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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM							
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	53.954	27.549	51.619	0.000	51.619	54.018	41.331	49.617	49.013	Continuing	Continuing
090: MLRS HIMARS	3.656	1.987	3.367	0.000	3.367	6.360	6.195	6.304	6.406	Continuing	Continuing
093: Multi-Launch Rocket System (MLRS)	3.981	4.514	3.691	0.000	3.691	1.447	0.962	0.978	0.994	Continuing	Continuing
784: GUIDED MLRS	46.317	8.911	2.582	0.000	2.582	2.634	2.697	11.156	12.041	Continuing	Continuing
78G: GMLRS ALTERNATIVE WARHEADS	0.000	12.137	41.979	0.000	41.979	43.577	31.477	31.179	29.572	Continuing	Continuing
A. Mission Description and Budget Item Justification											
<p>The M142 High Mobility Artillery Rocket System (HIMARS) fully supports more deployable, affordable and lethal, Brigade Combat Teams, Fires Brigade, Modular Forces, and Joint Expeditionary Forces. The HIMARS launcher is a C-130 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM) and Army Tactical Missile System (ATACMS) Family of Munitions. The HIMARS launcher has extensive commonality with the MLRS M270A1 tracked launcher and consists of a Fire Control System, a carrier (FMTV XM1140 automotive chassis) and a launcher-loader module that performs all operations necessary to complete a fire mission. The MFOM and AFOM are a family of rockets and missiles capable of attacking a variety of tactical and operational targets, providing the requisite range and lethality to support maneuver commanders out to 300 kilometers. HIMARS, when firing ATACMS and GMLRS, is capable of the precise attack of targets in both open and complex/urban terrain, with low collateral damage. HIMARS satisfies the Army's digitization requirements by interfacing with the Advanced Field Artillery Tactical Data System fire support command and control system. HIMARS is interoperable with existing MLRS units in terms of communications and reloading capabilities. HIMARS is an all-weather, day/night, indirect fire system used in support of light, early and forced entry expeditionary operations using a more deployable, lethal, survivable and tactically mobile long range artillery system. The HIMARS is deployable worldwide and will operate in a wide range of climatic conditions. It is certified by the Air Force for fixed-wing air transport in a fully combat loaded, combat ready configuration. HIMARS, as part of the Fires Brigade, will provide fires that shape, shield and isolate the battle space. Using both precision GMLRS and ATACMS Unitary munitions, HIMARS provides close support fires for Troops in Contact (TIC) in both open and urban terrain. The HIMARS provides Joint Expeditionary Forces a flexible and lethal rocket/missile capability that can be employed by platoon, battery, or battalion, each with the ability to operate independently for a limited period. HIMARS units can be quickly tailored for centralized or decentralized execution throughout the depth and breadth of the battle space in support of distributed forces. The program also includes training devices for tactical training, classroom training, and handling exercises. HIMARS has been deployed to both Operation Iraqi Freedom and Operation Enduring Freedom with great success. HIMARS is also a key component of the Marine Corps Future Fighting Effort. The M270A1 upgraded MLRS launcher is mounted on a Bradley Fighting Vehicle chassis, and is capable of firing the MFOM and the AFOM, including precision munitions, to a range of 300KM. M270A1, as part of the fires brigade, will provide fires that shape, shield, and isolate the battlefield in open, urban, and complex terrain. Guided Multiple Launch Rocket Systems (GMLRS) munitions are the Army's</p>											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM			
BA 7: Operational Systems Development					
primary organic Joint Expeditionary, all-weather, all-terrain, 24/7, tactical range precision guided rockets employed by modular Fired Brigades supporting Brigade Combat Teams, Joint Special Operations Force and Joint Force combatant commanders. GMLRS are the primary munitions for units fielded with the HIMARS and MLRS M270A1 rocket and missile launcher platforms. GMLRS is a major upgrade/replacement for the aging M26A1/A2 rocket inventory that integrates a guidance and control package and an improved rocket motor achieving greater range and precision accuracy requiring fewer rockets to defeat targets than current artillery rockets, thereby reducing the logistics burden. There are two variants of GMLRS; GMLRS with Dual Purpose Improved Conventional Munitions (DPICM) and GMLRS with a 200-pound class high explosive warhead (Unitary). The GMLRS Unitary is a modification to the GMLRS DPICM integrating a multi-mode fuze and high explosive warhead making it an all-weather, low collateral damage, precision rocket. This expands the MLRS target set into urban and complex environments, adds point targets, and supports TIC. The alternative warhead will replace the DPICM with similar lethal capability that reduces unexploded ordnance and increases warhead IM compliance.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	59.552	27.693	9.694	0.000	9.694
Current President's Budget	53.954	27.549	51.619	0.000	51.619
Total Adjustments	-5.598	-0.144	41.925	0.000	41.925
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Adjustments to Budget Years	-5.598	-0.144	41.925	0.000	41.925
Change Summary Explanation					
Change Summary Explanation: Funding - FY 2011: Funds increased to support GMLRS Alternative Warhead.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0603778A: <i>MLRS PRODUCT IMPROVEMENT PROGRAM</i>				PROJECT 090: <i>MLRS HIMARS</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
090: <i>MLRS HIMARS</i>	3.656	1.987	3.367	0.000	3.367	6.360	6.195	6.304	6.406	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>The M142 High Mobility Artillery Rocket System (HIMARS) fully supports more deployable, affordable, and lethal Brigade Combat Teams, Fires Brigade, Modular Forces and Joint Expeditionary Forces. It is a light weight, deployable system which provides long range precision strike capability in both early and forced entry scenarios. Mounted on a medium tactical wheeled vehicle chassis, HIMARS is transportable in a C-130 aircraft, and is self-loading and self-locating using Global Positioning System technology. It fires the full Multiple Launch Rocket System (MLRS) Family of Munitions and Army Tactical Missile System (ATACMS) Family of Munitions. Additionally a HIMARS battery requires significantly reduced airlift resources that are required to transport a battery of the tracked M270/M270A1 MLRS. HIMARS, as part of the Fires Brigade, provides fires that shape, shield and isolate the battle space. Using both Precision Guided Multiple Launch Rocket System and ATACMS Unitary munitions, HIMARS provides close support fires for Troops In Contact in both open and urban terrain. HIMARS has been deployed to both Operation Iraqi Freedom and Operation Enduring Freedom with great success. HIMARS is also a key component of the Marine Corps Future Fighting Effort.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Continue system design and Production Qualification Testing, conduct Functional Configuration Audit, and develop Integrated Logistics Products; integrate and test Horizontal Technology Insertion (HTI) upgrades including Increased Crew Protection Cab, Enhanced Command and Control, Improved Initialization, Obsolescence Mitigation, Tactical Fire Control, Embedded Training Launcher Loader Module electric drive, Diagnostics/Prognostics, Alternate Coupling, Situational Awareness, Long Range Communication and future munition integration. Perform technical assessments, concept studies, cost reduction, risk reduction, field issue resolution and required documentation.							3.656	1.931	3.367	0.000	3.367

