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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>							
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	20.122	61.350	51.851	-	51.851	56.695	15.716	16.976	18.402	Continuing	Continuing
S56: <i>MOUNTED SOLDIER</i>	20.122	22.803	-	-	-	-	-	-	-	Continuing	Continuing
S65: <i>SOLDIER POWER</i>	-	-	5.054	-	5.054	9.914	-	-	-	Continuing	Continuing
S75: <i>GROUND SOLDIER ENSEMBLE</i>	-	38.547	46.797	-	46.797	46.781	15.716	16.976	18.402	Continuing	Continuing

Note

Fiscal Year 2012 - Program Increase of \$13.041 million to Project S75 for Nett Warrior transition from 0603827A Soldier Systems Advanced Development to 0604827A Soldier Systems Warrior Demonstation/Validation.

Fiscal Year 2013 - Program Decrease of \$15.374 million to Project S56 for termination of the Mounted Soldier program. Program inrease of \$5.054 million to Project S65 for Soldier Power development efforts. Program increase of \$2.168 million to Project S75 for Nett Warrior development efforts.

A. Mission Description and Budget Item Justification

This program element contains three projects: Project S56 for Mounted Soldier System (MSS), Project S65 for Soldier Power and Project S75 for Nett Warrior (NW), [named in honor of Medal of Honor recipient COL Robert Nett], previously known as Ground Soldier System (GSS). MSS provides an integrated suite of enhancements to the combat vehicle crew member and commander to address identifiable capability gaps in their ability to fight, communicate, and maneuver across the full spectrum of operations. MSS consists of lightweight, modular, and misison tailorable equipment and Command, Control, Communications and Computer (C4) devices worn, carried, or used by mounted crew members in performance of their missions. Congressionally added funding in FY10 for Soldier Power efforts has been applied to the Soldier Power project line. NW provides unparalleled situational awareness and understanding to the dismounted leader allowing for faster and more accurate decisions in the tactical fight. This translates into Soldiers being at the right place, at the right time, with the right equipment making them more effective, more lethal, and more survivable in the execution of their combat mission.

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0604827A: Soldier Systems - Warrior Dem/Val			
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	20.886	48.309	60.003	-	60.003
Current President's Budget	20.122	61.350	51.851	-	51.851
Total Adjustments	-0.764	13.041	-8.152	-	-8.152
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.620	-			
• Adjustments to Budget Years	-0.144	-	-	-	-
• Other Adjustments 1	-	13.041	-8.152	-	-8.152

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Exhibit R-2A, RDT&E Project 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>				PROJECT S56: <i>MOUNTED SOLDIER</i>			
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
S56: <i>MOUNTED SOLDIER</i>	20.122	22.803	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											
Note Program slated for termination December 2012.											
A. Mission Description and Budget Item Justification Mounted Soldier System (MSS) provides an integrated suite of critical mission enhancing capabilities to the combat vehicle crew member and commander to address identified capability gaps in their ability to fight, communicate, and maneuver across the full spectrum of operations. The MSS consists of lightweight, modular, and mission tailorable equipment and Command, Control, Communications and Computer (C4) devices worn, carried, or used by mounted crew members in performance of their missions. Major components include a helmet mounted display mounted on the Combat Vehicle Crewmember Helmet (CVCH), an untethered (wireless) communications system, and a microclimate cooling system. Other integral components include a Mounted Soldier over-garment and cold weather gloves, Chemical/Biological/Radiological/Nuclear (CBRN) protection, multi-threat eye protection, ballistic protection, flash/flare protection, and individual weapon holsters. The MSS increases mission effectiveness by improving Command and Control and Situational Awareness while increasing crewmember survivability, endurance, and comfort. MSS enables Mounted Crewman to utilize existing platform sensor, situational awareness, and C4 capabilities in and around their platform, therefore increasing combat effectiveness.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: Mounted Soldier System (MSS).								15.533	22.803	-	
Articles:								0	0		
Description: Developmental Engineering, Prototyping, Systems Engineering and Program Management Support.											
FY 2011 Accomplishments: Integrated MSS on M2A2 Operation Desert Storm, Bradley fire support vehicle and M1064 mortar carrier. Conducted developmental testing on M1A2 System Enhancement Program, M2A3 and M3A3 Bradley fighting vehicles. Through a Research, Development, Test and Evaluation Small Business Inovative Research effort, developed prototypes and conducted user evaluation of maxillofacial protection prototype. Conducted compatibility integration of MSS microclimate cooling subsystem with Joint Service Lightweight Integrated Suit Technology (JSLIST) Chemical/Biological Coverall for Combat Vehicle Crewmen protective overgarment.											
Conduct provisioning activities to assign NSNs and technical documentation to transition MSS Hardware to PEO GCS.											
FY 2012 Plans:											

