

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				PE 0605450N: Joint Air-to-ground Missile (JAGM)							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	54.972	77.412	100.846	0.000	100.846	120.044	126.481	131.679	63.622	Continuing	Continuing
2211: Joint Air-to-Ground Missile	54.972	77.412	100.846	0.000	100.846	120.044	126.481	131.679	63.622	Continuing	Continuing

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.

This PE includes \$.404M for the Acquisition Workforce Development Fund in FY 2009.

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	61.757	81.434	0.000	0.000	0.000
Current President's Budget	54.972	77.412	100.846	0.000	100.846
Total Adjustments	-6.785	-4.022	100.846	0.000	100.846
• Congressional General Reductions		-0.322			
• Congressional Directed Reductions		-3.700			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-5.950	0.000			
• SBIR/STTR Transfer	-0.835	0.000			
• Program Adjustments	0.000	0.000	100.846	0.000	100.846

UNCLASSIFIED

R-1 Line Item #133

Page 1 of 12

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>	
<p><u>Change Summary Explanation</u></p> <p>Technical: Not applicable.</p> <p>Schedule: Not applicable.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

UNCLASSIFIED

R-1 Line Item #133

Page 2 of 12

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>				PROJECT 2211: <i>Joint Air-to-Ground Missile</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2211: <i>Joint Air-to-Ground Missile</i>	54.972	77.412	100.846	0.000	100.846	120.044	126.481	131.679	63.622	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
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. This project includes \$.404M for the Defense Acquisition Workforce Development Fund (DAWDF) in FY2009.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
JAGM Technology Development						54.568	77.412	0.000	0.000	0.000	
<i>FY 2009 Accomplishments:</i> Funding was used toward 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.											
<i>FY 2010 Plans:</i> 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											

UNCLASSIFIED

R-1 Line Item #133

Page 3 of 12

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605450N: Joint Air-to-ground Missile (JAGM)				PROJECT 2211: Joint Air-to-Ground Missile			
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
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.											
JAGM Engineering Manufacturing Development (EMD) FY 2011 Base Plans: Funding is to be used towards EMD. A competitive downselect at the end of the technology development effort will allow for continuation of one contractor into the 4-year EMD period. 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.						0.000	0.000	100.846	0.000	100.846	
Acquisition Workforce Fund FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund						0.404	0.000	0.000	0.000	0.000	
Accomplishments/Planned Programs Subtotals						54.972	77.412	100.846	0.000	100.846	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• WPN, 224800: JAGM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	32.878	143.865	3,011.128	3,187.871
• RDT&E ARMY, 0605450A: JAGM	114.817	126.725	130.340	0.000	130.340	127.534	136.692	109.476	57.084	104.002	906.670
• MPA, C70302: JAGM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.508	96.442	3,313.250	3,415.200
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											

UNCLASSIFIED

R-1 Line Item #133

Page 4 of 12

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>	PROJECT 2211: <i>Joint Air-to-Ground Missile</i>
<p>(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 planned to choose a single contractor to continue into the EMD phase.</p> <p><u>E. Performance Metrics</u></p> <p>JAGM to complete OSD directed 27 month competitive technology development effort 1Q FY11.</p>		

UNCLASSIFIED

R-1 Line Item #133

Page 5 of 12

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605450N: Joint Air-to-ground Missile (JAGM)				PROJECT 2211: Joint Air-to-Ground Missile					
Product Development (\$ in Millions)													
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Technology Development	C/CPIF	Lockheed Martin Orlando, FL	8.629	10.901	Dec 2009	0.000		0.000		0.000	0.000	19.530	19.530
Technology Development	C/CPIF	Raytheon Tucson, AZ	8.629	10.901	Dec 2009	0.000		0.000		0.000	0.000	19.530	19.530
EMD	C/CPIF	TBD TBD	0.000	0.000		47.434	Dec 2010	0.000		47.434	210.367	257.801	257.801
Aircraft Integraton	WR	NAWCAD Pax River, MD	1.072	1.517	Nov 2009	1.806	Nov 2010	0.000		1.806	41.129	45.524	Continuing
Aircraft Integration (AH-1Z)	TM	Bell Helicopter Hurst, TX	0.725	1.775	Dec 2009	4.420	Dec 2010	0.000		4.420	5.048	11.968	11.968
Aircraft Integration (F-18E/F)	TM	Boeing St. Louis MO	5.991	9.711	Dec 2009	3.391	Dec 2010	0.000		3.391	14.539	33.632	33.632
Aircraft Integration (MH-60R)	TM	Sikorsky East Hartford CT	1.050	0.550	Nov 2009	0.500	Nov 2010	0.000		0.500	7.205	9.305	9.305
Sytems Eng - WD	WR	NAWCWD China Lake, CA	15.642	15.889	Nov 2009	15.427	Nov 2010	0.000		15.427	53.698	100.656	Continuing
Subtotal			41.738	51.244		72.978		0.000		72.978	331.986	497.946	351.766
Remarks													

