

# UNCLASSIFIED

**CLASSIFICATION:**

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: <b>May 2009</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY / BA-5</b>					R-1 ITEM NOMENCLATURE 0605450N JOINT AIR-TO-GROUND MISSILE (JAGM)			
COST (\$ in Millions)	FY 2008	FY 2009	FY 2010					
Total PE Cost		<b>61.757</b>	<b>81.434</b>					
2211 JOINT AIR-TO-GROUND MISSILE		<b>61.757</b>	<b>81.434</b>					
<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>								
<p>(U) JOINT AIR TO GROUND MISSILE (JAGM): JAGM is an Army-led close-air-support missile program that will utilize tri-mode seeker technology and be employed against land and maritime stationary and moving targets. JAGM will provide a fixed wing, rotary wing, and unmanned aircraft system launched missile system that provides advanced Line-of-sight and Beyond-line-of-sight capabilities, including precision point targeting and fire and forget seeker technologies; increased range; and increased lethality against soft and hardened moving and stationary targets. Its multi-mode seeker will provide robust capability in adverse weather, day or night, and in an obscured/countermeasure environment, against both stationary and moving targets. Initial Navy platform integration efforts include the F/A-18E/F, AH-1Z and MH-60R platforms. The JAGM system includes the missiles, trainers, containers, support equipment, and launcher modifications.</p> <p>FY 2008 funds are budgeted under R-1 # 76, Program Element 0604450N, Project Unit 2211.</p>								

R-1 SHOPPING LIST - Item No. 132

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<p><b>B. PROGRAM CHANGE SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Funding:</th> <th style="text-align: right;">FY08</th> <th style="text-align: right;">FY09</th> <th style="text-align: right;">FY10</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget:</td> <td></td> <td style="text-align: right;">62.324</td> <td style="text-align: right;">79.880</td> </tr> <tr> <td>Current BES</td> <td></td> <td style="text-align: right;">61.757</td> <td style="text-align: right;">81.434</td> </tr> <tr> <td>Total Adjustments</td> <td></td> <td style="text-align: right; border-top: 1px solid black;">-0.567</td> <td style="text-align: right; border-top: 1px solid black;">1.554</td> </tr> <tr> <td colspan="4" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td>    Congressional Rescissions</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Congressional Adjustments</td> <td></td> <td style="text-align: right;">-0.398</td> <td></td> </tr> <tr> <td>    SBIR/STTR/FTT Assessments</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Program Adjustments</td> <td></td> <td></td> <td style="text-align: right;">1.576</td> </tr> <tr> <td>    Rate/Misc Adjustments</td> <td></td> <td style="text-align: right;">-0.169</td> <td style="text-align: right;">-0.022</td> </tr> <tr> <td>    Subtotal</td> <td></td> <td style="text-align: right; border-top: 1px solid black;">-0.567</td> <td style="text-align: right; border-top: 1px solid black;">1.554</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Schedule:</p> <p style="margin-left: 20px;">Schedule has been updated to reflect an OSD directed 27 month competitive technology development effort. A competitive downselect at the end of the technology development effort will allow for continuation of one contractor for a 4-year EMD period. Navy efforts will be focused on the F/A-18E/F, AH-1Z and MH-60R integrations. The milestone reviews and IOCs have been updated to reflect the revised Acquisition Strategy.</p> <p style="margin-top: 10px;">Technical:</p> <p style="margin-left: 20px;">Not Applicable</p> <p style="margin-top: 10px;">FY 2008 funds are budgeted under R-1 # 76, Program Element 0604450N, Project Unit 2211.</p>			Funding:	FY08	FY09	FY10	Previous President's Budget:		62.324	79.880	Current BES		61.757	81.434	Total Adjustments		-0.567	1.554	Summary of Adjustments				Congressional Rescissions				Congressional Adjustments		-0.398		SBIR/STTR/FTT Assessments				Program Adjustments			1.576	Rate/Misc Adjustments		-0.169	-0.022	Subtotal		-0.567	1.554
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R-1 SHOPPING LIST - Item No. 132

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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>May 2009</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>		PROGRAM ELEMENT NUMBER AND NAME 0605450N JOINT AIR-TO-GROUND MISSILE			PROJECT NUMBER AND NAME 2211 JOINT AIR-TO-GROUND MISSILE (JAGM)			
COST (\$ in Millions)	FY 2008	FY 2009	FY 2010					
Project Cost		<b>61.757</b>	<b>81.434</b>					
RDT&E Articles Qty								

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) JOINT AIR TO GROUND MISSILE (JAGM): JAGM is an Army-led close-air-support missile program that will utilize tri-mode seeker technology and be employed against land and maritime stationary and moving targets. JAGM will provide a fixed wing, rotary wing, and unmanned aircraft system launched missile system that provides advanced Line-of-sight and Beyond-line-of-sight capabilities, including precision point targeting and fire and forget seeker technologies; increased range; and increased lethality against soft and hardened moving and stationary targets. Its multi-mode seeker will provide robust capability in adverse weather, day or night, and in an obscured/countermeasure environment, against both stationary and moving targets. Initial Navy platform integration efforts include the F/A-18E/F, AH-1Z and MH-60R platforms. The JAGM system includes the missiles, trainers, containers, support equipment, and launcher modifications.

FY 2008 funds are budgeted under R-1 # 76, Program Element 0604450N, Project Unit 2211.

