

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604611A: JAVELIN (AAWS-M)							
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	0.000	0.000	9.999	0.000	9.999	17.400	49.556	74.349	123.821	Continuing	Continuing
499: JAVELIN (AAWS-M)	0.000	0.000	9.999	0.000	9.999	17.400	49.556	74.349	123.821	Continuing	Continuing
<u>Note</u> Not applicable for this item.											
<u>A. Mission Description and Budget Item Justification</u> Javelin Increment II continues the development and evolution of the Army's only man-portable missile system. The Increment II program improves Javelin's lethal effects on soft and irregular targets and field fortifications while maintaining its anti-tank effectiveness by adding a Multi-purpose Warhead. Javelin Increment II will provide increased effective range, precision and a regret/fratricide avoidance capability with the addition of Precision Terminal Guidance. Increment II Component Modernization includes a state of the art seeker and other improvements, which will also mitigate major obsolescence issues, allowing Javelin to maintain its overmatch capability well into the 21st Century.The Javelin is a medium-range, man-portable, shoulder launched fire and forget missile system. Javelin is a critical system because of its precision strike, man-portability, high reliability, and capability to engage multiple targets (tanks, armored personnel carriers, bunkers, helicopters, walls, etc). These key system aspects support the Army's move to a more versatile, deployable, lethal, survivable, joint/expeditionary and sustainable force. The Javelin has a high kill rate against all known armor threats, field fortifications, and irregular targets. Javelin is operational at extended ranges, under adverse weather conditions, and in the presence of battlefield obscurants, advanced vehicle camouflage techniques and Active Protection Systems (APS). The system is hardened against countermeasures and does not require extensive training for effective employment by providing for software improvements to maintain lethality against evolving targets and countermeasures, and increase the robustness of system performance in all environments.											

UNCLASSIFIED

R-1 Line Item #82

Page 1 of 9

724 of 1922

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604611A: JAVELIN (AAWS-M)			
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	9.999	0.000	9.999
Total Adjustments	0.000	0.000	9.999	0.000	9.999
• 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	0.000	0.000	9.999	0.000	9.999
Change Summary Explanation					
FY2010 increase of \$9.999 million for Engineering and Manufacturing Development phase of the Javelin Increment II program.					

UNCLASSIFIED

R-1 Line Item #82

Page 2 of 9

725 of 1922

UNCLASSIFIED

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 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>				PROJECT 499: <i>JAVELIN (AAWS-M)</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
499: <i>JAVELIN (AAWS-M)</i>	0.000	0.000	9.999	0.000	9.999	17.400	49.556	74.349	123.821	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>Javelin Increment II continues the development and evolution of the Army's only man-portable missile system. The Increment II program improves Javelin's lethal effects on soft and irregular targets and field fortifications while maintaining its anti-tank effectiveness by adding a Multi-purpose Warhead. Javelin Increment II will provide increased effective range, precision and a regret/fratricide avoidance capability with the addition of Precision Terminal Guidance. Increment II Component Modernization includes a state of the art seeker and other improvements, which will also mitigate major obsolescence issues, allowing Javelin to maintain its overmatch capability well into the 21st Century. The Javelin is a medium-range, man-portable, shoulder launched fire and forget missile system. Javelin is a critical system because of its precision strike, man-portability, high reliability, and capability to engage multiple targets (tanks, armored personnel carriers, bunkers, helicopters, walls, etc). These key system aspects support the Army's move to a more versatile, deployable, lethal, survivable, joint/expeditionary and sustainable force. The Javelin has a high kill rate against all known armor threats, field fortifications, and irregular targets. Javelin is operational at extended ranges, under adverse weather conditions, and in the presence of battlefield obscurants, advanced vehicle camouflage techniques and Active Protection Systems (APS). The system is hardened against countermeasures and does not require extensive training for effective employment by providing for software improvements to maintain lethality against evolving targets and countermeasures, and increase the robustness of system performance in all environments.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Javelin Increment II continues development of a multi-purpose warhead and begins development of precision terminal guidance (PTG) and component modernization. <i>FY 2009 Accomplishments:</i> FY 2009							0.000	0.000	9.999	0.000	9.999

UNCLASSIFIED

R-1 Line Item #82

Page 3 of 9

726 of 1922

UNCLASSIFIED

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 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>		PROJECT 499: <i>JAVELIN (AAWS-M)</i>	
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>						
			FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO
<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			0.000	0.000	9.999	0.000
<u>C. Other Program Funding Summary (\$ in Millions)</u>						
<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	
• Ord. #1: <i>Missile Procurement, Army, CC0007, Javelin</i>	367.888	258.553	163.929	0.000	163.929	
						1,270.892
<u>D. Acquisition Strategy</u>						
The development effort for the Javelin Increment II program shall be acquired sole source from Javelin Joint Venture/Raytheon/Lockheed Martin who developed and produced the Block 0 and Block I configurations of the system.						
<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.						

