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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>			PE 0605450N: <i>Joint Air-to-ground Missile (JAGM)</i>								
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	61.762	100.846	118.395	-	118.395	124.490	129.651	61.629	34.147	Continuing	Continuing
2211: <i>Joint Air-to-Ground Missile</i>	61.762	100.846	118.395	-	118.395	124.490	129.651	61.629	34.147	Continuing	Continuing

A. Mission Description and Budget Item Justification

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.

FY08 funding captured under PE 0604450N.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	77.412	100.846	120.044	-	120.044
Current President's Budget	61.762	100.846	118.395	-	118.395
Total Adjustments	-15.650	-	-1.649	-	-1.649
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-13.581	-			
• SBIR/STTR Transfer	-1.330	-			
• Program Adjustments	-0.001	-	-0.096	-	-0.096
• Section 219 Reprogramming	-0.736	-	-	-	-
• Rate/Misc Adjustments	-	-	-1.553	-	-1.553
• Congressional General Reductions Adjustments	-0.002	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

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Schedule:

JAGM is a lead program for implementation of the OSD Competitive Technology Development (TD) initiatives. The goals for each of the JAGM TD contractors were achieved, including system level Preliminary Design Reviews, 3 ground launched missile shots demonstrating each of the 3 seeker modes (SAL/IR/MMW), F/A-18E/F wind tunnel testing of the new launcher/missile configuration, and F/A-18 E/F flying quality flight tests. The JAGM Engineering Manufacturing Development acquisition approach is aligned with FY09 Weapon Systems Acquisition Reform Act initiatives and OSD (AT&L) acquisition initiatives. The JAGM MS B originally scheduled in 1Q FY11 has been delayed to 3Q FY11 while obtaining approval of the JAGM Acquisition Strategy. As a result, there will be corresponding delays to the program. Army Extended Range Multi Purpose Unmanned Aerial System, Armed Reconnaissance Helicopter Integration, and Production Qualification Test deleted from the Navy schedule as it is not required to depict Army efforts on the Navy schedule.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

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>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2211: <i>Joint Air-to-Ground Missile</i>	61.762	100.846	118.395	-	118.395	124.490	129.651	61.629	34.147	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2010	FY 2011	FY 2012
<p>Title: JAGM Technology Development</p> <p align="right">Articles:</p> <p>FY 2010 Accomplishments: Funding was used towards an OSD directed 27 month competitive technology development effort. Funding was used to support the Navy's program management and integration efforts on 3 threshold platforms. This included support of all acquisition, system engineering and test reviews. Navy integration efforts were focused on the following threshold platforms: F/A-18E/F, AH-1Z and MH-60R.</p>	61.762 0	-	-
<p>Title: JAGM Engineering and Manufacturing Development (EMD)</p> <p>FY 2011 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.</p> <p>FY 2012 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</p>	-	100.846 0	118.395 0

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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>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
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.			
Accomplishments/Planned Programs Subtotals	61.762	100.846	118.395

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2010	FY 2011	FY 2012			FY 2013	FY 2014	FY 2015	FY 2016	Cost To	
			Base	OCO	Total					Complete	Total Cost
• WPN, 224800: JAGM	0.000	0.000	0.000	0.000	0.000	0.000	9.869	166.722	174.673	2,941.036	3,292.300
• RDT&E ARMY, 0605450A: JAGM	126.775	130.340	127.534	0.000	127.534	136.692	109.476	57.084	58.054	Continuing	Continuing
• MPA, C70302: JAGM	0.000	0.000	0.000	0.000	0.000	0.000	5.508	96.442	98.081	3,313.250	3,513.281

D. Acquisition Strategy

The JAGM System is a pre-Acquisition Category 1D Joint Army/Navy program with the Army designated as lead service. The Government utilized full and open competition to initiate the Technology Development phase of the JAGM program. The 27 month Technology Development phase is complete and will be followed by a 48 month EMD phase followed by limited rate and full rate production. In the TD Phase the two contractors completed a Preliminary Design Review, 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.

E. Performance Metrics

JAGM completed the OSD directed 27 month competitive technology development effort 1Q FY 2011.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