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #2 Small Business Innovative Research/Small Business Technology Transfer Programs	0.000	0.056	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	3.656	1.987	3.367	0.000	3.367

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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
• Ord. #1: HIMARS Launcher (C02901)	227.509	208.416	211.517	0.000	211.517	31.737	20.265	7.095	7.216	0	713.755
• Ord. #2: HIMARS Modifications (C67501)	33.144	70.890	39.371	0.000	39.371	9.802	6.379	6.643	6.664	Continuing	Continuing
• Ord. #3: HIMARS Modifications: Initial Spares (CA0289)	1.053	1.801	1.856	0.000	1.856	1.891	1.925	1.958	1.991	Continuing	Continuing
• Ord. #4: Initial Spares, HIMARS (CA0288)	12.933	8.915	9.706	0.000	9.706	0.939	1.221	1.241	1.263	0	36.218
D. Acquisition Strategy											
The HIMARS program is currently in Full Rate Production (FRP) and awarded the FRP-5 contract December 2009. HIMARS follow-on HTI efforts include the Increased Crew Protection, Enhanced Command and Control, Improved Initialization, and Long Range Communications.											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM					PROJECT 090: MLRS HIMARS				
Product Development (\$ 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	
Risk Reduction/ Maturation Contract	SS/CPAF	LMMFC Texas	110.202	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
Path through Operational Test	SS/CPFF	LMMFC Texas	11.455	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
Work Directives/ Chassis and Cab	C	TACOM (S&S) Location could not be determined.	5.561	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
Battle Command	SS/CPFF	CECOM STRICOM, AMRDEC, Techrizon, LMMFC,Texas	10.368	1.074		2.516		0.000		2.516	Continuing	Continuing	0	
Government Support	C	AMCOM/ GSA RSA & TSM	16.709	0.256		0.294		0.000		0.294	Continuing	Continuing	0	
Increased Crew Protection	SS/CPFF	LMMFC Texas	25.261	0.000		0.000		0.000		0.000	Continuing	Continuing	0	
Subtotal			179.556	1.330		2.810		0.000		2.810			0.000	
Remarks TACOM - Tank Automotive & Armaments Command; AMCOM - Aviation & Missile Command RSA - Redstone Arsenal Alabama; STRICOM - Simulation Training and Instrument CommandS&S - Stewart & Stevenson; GSA - General Services Administration LMMFC - Lockheed Martin Missile and Fire Control TSM - TRADOC System Manager; TBD - To Be Determined; N/A - Not Applicable CECOM - US Army Communication - Electronics CommandAMRDEC - Aviation and Missile Research Development and Engineering CenterSS - Sole Source; CPIF - Cost Plus Incentive Fee; CPAF - Cost Plus Award FeeCPFF - Cost Plus Fixed Fee; UA - Unit of Action														

