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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0605625A: <i>Manned Ground Vehicle</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	313.413	449.387	639.874	-	639.874	1,416.884	1,772.042	1,487.524	1,099.821	Continuing	Continuing
FC8: <i>BCT Ground Combat Vehicle</i>	313.413	449.387	639.874	-	639.874	1,416.884	1,772.042	1,487.524	1,099.821	Continuing	Continuing

Note

Change Summary Explanation:

Funding:

FY2011: The FY2012 President's Budget did not reflect program strategy revisions approved late in 2010. These revisions reduced estimated program costs and also delayed the planned contract awards by approximately seven months (to 3QFY2011). Delays related to the source selection and milestone review processes resulted in a further three month slip to the contract awards. In addition, two (versus the planned three) contracts were awarded for the TD phase. Finally, a protest caused a stop work order shortly after award of the contracts. All of these factors contributed to the congressional reduction (Other Adjustment 1) and rescission (Other Adjustment 2) in FY2011.

FY2012: Based on the factors discussed above, the Army provided revised FY2012 funding requirements to the congressional committees 4QFY2011. As a result, Congressional action as part of the final FY2012 appropriation/authorization process reduced funding to the level reflected in this exhibit (Other Adjustment 1).

FY2013: The FY2013 requested funding reflects adjustments (Other Adjustment 3) due to all the factors discussed above.

A. Mission Description and Budget Item Justification

The Ground Combat Vehicle (GCV) program is based on an Initial Capabilities Document (ICD) that was approved 10 December 2009 and a draft Capabilities Development Document (CDD) developed by the U.S. Army Training and Doctrine Command (TRADOC). The accomplishments and funding reflected in this justification are based on these documents and on program milestone decision memoranda. A Milestone A Defense Acquisition Board was conducted on 21 July 2011. An Acquisition Decision Memorandum (ADM) was signed 17 August 2011. It granted the Project Management Office approval to enter the Technology Development (TD) phase. Although the Army had originally planned to award up to three TD contracts, the source selection process resulted in only two being awarded on 18 August 2011. One contract was awarded to BAE Systems Land & Armaments, L.P. and one was awarded to General Dynamics Land Systems Inc. Following GAO receipt of a protest, stop work orders were issued on 29 August 2011. The Government Accountability Office denied the protest on 5 December 2011, and work resumed 6 December 2011. The following funding requirements/justifications reflect the impact of the 100 day delay caused by the protest. This delay also means that full contract baselines were not available for use in preparing these justifications. Accordingly, these funding requirements are largely based on program office estimates.

The Army requires an Infantry Fighting Vehicle (IFV) capability to rapidly deploy an overmatching infantry squad anywhere on the battlefield. The GCV IFV will provide the infantry squad with a highly mobile, protected, transport to the decisive locations on the battlefield. The GCV IFV will provide both destructive fires against threat armored vehicles and direct fire support for the squad during dismounted assaults. It will increase the Infantry's tactical mobility, survivability, and lethality against light and heavy armored threats across a variety of missions.

The GCV program is using an incremental approach with the GCV IFV as the first increment (future increments have not yet been defined). The GCV IFV program will utilize competitive development and a 3-phased approach that started with MS A in 4QFY2011. Due to the aforementioned protest, the 24 month Technology