UNCLASSIFIED

R-1 Line Item #133

Page 6 of 12

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605450N: Joint Air-to-ground Missile (JAGM)					PROJECT 2211: Joint Air-to-Ground Missile			
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	WR	NAWCWD China Lake, CA	0.491	5.239	Nov 2009	7.277	Nov 2010	0.000		7.277	76.551	89.558	Continuing
Software Development	TM	LMSI Owego NY	0.855	4.341	Dec 2009	6.250	Dec 2010	0.000		6.250	24.000	35.446	35.446
Integrated Logistics Support	WR	NAWCWD China Lake, CA	0.325	0.403	Nov 2009	0.874	Nov 2010	0.000		0.874	6.763	8.365	Continuing
Subtotal			1.671	9.983		14.401		0.000		14.401	107.314	133.369	35.446
Remarks													
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	WR	NAWCAD Pax River , MD	1.125	3.375	Nov 2009	3.625	Nov 2010	0.000		3.625	25.351	33.476	Continuing
Test & Evaluation	WR	NAWCWD China Lake, CA	1.875	3.025	Nov 2009	3.272	Nov 2010	0.000		3.272	25.124	33.296	Continuing
Test & Evaluation	MIPR	NASA AMES CA	2.141	0.460	Nov 2009	0.500	Nov 2010	0.000		0.500	0.000	3.101	Continuing
Test & Evaluation	MIPR	AEDC/DOF, AFB TN	6.000	3.500	Nov 2009	0.000		0.000		0.000	0.000	9.500	Continuing

