

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army	DATE: April 2013
---	-------------------------

APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>System Development & Demonstration (SDD)</i>					PE 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>							
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	-	41.680	51.851	48.477	-	48.477	18.923	19.043	18.237	0.596	Continuing	Continuing
DX7: <i>TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM</i>	-	0.800	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
S56: <i>MOUNTED SOLDIER</i>	-	3.276	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
S65: <i>Soldier Power</i>	-	0.000	5.054	7.414	-	7.414	0.000	0.000	0.000	0.000	Continuing	Continuing
S75: <i>Ground Soldier Ensemble</i>	-	37.604	46.797	41.063	-	41.063	18.923	19.043	18.237	0.596	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

Fiscal Year 2012: Congressional Rescission \$5.000 million and Program Decrease of \$14.670 million to Mounted Soldier System.

Fiscal Year 2014: Program Decreases of \$5.718 million to Ground Soldier Ensemble and \$2.000 million to Soldier Power.

A. Mission Description and Budget Item Justification

This program element contains four projects: Project S56 for Mounted Soldier System (MSS), Project S65 for Soldier Power, Project S75 for Nett Warrior (NW), [named in honor of Medal of Honor recipient COL Robert Nett], previously known as Ground Soldier System (GSS), and Project DX7 Tactical Communications and Protective System (TCAPS). 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 mission 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. TCAPS enables Soldiers to communicate over radios in combat environments while simultaneously providing hearing protection from both steady state and impulse noise.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army				DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0604827A: Soldier Systems - Warrior Dem/Val			
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	61.350	51.851	56.695	-	56.695
Current President's Budget	41.680	51.851	48.477	-	48.477
Total Adjustments	-19.670	0.000	-8.218	-	-8.218
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-5.000	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-14.670	-	-8.218	-	-8.218

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>				PROJECT DX7: <i>TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM</i>			
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
DX7: <i>TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM</i>	-	0.800	0.000	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												
A. Mission Description and Budget Item Justification <p>The Tactical Communications and Protective System (TCAPS) enables Soldiers to communicate over radios in combat environments while simultaneously providing hearing protection from both steady state and impulse noise. TCAPS enhances survivability through improved threat detection in operational environments and supports situational awareness by enabling clear and understandable communications over radios in combat situations where hearing can be temporarily impaired from gunfire and explosions. By reducing noise-induced hearing damage, TCAPS contributes to the reduction of post-service disability compensation and limits lost in-service time related to hearing injury. TCAPS will employ commercial-off-the-shelf (COTS) solution(s) with technical readiness level of 8 or higher.</p> <p>There is an immediate need for TCAPS. Theater reports indicate a high incidence of temporary and permanent hearing loss caused by impulse noise when Soldiers remove hearing protection to communicate over radios. Currently hearing loss and other hearing injuries (tinnitus, dizziness, etc.) are the fourth leading reason for medical referral for combatants returning from deployments.</p>												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
Title: Tactical Communications and Protective System (TCAPS) Description: TCAPS procurement of test articles and testing FY 2012 Accomplishments: Funding provided via a below the threshold reprogramming (BTR) action supported FY12-13 purchase of test articles from many different vendors and conduct of technical and operational testing.										Articles: 0.800 0	0.000	0.000
Accomplishments/Planned Programs Subtotals										0.800	0.000	0.000

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>			PROJECT DX7: <i>TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM</i>			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• SSN B55510: <i>Tactical Communications and Protective System</i>			31.868		31.868	20.000				0.000	51.868
Remarks											
D. Acquisition Strategy											
TCAPS is an ACAT III program leveraging commercial-off-the-shelf (COTS) technology with technical readiness level (TRL) of 8 or higher. Pending funding, TCAPS will conduct an annual relook of commercial technology to seek improved capabilities, conduct testing and transition to procurement.											
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.											