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Exhibit R-2A, RDT&E Project 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>			PROJECT S56: <i>MOUNTED SOLDIER</i>					

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2011	FY 2012	FY 2013
<p>\$17.8M adjustment funded another program. Remaining \$5M will prepare program for orderly shutdown, transition of select components to PEO GCS and termination.</p> <p>Title: Governmental Tests and Evaluation (T&E) Activities</p> <p align="right">Articles:</p> <p>Description: Funding is provided for the following efforts:</p> <p>FY 2011 Accomplishments: Conducted limited user test (LUT) on HBCT and SBCT platforms.</p> <p>Conduct limited DT/OT to verify deficiencies identified during the LUT are corrected prior to transition to PEO GCS.</p>				3.942 0	-	-
<p>Title: Small Business Innovative Research/Small Business Technology Transfer Programs</p> <p align="right">Articles:</p> <p>Description: Funding is provided for the following efforts:</p> <p>FY 2011 Accomplishments: .</p>				0.647 0	-	-
Accomplishments/Planned Programs Subtotals				20.122	22.803	-

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
• OPA 3: <i>OPA 3 Mounted Soldier</i>	38.863	5.000								0.000	43.863

D. Acquisition Strategy	
MSS as a Program of record is being terminated. Select components are being transitioned to PEO GCS.	
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			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604827A: Soldier Systems - Warrior Dem/ Val				PROJECT S56: MOUNTED SOLDIER					
Management Services (\$ 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
PM Soldier Warrior Management/Support of MSS program	MIPR	PM Soldier Warrior;;Ft. Belvoir, VA	19.215	-		-		-		-	0.000	19.215	0.000
SBIR/SBTTR	TBD	N/A:N/A	2.000	-		-		-		-	0.000	2.000	0.000
Subtotal			21.215	-		-		-		-	0.000	21.215	0.000
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
Develop and Engineer Mounted Soldier System Wireless Comms	C/FFP	Thales Communications, Inc.:Clarksburg, MD	4.206	-		-		-		-	0.000	4.206	0.000
Develop and Engineer Mounted Soldier System Microclimate Cooling	C/FFP	Carleton Technologies, Inc.:Orchard Park, NY	0.826	-		-		-		-	0.000	0.826	0.000
Develop and Engineer Mounted Soldier System Display	C/FFP	Rockwell Collins:Carlsbad, CA	1.531	-		-		-		-	0.000	1.531	0.000
Develop and Engineer Mounted Soldier System	MIPR	Various:Various	24.009	22.803		-		-		-	0.000	46.812	0.000
Subtotal			30.572	22.803		-		-		-	0.000	53.375	0.000
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
Mounted Soldier Platform Integration	MIPR	PM HBCT, PM SBCT, and others;;Various	8.584	-		-		-		-	0.000	8.584	0.000
Subtotal			8.584	-		-		-		-	0.000	8.584	0.000

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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
Various Testing Organizations	MIPR	ATEC, TTC/YPG/DTC/EPG/ARL-SLAD, etc.; Various	10.318	-		-		-		-	0.000	10.318	0.000
Subtotal			10.318	-		-		-		-	0.000	10.318	0.000