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Support (\$ in Millions) <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>FY 2011 Total</th> <th colspan="3"></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>Support Contract</td> <td>C/CPFF</td> <td>Camber Research/S3/TMI Alabama</td> <td align="right">2.905</td> <td align="right">0.325</td> <td></td> <td align="right">0.299</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.299</td> <td>Continuing</td> <td>Continuing</td> <td align="right">0</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">2.905</td> <td align="right">0.325</td> <td></td> <td align="right">0.299</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.299</td> <td></td> <td></td> <td align="right">0.000</td> </tr> </table>																		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	Support Contract	C/CPFF	Camber Research/S3/TMI Alabama	2.905	0.325		0.299		0.000		0.299	Continuing	Continuing	0	Subtotal			2.905	0.325		0.299		0.000		0.299			0.000
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																											
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Subtotal			2.905	0.325		0.299		0.000		0.299			0.000																																																								
Remarks S3 - Systems Studies Simulation, Inc., TMI - Tec Masters Inc																																																																					
Test and Evaluation (\$ in Millions) <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>FY 2011 Total</th> <th colspan="3"></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>Test Support</td> <td>C</td> <td>Fort Hood ATEC,APG MD,WSMR NM & RTTC RSA</td> <td align="right">42.489</td> <td align="right">0.224</td> <td></td> <td align="right">0.111</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.111</td> <td>Continuing</td> <td>Continuing</td> <td align="right">0</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">42.489</td> <td align="right">0.224</td> <td></td> <td align="right">0.111</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.111</td> <td></td> <td></td> <td align="right">0.000</td> </tr> </table>																		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 Support	C	Fort Hood ATEC,APG MD,WSMR NM & RTTC RSA	42.489	0.224		0.111		0.000		0.111	Continuing	Continuing	0	Subtotal			42.489	0.224		0.111		0.000		0.111			0.000
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																											
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Subtotal			42.489	0.224		0.111		0.000		0.111			0.000																																																								
Remarks APG MD - Aberdeen Proving Ground, Maryland WSMR NM - White Sands Missile Range, New Mexico RTTC RSA - Redstone Technical Test Center, Redstone Arsenal, Alabama ATEC - US Army Test and Evaluation Command																																																																					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0603778A: <i>MLRS PRODUCT IMPROVEMENT PROGRAM</i>				PROJECT 093: <i>Multi-Launch Rocket System (MLRS)</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
093: <i>Multi-Launch Rocket System (MLRS)</i>	3.981	4.514	3.691	0.000	3.691	1.447	0.962	0.978	0.994	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>The Multiple Launch Rocket and Missile System (MLRS) is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, Precision Strike weapons system that is organic/assigned to Fires Brigades supporting Brigade Combat Teams. The MLRS launcher provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. The launcher is complimented by the MLRS Family of Munitions (MFOM) to include the Guided Multiple Launch Rocket System (GMLRS), and the Army Tactical Missile System (ATACMS) Family of Munitions (AFOM), capable of engaging targets up to a range of 300 kilometers. The MLRS product improvement program provides funding for research, development, and integration efforts to the MLRS necessary for sustainment, obsolescence mitigation, reliability improvements, incorporation of advanced technologies, and decreasing the logistics footprint. This effort includes performing technical assessments, concept studies, and risk reduction efforts for incorporation of future requirements. The MLRS product improvement program maintains compliance with Intra-Army Interoperability and Digital Communications via Joint Variable Message Format.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Perform Command, Control, Communications, Computers, and Intelligence (C4I)/Interoperability Certification Tests and the Improved Operational Timeline, conduct Network Interoperability Testing/Certification. Perform technical assessments, concept studies, obsolescence mitigation, crew protection enhancements, and risk reduction. <i>FY 2009 Accomplishments:</i> FY 2009							3.981	4.387	3.691	0.000	3.691