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>						PROJECT DX7: <i>TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM</i>			
Management Services (\$ 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
Sesame Model	MIPR	AMSAA:APG, MD	0.000	0.018		-		-		-		-	0.000	0.018	0.000
Subtotal			0.000	0.018		0.000		0.000		0.000		0.000	0.000	0.018	0.000
Support (\$ 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
Test Articles (Engineering Assessment)	MIPR	DLA DSCP:Philadelphia, PA	0.000	0.026		-		-		-		-	0.000	0.026	0.000
Test Articles (Development Test)	MIPR	DLA DSCP:Philadelphia, PA	0.000	0.020		-		-		-		-	0.000	0.020	0.000
Test Articles (OT)	MIPR	DLA DSCP:Philadelphia, PA	0.000	0.120		-		-		-		-	0.000	0.120	0.000
Subtotal			0.000	0.166		0.000		0.000		0.000		0.000	0.000	0.166	0.000
Test and Evaluation (\$ 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
Technical Test	MIPR	ATEC, AEC, OTC, ARL-SLAD:Various Locations	0.000	0.177		-		-		-		-	0.000	0.177	0.000
Customer Test - 2 CR	Various	Army Hearing Program Office:Various Locations	0.000	0.028		-		-		-		-	0.000	0.028	0.000
Operational Test	Various	ATEC, AEC, OTC, ARL-SLAD:Various Locations	0.000	0.411		-		-		-		-	0.000	0.411	0.000

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>				PROJECT DX7: <i>TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM</i>				

Test and Evaluation (\$ 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	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	0.616		0.000		0.000		0.000		0.000		0.000	0.000	0.616	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	0.800	0.000	0.000	0.000	0.000	0.000	0.800	0.000

Remarks

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>				PROJECT S56: <i>MOUNTED SOLDIER</i>			
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
S56: <i>MOUNTED SOLDIER</i>	-	3.276	0.000	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 Program terminated in 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 2012	FY 2013	FY 2014	
Title: MSS transition support to Program Executive Office Ground Combat System (PEO GCS)									3.276	0.000	0.000	
Articles:									0			
Description: MSS transition support to PEO GCS												
FY 2012 Accomplishments: Prepared program for orderly shutdown, transition of select components to PEO GCS, disposition of residual program hardware assets and termination in accordance with the approved termination plan.												
Accomplishments/Planned Programs Subtotals									3.276	0.000	0.000	

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>			PROJECT S56: <i>MOUNTED SOLDIER</i>				
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>
	• OPA 3: <i>OPA 3 Mounted Soldier</i>	5.000									0.000	5.000
Remarks FY12 OPA3 funding was not executed by Mounted Soldier System.												
D. Acquisition Strategy MSS as a Program of record was terminated. Select components were 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.												

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>						PROJECT S56: <i>MOUNTED SOLDIER</i>			
Management Services (\$ 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
Management/Support of MSS program termination and transition to PEO GCS	MIPR	PM Soldier Warrior;:Ft. Belvoir, VA	19.215	3.276		-		-		-		-	0.000	22.491	0.000
SBIR/SBTR	TBD	N/A:N/A	2.000	-		-		-		-		-	0.000	2.000	0.000
Subtotal			21.215	3.276		0.000		0.000		0.000		0.000	0.000	24.491	0.000
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
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 Display	MIPR	Various:Various	24.009	-		-		-		-		-	0.000	24.009	0.000
Subtotal			30.572	0.000		0.000		0.000		0.000		0.000	0.000	30.572	0.000
Support (\$ 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
Mounted Soldier Platform Integration	MIPR	PM HBCT, PM SBCT, and others;:Various	8.584	-		-		-		-		-	0.000	8.584	0.000

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>					PROJECT S56: <i>MOUNTED SOLDIER</i>			
Support (\$ 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
Subtotal			8.584	0.000		0.000		0.000		0.000		0.000	0.000	8.584	0.000
Test and Evaluation (\$ 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
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		0.000		0.000		0.000		0.000	0.000	10.318	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			70.689	3.276		0.000		0.000		0.000		0.000	0.000	73.965	0.000
Remarks															

UNCLASSIFIED

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

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Hardware modification																												
DT/OT of components for transition																												
Program documentation closeout / HW transfer																												
Termination complete																												