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<p>Development phase (with 2 competing contractors) began 6 December 2011. Following Milestone B currently planned for 1Q2014, the program is planning to award up to two competitively selected 48 month contracts for the Engineering and Manufacturing Development (EMD) phase. During EMD, each contractor will continue to refine designs and deliver prototypes to support engineering development, risk mitigation, and technical and operational tests. Milestone C is planned for 1QFY2018 and will immediately be followed with award of a Low Rate Initial Production (LRIP) contract to one contractor.</p> <p>For the TD phase, the Army will mature its requirements by using four key program imperatives to shape trade space and to ensure convergence on an affordable and achievable set of requirements: 1) Providing requisite force protection to the Squad and crew in the vehicle, 2) Capable of carrying a full nine-Soldier squad, 3) using a modular, open architecture and sufficient margin to support full spectrum operations and changing threats over time, and 4) deliver the first production vehicle approximately seven years after award of the TD phase contracts. In support of these key requirements as well as affordability targets, the TD phase contracts allow contractors to trade selected capability to support the path to an affordable set of requirements and to reduce program cost and risk. In addition to the effort related to the TD contracts, PM GCV will conduct assessments of selected non-developmental vehicles and will support a dynamic update to the Analysis of Alternatives (AoA). This "three pronged effort" (TD contracts, vehicle assessments, and dynamic AoA update) will generate data that will ensure a well informed Milestone B. Information generated from the TD phase will inform the requirements generation/maturation process and will lead to a Joint Requirements Oversight Council (JROC) approved CDD prior to Milestone B.</p> <p>During the TD phase, the contractors will focus on integration leading to the completion of Preliminary Design Reviews (PDR). In support of the PDRs, each contractor will be required to develop, fabricate, integrate, and test two different subsystem prototypes: Rocket Propelled Grenade (RPG) Protection Subsystem prototype and Mine Blast Subsystem prototype. Additional subsystem prototypes may be defined by contractors to support development. Prototype subsystem testing will be conducted by the Government.</p> <p>The combined fiscal impacts of the protest delay and the selection of only two TD contractors are: 1) larger than planned FY2011 carry-over dollars, and 2) adjustments to funding requirements for FY2012 and beyond. The FY2012 funding was adjusted as</p>		

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0605625A: Manned Ground Vehicle			
BA 5: Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	934.366	884.387	1,963.178	-	1,963.178
Current President's Budget	313.413	449.387	639.874	-	639.874
Total Adjustments	-620.953	-435.000	-1,323.304	-	-1,323.304
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	-475.953	-435.000	-	-	-
• Other Adjustments 2	-145.000	-	-	-	-
• Other Adjustments 3	-	-	-1,323.304	-	-1,323.304

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605625A: Manned Ground Vehicle				PROJECT FC8: BCT Ground Combat Vehicle			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
FC8: BCT Ground Combat Vehicle	313.413	449.387	639.874	-	639.874	1,416.884	1,772.042	1,487.524	1,099.821	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
A Request for Proposal (RFP) was released by the Government in November 2010 and up to three Technology Development (TD) contracts were intended to be awarded 4QFY2011. An Acquisition Decision Memorandum (ADM) was signed 17 August 2011 and 2 TD contracts were awarded 18 August 2011. A protest was filed with the Government Accountability Office challenging the Department of the Army's rejection of a third proposal. The protest resulted in a stop work contract modification and 100 day program schedule delay. On 5 December 2011, the GAO denied the protest and TD work resumed via contract modification. The fiscal impacts of the protest delay and selection of only two TD contractors are: 1) larger than planned FY2011 carry-over dollars, and 2) adjustments to funding requirements for FY2012 and beyond, which are reflected above. The FY2011 carry-over means that contract work discussed in the below FY2011 Descriptions will reflect efforts through approximately February, 2012.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: Government System Engineering & Program Management								39.194	75.297	96.250	
								Articles: 0	0		
Description: Provides for basic Government oversight of the Ground Combat Vehicle (GCV) program. Includes funding for government personnel (labor, travel, training, supplies) and other support (other government agencies, support contractors, automated data processing, communications, and equipment).											
FY 2011 Accomplishments: Developing the GCV Request for Proposal (RFP), conducting a Source Selection Evaluation Board (SSEB), and preparing for the Milestone A. The Project Management Office (PMO) began to execute the approved three-pronged strategy mandated by the 17 August 2011 Acquisition Decision Memorandum. The TD contracts represent one prong, assessments of selected non-development vehicles and a dynamic update to the Analysis of Alternatives (AoA) represent the other two. For these latter two prongs, the PMO conducted detailed planning in FY2011 and initiated efforts to acquire the necessary data. This included both analytical effort and the conduct of limited system/subsystem tests.											
FY 2012 Plans: Provide integrated program management for all development activities by continuing to execute the GCV three-pronged development effort. The PMO will provide United States Code (USC) Title 10 oversight to the TD contractors. The GCV Earned Value Management (EVM) team will evaluate cost and schedule performance against the established Performance Measurement Baseline (PMB) and Integrated Master Schedule (IMS) for each contractor. The GCV Integrated Product Teams (IPTs) will oversee the technical development efforts of each contractor in order to monitor and track technical progress related to the											