	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	70.689	22.803		-		-		-	0.000	93.492	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army																DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE								PROJECT			
2040: Research, Development, Test & Evaluation, Army								PE 0604827A: Soldier Systems - Warrior Dem/								S56: MOUNTED SOLDIER			
BA 5: Development & Demonstration (SDD)								Val											

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Exhibit R-4A, RDT&E Schedule Details: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>	PROJECT S56: <i>MOUNTED SOLDIER</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Termination complete	1	2013	1	2013

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Exhibit R-2A, RDT&E Project 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>				PROJECT S65: <i>SOLDIER POWER</i>			
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
S65: <i>SOLDIER POWER</i>	-	-	5.054	-	5.054	9.914	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											
Note Not applicable for this item.											
A. Mission Description and Budget Item Justification Individual Soldier Power Systems (SPSs) enable dismounted Soldiers and squads to execute their missions with significantly less battery weight and enable longer missions without a daily unit re-supply of batteries. These improved systems enable the warfighter to sustain themselves for extended mission duration. An advanced, integrated Soldier power system provides the Soldier with a worn power capability that is significantly more efficient and lighter than carrying separate batteries for each device. Soldier Power Systems address the power and energy gap created by the increase in mission essential, Soldier portable power consumers, such as Situational Awareness (SA) (Displays), Global Positioning System (GPS) Navigation, Weapon Sensors, and Radio Command and Control Communications. This effort began as a Congressional plus up for development and system improvements to the M-25 fuel cell and Acid Alkaline (AA) batteries, and continues to develop a line of power sources and solutions suited for not only the individual Soldier, but for the Team and Squad. These power solutions include, but are not limited to individual Soldier worn systems, integrated power vests, wireless power technology, and small unit charger/power supplies; all intended for use in the most austere operating environments. A Portable Power System will equip the Squad with power to the forward edge. Soldier portable power platforms reduce the weight and logistical risk and burden associated with moving fuel and primary (disposable) batteries. It enables Infantry Squads to operate independently for longer durations without being tethered to a large generator, vehicle, or supply train. This effort is in support of the March 2011 Soldier Protection Capability Development Document (CDD), the December 2011 Operational Energy Initial Capabilities Document (ICD), the Army Chief of Staff's Squad: Foundation of the Decisive Force initiative, and the December 2011 Operation Enduring Freedom (OEF) Operational Energy directives specified by GEN Allen.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013	
Title: Individual Soldier Power								-	-	3.404	
Description: Funding is provided for the following effort:											
FY 2013 Plans: Will mature: 1) a safe, high energy, lightweight, Soldier-wearable battery that conforms to the body armor and improved outer tactical vest; and 2) a cabling/wiring solution that is integrated into a textile that is suitable for combat environments and capable of supporting the exchange of power and data. Will develop a Soldier wearable power system that includes a conformal battery, smart textiles, and power management integrated into the existing body armor and improved outer tactical vest. Will mature: 1) an integrated, ergonomic, Soldier worn, bionic energy harvester capable of providing power for Soldier worn power systems; 2) a light weight, high power, Soldier worn fuel cell capable of providing power to all devices worn by the warfighter while reducing											