UNCLASSIFIED

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

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Hardware modification	3	2012	3	2012
DT/OT of components for transition	3	2012	1	2013
Program documentation closeout / HW transfer	1	2013	1	2013
Termination complete	1	2013	1	2013

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior Dem/Val				PROJECT S65: Soldier Power			
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
S65: Soldier Power	-	0.000	5.054	7.414	-	7.414	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												
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 a Soldier worn power/data 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 tactical radios. This effort began in FY10 as a Congressional add 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 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. By using renewable energy and power scavenging technology, it enables Infantry Squads to operate independently for longer durations without being tethered to a large generator, vehicle, or supply train. This effort supports the draft Small Unit Power Capability Development Document (CDD), March 2011; the Soldier Protection 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, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Individual Soldier Power									0.000	3.404	5.218	
Articles:										0		
Description: Integrated soldier power/data and individual power												
FY 2013 Plans:												
Mature an integrated Soldier system capable of managing power and system C4I data from Soldier worn/carried peripherals. This system is comprised of a safe, high energy, lightweight, Soldier-wearable battery that conforms to the Soldier's body armor and improved outer tactical vest. This conformal battery is the central source of power for all Soldier worn devices and serves as the												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>		PROJECT S65: <i>Soldier Power</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2012	FY 2013	FY 2014
<p>central power storage point for integrated Soldier worn energy harvesting and renewable energy sources. This integrated Soldier system passes its power and peripheral system C4I data through a wiring system that is integrated into the fabric of the improved outer tactical vest. Mature: 1) wireless charging on the Soldier from vehicle platforms and from Soldier worn power sources, thus reducing the dependence on battery chargers and numbers of batteries carried; 2) light weight hybrid power sources; 3) integrated embedded "smart" electro-textiles to improve Soldier mobility and reduce Soldier weight; and 4) Soldier carried power/data management devices that are capable of harvesting energy from a variety of available power sources even in the most austere/remote environments reducing Soldier resupply.</p> <p>FY 2014 Plans: Will continue to mature an integrated Soldier system capable of managing power and system C4I data from Soldier worn/carried peripherals. This system will be comprised of a safe, high energy, lightweight, Soldier-wearable battery that will conform to the Soldiers body armor and improved outer tactical vest. This improved conformal battery will be the central source of power for all Soldier worn devices and serve as the central power storage point for integrated Soldier worn energy harvesting and renewable energy sources. This integrated Soldier system will pass its power and peripheral C4I data through a wiring system that will be integrated into the fabric of the improved outer tactical vest. Will continue to mature: 1) wireless charging on the Soldier from vehicle platforms and from Soldier worn power sources, thus reducing dependency on battery chargers and numbers of batteries carried; 2) improved light weight hybrid power sources; 3) integrated embedded "smart" electro-textiles to improve Soldier mobility and reduce Soldier weight; 4) Soldier carried power/data management devices that are capable of harvesting energy from a variety of available power sources even in the most austere/remote environments reducing Soldier resupply; and 5) Will mature a highly efficient solar technology conducive to a variety of operating environments and capable of providing over twice the current level of power in an equal or smaller form factor.</p>					
<p>Title: Squad Soldier Power</p> <p align="right">Articles:</p> <p>Description: Soldier portable, renewable energy solutions for Squad formation</p> <p>FY 2013 Plans: Develop and integrate Soldier portable, renewable 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 improved renewable energy solutions and hybridized technology. Continue development of light weight, Soldier portable chargers and power scavenging technology capable of supporting the variety of batteries used in the tactical formations.</p> <p>FY 2014 Plans: Will continue development and integration of Soldier portable, renewable energy solutions that have the power capacity to sustain expeditionary austere operations for 72 hours, while decreasing dependence on combat logistics through the use of fuels cells,</p>			0.000	0.968 0	1.472