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>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Technology Development	C/CPIF	Lockheed Martin:Orlando, FL	13.846	-		-		-		-	0.000	13.846	13.846
Technology Development	C/CPIF	Raytheon:Tucson, AZ	13.846	-		-		-		-	0.000	13.846	13.846
EMD	C/CPIF	TBD:TBD	-	47.434	Dec 2010	47.182	Dec 2011	-		47.182	163.185	257.801	257.801
Aircraft Integraton	WR	NAWCAD:Pax River, MD	2.589	1.806	Nov 2010	10.066	Nov 2011	-		10.066	29.974	44.435	
Aircraft Integration (AH-1Z)	SS/T&M	Bell Helicopter:Hurst, TX	2.500	4.420	Dec 2010	0.901	Dec 2011	-		0.901	4.147	11.968	11.968
Aircraft Integration (F-18E/F)	SS/T&M	Boeing:St. Louis MO	15.702	3.391	Jan 2011	3.400	Jan 2012	-		3.400	11.139	33.632	33.632
Aircraft Integration (MH-60R)	SS/T&M	Sikorsky:East Hartford CT	1.600	0.500	Apr 2011	4.000	Apr 2012	-		4.000	3.205	9.305	9.305
Sytems Eng - WD	WR	NAWCWD:China Lake, CA	27.985	15.427	Nov 2010	16.056	Nov 2011	-		16.056	37.298	96.766	
Subtotal			78.068	72.978		81.605		-		81.605	248.948	481.599	

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	5.730	7.277	Nov 2010	14.184	Nov 2011	-		14.184	62.367	89.558	
Software Development	SS/T&M	LMSI:Owego NY	5.196	6.250	Jan 2011	8.021	Jan 2012	-		8.021	15.979	35.446	35.446
Integrated Logistics Support	WR	NAWCWD:China Lake, CA	0.728	0.874	Nov 2010	1.395	Nov 2011	-		1.395	5.368	8.365	
Subtotal			11.654	14.401		23.600		-		23.600	83.714	133.369	

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Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total		Target Value of Contract
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	
Test & Evaluation	WR	NAWCAD:Pax River , MD	4.500	3.625	Nov 2010	3.721	Nov 2011	-		3.721	21.630	33.476
Test & Evaluation	WR	NAWCWD:China Lake, CA	4.900	3.272	Nov 2010	3.335	Nov 2011	-		3.335	21.789	33.296
Test & Evaluation	MIPR	NASA AMES:CA	2.601	0.500	Nov 2010	-		-		-	0.000	3.101
Test & Evaluation	MIPR	AEDC/DOF, AFB:TN	8.764	-		-		-		-	0.000	8.764
Subtotal			20.765	7.397		7.056		-		7.056	43.419	78.637

Remarks

Contract type for Test \$ Evaluation to NASA AMES is IPR.

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total		Target Value of Contract
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	
Contr Eng Supt - ETS (NON-FFRDC)	Various	Various:Various	4.750	2.450	Dec 2010	2.417	Nov 2011	-		2.417	3.645	13.262
Government Eng Sup	WR	NAWCAD:Pax River, MD	5.673	3.520	Nov 2010	3.630	Nov 2011	-		3.630	8.030	20.853
Travel - Internal	WR	NAVAIR:Pax River, MD	0.200	0.100	Oct 2010	0.087	Nov 2011	-		0.087	0.200	0.587
Acquisition Workforce Fund	Various	Various:Various	0.404	-		-		-		-	0.000	0.404
Subtotal			11.027	6.070		6.134		-		6.134	11.875	35.106

Remarks

Contract type for Travel is TO.

	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		121.514	100.846	118.395	-	118.395	387.956	728.711

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy

DATE: February 2011

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*

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy **DATE:** February 2011

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>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
JAGM				
Acquisition Milestones: Milestones: Milestone B	3	2011	3	2011
Acquisition Milestones: Milestones: Milestone C	3	2015	3	2015
Systems Development: Technology Development Phase	1	2010	1	2011
Systems Development: Engineering and Manufacturing Development (EMD) Contract Award	4	2011	4	2011
Systems Development: EMD Phase	4	2011	4	2015
Reviews: Program Design Review	3	2010	3	2010
Reviews: Critical Design Review	1	2013	1	2013
Reviews: In-Process Review	1	2015	1	2015
Test and Evaluation Milestones: Integration: AH-1Z Integration	1	2010	3	2014
Test and Evaluation Milestones: Integration: AH-1Z Development Test (DT) Shots	4	2014	2	2015
Test and Evaluation Milestones: Development Testing: F/A-18 E/F Integration	1	2010	3	2014
Test and Evaluation Milestones: Development Testing: F/A-18 E/F DT Shots	4	2014	2	2015
Test and Evaluation Milestones: Development Testing: MH-60R Integration	1	2010	4	2016
Test and Evaluation Milestones: Eng Dev Test (EDT): Engineering Development Test (1)	1	2010	1	2011
Test and Evaluation Milestones: Eng Dev Test (EDT): Engineering Development Test (2)	2	2011	4	2012
Test and Evaluation Milestones: Prod Prove-Out Test (System Qual): Prod Prove-Out Test (System Qual)	1	2012	3	2015
Production Milestones: Contract Awards: Advanced Procurement 1	1	2015	1	2015
Production Milestones: Contract Awards: LRIP 1 WPN	1	2016	1	2016

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: Contract Awards: Advanced Procurement 2	1	2016	1	2016