Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army											Date: February 2015	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604641A *I TACTICAL UNMANNED GROUND VEHICLE*							
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	-	-	2.769	40.374	-	40.374	50.782	30.099	23.886	9.927	Continuing	Continuing
DV7: *Small Unmanned Ground Vehicle*	-	-	2.769	40.374	-	40.374	50.782	30.099	23.886	9.927	Continuing	Continuing

A. Mission Description and Budget Item Justification

CRS-(I) is a man-packable, miniature (<25lbs), highly mobile, unmanned robotic system with advanced sensors/mission modules for dismounted Soldiers. The program is the result of collaboration between Director, Army Capabilities Integration Center (DIR ARCIC), United States Army Training and Doctrine Command (TRADOC) and Deputy Commandant for Combat Development and Integration (DC CD&I), Headquarters Marine Corps (HQMC) dated 19 Sep 2012. Thus the CRS-(I) program has been jointly developed by the Army and USMC incorporating Army capability requirements, USMC Engineering Squad Robot (ESR) and USMC Tactical Robotic Controller (TRC) capabilities into one program.

As the lead service and in accordance with the Joint MOA Sec. 8.a., the Army will "have responsibility and authority for overall programming, budgeting, obligation, and expenditure of Research, Development, Test, and Evaluation (RDT&E) funding appropriated for program development."

The CRS-(I) capability contributes to the essential Joint Operational Concepts (JOC) of: Major Combat Operations (MCO); Military Support to Stabilization, Security, Transition, and Reconstruction (SSTR); Homeland Support and Civil Defense and Joint Functional Concepts (JFC) of: Force Application and Protection. The CRS-(I) contributes directly to Situational Awareness, Detect, Protect and Neutralize by providing a standoff hazards interrogation, detection, confirmation and neutralization capability employed to support a wide spectrum of mobility missions for current and future forces by providing required standoff capability across the Warfighting Functions. This capability allows commanders to make more informed decisions and plans, to use their forces more effectively and efficiently to produce desired outcomes, and to conduct focused operations for high-risk missions or selected missions that best satisfy the requirement without the limitations and vulnerabilities of manned systems. The CRS-(I) capability provides commanders the ability to persistently monitor the operational environment (OE) while protecting and sustaining the force at standoff distances from the threat. The CRS-(I) complements the Joint Integrated Warfighting Force by providing standoff to the Warfighter during Major Combat Operations, stability operations, and homeland security. The CRS-(I) provides Warfighters the capability to find and identify targets of interest in the operational environment.

In support of emerging requirements, the Robot Enhancement Program (REP) uses a "buy, try and inform" methodology to evaluate Commercial Off The Shelf (COTS), Government Off The Shelf (GOTS) and Non-Developmental Items (NDI) products that have the potential to enhance Soldier combat effectiveness. Hardware quantities will be limited to available REP funds. Evaluation results obtained will be used to inform emerging requirements documents and Cost-Benefit Analyses to support future Army decision making actual operational user feedback.

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army					Date: February 2015
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*		R-1 Program Element (Number/Name) PE 0604641A / *TACTICAL UNMANNED GROUND VEHICLE*			
B. Program Change Summary ($ in Millions)	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**
Previous President's Budget	-	6.770	20.290	-	20.290
Current President's Budget	-	2.769	40.374	-	40.374
Total Adjustments	-	-4.001	20.084	-	20.084
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-4.001			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	20.084	-	20.084

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604641A / *TACTICAL UNMANNED GROUND VEHICLE*	Project (Number/Name) DV7 / *Small Unmanned Ground Vehicle*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
DV7: *Small Unmanned Ground Vehicle*	-	-	2.769	40.374	-	40.374	50.782	30.099	23.886	9.927	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY15 Program Element 0604641A Project DV7 will capture requirements for Common Robotic System (Individual) (CRS-(I)) and a number of other emerging robotic systems development and test requirements. This program is a new start in FY15.

A. Mission Description and Budget Item Justification

CRS-(I) is a man-packable, miniature (<25lbs), highly mobile, unmanned robotic system with advanced sensors/mission modules for dismounted Soldiers. The program is the result of collaboration between Director, Army Capabilities Integration Center (DIR ARCIC), United States Army Training and Doctrine Command (TRADOC) and Deputy Commandant for Combat Development and Integration (DC CD&I), Headquarters Marine Corps (HQMC) dated 19 Sep 2012. Thus the CRS-(I) program has been jointly developed by the Army and USMC incorporating Army capability requirements, USMC Engineering Squad Robot (ESR) and USMC Tactical Robotic Controller (TRC) capabilities into one program.