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2 Small Business Innovative Research/Small Business Technology Transfer		0.000	0.127	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Accomplishments/Planned Programs Subtotals		3.981	4.514	3.691	0.000	3.691

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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
• Ord. #1: MLRS Mods(C67500)	1.866	22.423	8.217	0.000	8.217	8.253	6.939	14.204	14.437	Continuing	Continuing
• Ord. #2: MLRS Mod Initial Spares (CA0265)	1.037	1.018	1.014	0.000	1.014	1.033	1.052	1.071	1.089	Continuing	Continuing
D. Acquisition Strategy											
The MLRS product improvement program ensures compliance as defined in the Department of Defense (DoD) Information Technical Standards. Funding is provided to several Government Agencies/Laboratories each Fiscal Year in support of this program. Support efforts also include Enhanced C2, Interoperability Certifications, obsolescence mitigation, increased crew protection, and Information Assurance compliance.											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Remarks CPFF - Cost Plus Fixed Fee LMMFC-D - Lockheed Martin Missile and Fire Control-Dallas N/A - Not Applicable AMRDEC - United States Army Research, Development, and Engineering Command RSA AL - Redstone Arsenal, Alabama OK - Oklahoma CECOM - United States Army Communication - Electronics Command																																																																																			
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Remarks CTSF - Central Test Support Facility AMCOM - Army Missile Command RTTC-Redstone Technical Test Center WSMR - White Sands Missile Range																																																																																										
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Remarks PFRMS - Precision Fires Rocket and Missile Systems																																																																																										

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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
784: <i>GUIDED MLRS</i>	46.317	8.911	2.582	0.000	2.582	2.634	2.697	11.156	12.041	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>Guided Multiple Launch Rocket System (GMLRS) munitions are the Army's primary organic Joint Expeditionary, all-weather, all-terrain, 24/7, tactical range precision guided rockets employed by modular Fires Brigades supporting Brigade Combat Teams, Divisions, Joint Special Operations Force, and Joint Force combatant commanders. GMLRS are the primary munitions for units fielded with the High Mobility Artillery Rocket System (HIMARS) and Multiple Launch Rocket System (MLRS) M270A1 rocket and missile launcher platforms. GMLRS provides close, medium and long range pin point precision and area fires to destroy, suppress and shape threat forces and protect friendly forces against: cannon, mortar, rocket and missile artillery; light materiel and armor; personnel; command and control; and air defense surface targets. There are two variants of GMLRS; GMLRS with Dual Purpose Improved Conventional Munitions (DPICM) and GMLRS with a 200 pound class high explosive warhead (Unitary). The GMLRS DPICM is a five nation cooperative program among France, Germany, Italy, United Kingdom and the United States. The GMLRS Unitary is a modification to the GMLRS DPICM integrating a multi-mode fuze and high explosive warhead making it an all-weather, low collateral damage, precision rocket. This modification expands the MLRS target set into urban and complex environments, adds point targets, and supports Troops in Contact (TIC). The GMLRS alternative warhead will replace DPICM and service the DPICM target set and leave zero unexploded ordnance on the battlefield. This effort includes development and test activities. Obsolescence and cost reduction studies begin FY11, with an additional emphasis on MLRS Common Test Equipment (MCTE) upgrades and future insensitive munition (IM) technology studies beginning FY14. In the more than 1500 rockets fired in Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF), the GMLRS Unitary Rocket has demonstrated high effectiveness and low collateral damage while supporting TIC. Continued GMLRS Unitary development efforts will incorporate trajectory shaping capability into the flight software. Material changes will provide operational flexibility and capability against an expanded target set. GMLRS is also a key component of the Marine Corps Future Fighting Effort.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #1						3.749	1.886	1.734	0.000	1.734	
Perform technical assessments, concept studies, prepare milestone documentation and risk reduction											

