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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604641A: TACTICAL UNMANNED GROUND VEHICLE							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	0.000	13.141	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DV7: Small Unmanned Ground Vehicle	-	0.000	13.141	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
Note												
The Small Unmanned Ground Vehicle (SUGV) Engineering and Manufacturing Development (EMD) effort will continue under an alternate contract. Funding in FY12 is in Unmanned Ground Vehicles Program Element 0604663A Project FC4.												
A. Mission Description and Budget Item Justification												
One program is covered by the Tactical Unmanned Ground Vehicle (TUGV) Program Element 0604641A: The Small Unmanned Ground Vehicle (SUGV) platform.												
The Small Unmanned Ground Vehicle (SUGV), designated as the XM1216, is a lightweight (32 lbs), man-portable, direct current powered UGV capable of conducting Military Operations in Urban Terrain (MOUT) to include tunnels, sewers, and caves. The SUGV provides an unmanned capability for those missions that are manpower intensive or high-risk such as Urban Intelligence, Surveillance, and Reconnaissance (ISR) missions in a MOUT environment, and investigating Improvised Explosive Devices and Chemical/Toxic Materials reconnaissance missions without exposing soldiers directly to the hazard. The SUGV will be used to obtain information on situational awareness at the squad level.												
SUGV Planned Product Improvements (Increment 1 Follow on) designated as the XM1216E1: The SUGV configuration for a competitive Low Rate Initial Production (LRIP) moving to Full Rate Production (FRP) is based on the SUGV IBCT Capability Production Document Threshold Requirements. It will weigh 35 pounds and is capable of carrying up to 4 lbs of payload weight. The SUGV will have the following capabilities: a hardened militarized Electro Optical/Infrared (EO/IR) sensor to meet stringent day & night detection of enemy personnel & systems, a National Security Agency (NSA) compliant radio from the Joint Tactical Radio System program, improved hand controller, the capability to provide grid location of the enemy, and the following capability to mount payloads: tether spooler; manipulator arm; Chemical, Biological, Radiological, Nuclear (CBRN) suite; and Embedded-Tactical Engagement Simulation System (E-TESS).												
The POM/BES 2014-2018 removed all funding for SUGV OPA and RDTE. The Program Manager briefed the Army Acquisition Executive on 10 Aug 12 and 04 Oct 12 resulting in a decision that the Army would cease work on the SUGV RDTE program and close out all efforts by May 2013.												

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0604641A: TACTICAL UNMANNED GROUND VEHICLE			
BA 5: System Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	0.000	13.141	0.000	-	0.000
Current President's Budget	0.000	13.141	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604641A: TACTICAL UNMANNED GROUND VEHICLE				PROJECT DV7: Small Unmanned Ground Vehicle			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
DV7: Small Unmanned Ground Vehicle	-	0.000	13.141	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
Note												
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: SUGV Product Improvement									0.000	13.141	0.000	
Articles:										0		

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>System Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604641A: <i>TACTICAL UNMANNED GROUND VEHICLE</i>			PROJECT DV7: <i>Small Unmanned Ground Vehicle</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2012	FY 2013	FY 2014	
Description: Funding is provided for the following effort FY 2013 Plans: Complete the build, integration and delivery of seven SUGV production prototypes and payloads. Complete Engineering and Manufacturing Development (EMD) by 1QFY14. Technical Testing/Force Development Testing and Experimentation/Limited User Testing (TT/FDTE/LUT) will be conducted in the April-August 2013 timeframe leading up to a Milestone C competitive LRIP Decision in 1QFY14. The competitive LRIP will utilize the Technical Data Package (TDP) procured under the EMD contract. The EMD effort will integrate and test SUGV product improvements that utilize a point-to-point datalink, provide increased Intelligence, Surveillance and Reconnaissance (ISR) capability with the integrated militarized Electro Optical/Infrared (EO/IR) head, and also provide increased functionality in the form of a modular payload system that includes the fiber optic tether data link capability, manipulator arm, and Embedded-Tactical Engagement Simulation System (E-TESS). Conduct Contractor and Government testing on the seven SUGV Production prototypes to evaluate performance: environments, platform mobility, radio performance for latency and range, EO/IR performance for personnel detection, payloads, shock/vibration, Reliability, Availability and Maintainability (RAM), Logistics and Training. Conduct LUT to assess operational utility and performance of the SUGV. The Informal Qualification Test and LUT testing will provide data to support the production decision that the fully integrated SUGV meets CPD requirements for mobility, payloads, EO/IR detection and National Security Agency/Information Assurance (NSA/IAS) compliance. Develop and provide all documentation, technical manuals and training products to support logistics, supportability and training requirements required to field the SUGV.											
Accomplishments/Planned Programs Subtotals								0.000	13.141	0.000	
C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• F00001: <i>OPA BCT Unmanned Ground Vehicle</i>	24.805	83.937								Continuing	Continuing
• 0604641A Project FC4: <i>RDTE FCS Unmanned Ground Vehicles</i>	35.966									Continuing	Continuing
Remarks											
D. Acquisition Strategy											
Funding continues engineering, manufacturing development follow-on ECP efforts leading to seven production prototypes.											

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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 2014 Army												DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>System Development & Demonstration (SDD)</i>						R-1 ITEM NOMENCLATURE PE 0604641A: <i>TACTICAL UNMANNED GROUND VEHICLE</i>				PROJECT DV7: <i>Small Unmanned Ground Vehicle</i>				

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Unmanned Ground Vehicle (SUGV)	SS/CPIF	iRobot Corporation:Burlington, MA	0.000	-		13.141		-		-		-	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		13.141		0.000		0.000		0.000			

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	13.141	0.000	0.000	0.000			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army																DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE								PROJECT			
2040: Research, Development, Test & Evaluation, Army								PE 0604641A: TACTICAL UNMANNED								DV7: Small Unmanned Ground Vehicle			
BA 5: System Development & Demonstration (SDD)								GROUND VEHICLE											

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: *Research, Development, Test & Evaluation, Army*
BA 5: *System Development & Demonstration (SDD)*

R-1 ITEM NOMENCLATURE

PE 0604641A: *TACTICAL UNMANNED
GROUND VEHICLE*

PROJECT

DV7: *Small Unmanned Ground Vehicle*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Incr 1 Production Delivery (Brigade 2)	1	2013	1	2013
SUGV Prototype Build/Delivery	1	2013	2	2013