As the lead service and in accordance with the Joint MOA Sec. 8.a., the Army will "have responsibility and authority for overall programming, budgeting, obligation, and expenditure of Research, Development, Test, and Evaluation (RDT&E) funding appropriated for program development."

The CRS-(I) capability contributes to the essential Joint Operational Concepts (JOC) of: Major Combat Operations (MCO); Military Support to Stabilization, Security, Transition, and Reconstruction (SSTR); Homeland Support and Civil Defense and Joint Functional Concepts (JFC) of: Force Application and Protection. The CRS-(I) contributes directly to Situational Awareness, Detect, Protect and Neutralize by providing a standoff hazards interrogation, detection, confirmation and neutralization capability employed to support a wide spectrum of mobility missions for current and future forces by providing required standoff capability across the Warfighting Functions. This capability allows commanders to make more informed decisions and plans, to use their forces more effectively and efficiently to produce desired outcomes, and to conduct focused operations for high-risk missions or selected missions that best satisfy the requirement without the limitations and vulnerabilities of manned systems. The CRS-(I) capability provides commanders the ability to persistently monitor the operational environment (OE) while protecting and sustaining the force at standoff distances from the threat. The CRS-(I) complements the Joint Integrated Warfighting Force by providing standoff to the Warfighter during Major Combat Operations, stability operations, and homeland security. The CRS-(I) provides Warfighters the capability to find and identify targets of interest in the operational environment.

In support of emerging requirements, the Robot Enhancement Program (REP) uses a "buy, try, and inform" methodology to evaluate Commercial Off The Shelf (COTS), Government Off The Shelf (GOTS) and Non-Developmental Items (NDI) products that have the potential to enhance Soldier combat effectiveness. Hardware quantities will be limited to available REP funds. Evaluation results obtained will be used to inform emerging requirements documents and Cost-Benefit Analyses to support future Army decision making actual operational user feedback.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604641A / *TACTICAL UNMANNED GROUND VEHICLE*	**Project (Number/Name)** DV7 / *Small Unmanned Ground Vehicle*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: CRS(I) and emerging robotic requirements.	-	2.769	40.374
Description: During FY15, the CRS-(I) program expects a Material Development Decision (MDD), will complete CRS-(I) AoA letter of sufficiency, begin the program Test & Evaluation Working-Level Integrated Product Team (T&E WIPT), form a CRS-(I) program IPT to support the acquisition process, and additionally support emerging robotic system requirements and REP. ***FY 2015 Plans:*** Emerging robotic systems requirements for REP, Material Development Decision (MDD), complete CRS-(I) AoA letter of sufficiency, begin program Test & Evaluation Working-Level Integrated Product Team (T&E WIPT) and form a CRS-(I) program IPT to support the acquisition process. ***FY 2016 Plans:*** During FY16, the CRS-(I) program expects to begin pre-EMD and work towards entering MS B, will initiate an RFP, and complete EMD contract award beginning in FY17. Additionally, REP funding under CRS-(I) line will support emerging robotic system requirements.			
Accomplishments/Planned Programs Subtotals	-	2.769	40.374

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• F00001: *OPA BCT Unmanned Ground Vehicle*	-	-	-	-	-	33.939	64.178	112.644	124.222	Continuing	Continuing

Remarks

D. Acquisition Strategy

The CRS-(I) system will enter the acquisition process in the Material Solution Analysis (MSA) Phase. Per DoDI 5000.02, an Acquisition Strategy is not required in the MSA Phase of the acquisition process. A letter of sufficiency will be received in FY15. CRS-(I) will enter MS-B as an ACAT III program.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604641A / *TACTICAL UNMANNED GROUND VEHICLE*	Project (Number/Name) DV7 / *Small Unmanned Ground Vehicle*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CRS-(I)	TBD	PdM UGV : Warren, MI	0.000	-		-		1.000		-		1.000	-	1.000	-
		Subtotal	0.000	-		-		1.000		-		1.000	-	1.000	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CRS-(I)	MIPR	PdM UGV : Warren, MI	0.000	-		1.000		0.980		-		0.980	-	1.980	-
REP	MIPR	PdM UGV : Warren, MI	0.000	-		0.805		1.090		-		1.090	-	1.895	-
		Subtotal	0.000	-		1.805		2.070		-		2.070	-	3.875	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
REP	SS/CR	PdM UGV : Warren, MI	0.000	-		0.964		5.980		-		5.980	-	6.944	-
CRS-(I) EMD Contract	C/CPIF	PdM UGV : Warren, MI	0.000	-		-		31.324		-		31.324	-	31.324	-
		Subtotal	0.000	-		0.964		37.304		-		37.304	-	38.268	-

