start effort. The Broach MWS provides blast/fragmentation effects as well as enhanced penetration capability against hard point targets. The Broach MWS development and integration risk is reduced significantly by the on going Broach developmental efforts of the United Kingdom Storm Shadow Program, the JSOW Foreign Warhead Comparative Testing previously conducted, and the early provisioning for Broach in the JSOW Unitary Roadmap.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ENGINEERING & MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

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Exhibit R-2, RD TEN Budget Item Justification
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EXHIBIT R-2, RDT&E Budget Item Justification						DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0604727N Joint Standoff Weapon System						
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002							
Total PE Cost	646.151	28.920	27.694	26.852							
A2068 (formally E2068) Joint Standoff Weapon (JSOW)	646.151	28.920	27.694	26.852							
Quantity of RDT&E Articles		3	3	19							
<p>(Formerly managed under PEO(T) and Project Unit E2068, this program was transferred to PEO(W). Beginning with FY 01, it will be executed under Project Unit A2068.</p> <p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <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. 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 submunition payload. This weapon is 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/BLU-108 variant will provide a standoff delivery capability against massed armor and land combat vehicles. The JSOW Unitary (AGM-154C) variant has a terminal seeker, Autonomous Target Acquisition (ATA) capability, and a unitary warhead to enable the attack of blast/fragmentation targets. The JSOW/BLU-108 MOT&E is scheduled to begin in FY03 after an 18 month LCCS ECP effort. The JSOW Unitary will provide increased accuracy and lethality and the capability for aimpoint selection. The Unitary E&MD phase of the program concludes with the completion of Operational Evaluation (OPEVAL). A Low Rate Initial Production Contract Award is planned for FY-03. Through adherence to international standards for weapons interfaces and weight and dimension considerations, JSOW will be compatible with Air Force and NATO aircraft. JSOW is a joint Navy/Air Force program.</p> <p>The Unitary E&MD program phase incorporates a 500 lb class "Unitary" warhead that includes the integration of the Broach Multiple Warhead System (MWS) into the JSOW AGM-154C variant. This is an FY01 Congressionally approved New Start effort. The Broach MWS provides blast/fragmentation effects as well as enhanced penetration capability against hard point targets. The Broach MWS development and integration risk is reduced significantly by the on going Broach developmental efforts of the United Kingdom Storm Shadow Program, the JSOW Foreign Warhead Comparative Testing previously conducted, and the early provisioning for Broach in the JSOW Unitary Roadmap.</p>											

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Exhibit R-2, RDTEN Budget Item Justification
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EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604727N Joint Standoff Weapon System	June 2001
(U) PROGRAM ACCOMPLISHMENTS AND PLANS:		
1. FY 2000 ACCOMPLISHMENTS:		
(U) Unitary		
(\$26.736) Continued E&MD efforts, configuration audits, and environmental testing		
(\$ 1.499) Conducted systems engineering technical efforts, mission planning system integration and contractor flight tests		
(\$.648) Began Navy DT&E planning/preparations		
(U) BLU-108		
(\$.037) Performed MOT&E planning/preparations		
2. FY 2001 PLANS:		
(U) Unitary:		
(\$18.276) Continue E&MD efforts, configuration audits and environmental testing		
(\$ 2.117) Conduct combined Development Testing and Operational Testing (DT/OT) testing		
(\$ 2.186) Continue systems engineering technical support; complete insensitive munitions qualification and system safety approvals		
(\$ 5.100) Broach Warhead development		
(U) BLU-108		
(\$.015) Performed MOT&E planning/preparations		
3. FY 2002 PLANS:		
(U) Unitary:		
(\$15.875) Continue E&MD efforts, configuration audits and environmental testing and perform Broach integration		
(\$ 6.627) Broach Warhead development		
(\$ 2.500) Conduct combined Development Testing and Operational Testing (DT/OT) testing		
(\$ 1.850) Continue systems engineering technical support; complete insensitive munitions qualification and system safety approvals		

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
		June 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-5	0604727N Joint Standoff Weapon (JSOW)	A2068 (formallyE2068) Joint Standoff Weapon (JSOW)	
(U) B. PROGRAM CHANGE SUMMARY:			
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget Submit:	30.398	20.823	5.613
(U) Adjustments from FY 2001 President's Budget:	1.478	6.871	21.239
(U) FY 2002 President's Budget:	28.920	27.694	26.852
CHANGE SUMMARY EXPLANATION:			
(U) Funding: (1) The FY 2000 decrease of \$1.478 million reflects a decrease of \$0.452 million for repriorization of requirements within the Navy and a decrease of \$1.026 million for Small Business Innovative Research assessment.			
(2) The FY 2001 net increase of \$6.871 reflects an increase of \$7.093 million for JSOW Broach integration and a decrease of \$0.146 million for Congressional reduction, a decrease of \$0.045 million for a government-wide recission and a decrease of \$0.031 for repriorization of requirements within the Navy.			
(3) The FY 2002 net increase of \$21.239 million reflects an increase of \$12.000 million for JSOW Broach integration, an increase of \$6.217 million for repriorization of requirements within the Navy for the Unitary program, an increase of \$3.000 million for P-3 SRP reductions, an increase of \$0.050 million for program support and a decrease of \$0.031 for Navy Working Capital Fund rates.			
(U) Schedule: Unitary schedule change is due to Broach Lethal Package integration. Baseline/BLU-108 schedule change is due to Low Cost Control Section (LCCS) ECP effort.			
(U) C. OTHER PROGRAM FUNDING SUMMARY:			
<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
USN WP,N; BLI: 223000 JSOW			
\$s	113.798	181.778	0.000
Qtys	454	104	0