UNCLASSIFIED

R-1 Line Item #133

Page 7 of 12

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010																																																																																																																																														
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>				PROJECT 2211: <i>Joint Air-to-Ground Missile</i>																																																																																																																																																	
<p>Test and Evaluation (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th colspan="2">FY 2011 Total</th> <th colspan="2"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method & Type</th> <th>Performing Activity & Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">11.141</td> <td align="right">10.360</td> <td></td> <td align="right">7.397</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">7.397</td> <td align="right">50.475</td> <td align="right">79.373</td> <td></td> </tr> </table> <p>Remarks Contract type for Test \$ Evaluation to NASA AMES is IPR.</p> <p>Management Services (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th colspan="2">FY 2011 Total</th> <th colspan="2"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method & Type</th> <th>Performing Activity & Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td>Contr Eng Supt - ETS (NON-FFRDC)</td> <td>Various/ Various</td> <td>Various Various</td> <td align="right">2.350</td> <td align="right">2.400</td> <td>Dec 2009</td> <td align="right">2.450</td> <td>Dec 2010</td> <td align="right">0.000</td> <td></td> <td align="right">2.450</td> <td align="right">6.265</td> <td align="right">13.465</td> <td>Continuing</td> </tr> <tr> <td>Government Eng Sup</td> <td>WR</td> <td>NAWCAD Pax River, MD</td> <td align="right">2.348</td> <td align="right">3.325</td> <td>Nov 2009</td> <td align="right">3.520</td> <td>Nov 2010</td> <td align="right">0.000</td> <td></td> <td align="right">3.520</td> <td align="right">11.660</td> <td align="right">20.853</td> <td>Continuing</td> </tr> <tr> <td>Travel - Internal</td> <td>WR</td> <td>NAVAIR Pax River, MD</td> <td align="right">0.100</td> <td align="right">0.100</td> <td>Oct 2009</td> <td align="right">0.100</td> <td>Oct 2010</td> <td align="right">0.000</td> <td></td> <td align="right">0.100</td> <td align="right">0.300</td> <td align="right">0.600</td> <td>Continuing</td> </tr> <tr> <td>Acquisition Workforce Fund</td> <td>Various/ Various</td> <td>Various Various</td> <td align="right">0.404</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">0.404</td> <td>Continuing</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">5.202</td> <td align="right">5.825</td> <td></td> <td align="right">6.070</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">6.070</td> <td align="right">18.225</td> <td align="right">35.322</td> <td></td> </tr> </table> <p>Remarks Contract type for Travel is TO.</p>																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	Subtotal			11.141	10.360		7.397		0.000		7.397	50.475	79.373						FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	Contr Eng Supt - ETS (NON-FFRDC)	Various/ Various	Various Various	2.350	2.400	Dec 2009	2.450	Dec 2010	0.000		2.450	6.265	13.465	Continuing	Government Eng Sup	WR	NAWCAD Pax River, MD	2.348	3.325	Nov 2009	3.520	Nov 2010	0.000		3.520	11.660	20.853	Continuing	Travel - Internal	WR	NAVAIR Pax River, MD	0.100	0.100	Oct 2009	0.100	Oct 2010	0.000		0.100	0.300	0.600	Continuing	Acquisition Workforce Fund	Various/ Various	Various Various	0.404	0.000		0.000		0.000		0.000	0.000	0.404	Continuing	Subtotal			5.202	5.825		6.070		0.000		6.070	18.225	35.322	
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																																																																																																															
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																																																																																																																												
Subtotal			11.141	10.360		7.397		0.000		7.397	50.475	79.373																																																																																																																																													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																																																																																																															
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																																																																																																																												
Contr Eng Supt - ETS (NON-FFRDC)	Various/ Various	Various Various	2.350	2.400	Dec 2009	2.450	Dec 2010	0.000		2.450	6.265	13.465	Continuing																																																																																																																																												
Government Eng Sup	WR	NAWCAD Pax River, MD	2.348	3.325	Nov 2009	3.520	Nov 2010	0.000		3.520	11.660	20.853	Continuing																																																																																																																																												
Travel - Internal	WR	NAVAIR Pax River, MD	0.100	0.100	Oct 2009	0.100	Oct 2010	0.000		0.100	0.300	0.600	Continuing																																																																																																																																												
Acquisition Workforce Fund	Various/ Various	Various Various	0.404	0.000		0.000		0.000		0.000	0.000	0.404	Continuing																																																																																																																																												
Subtotal			5.202	5.825		6.070		0.000		6.070	18.225	35.322																																																																																																																																													

UNCLASSIFIED

R-1 Line Item #133

Page 8 of 12

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy							DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>			PROJECT 2211: <i>Joint Air-to-Ground Missile</i>				
<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"></div> <div style="width: 20%; text-align: center;"> Total Prior Years Cost </div> <div style="width: 10%; text-align: center;"> FY 2010 </div> <div style="width: 10%; text-align: center;"> FY 2011 Base </div> <div style="width: 10%; text-align: center;"> FY 2011 OCO </div> <div style="width: 10%; text-align: center;"> FY 2011 Total </div> <div style="width: 10%; text-align: center;"> Cost To Complete </div> <div style="width: 10%; text-align: center;"> Total Cost </div> <div style="width: 10%; text-align: center;"> Target Value of Contract </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 25%;">Project Cost Totals</div> <div style="width: 20%; text-align: center;">59.752</div> <div style="width: 10%; text-align: center;">77.412</div> <div style="width: 10%; text-align: center;">100.846</div> <div style="width: 10%; text-align: center;">0.000</div> <div style="width: 10%; text-align: center;">100.846</div> <div style="width: 10%; text-align: center;">508.000</div> <div style="width: 10%; text-align: center;">746.010</div> <div style="width: 10%; text-align: center;">387.212</div> </div>										
Remarks										

UNCLASSIFIED

R-1 Line Item #133

Page 9 of 12

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: *Research, Development, Test & Evaluation, Navy*
BA 5: *Development & Demonstration (SDD)*