	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		2.769		40.374		-		40.374	-	43.143	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604641A / *TACTICAL UNMANNED GROUND VEHICLE*	**Project (Number/Name)** DV7 / *Small Unmanned Ground Vehicle*

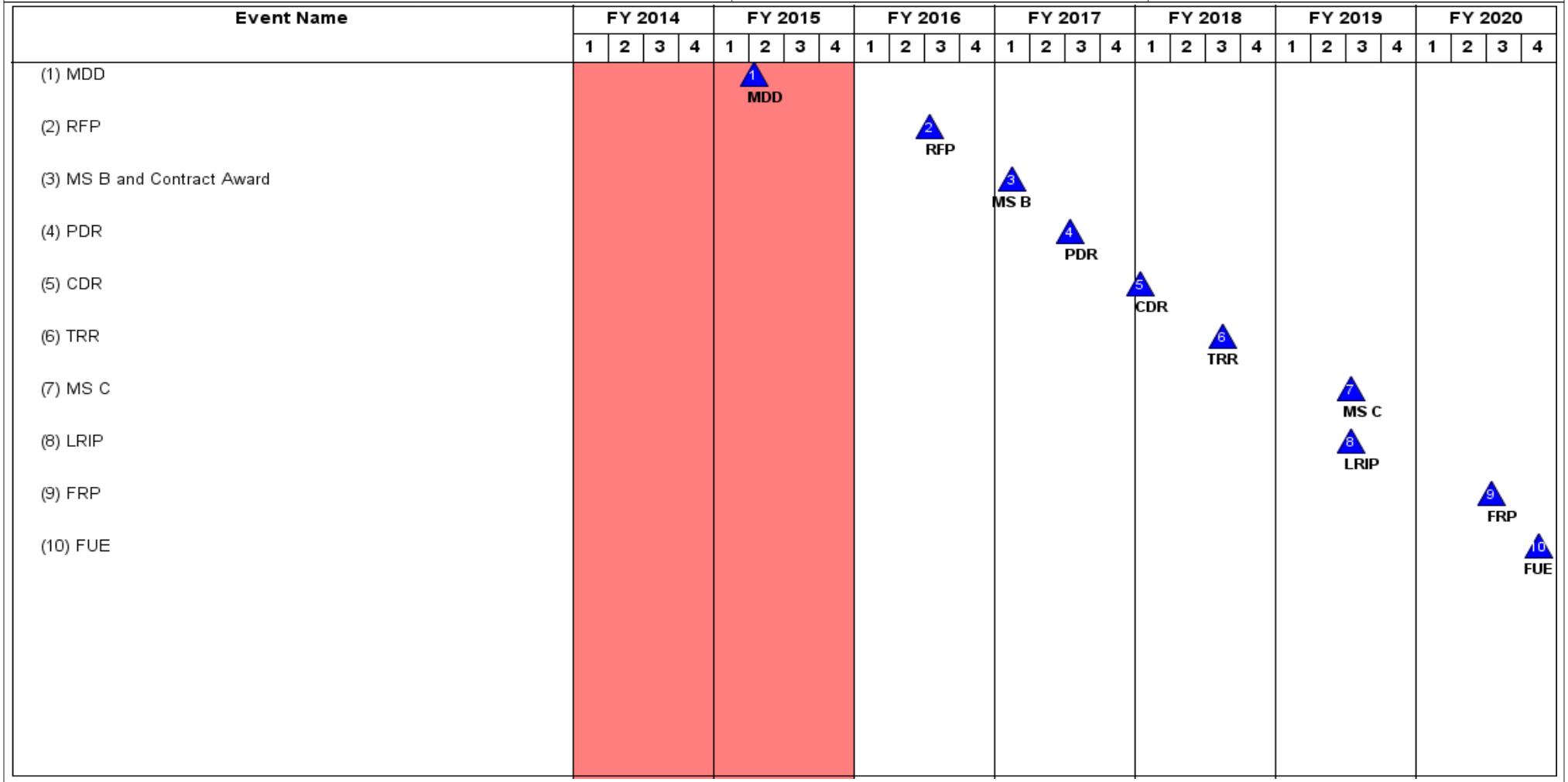

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604641A / *TACTICAL UNMANNED GROUND VEHICLE*	**Project (Number/Name)** DV7 / *Small Unmanned Ground Vehicle*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
MDD	2	2015	2	2015
RFP	3	2016	3	2016
MS B and Contract Award	1	2017	1	2017
PDR	3	2017	3	2017
CDR	1	2018	1	2018
TRR	3	2018	3	2018
MS C	3	2019	3	2019
LRIP	3	2019	3	2019
FRP	3	2020	3	2020
FUE	4	2020	4	2020