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Exhibit R-2a, RD TEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604727N Joint Standoff Weapon (JSOW)	PROJECT NUMBER AND NAME A2068 (formallyE2068) Joint Standoff Weapon (JSOW)																				
<p>(U) D. 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 E&MD program effort. Fixed price type contracts will be used for production.</p> <p>(U) E. SCHEDULE PROFILE:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 20%; text-align: center;"><u>FY 2000</u></th> <th style="width: 20%; text-align: center;"><u>FY 2001</u></th> <th style="width: 30%; text-align: center;"><u>FY 2002</u></th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> (U) Program Milestones Baseline BLU-108 Unitary </td> <td></td> <td></td> <td></td> </tr> <tr> <td style="vertical-align: top;"> (U) Engineering Milestones Baseline BLU-108 Unitary </td> <td></td> <td></td> <td></td> </tr> <tr> <td style="vertical-align: top;"> (U) T&E Milestones Baseline BLU-108 Unitary </td> <td></td> <td style="vertical-align: top;"> 4Q/01 1ST Free Flight 1Q/01-1Q/03 DT&E </td> <td></td> </tr> <tr> <td style="vertical-align: top;"> (U) Contract Milestones Baseline BLU-108 Unitary </td> <td style="vertical-align: top;"> 1Q/00 FRP Option </td> <td></td> <td style="vertical-align: top;"> 3Q/02 FRP 3Q/02 LRIP </td> </tr> </tbody> </table>				<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	(U) Program Milestones Baseline BLU-108 Unitary				(U) Engineering Milestones Baseline BLU-108 Unitary				(U) T&E Milestones Baseline BLU-108 Unitary		4Q/01 1 ST Free Flight 1Q/01-1Q/03 DT&E		(U) Contract Milestones Baseline BLU-108 Unitary	1Q/00 FRP Option		3Q/02 FRP 3Q/02 LRIP
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Exhibit R-3 Cost Analysis (page 1)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT			PROJECT NUMBER AND NAME					
RDT&E, N / BA-5				0604727N Joint Standoff Weapon System			A2068 (formally E2068) Joint Standoff Weapon (JSOW)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
DEM/VAL contract	C/CPIF	Raytheon Tucson, AZ	22.101									
Pre-MS-I contract	C/CPIF	Raytheon Tucson, AZ	3.275									
Pre-E&MD contract	C/CPIF	Raytheon Tucson, AZ	3.143									
Baseline E&MD contract	C/CPIF	Raytheon Tucson, AZ	243.776									
Unitary pre-E&MD contract	SS/CPIF	Raytheon Tucson, AZ	6.316									
Unitary E&MD contract	SS/CPIF/AF	Raytheon Tucson, AZ	184.738	18.276	10/00	15.875	10/01					
Unitary E&MD contract Award Fees (Note 2)	Fee	Raytheon Tucson, AZ	7.118									
BLU-108 Pre-E&MD contract	SS/CPIF	Raytheon Tucson, AZ	0.474									
BLU-108 E&MD contract	SS/CPIF	Raytheon Tucson, AZ	10.671									
BLU-108 Smart Rack	SS/CPIF	MTechnology Horsham, PA	4.585									
F/A-18 JSOW Integration	SS/CPIF	McDonnell Douglas St. Louis, MO	16.870									
Software Integration IDIQ/TAMPS	SS/CPIF	Raytheon Tucson, AZ	2.191									
BLU-108 SFW E&MD	SS/CPIF	Textron	2.923									
SFW E7MD Award Fee (Note 2)	Award Fee	Textron	0.080									
Systems Engineering Technical Support	WX	NAWCWD China Lake, CA	103.400	1.606	10/00	1.600	10/01					
F/A-18 Integration	WX	NAWCWD China Lake, CA	15.058									
Engineering and Technical Services	Various	Various	16.900	0.300	10/00	0.150	10/01					
Miscellaneous Contracts (<\$1M)	Various	Various	6.612	0.280	10/00	0.100	10/01					
Unitary BROACH Warhead	SS/FPFF	BAE Chorley, England	0.000	5.100	05/01	6.627	10/01					
Subtotal Product Development			650.231	25.562		24.352						
Remarks: Note 1: Historical Unitary E&MD Award Fee information (percent awarded): Fee#1: 98.3%, Fee#2: 90.1%, Fee#3: 98.0%, Fee #4: 100%, Note 2: No historical information available; this is a one-time award fee.												

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Exhibit R-3 Cost Analysis (page 2)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT			PROJECT NUMBER AND NAME					
RDT&E, N / BA-5				0604727N JSOW			A2068 (formallyE2068) Joint Standoff Weapon (JSOW)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	NAWCWD China Lake, CA	19.953	2.032	10/00	1.700	10/01					
Operational Test & Evaluation	WX	OPTEVFOR Norfolk, VA	4.887	0.100	10/00	0.800	10/01					
Subtotal T&E			24.840	2.132		2.500		0.000				
Remarks:												
Subtotal Management			0.000	0.000		0.000		0.000				
Remarks: There are no Support Category requirements												
Total Cost			675.071	27.694		26.852						
Remarks:												

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