UNCLASSIFIED

R-1 Line Item #82

Page 4 of 9

727 of 1922

UNCLASSIFIED

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 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>				PROJECT 499: <i>JAVELIN (AAWS-M)</i>					
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
Javelin Joint Venture/ Raytheon/Lockheed Martin	C	Tucson Arizona/Orlando, Florida	0.000	0.000		5.746		0.000		5.746	Continuing	Continuing	0
Government Component Test Support	C	Various Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Subtotal			0.000	0.000		5.746		0.000		5.746			0.000
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
Other Government Agencies	C	Various Location could not be determined.	0.000	0.000		1.340		0.000		1.340	Continuing	Continuing	0
Javelin Joint Venture/ Raytheon/Lockheed Martin	C	Various Location could not be determined.	0.000	0.000		0.165		0.000		0.165	Continuing	Continuing	0
Subtotal			0.000	0.000		1.505		0.000		1.505			0.000
Remarks													

UNCLASSIFIED

R-1 Line Item #82

Page 5 of 9

728 of 1922

UNCLASSIFIED

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 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>				PROJECT 499: <i>JAVELIN (AAWS-M)</i>																																																																											
Management Services (\$ 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>Javelin Joint Venture/ Raytheon/Lockheed Martin</td> <td align="center">C</td> <td>Tucson Arizona and Orlando, Florida</td> <td align="right">0.000</td> <td align="right">0.000</td> <td></td> <td align="right">1.792</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">1.792</td> <td align="center">Continuing</td> <td align="center">Continuing</td> <td align="right">0</td> </tr> <tr> <td>Government System Engineering and Program Management</td> <td align="center">C</td> <td>Redstone Arsenal Alabama</td> <td align="right">0.000</td> <td align="right">0.000</td> <td></td> <td align="right">0.956</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.956</td> <td align="center">Continuing</td> <td align="center">Continuing</td> <td align="right">0</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td> <td align="right">0.000</td> <td align="right">0.000</td> <td></td> <td align="right">2.748</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">2.748</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	Javelin Joint Venture/ Raytheon/Lockheed Martin	C	Tucson Arizona and Orlando, Florida	0.000	0.000		1.792		0.000		1.792	Continuing	Continuing	0	Government System Engineering and Program Management	C	Redstone Arsenal Alabama	0.000	0.000		0.956		0.000		0.956	Continuing	Continuing	0	Subtotal			0.000	0.000		2.748		0.000		2.748			0.000
				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																																																																						
Javelin Joint Venture/ Raytheon/Lockheed Martin	C	Tucson Arizona and Orlando, Florida	0.000	0.000		1.792		0.000		1.792	Continuing	Continuing	0																																																																						
Government System Engineering and Program Management	C	Redstone Arsenal Alabama	0.000	0.000		0.956		0.000		0.956	Continuing	Continuing	0																																																																						
Subtotal			0.000	0.000		2.748		0.000		2.748			0.000																																																																						
Remarks																																																																																			
<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">0.000</td> <td align="right">0.000</td> <td></td> <td align="right">9.999</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">9.999</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			0.000	0.000		9.999		0.000		9.999			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																																																																						
Project Cost Totals			0.000	0.000		9.999		0.000		9.999			0.000																																																																						
Remarks																																																																																			

UNCLASSIFIED

R-1 Line Item #82

Page 6 of 9

729 of 1922

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>	PROJECT 499: <i>JAVELIN (AAWS-M)</i>

[illegible]

UNCLASSIFIED

R-1 Line Item #82

Page 7 of 9

730 of 1922

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>	PROJECT 499: <i>JAVELIN (AAWS-M)</i>		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
CDD Development, AoA, and Milestone Documentation	4	2010	4	2012
Milestone B	1	2013	1	2013

UNCLASSIFIED

UNCLASSIFIED

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 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604611A: <i>JAVELIN (AAWS-M)</i>				PROJECT 499: <i>JAVELIN (AAWS-M)</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 Javelin Increment II EMD contract will incorporate the "Limitation of Funds" clause from the FAR 52.232-22 to limit the Government's liability.

UNCLASSIFIED

R-1 Line Item #82

Page 9 of 9

732 of 1922