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2011	FY 2012	FY 2013
development of the various subsystems. This includes review and acceptance of all formal contract deliverables for the two contractor teams. These deliverables will be used to support execution of the GCV knowledge based management plan. The government management team will also oversee each contractor as they perform systems engineering, requirements analysis, functional analysis, configuration management, risk management, interface management, data management, technical reviews, trade studies, modeling and simulation, specialty engineering, software engineering, test and training. The PMO will continue (and likely conclude) efforts associated with the assessments of selected non-developmental vehicles and efforts associated with the dynamic AoA update. All information from the three-pronged strategy will be used to begin preparation of Milestone B products and to support the maturation/approval of the GCV Capability Development Document (CDD).					
FY 2013 Plans: Provide integrated program management for all development activities by continuing to execute the GCV knowledge based management plan and by providing USC Title 10 oversight to the TD contractors. The GCV Earned Value Management (EVM) team will continue to evaluate cost and schedule performance against the established Performance Measurement Baseline (PMB) and Integrated Master Schedule (IMS) for each contractor. The GCV IPTs will continue to oversee the technical development efforts of each contractor in order to monitor and track technical progress related to the development of the various subsystems. This includes review and acceptance of all formal contract deliverables for the two contractor teams. The government management team will continue to oversee each contractor as they perform systems engineering, requirements analysis, functional analysis, configuration management, risk management, interface management, data management, technical reviews, trade studies, modeling and simulation, specialty engineering, software engineering, test and training. The Government team will emphasize support for each contractor's Preliminary Design Review (PDR), currently planned for 3QFY2013 . Information generated from the three-pronged strategy will be used to complete Engineering and Manufacturing Development (EMD) performance specification for inclusion in the EMD Request for Proposal (RFP), planned for release 3QFY2013. In addition to the above, approximately 40 documents to support the Milestone B will be prepared. The Milestone B is currently planned for 1QFY2014.					
Title: Contractor Systems Engineering/Program Management			253.356	240.083	386.269
Articles:			0	0	
Description: Provides for contractor basic development, engineering, and management for the GCV prime contracts, less prototype hardware and software development (which are captured in the following sections). Includes material consumed in support of component level engineering efforts.					
FY 2011 Accomplishments:					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2011	FY 2012	FY 2013
In 4QFY2011, prime contractors awarded subsystem and component provider contracts, began vehicle design, installed the Performance Measurement Baseline (PMB) and delivered the initial Integrated Master Schedule (IMS). Conducted formal start-of-work meetings and completed System Requirement Reviews (SRRs). FY 2012 Plans: Continue preliminary design of subsystems focusing on size, weight, power, and cooling requirements. Conduct System Functional Reviews (SFRs) 3QFY2012 and conduct sub-system Preliminary Design Reviews. Complete the designs for the subsystem test assets. Complete initial delivery of the integrated set of architecture artifacts. Plan, design, and complete the initial fabrication of the GCV System Integration Environment. Provide a GCV Hot Bench to support integration of hardware and software sub-components prior to vehicle level integration. Design and fabricate vehicle and modular armor mock-ups. Complete design studies to allow identification of Engineering and Manufacturing Development (EMD) long lead hardware requirements. Initiate testing related to the subsystem test assets. Perform program management using Earned Value Management (EVM) and Technical Performance Measures (TPMs) to report cost, schedule and technical status. FY 2013 Plans: Conduct and support TD subsystem prototype testing. Utilize the System Integration Environment and the Hot Bench to mature subsystem designs. Deliver approximately 35 data items and conduct the GCV system level Preliminary Design Review (PDR) in 3QFY2013. Following PDR, initiate detailed design of subsystems focusing on size, weight, power, and cooling requirements. Perform program management using EVM and TPMs to report cost, schedule and technical status. Prepare and submit all contract deliverables.					
Title: Contractor Prototypes Articles: Description: Procurement and fabrication of subsystem test assets required by the Technology Development (TD) contract and for system level prototypes planned in the EMD phase. Does not include material consumed in support of component level engineering efforts. FY 2011 Accomplishments: Ordered long-lead items required for the TD subsystem test assets. FY 2012 Plans: Initiate hardware procurement and integration of the subsystem test assets required of each contractor (Rocket Propelled Grenade (RPG) Protection Subsystem Prototype and Mine Blast Subsystem Prototype Test Article). Subject to Defense Acquisition Executive (DAE) approval, procure limited long lead hardware required for the EMD early prototypes. FY 2013 Plans:			2.582 0	30.695 0	99.860