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #2 Conduct Development and Engineering for IM Program	4.784	2.534	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #3	23.279	1.058	0.848	0.000	0.848

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Conduct Development Engineering; Design and Develop; Perform Integration and Test of Multi-Mode Fuzes and Alternative Warheads FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO					
Program #4 Conduct system test and evaluation activities FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO	14.505	3.199	0.000	0.000	0.000

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<u>B. Accomplishments/Planned Program (\$ in Millions)</u>											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #5						0.000	0.234	0.000	0.000	0.000	
Small Business Innovative Research/Small Business Technology Transfer Programs											
<i>FY 2009 Accomplishments:</i>											
FY 2009											
<i>FY 2010 Plans:</i>											
FY 2010											
<i>FY 2011 Base Plans:</i>											
FY 2011 Base											
<i>FY 2011 OCO Plans:</i>											
FY 2011 OCO											
Accomplishments/Planned Programs Subtotals						46.317	8.911	2.582	0.000	2.582	
<u>C. Other Program Funding Summary (\$ in Millions)</u>											
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
• Ord. #1: <i>Missile Procurement Army - GMLRS (C64400)</i>	309.205	353.311	353.268	0.000	353.268	314.784	326.763	337.778	347.079	Continuing	Continuing
<u>D. Acquisition Strategy</u>											
The MLRS Product Improvement Program project is intended to support streamlined product improvement initiative as they are identified by the material developer or combat developer. This project also supports insensitive munition (IM) activities to improve the overall posture of the system all the way down to component level. The product office also leverages this project to investigate and develop alternative material changes to improve the GMLRS family of munitions. Future initiatives could include a service life extension program to extend the shelf life of the GMLRS rocket.											

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<u>E. Performance Metrics</u> Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.		

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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																																																																													
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EMD DPICM Contract	SS/CPAF	LMMFCS Dallas TX	91.194	0.000		0.000		0.000		0.000	Continuing	Continuing	0																																																																													
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Remarks DPICM - Dual Purpose Improved Conventional Munitions; SS/CPAF - Sole Source/Cost Plus Award Fee; SS/CPFF - Sole Source/Cost Plus Fixed Fee; LMMFCS - Lockheed Martin Missile and Fire Control System; TX - Texas; AMCOM-Aviation & Missile Command; AMRDEC - U.S. Army Research, Development & Engineering Command; RSA - Redstone Arsenal, Alabama; N/A - Not Applicable																																																																																										
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Subtotal			19.704	0.506		0.257		0.000		0.257			0.000																																																																													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM				PROJECT 784: GUIDED MLRS						
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	
Remarks C/CPFF-Cost/Cost Plus Fixed FeeS3-Systems Studies Simulation, Inc.TMI-Tec Masters, Inc.														
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 Support	C	WSMR NM	94.853	2.600		0.000		0.000		0.000	Continuing	Continuing	0	
Subtotal			94.853	2.600		0.000		0.000		0.000			0.000	
Remarks WSMR, NM - White Sands Missile Range, New Mexico														
Management Services (\$ 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	
In-House Support	C	PFRMS Proj Ofc RSA	23.012	0.599		0.599		0.000		0.599	Continuing	Continuing	0	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010																																												
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				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			23.012	0.599		0.599		0.000		0.599			0.000																																										
<p>Remarks PFRMS - Precision Fires Rocket and Missile Systems</p>																																																							
<table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="3"></th> <th>Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td align="right" colspan="3">Project Cost Totals</td> <td align="right">499.288</td> <td align="right">8.911</td> <td></td> <td align="right">2.582</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">2.582</td> <td></td> <td></td> <td align="right">0.000</td> </tr> </table>																	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Project Cost Totals			499.288	8.911		2.582		0.000		2.582			0.000														
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																										
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<p>Remarks</p>																																																							

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DATE: February 2010

PROJECT

784: *GUIDED MLRS*

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 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
Alternative Warhead Milestone A			#																									
GMLRS FRP V				#																								
Technical Assessment/Concept Studies/Cost Reduction Studies									#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM		PROJECT 784: GUIDED MLRS	
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Alternative Warhead Milestone A	3	2009	3	2009
GMLRS FRP V	1	2010	1	2010
Technical Assessment/Concept Studies/Cost Reduction Studies	4	2010	3	2015