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>	PROJECT S65: <i>Soldier Power</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013
hybridized power sources and other maturing power sources. Will continue development and optimization of light weight, Soldier portable chargers capable of supporting the variety of batteries used in the tactical formations.			
Title: Soldier Power Test and Evaluation		0.000	0.682
Articles:			0
Description: Integration testing and annual testing and evaluation events			
FY 2013 Plans: Conduct annual test and evaluation at the Network Integration Evaluation (NIE), Ft. Bliss, TX. Conduct integration testing on power components at the Army Expeditionary Warrior Experiment (AEWE), Ft. Benning, GA.			
FY 2014 Plans: Will conduct annual test and evaluation at the Network Integration Evaluation (NIE), Ft. Bliss, TX. Will conduct integration testing on power components at the Army Expeditionary Warrior Experiment (AEWE), Ft. Benning, GA.			
Accomplishments/Planned Programs Subtotals		0.000	5.054
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks			
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 resulting from Army Science and Technology investments. The power initiatives will be evaluated through events at the Army Expeditionary Warrior Experiments (AEWE), the Network Integrated Evaluation (NIE) and FY14 Capability Integration Evaluation (CIE) events, and if successful, selected for procurement 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.			

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>						PROJECT S65: <i>Soldier Power</i>			
Management Services (\$ 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
PM integration and oversight	MIPR	Various:Various	0.000	-		1.294		2.088		-		2.088	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		1.294		2.088		0.000		2.088			
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
Soldier Power Development and Integration	TBD	TBD:TBD	5.648	-		2.298		3.774		-		3.774	Continuing	Continuing	Continuing
Subtotal			5.648	0.000		2.298		3.774		0.000		3.774			
Support (\$ 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
Martix Support	MIPR	ARL, CERDEC, Various:Various	0.732	-		0.780		0.828		-		0.828	Continuing	Continuing	Continuing
Subtotal			0.732	0.000		0.780		0.828		0.000		0.828			
Test and Evaluation (\$ 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
Various Testing Organizations	MIPR	Various:Various	0.000	-		0.682		0.724		-		0.724	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.682		0.724		0.000		0.724			

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: 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 0604827A: Soldier Systems - Warrior Dem/Val					PROJECT S65: Soldier Power			
	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	6.380	0.000		5.054		7.414		0.000		7.414			

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>		
			PROJECT S65: <i>Soldier Power</i>		

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
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 (CIE 14.2)																												
Squad Soldier Power Evaluation (CIE 14.2)																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: 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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>	PROJECT S65: <i>Soldier Power</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
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 (CIE 14.2)	2	2014	3	2014
Squad Soldier Power Evaluation (CIE 14.2)	2	2014	3	2014

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior Dem/Val				PROJECT S75: Ground Soldier Ensemble			
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
S75: Ground Soldier Ensemble	-	37.604	46.797	41.063	-	41.063	18.923	19.043	18.237	0.596	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												
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 Colonel Robert C. Nett), also known as the Ground Soldier System (GSS) Program, leverages commercial smart devices and secure Army tactical radios to provide the dismounted leader an integrated mission command and situational awareness system for use during combat operations. The NW system provides operators electronic, real-time information on friendly positions; information about enemy activity and movement; navigational data and map imagery; and other mission related graphics which effectively puts the power of the entire Army tactical network in the hands of the dismounted leader. The NW system also provides the same integrated mission command capability to tactical vehicle mounted leaders so that when they dismount their vehicles, they still have access to the common operating picture (COP) and have full situational awareness. This capability provides unparalleled situational awareness and understanding to the dismounted leader allowing for faster, more accurate decisions and reduced fratricide in the tactical fight.												
The development and integration process relies significantly on feedback from combat operations and employs combat veterans for Soldier integration and feedback enhancing human factors design and fightability of the system. The NW program also integrates soldier power systems aimed at considerably reducing the weight of the dismounted soldier's load. This project funds the following: 1) Yearly developmental and operational test of the NW with continually advancing commercial smart device technology inserted, 2) 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.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Test and Evaluation including twice a year Network Integration Evaluation (NIE) to gain Soldier feedback									8.780	14.323	12.672	
									0	0		
Description: Funding is provided for the following effort												
FY 2012 Accomplishments:												
Conducted Nett Warrior (NW) test and evaluation to include semi-annual operational assessments at Network Integration Evaluation (NIE) events at Ft. Bliss, TX., supporting objective of full Army network integration from dismounted Soldier level.												