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Exhibit R-2A, RDT&E Project 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>		PROJECT S65: <i>SOLDIER POWER</i>
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
the logistics burden; and 3) Soldier carried power management devices that are capable of harvesting remaining energy from any available power sources and manages/distributes worn or carried power.				
Title: Squad Soldier Power Description: Funding is provided for the following effort: FY 2013 Plans: Will continue development of Soldier portable, renewable/ replenishable energy solutions that have the power capacity to sustain Expeditionary Austere Operations for 72 hours, while decreasing dependence on packaged fuel and combat logistics through the use of fuels cells and hybridized technology. Will continue development of light weight, Soldier portable chargers capable of supporting the variety of batteries used in the conventional IBCT formation.		-	-	0.968
Title: Soldier Power Test and Evaluation Description: Funding is provided for the following effort: FY 2013 Plans: Will conduct annual test and evaluation at the Network Integration Evaluation, Ft. Bliss, TX. Will conduct integration testing on power components at the Army Expeditionary Warrior Experiment, Ft. Benning, GA.		-	-	0.682
Accomplishments/Planned Programs Subtotals		-	-	5.054
C. Other Program Funding Summary (\$ in Millions) N/A				
D. Acquisition Strategy Pursue a variety of Soldier power initiatives under full and open competition. These initiatives range from Commercial-Off-The-Shelf (COTS) solutions to developmental efforts. The type of solicitation (Broad Agency Announcement (BAA) or Request for Proposal (RFP)) depends on the maturity of the technology. The power initiatives will be evaluated through the scheduled Network Integrated Evaluation (NIE) events, and if successful, selected for procuring and subsequent fielding and sustainment.				
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			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				PE 0604827A: Soldier Systems - Warrior Dem/ Val				S65: SOLDIER POWER					
Management Services (\$ 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
PM oversight	MIPR	Various:Various	-	-		0.386		-		0.386	Continuing	Continuing	Continuing
Subtotal			-	-		0.386		-		0.386			
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
Soldier Power Development and Integration	TBD	TBD:TBD	5.648	-		3.552		-		3.552	Continuing	Continuing	Continuing
Subtotal			5.648	-		3.552		-		3.552			
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
Martix Support	MIPR	ARL, CERDEC, Various:Various	0.732	-		0.434		-		0.434	Continuing	Continuing	Continuing
Subtotal			0.732	-		0.434		-		0.434			
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
Various Testing Organizations	MIPR	Various:Various	-	-		0.682		-		0.682	Continuing	Continuing	Continuing
Subtotal			-	-		0.682		-		0.682			
			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			6.380	-		5.054		-		5.054			

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	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>		PROJECT S65: <i>SOLDIER POWER</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
Soldier Power Field Evaluation/Feedback																												
Individual Soldier Power Maturation/Integration																												
Individual Soldier Power Evaluation (NIE 13.2)																												
Squad Soldier Power Maturation/Integration																												
Squad Soldier Power Evaluation (NIE 13.2)																												
Individual Soldier Power Evaluation (NIE 14.2)																												
Squad Soldier Power Evaluation (NIE 4.2)																												

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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
Soldier Power Field Evaluation/Feedback	3	2011	4	2012
Individual Soldier Power Maturation/Integration	1	2013	4	2014
Individual Soldier Power Evaluation (NIE 13.2)	2	2013	3	2013
Squad Soldier Power Maturation/Integration	1	2013	4	2014
Squad Soldier Power Evaluation (NIE 13.2)	2	2013	3	2013
Individual Soldier Power Evaluation (NIE 14.2)	2	2014	3	2014
Squad Soldier Power Evaluation (NIE 4.2)	2	2014	3	2014

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604827A: Soldier Systems - Warrior Dem/ Val				PROJECT S75: GROUND SOLDIER ENSEMBLE			
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
S75: GROUND SOLDIER ENSEMBLE	-	38.547	46.797	-	46.797	46.781	15.716	16.976	18.402	Continuing	Continuing
Quantity of RDT&E Articles											

Note

Previously funded in 0603827A - Soldier Systems Advanced Development - S49 Ground Soldier System.