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Exhibit R-5, RDT&E Termination Liability: PB 2011 Army								DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0603778A: <i>MLRS PRODUCT IMPROVEMENT PROGRAM</i>				PROJECT 784: <i>GUIDED MLRS</i>
Cost (\$ in Millions)	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	
Program Termination Liability	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Notes

The GMLRS Program Prime Contract incorporates the "Limitation of Funds" Clause (DFARS 52.232-22) to limit the Government's liability. For the GMLRS Program, the "Limitation of Funds" Clause limits the Government's financial liability per the contract to those funds placed on contract plus costs associated with the orderly termination of contractual actions.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0603778A: <i>MLRS PRODUCT IMPROVEMENT PROGRAM</i>				PROJECT 78G: <i>GMLRS ALTERNATIVE WARHEADS</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
78G: <i>GMLRS ALTERNATIVE WARHEADS</i>	0.000	12.137	41.979	0.000	41.979	43.577	31.477	31.179	29.572	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Guided Multiple Launch Rocket System (GMLRS) munitions are the Army's primary organic Joint Expeditionary, all-weather, all-terrain, 24/7, tactical range precision guided rockets employed by modular Fires Brigades supporting Brigade Combat Teams, Divisions, Joint Special Operations Force, and Joint Force combatant commanders. GMLRS are the primary munitions for units fielded with the High Mobility Artillery Rocket System (HIMARS) and Multiple Launch Rocket System (MLRS) M270A1 rocket and missile launcher platforms. GMLRS provides close, medium and long range pin point precision and area fires to destroy, suppress and shape threat forces and protect friendly forces against: cannon, mortar, rocket and missile artillery; light materiel and armor; personnel; command and control; and air defense surface targets. GMLRS is a major upgrade/replacement for the aging M26/A1/A2 rocket inventory that integrates a guidance and control package and an improved rocket motor achieving greater range and precision accuracy requiring fewer rockets to defeat targets than current artillery rockets, thereby reducing the logistics burden. There are two variants of GMLRS; GMLRS with Dual Purpose Improved Conventional Munitions (DPICM) and GMLRS with a 200 pound class high explosive warhead (Unitary). The GMLRS Alternative Warhead (AW) is a material replacement for DPICM warheads that are currently present in the M-26, the M-26A2, and M-30 (GMLRS DPICM) rockets. The GMLRS AW is being developed to eliminate the risks of Unexploded Ordnance (UXO) to a threshold level of less than one (1)percent (Objective zero (0) percent) in accordance with recent Department of Defense (DoD) policy. It fills a Warfighting Capability Gap left by the future removal of current cluster munitions from the battlefield. A Configuration Steering Board (CSB) was convened on 22 Oct 2008 to consider potential changes to the GMLRS DPICM program and address the concept refinement of GMLRS AW program. The outcome of the CSB was the signature of two Acquisition Decision Memorandums signed on 7 NOV 2008, which directed the cessation of U.S. Army DPICM production after FRP-III deliveries, and the development of a competitive procurement strategy for the GMLRS AW Program. The AW Program strategy will consist of a Technology Demonstration (TD) phase during which the Army will evaluate proposals submitted by three competing contractors to provide technology solutions, demonstrating an alternative warhead for DPICM that satisfies the MLRS ORD, dated 14 Nov 2003. The GMLRS AW will be effective against the DPICM target set. This effort includes development, integration and test activities for the payload, dispense mechanism (if required), proximity sensor (if required), electronic safe and arm device/ fuze, and associated flight software.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.000	4.072	22.938	0.000	22.938

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM	PROJECT 78G: GMLRS ALTERNATIVE WARHEADS				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Conduct Development Engineering, Design Component Testing, and Performance Analysis FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #2 Perform Technical Assessments and Concept Studies FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		0.000	3.614	10.967	0.000	10.967