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Complete fabrication, integration, and delivery of the subsystem test assets required of each contractor (Rocket Propelled Grenade (RPG) Protection Subsystem Prototype and Mine Blast Subsystem Prototype Test Article). Subject to Defense Acquisition Executive (DAE) approval, procure long lead hardware required for the EMD early prototypes.				
Title: Government Tests and Modeling and Simulation Description: Government costs to perform and validate system-related test activities. This element includes costs of the detailed planning, conduct, support, data reduction, and reports from such testing. The actual test articles (i.e., functionally configured systems) are excluded from this element as they are included in the prototype manufacturing section. FY 2011 Accomplishments: Test planning, coordination and safety requirements development and coordination efforts in support of the Subsystem Prototype testing began in FY2011. FY 2012 Plans: Detailed test planning, coordination and safety requirements development efforts in support of the Subsystem Prototype testing continue in FY2012. Initiate development of the Test and Evaluation Master Plan (TEMP) required to support Milestone B. FY 2013 Plans: Subsystem Prototype testing will be conducted at Government test facilities during 2-3QFY2013. The subsystem test assets will be tested, as required. This includes testing of the Rocket Propelled Grenade (RPG) Protection Subsystem Prototypes and Mine Blast Subsystem Prototype Test Articles against relevant threats. The TEMP will be completed to support Milestone B scheduled in 1QFY2014. PM GCV will continue to procure test threats to support future Survivability/Force Protection testing, and test ammunition to support future integration testing and Lethality testing. Detailed test planning will be initiated for the Engineering and Manufacturing Development (EMD) phase. Army Test and Evaluation Command will develop the System Evaluation Plan and support the GCV Operational Test Agency MS B Assessment Report.		Articles: 5.007 0	10.783 0	15.527
Title: Contractor Software Description: Software development efforts for the GCV prime contracts. This includes all software related to the various subsystems, training, logistics, vehicle management, and battle command integration. FY 2011 Accomplishments:		Articles: 4.677 0	31.126 0	41.968