A. Mission Description and Budget Item Justification

The Nett Warrior (NW) program [named in honor of Medal of Honor recipient COL Robert Nett], previously known as Ground Soldier System (GSS) program, leverages commercial smart devices to provide an integrated dismounted leader Mission Command (MC) and Situational Awareness (SA) system for use during combat operations. The system provides unparalleled situational awareness and understanding to the dismounted leader allowing for faster and more accurate decisions in the tactical fight. This translates into Soldiers being at the right place, at the right time, with the right information making them more effective, more lethal, and more survivable in the execution of their combat mission. The NW program focuses on the integration and evaluation of commercial smart devices for the MC/SA system, improved navigation, and reduced fratricide through the visualization of friendly forces. The development and integration process employs combat veteran for Soldier integration and feedback enhancing the human factors and fightability. NW also develops supporting power systems aimed at achieving NET ZERO power balance in the expeditionary environment. This project funds the following: 1) the yearly developmental and operational test of the NW with continually advancing commercial smart device technology inserted, (2) the software development for planned updates, 3) integration with Joint Tactical Radio System (JTRS), including vehicle power integration, 4) and government led integration and system engineering and program management. Note this is the continuation of work performed in Program Element (PE) 0603827A/S49.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Test and Evaluation and Network Integration Evaluation (NIE)	-	11.676	14.174
Articles:		0	
Description: Funding is provided for the following effort			
FY 2012 Plans: Conduct Nett Warrior (NW) test and evaluation to include semi-annual operational assessments at Network Integration Exercise (NIE) events at Ft. Bliss, TX., supporting objective of full Army network integration from dismounted Soldier level. Conduct component and system, and operational level developmental testing to support production decision of NW.			
FY 2013 Plans: Will conduct NW test and evaluation for technical verification at developmental events and user verification through operational testing at semi-annual NIE events. Test events will include: Brigade level support, equipping, training, test costs, and spares for			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
NW Initial Operational Test; Evaluation at NIE to support a full rate production decision; Logistics Demonstration; safety testing; airborne; air-worthiness; Army Interoperability Certification; environmental testing; electronic warfare testing; and Information Assurance penetration prevention testing.				
Title: Hardware and Software for Integration and Evaluation Description: Funding is provided for the following effort FY 2012 Plans: Acquire, integrate and evaluate Brigade sized quantities of commercial smart devices, cables, and other hardware for potential integration into the NW system of proven and mature capability during the semi-annual NIE events. Integrate 3rd party software combat applications. This allows NW to keep pace with emerging technology and informs the acquisition decision process as to yearly Army Capability Set insertion. FY 2013 Plans: Will continue to acquire, integrate and evaluate Brigade sized quantities of commercial smart devices, cables, and other hardware for potential integration into the NW system of proven and mature capability during the semi-annual NIE events. Will integrate 3rd party software combat applications. This allows NW to keep pace with emerging technology and informs the acquisition decision process as to yearly Army Capability Set insertion.		Articles: -	14.789 0	17.954
Title: Software Development Description: Funding is provided for the following effort FY 2012 Plans: Develop and integrate software based on the Army's Joint Battle Command Platform software development kit for commercial smart device hardware for potential integration into the NW system to provide the most current capability into production on a semi-annual basis. Maintain software updates and changes for NW program to keep pace with Army software blocking updates, maintain information assurance accreditation, and retain interoperability certification for Army Capability Sets. FY 2013 Plans: Will continue to develop software based on the Army's Joint Battle Command Platform software development kit for commercial smart device hardware for potential integration into the NW system to provide the most current capability into production on a		Articles: -	5.253 0	6.377

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	PE 0604827A: Soldier Systems - Warrior Dem/ Val	S75: GROUND SOLDIER ENSEMBLE		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
semi-annual basis. Will maintain software updates and changes for NW program to keep pace with Army software blocking updates, maintain information assurance accreditation, and retain interoperability certification for Army Capability Sets.				
Title: Integration with Joint Tactical Radio System (JTRS) and Interface, Vehicle Power and Integration Description: Funding is provided for the following effort FY 2012 Plans: Integrate JTRS Rifleman Radio running Soldier Radio Wave form into NW system. Develop austere power recharging solutions and integrate power recharging systems for Infantry, Stryker and Heavy Brigade Combat Team vehicles with development, testing and verification of 4 types of vehicle integration kits to support NW and the radio batteries. FY 2013 Plans: Will integrate and verify modified JTRS Rifleman Radio running Soldier Radio Wave form and cross domain guards into NW system. Will continue to develop austere power recharging solutions and integrate power recharging systems for Infantry, Stryker and Heavy Brigade Combat Team vehicles with development, testing and verification of 4 types of vehicle integration kits to support NW and the radio batteries.		-	4.800 0	5.828
Title: Conduct Systems Engineering and Program Management Support to Nett Warrior Description: Funding is provided for the following effort FY 2012 Plans: Conduct government systems engineering, assessment and program management support for NW program. Integrate evolving commercial smart devices and technology for test and evaluation. Collect input from Soldiers at semi-annual NIE events to improve NW size, weight, power, fightability, safety and effectiveness via surveys and electronic data monitoring from Developmental and Operational Testing events. Conduct surveys and technical analysis of austere power generation capability at Developmental and Operational testing at NIE at Ft. Bliss to improve power generation process. FY 2013 Plans: Will continue to conduct government systems engineering, assessment and program management support for NW program. Will integrate evolving commercial smart devices, software applications and technology for test and evaluation. Will collect input from Soldiers at semi-annual NIE events to improve NW size, weight, power, fightability, safety and effectiveness via surveys		-	2.029 0	2.464