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM		PROJECT 78G: GMLRS ALTERNATIVE WARHEADS		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #3		0.000	2.032	3.148	0.000	3.148
Prepare Milestone Documentation, Risk Reduction and Program Reviews						
FY 2009 Accomplishments:						
FY 2009						
FY 2010 Plans:						
FY 2010						
FY 2011 Base Plans:						
FY 2011 Base						
FY 2011 OCO Plans:						
FY 2011 OCO						
Program #4		0.000	2.080	4.926	0.000	4.926
Conduct System Test and Evaluation Activities						
FY 2009 Accomplishments:						
FY 2009						
FY 2010 Plans:						
FY 2010						
FY 2011 Base Plans:						
FY 2011 Base						
FY 2011 OCO Plans:						
FY 2011 OCO						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0603778A: <i>MLRS PRODUCT IMPROVEMENT PROGRAM</i>	PROJECT 78G: <i>GMLRS ALTERNATIVE WARHEADS</i>			
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #5 SBIR/STTR <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base <i>FY 2011 OCO Plans:</i> FY 2011 OCO	0.000	0.339	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	0.000	12.137	41.979	0.000	41.979
<u>C. Other Program Funding Summary (\$ in Millions)</u>					
N/A					
<u>D. Acquisition Strategy</u>					
The GMLRS AW rocket will also be a product improved version of the current GMLRS DPICM rocket. The GMLRS Program strategy relative to design technology is to identify leading technologies, offerors, and hardware through an open competition between three potential warheads. A Request for Proposal process has been used to solicit offerors, with the most mature, cost effective and capable choices chosen for further development. At the conclusion of the Technology Demonstration (TD) Phase, the government will make a downselect to one technology to be fully developed and integrated during Engineering and Manufacturing Development Phase.					
<u>E. Performance Metrics</u>					
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.					

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM				PROJECT 78G: GMLRS ALTERNATIVE WARHEADS				
Product Development (\$ 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	
AWP Contracts (Multiple)	SS/CPFF	GD-OTS Niceville, FL. ATK, Plymouth, MN. Aerojet, Sacram	0.000	5.429		30.584		0.000		30.584	Continuing	Continuing	0	
Government Support	C	AMCOM/ AMRDEC RSA	0.000	1.461		2.404		0.000		2.404	Continuing	Continuing	0	
Subtotal			0.000	6.890		32.988		0.000		32.988			0.000	
Remarks														
AWP-Alternative Warhead Program; C/FFP-Cost/Firm Fixed Price/SS/CPFF-Sole Source/Cost Plus Fixed Fee; AMCOM-Army Materiel Command;AMRDEC-U.S. Army Research, Development & Engineering Command; RSA-Redstone Arsenal, Alabama; N/A-Not Applicable; GD-OTS-General Dynamics-Ordnance and Tactical Systems; FL-Florida; ATK-Alliant Techsystems, Inc.; MN-Minnesota; LMMFCS-Lockheed Martin Missile and Fire Control System; TX-Texas														
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	
Support Contract	C/CPFF	Camber Research/ S3/TMI Alabama	0.000	0.506		1.029		0.000		1.029	Continuing	Continuing	0	
Subtotal			0.000	0.506		1.029		0.000		1.029			0.000	

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Remarks C/CPFF-Cost/Cost Plus Fixed Fee;S3-Systems Studies Simulation, Inc.;TMI-Tec Master, Inc.													
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 Support	C	WSMR NM	0.000	1.977		4.347		0.000		4.347	Continuing	Continuing	0
Subtotal			0.000	1.977		4.347		0.000		4.347			0.000
Remarks WSMR,NM-White Sands Missile Range, New Mexico													
Management Services (\$ 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
In-House Support	C	PFRMS Proj Ofc RSA	0.000	2.764		3.615		0.000		3.615	Continuing	Continuing	0

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0603778A: <i>MLRS PRODUCT IMPROVEMENT PROGRAM</i>				PROJECT 78G: <i>GMLRS ALTERNATIVE WARHEADS</i>					
Management Services (\$ 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
Subtotal			0.000	2.764		3.615		0.000		3.615			0.000
Remarks PFRMS-Precision Fires Rocket and Missile Systems													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	12.137		41.979		0.000		41.979			0.000
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army																								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development												R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM												PROJECT 78G: GMLRS ALTERNATIVE WARHEADS			

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0603778A: MLRS PRODUCT IMPROVEMENT PROGRAM	PROJECT 78G: GMLRS ALTERNATIVE WARHEADS		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Warhead Flight Demonstrations	3	2010	3	2010
System PDR	1	2011	1	2011
Milestone B	3	2011	3	2011
Critical Design Review (CDR)	3	2012	3	2012
Production Qualification Testing	2	2013	3	2013
Limited User Test	1	2014	1	2014
Milestone C	4	2014	4	2014

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