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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 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0305205A: Long Endurance Multi-Intelligence Vehicle (LEMV)							
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	93.000	0.000	93.000	43.000	26.000	26.000	26.000	Continuing	Continuing
LE4: LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)	0.000	0.000	93.000	0.000	93.000	43.000	26.000	26.000	26.000	Continuing	Continuing
Note This program element funds Long Endurance Multi-Intelligence Vehicle (LEMV) efforts performed by the US Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT).											
A. Mission Description and Budget Item Justification USASMDC/ARSTRAT: Headquarters, Department of the Army General Order Number 37, dated 16 October 2006, designated USASMDC/ARSTRAT as the Army proponent for space and ground-based midcourse defense (GMD), the Army integrator for global missile defense, and the Army Service Component Command of U.S. Strategic Command (USSTRATCOM). Army Regulation (AR) 10-87 Army Commands, Army Service Component Commands, and Direct Reporting Units, dated 4 September 2007 and AR 5-22 The Army Force Modernization Proponent System dated 19 August 2009 designates USASMDC/ARSTRAT as the Army specified proponent for Global Missile Defense and Space/High Altitude capabilities.Project LE4 funds the LEMV. The LEMV will be utilized to provide persistent Intelligence, Surveillance and Reconnaissance (ISR) support in multiple environments, including combat areas. Technical objectives for the LEMV include an unmanned aerial system capable of being controlled through an existing Department of Defense ground station, 3 week flight endurance, 2,500 pound sensor payload, 20,000 feet operating altitude, multi-intelligence capable, 16 kilowatts of power for payload, capable of station keeping (the capability to loiter or maintain position over a required mission area in different types of weather), recoverable and reusable.											

UNCLASSIFIED

R-1 Line Item #72

Page 1 of 10

466 of 1922

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army				DATE: February 2010	
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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	93.000	0.000	93.000
Total Adjustments	0.000	0.000	93.000	0.000	93.000
• 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	93.000	0.000	93.000
Change Summary Explanation					
Change Summary Explanation: FY2011: Funding for the Long Endurance Multi-Intelligence Vehicle (LEMV) was moved from program element (PE) 0603308A to 0305205A.					

UNCLASSIFIED

R-1 Line Item #72

Page 2 of 10

467 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 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0305205A: <i>Long Endurance Multi-Intelligence Vehicle (LEMV)</i>				PROJECT LE4: <i>LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)</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
LE4: <i>LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)</i>	0.000	0.000	93.000	0.000	93.000	43.000	26.000	26.000	26.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>The Long Endurance Multi-Intelligence Vehicle (LEMV) will be utilized to provide persistent Intelligence, Surveillance and Reconnaissance (ISR) support in multiple environments, including combat areas. Technical objectives for the LEMV include an unmanned aerial system capable of being controlled through a Department of Defense ground station, 3 week flight endurance, 2,500 pound sensor payload, 20,000 feet operating altitude, multi-intelligence capable, 16 kilowatts of power for payload, capable of station keeping (the capability to loiter or maintain position over a required mission area in different types of weather), recoverable and reusable.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #1 Develop and maintain LEMV program plans and strategies. Program management for LEMV materiel development and acquisition planning, testing, and initial demonstration planning. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base						0.000	0.000	3.000	0.000	3.000	

UNCLASSIFIED

R-1 Line Item #72

Page 3 of 10

468 of 1922

UNCLASSIFIED

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #2 Define LEMV system architectural requirements and coordinate with combat developer on concept of operations. Coordinate with other Services on technology development. Conduct system engineering and trade studies on viable concepts. Identify risk areas in technical performance, sustainability, cost and schedule. Develop materiel acquisition documentation to support milestone decisions and contracting actions. 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	0.000	5.000	0.000	5.000
Program #3 Conduct risk reduction efforts that include prototyping system representative command and control sub-elements to validate critical command and control connectivity and battle management functional processes early in development to show successful demonstration. Engineering testing includes characterization and demonstration of sub-system interfaces, demonstrations/validations of sub-subsystem functional interactions, validation of technology integration and performance objectives for sub-system processors, and collection of supportability		0.000	0.000	5.000	0.000	5.000

UNCLASSIFIED

R-1 Line Item #72

Page 4 of 10

469 of 1922

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0305205A: Long Endurance Multi-Intelligence Vehicle (LEMV)	PROJECT LE4: LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
related data required for development of the integrated logistic support package. Sub-system testing will be conducted to validate technology maturity. 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 Design, fabricate, and integrate platform, payload and ground station, conduct Preliminary Design Review and Critical Design Reviews, Developmental/Operational testing and sustainment. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base	0.000	0.000	80.000	0.000	80.000

UNCLASSIFIED

R-1 Line Item #72

Page 5 of 10

470 of 1922

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0305205A: <i>Long Endurance Multi-Intelligence Vehicle (LEMV)</i>		PROJECT LE4: <i>LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)</i>							
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>											
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total			
FY 2011 OCO Plans: FY 2011 OCO											
Accomplishments/Planned Programs Subtotals				0.000	0.000	93.000	0.000	93.000			
<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>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• Ord. #1: <i>PE 0603308A, Project 978</i>	0.000	79.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	79.583
<u>D. Acquisition Strategy</u>											
<p>The Army established an Other Transaction Authority (OTA) for this acquisition with the intention of increasing participation from non-traditional Department of Defense contractors. This acquisition is being pursued as a rapid acquisition and must complete Developmental and Operational testing within 18 months of award. As an OTA prototype acquisition, this requirement is subject to individual negotiation and bidders that can meet the stated requirements.</p>											
<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 #72

Page 6 of 10

471 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 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0305205A: <i>Long Endurance Multi-Intelligence Vehicle (LEMV)</i>				PROJECT LE4: <i>LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)</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
Sub-system risk reduction, testing, and validation	C/Various	Various Location could not be determined.	0.000	0.000		5.000		0.000		5.000	Continuing	Continuing	0
Design, development, and sub-system integration	C/Various	Various Location could not be determined.	0.000	0.000		50.000		0.000		50.000	Continuing	Continuing	0
Developmental/Operational testing and sustainment	C/Various	Various Location could not be determined.	0.000	0.000		30.000		0.000		30.000	Continuing	Continuing	0
Subtotal			0.000	0.000		85.000		0.000		85.000			0.000
Remarks													
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
Government support and support contracts	C/Various	Various Location could not be determined.	0.000	0.000		8.000		0.000		8.000	Continuing	Continuing	0
Subtotal			0.000	0.000		8.000		0.000		8.000			0.000
Remarks													

UNCLASSIFIED

R-1 Line Item #72

Page 7 of 10

472 of 1922

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army									DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT				
2040: Research, Development, Test & Evaluation, Army				PE 0305205A: Long Endurance Multi-Intelligence Vehicle (LEMV)				LE4: LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)				
BA 4: Advanced Component Development & Prototypes (ACD&P)												
		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		93.000		0.000		93.000			0.000
Remarks												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army																				DATE: February 2010							
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UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0305205A: Long Endurance Multi-Intelligence Vehicle (LEMV)	PROJECT LE4: LONG ENDURANCE MULTI-INTELLIGENCE VEHICLE (LEMV)		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Concept Development and Engineering Trade Studies	4	2010	4	2010
Sub-System Risk Reduction, Testing and Validation	4	2010	2	2011
Design, Development, and Sub-System Integration	4	2010	2	2012
System Development, Developmental/Operational Testing, and Prototype Sustainment	1	2011	3	2015

UNCLASSIFIED