R-1 ITEM NOMENCLATURE

PE 0605450N: *Joint Air-to-ground Missile (JAGM)*

PROJECT

2211: *Joint Air-to-Ground Missile*

Fiscal Year		2009				2010				2011				2012				2013				2014				2015												
		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									
Acquisition Milestones										MSB △																	MSO △											
Technology Development		TECHNOLOGY DEVELOPMENT PHASE																																				
Engineering Manufacturing Development										EMD △	EMD																											
Development									PDR △				CDR △				DDR △				IPR △																	
Test & Evaluation Milestones																																						
Integration		AH-1Z Integration																				DT Shots																
		F/A-18E/F Integration																				DT Shots																
Development Testing										MH-60R Integration																DT Shots												
Operational Testing																																						
Laboratory Testing (LT) /Eng Dev Test (EDT)		LT				EDT1				EDT2				System Qual																								
Prod Prove-Out Test (System Qual)																																						
Production Milestones																																						
LRIP I																						ADV PROC 1 △								LRIP 1 △								
LRIP II																																						
FRP																														ADV PROC 2 △				POT				
Production Deliveries																																						

UNCLASSIFIED

R-1 Line Item #133

Page 10 of 12

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>	PROJECT 2211: <i>Joint Air-to-Ground Missile</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Milestone B	1	2011	1	2011
Technology Development	1	2009	1	2011
EMD Contract Award	2	2011	2	2011
EMD	2	2011	1	2015
AH-1Z Integration	1	2009	4	2013
AH-1Z DT Shots	1	2014	3	2014
F/A-18 E/F Integration	1	2009	4	2013
F/A-18 E/F DT Shots	1	2014	3	2014
MH-60R Integration	1	2009	4	2014
MH-60R DT Shots	1	2015	3	2015
ERMP Integration	2	2015	4	2015
ARH Integration	2	2015	4	2015
Program Decision Review	3	2010	3	2010
Critical Design Review	4	2011	4	2011
Design Readiness Review	4	2012	4	2012
Laboratory Test	2	2009	4	2009
Engineering Design Test (1)	4	2009	1	2011
Engineering Design Test (2)	2	2011	4	2011

UNCLASSIFIED

R-1 Line Item #133

Page 11 of 12

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010																																													
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>		PROJECT 2211: <i>Joint Air-to-Ground Missile</i>																																												
		<table> <tr> <th rowspan="2">Event</th><th colspan="2">Start</th><th colspan="2">End</th></tr> <tr> <th>Quarter</th><th>Year</th><th>Quarter</th><th>Year</th></tr> <tr> <td>Prod Prove-Out Test (System Qual)</td><td align="center">1</td><td align="center">2012</td><td align="center">1</td><td align="center">2015</td></tr> <tr> <td>In-Process Review</td><td align="center">4</td><td align="center">2013</td><td align="center">4</td><td align="center">2013</td></tr> <tr> <td>Advanced Procurement 1</td><td align="center">1</td><td align="center">2014</td><td align="center">1</td><td align="center">2014</td></tr> <tr> <td>Milestone C</td><td align="center">1</td><td align="center">2015</td><td align="center">1</td><td align="center">2015</td></tr> <tr> <td>Advanced Procurement 2</td><td align="center">1</td><td align="center">2015</td><td align="center">1</td><td align="center">2015</td></tr> <tr> <td>LRIP 1</td><td align="center">1</td><td align="center">2015</td><td align="center">1</td><td align="center">2015</td></tr> <tr> <td>PQT</td><td align="center">3</td><td align="center">2015</td><td align="center">4</td><td align="center">2015</td></tr> </table>			Event	Start		End		Quarter	Year	Quarter	Year	Prod Prove-Out Test (System Qual)	1	2012	1	2015	In-Process Review	4	2013	4	2013	Advanced Procurement 1	1	2014	1	2014	Milestone C	1	2015	1	2015	Advanced Procurement 2	1	2015	1	2015	LRIP 1	1	2015	1	2015	PQT	3	2015	4	2015
Event	Start		End																																													
	Quarter	Year	Quarter	Year																																												
Prod Prove-Out Test (System Qual)	1	2012	1	2015																																												
In-Process Review	4	2013	4	2013																																												
Advanced Procurement 1	1	2014	1	2014																																												
Milestone C	1	2015	1	2015																																												
Advanced Procurement 2	1	2015	1	2015																																												
LRIP 1	1	2015	1	2015																																												
PQT	3	2015	4	2015																																												

UNCLASSIFIED

R-1 Line Item #133

Page 12 of 12