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Exhibit R-2A, RDT&E Project 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>			PROJECT S75: <i>GROUND SOLDIER ENSEMBLE</i>					

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2011	FY 2012	FY 2013
and electronic data monitoring from Developmental and Operational Testing (DT/OT) events. Will conduct surveys and technical analysis of austere power generation capability at DT/OT at NIE at Ft. Bliss to improve power generation process.						
Accomplishments/Planned Programs Subtotals				-	38.547	46.797

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
• OPA 3, R80501: <i>OPA 3, R80501, Ground Soldier System</i>	1.685	63.500	103.317		103.317		200.855	203.547	225.251	Continuing	Continuing
• RDT&E, PE 0603827A S49: <i>RDT&E, PE 0603827A S49 - Ground Soldier System (GSS)</i>	34.819	0.020								0.000	34.839

D. Acquisition Strategy

The Nett Warrior (NW) program provides unparalleled situational awareness and battle command to dismounted combat leaders through an integrated computer, display, power source and radio. The NW program executed a MS A in FY09 and began three competing TD phase contracts leading to developmental and operational testing FY10-11. The NW MS C is executed in 2QFY12 followed by a low rate Capability Set (CS) 14 production award. Conduct Developmental Test and Evaluation planned for 4QFY12-1QFY13, followed by 1QFY13 Initial Operational Test & Evaluation (IOT&E) as well as hardware, software, integration and program management. The Developmental and Operational tests are validation of the system utility, supportability, and austere-environment power production and regeneration strategy-leading to a production decision in the 2QFY13 to procure the CS14 quantity of NW systems and support. NW also continues to reduce size, weight and power through a semi-annual integration and evaluation and test of commercial smart device technologies which evolve continuously.

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			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
2040: Research, Development, Test & Evaluation, Army				PE 0604827A: Soldier Systems - Warrior Dem/				S75: GROUND SOLDIER ENSEMBLE					
BA 5: Development & Demonstration (SDD)				Val									
Management Services (\$ 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
PM Soldier Warrior hardware and software integration and evaluation	MIPR	Various:Various	-	14.789		17.954		-		17.954	Continuing	Continuing	Continuing
PM Soldier Warrior Systems Engineering and program management support	Various	Various:Various	-	2.029		2.464		-		2.464	Continuing	Continuing	Continuing
Subtotal			-	16.818		20.418		-		20.418			
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
JTRS integration and interface, vehicle power integration	MIPR	Various:Various	-	4.800		5.828		-		5.828	Continuing	Continuing	Continuing
Subtotal			-	4.800		5.828		-		5.828			
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
Software development	MIPR	Various:Various	-	5.253		6.377		-		6.377	Continuing	Continuing	Continuing
Subtotal			-	5.253		6.377		-		6.377			
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
Various Testing Organizations	MIPR	Various:Various	-	11.676		14.174		-		14.174	Continuing	Continuing	Continuing
Subtotal			-	11.676		14.174		-		14.174			