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012
Initiated vehicle software development activities in 4QFY2011 for supporting FY2013 prototype subsystem competitive testing and Modeling and Simulation (M&S) tests. The software development plan and schedule was developed.			
FY 2012 Plans: Continue the development of initial software builds in support of testing of the subsystem test assets. Define and establish software development and integration environments. Initiate development of Software Requirements Specification, interface requirements specification, software architecture definition/description, formulate software build plan to align with system and subsystem requirements development, and begin software development and integration. Create vehicle model and selected subsystem models (e.g. mobility, survivability, etc.) for Modeling and Simulation.			
FY 2013 Plans: All software requirements and interfaces for the early software build will be baselined to allow software development to complete in support of iterative software integration. Conduct early software integration using emulators and surrogates to verify correct subsystem behaviors and interfaces. Conduct qualification and regression testing and delivery of the software build to support subsystem level integration. Initiate subsequent software build/development efforts and incrementally build up the functionalities in meeting vehicle delivery schedules. Update software architecture with specific implementation features for all Government furnished software subsystems.			
Title: Assessment of Selected Non-developmental Vehicles (ASNV)		8.597	61.403
Articles:		0	0
Description: ASNV represents the second prong of the GCV TD three-prong approach as outlined in the 17 August 2011 Milestone A ADM. The ASNV includes comprehensive assessments of multiple configurations and families (mixes) of vehicles which could provide affordable, effective and suitable capability in the required timeframe. This element provides for the testing and analysis associated with the ASNV effort. Basic PM oversight of the effort, however, is included in Government Systems Engineering and Program Management.			-
FY 2011 Accomplishments: Technical and operational assessments began in the United States and at OCONUS locations. Identified limitations on vehicle availability with foreign vehicles. Began to gather relevant data to support the analysis in a manner that balanced cost and schedule limitations.			
FY 2012 Plans: Continue technical and operational assessments. Leverage the most cost effective means of gathering data. Conduct range test events, instrumentation testing, and modeling and simulation to validate data trends. Provide an acceptable level of data for each			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2011	FY 2012	FY 2013		
ASNV excursion to the GCV Integrated Concept Team (ICT) to support the GCV Capability Development Document (CDD) and Milestone B scheduled for 1QFY2014.											
Accomplishments/Planned Programs Subtotals							313.413	449.387	639.874		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• (GCV): <i>Ground Combat Vehicle</i> (GCV)								549.238	1,925.649	Continuing	Continuing
D. Acquisition Strategy											
<p>The strategy is to execute the program in three phases. GCV entered the acquisition process at Milestone A (4Q FY2011). Approval for the Technology Development (TD) phase was received through a signed Acquisition Decision Memorandum 17 August 2011. The TD phase is based on a three-pronged strategy. The first consists of award of development contracts (two TD phase contracts were awarded 18 August 2011). The second prong consists of assessments of selected non-developmental vehicles and the third includes a dynamic update to the Analysis of Alternatives. For the contracts, the TD phase will consist of designing an Infantry Fighting Vehicle based on requirements defined in the draft Capability Development Document (CDD) and articulated in the Specification included in the GCV Request for Proposal (RFP). Selected sub-system test assets will be delivered in FY2013. The TD phase includes competitive testing and evaluation of the sub-system test assets and completion of a Preliminary Design Review (3Q FY2013). This information, coupled with data obtained from the other two prongs, will be used to define an affordable, effective, and suitable set of requirements that will be embodied in the CDD and Engineering and Manufacturing Development (EMD) RFP performance specification. A full and open competition will be held and up to two contractors will enter EMD phase (2Q FY2014). EMD will end at MS C (2Q FY2018). During EMD, each contractor will successfully complete a Critical Design Review and produce three (3) early prototypes and twelve (12) complete prototypes. The EMD phase will end with a competitive down select to one contractor. The selected contractor will execute Low Rate Initial Production.</p>											
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 2013 Army										DATE: February 2012			
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Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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
Contractor System Engineering and Prog. Mgt	TBD	TBD:TBD	274.947	240.083		386.269		-		386.269	Continuing	Continuing	Continuing
Contractor Prototypes	TBD	TBD:TBD	2.582	30.695		99.860		-		99.860	Continuing	Continuing	Continuing
Contractor Software	TBD	TBD:TBD	4.677	31.126		41.968		-		41.968	Continuing	Continuing	Continuing
Subtotal			282.206	301.904		528.097		-		528.097			
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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 System Engineering and Prog. Mgt	TBD	PM Ground Combat Vehicle:Warren, MI	92.378	75.297		96.250		-		96.250	Continuing	Continuing	Continuing
Assessment of Selected Non-developmental Vehicles (ASNV)	TBD	TBD:TBD	8.597	61.403		-		-		-	0.000	70.000	0.000
Subtotal			100.975	136.700		96.250		-		96.250			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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 Tests & Modeling & Simulation	TBD	PM Ground Combat Vehicle:Warren, MI	7.093	10.783		15.527		-		15.527	Continuing	Continuing	Continuing
Subtotal			7.093	10.783		15.527		-		15.527			
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			390.274	449.387		639.874		-		639.874			
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army			DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0605625A: <i>Manned Ground Vehicle</i>		PROJECT FC8: <i>BCT Ground Combat Vehicle</i>	

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Milestone A																												
Technology Development Source Selection Board																												
Technology Development Contract Award																												
Technology Development Phase																												
Prototype Subsystem Testing																												
System Preliminary Design Review																												
Milestone B																												
EMD Contract Award																												
Engineering/Manufacturing Development																												
1st Early Prototype Vehicle																												
Critical Design Review																												
1st Full-up Prototype Vehicle																												
Critical Design Review Update																												
Production Qualification Test																												
Limited User Test																												
Production Readiness Review																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Army			DATE: February 2012
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone A	4	2011	4	2011
Technology Development Source Selection Board	2	2011	4	2011
Technology Development Contract Award	4	2011	4	2011
Technology Development Phase	4	2011	1	2014
Prototype Subsystem Testing	2	2013	4	2013
System Preliminary Design Review	3	2013	3	2013
Milestone B	1	2014	1	2014
EMD Contract Award	2	2014	2	2014
Engineering/Manufacturing Development	2	2014	4	2017
1st Early Prototype Vehicle	2	2015	2	2015
Critical Design Review	4	2015	4	2015
1st Full-up Prototype Vehicle	3	2016	3	2016
Critical Design Review Update	3	2017	3	2017
Production Qualification Test	3	2016	4	2017
Limited User Test	1	2017	2	2017
Production Readiness Review	4	2017	4	2017