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0605450N JOINT AIR-TO-GROUND MISSILE	PROJECT NUMBER AND NAME 2211 JOINT AIR-TO-GROUND MISSILE (JAG

**B. Accomplishments/Planned Program**

JAGM TECHNOLOGY DEVELOPMENT3	FY 08	FY 09	FY 10	
Accomplishments/Effort/Subtotal Cost		61.757	81.434	
RDT&E Articles Quantity				

Funding is to be used towards an OSD directed 27 month competitive technology development effort. Funding will be used to support the Navy's program management and integration efforts on 3 threshold platforms. This includes support of all acquisition, system engineering and test reviews. Navy integration efforts are focused on the following threshold platforms: F/A-18E/F, AH-1Z and MH-60R.

FY 2008 funds are budgeted under R-1 # 76, Program Element 0604450N, Project Unit 2211.

R-1 SHOPPING LIST - Item No. 132

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0605450N JOINT AIR-TO-GROUND MISSILE	PROJECT NUMBER AND NAME 2211 JOINT AIR-TO-GROUND MISSILE (
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**C. OTHER PROGRAM FUNDING SUMMARY:**

<u>Line Item No. &amp; Name</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
RDT&E, NAVY P. E. 0604450N	11.626		
RDT&E ARMY P. E. 0603460A	51.690		
RDT&E ARMY P. E. 0603460A		118.125	127.439

**D. ACQUISITION STRATEGY:**

The JAGM System is an ACAT 1D Joint Army/Navy program with the Army designated as lead service. The Government will utilize full and open competition to acquire the JAGM System. The JAGM program will consist of a 27 month Technology Development (TD) phase and a 48 month Engineering Manufacturing and Development (EMD) phase followed by limited rate and full rate production. The first phase will be a competitively awarded contract to two contractors and will include analysis, windtunnel, ground testing, and flight testing in support of initial Navy platform integration activities. A competitive downselect is

R-1 SHOPPING LIST - Item No. 132

# UNCLASSIFIED

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Exhibit R-3 Cost Analysis (page 1)							DATE: <b>May 2009</b>					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDTE&amp;E, N / BA-5</b>			0605450N			2211 JOINT AIR-TO-GROUND MISSILE (JAGM)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
Technology Development	C/CPIF	Lockheed Martin / Orlando		7.289	12/08	10.901	12/09					
Technology Development	C/CPIF	Raytheon / Tucson		7.289	12/08	10.901	12/09					
EMD	C/CPIF	TBD										
Aircraft Integration	WX	NAWCAD, Pax River		1.072	11/08	1.517	11/09					
Aircraft Integration (AH-1Z)	TBD	Bell Helicopter, Hurst, Texas		0.725	12/08	1.275	12/09					
Aircraft Integration (F-18E/F)	TBD	Boeing, St. Louis MO		5.991	12/08	9.711	12/09					
Aircraft Integration (MH-60R)	TBD	Sikorsky, East Hartford CT		1.050	11/08	1.050	11/09					
Sytems Eng - WD	WX	NAWCWD, China Lake		16.810	11/08	16.911	11/09					
Subtotal Product Development			0.000	40.226		52.266						
<p>Remarks: Technology Development target value of contract includes FY08 cost of \$2.68M; funded under PE: 06044540N, BA-4.</p>												
Software Development	WX	NAWCWD, China Lake		0.491	11/08	7.239	11/09					
Software Development	TBD	LMSI, Owego NY		0.855	12/08	4.341	12/09					
Integrated Logistics Support	WX	NAWCWD, China Lake		0.325	11/08	0.403	11/09					
Subtotal Support			0.000	1.671		11.983						

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Exhibit R-3 Cost Analysis (page 2)								DATE: <b>May 2009</b>			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME					
<b>RDTE&amp;E, N / BA-5</b>			0605450N			2211 JOINT AIR-TO-GROUND MISSILE (JAGM)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date				
Test & Evaluation	WX	NAWCAD, Pax River		2.125	11/08	3.625	11/09				
Test & Evaluation	WX	NAWCWD, China Lake		1.875	11/08	3.275	11/09				
Test & Evaluation	IPR	NASA AMES, Arlington Va		3.000	11/08	0.460	11/09				
Test & Evaluation	MIPR	AEDC/DOF, AFB, TN		7.062	11/08	3.500	11/09				
Subtotal T&E			0.000	14.062		10.860					
Remarks:											
Contr Eng Supt - ETS (NON-FFRDC)	TBD	TBD		2.350	12/08	2.400	12/09				
Government Eng Sup	WX	NAWCAD, Pax River		3.348	11/08	3.825	11/09				
Travel - Internal	TO	NAVAIR, Pax River MD		0.100	10/08	0.100	10/09				
Subtotal Management			0.000	5.798		6.325					
Remarks:											
Total Cost			0.000	61.757		81.434					
Remarks:											

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EXHIBIT R4, Schedule Profile														DATE:					
APPROPRIATION/BUDGET ACTIVITY <b>RDTE&amp;E, N / BA-5</b>							PROGRAM ELEMENT NUMBER AND NAME 0605450N JOINT AIR-TO-GROUND MISSILE							PROJECT NUMBER AND NAME 2211 JOINT AIR-TO-GROUND MI					
Fiscal Year	2008				2009				2010										
	1	2	3	4	1	2	3	4	1	2	3	4							
<b>Acquisition Milestones</b>				CA ▲															
Prototype Phase					Technology Development Phase (2 KTR)														
Development													PDR ▲						
FW Integration					F/A-18E/F														
RW Integration					AH-1Z & MH-60R														
<b>Test &amp; Evaluation Milestones</b>																			
Development Test					LT / EDT 1														
Operational Test																			
<b>Production Milestones</b>																			
Production Deliveries																			

R-1 SHOPPING LIST - Item No. 132