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Exhibit R-3, RDT&E Project Cost Analysis: 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 0604827A: Soldier Systems - Warrior Dem/ Val				PROJECT S75: GROUND SOLDIER ENSEMBLE			
	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	-	38.547		46.797		-		46.797			

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>		PROJECT S75: <i>GROUND SOLDIER ENSEMBLE</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
Army Configuration Steering Board (CSB)																												
Network Integration Evaluation (NIE 12.1)																												
NW Milestone C Decision																												
Low Rate Initial Production (LRIP) Contract Award																												
NW Low Rate Initial Production (LRIP)																												
Network Integration Evaluation (NIE 12.2)																												
NW Developmental Test (DT)																												
Initial Operational Test and Evaluation (IOTE)/ NIE 13.1																												
NW First Unit Equipment (FUE)																												
NW Initial Operating Capability (IOC)																												
Network Integration Evaluation (NIE 13.2)																												
CS14 Contract Award																												
CS14 Production																												
CS14 Fielding																												
Network Integration Evaluation (NIE 14.1)																												
Network Integration Evaluation (NIE 14.2)																												
CS15 Contract Award																												
CS15 Production																												
CS15 Fielding																												
Network Integration Evaluation (NIE 15.1)																												
Network Integration Evaluation (NIE 15.2)																												
CS16 Contract Award																												
CS16 Production																												

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Exhibit R-4, RDT&E Schedule Profile: 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 0604827A: Soldier Systems - Warrior Dem/ Val										PROJECT S75: GROUND SOLDIER ENSEMBLE												
					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
CS16 Fielding																																
Network Integration Evaluation (NIE 16.1)																																
Network Integration Evaluation (NIE 16.2)																																
CS17 Contract Award																																
CS17 Production																																
CS17 Fielding																																

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Exhibit R-4A, RDT&E Schedule Details: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>	PROJECT S75: <i>GROUND SOLDIER ENSEMBLE</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Army Configuration Steering Board (CSB)	4	2011	4	2011
Network Integration Evaluation (NIE 12.1)	1	2012	1	2012
NW Milestone C Decision	2	2012	2	2012
Low Rate Initial Production (LRIP) Contract Award	3	2012	3	2012
NW Low Rate Initial Production (LRIP)	3	2012	2	2013
Network Integration Evaluation (NIE 12.2)	3	2012	3	2012
NW Developmental Test (DT)	4	2012	1	2013
Initial Operational Test and Evaluation (IOTE)/NIE 13.1	1	2013	1	2013
NW First Unit Equipment (FUE)	2	2013	2	2013
NW Initial Operating Capability (IOC)	2	2013	2	2013
Network Integration Evaluation (NIE 13.2)	3	2013	3	2013
CS14 Contract Award	3	2013	3	2013
CS14 Production	3	2013	2	2014
CS14 Fielding	4	2013	4	2014
Network Integration Evaluation (NIE 14.1)	1	2014	1	2014
Network Integration Evaluation (NIE 14.2)	3	2014	3	2014
CS15 Contract Award	3	2014	3	2014
CS15 Production	3	2014	2	2015
CS15 Fielding	4	2014	4	2015
Network Integration Evaluation (NIE 15.1)	1	2015	1	2015
Network Integration Evaluation (NIE 15.2)	3	2015	3	2015
CS16 Contract Award	3	2015	3	2015

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Exhibit R-4A, RDT&E Schedule Details: 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 0604827A: Soldier Systems - Warrior Dem/ Val		PROJECT S75: GROUND SOLDIER ENSEMBLE	
	Start		End	
Events	Quarter	Year	Quarter	Year
CS16 Production	3	2015	2	2016
CS16 Fielding	4	2015	4	2016
Network Integration Evaluation (NIE 16.1)	1	2016	1	2016
Network Integration Evaluation (NIE 16.2)	3	2016	3	2016
CS17 Contract Award	3	2016	3	2016
CS17 Production	3	2016	2	2017
CS17 Fielding	4	2016	4	2017