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior Dem/Val		PROJECT S75: Ground Soldier Ensemble
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Conducted component, system, and operational level developmental testing to support production decision of NW including Soldier Power. Conducted validation of software interoperability. FY 2013 Plans: Continue NW developmental and operational evaluation of the latest commercial smart devices and emerging technologies. Conduct testing at NIE (with multiple commercial smart devices to support yearly production decisions) and program management support for NW. Test events include: Brigade level support, equipping, training, test costs, and spares for NW Developmental and Operational Test at NIE to support a Low Rate Initial Production extension decision; Logistics Demonstration; safety testing; airborne; air-worthiness; Army Interoperability Certification; environmental testing; electronic warfare testing; and Information Assurance penetration prevention testing. FY 2014 Plans: Will conduct NW test and evaluation for technical verification at developmental events and user verification through operational testing at semi-annual Network Integration Evaluation (NIE) events to support continued production decisions. Test events will include: Brigade level support, equipping, training, test costs, and spares for NW; evaluation at NIE to support continued production decisions; yearly Army Interoperability Certification; environmental testing; electronic warfare testing; and Information Assurance penetration prevention testing for new commercial smart devices.				
Title: Hardware and Software Integration and Evaluation for Capability Improvements Articles: Description: Funding is provided for the following effort FY 2012 Accomplishments: Acquired, integrated and evaluated Brigade sized quantities of commercial smart devices, cables, Soldier Power solutions and other hardware for integration into the NW system of proven and mature capability during the semi-annual NIE events. Integrated 3rd party software combat applications for foreign language translation and fire support missions. This allowed NW to keep pace with emerging technology and informs the acquisition decision process as to yearly Army Capability Set insertion. FY 2013 Plans: Acquire, integrate and evaluate Brigade sized quantities of the latest commercial smart devices, cables, and other hardware for integration into the NW system proven and mature capability during the semi-annual NIE events. Integrate 3rd party software combat applications to allow NW to keep pace with emerging technology and inform the acquisition decision process as to yearly Army Capability Set insertion. FY 2014 Plans:		12.422 0	9.004 0	8.816

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior Dem/Val	PROJECT S75: Ground Soldier Ensemble		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Will continue to acquire, integrate and evaluate Brigade sized quantities of the latest 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.				
Title: Software Development and Integration Description: Funding is provided for the following effort FY 2012 Accomplishments: Developed and integrated 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. Maintained software updates and changes for NW program to keep pace with Army software blocking updates, maintained information assurance accreditation, and retained interoperability certification for Army Capability Sets. FY 2013 Plans: Continue software integration of the Army's Joint Battle Command Platform software development kit for commercial smart device hardware to support Governmental T&E activities by conducting Developmental Tests, and Operational Testing preparing for production decisions and fielding for FY14. Integrate applications to expand Nett Warrior capabilities to meet other requirements with a common smart device. Software updates support Army Interoperability Certification testing and other testing supporting Developmental Testing (DT) and Operational Testing (OT). FY 2014 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 semi-annual basis. Integrates applications to expand Nett Warrior capabilities to meet other requirements with a common smart device. 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.		Articles: 3.696 0	5.636 0	5.518
Title: Integration with Joint Tactical Radio System (JTRS) and Vehicle Platforms Description: Funding is provided for the following effort FY 2012 Accomplishments:		Articles: 1.882 0	8.988 0	5.659

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior Dem/Val	PROJECT S75: Ground Soldier Ensemble		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Integrated JTRS Rifleman Radio running Soldier Radio Wave form into NW system. Developed austere power recharging solutions and integrated 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: Complete integration and verification of JTRS Nett Warrior Leader Radio and cross domain guards into NW system and vehicle integration kits for DT and IOT&E. 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 2014 Plans: Will integrate new commercial smart devices with JTRS Nett Warrior Leader Radio and cross domain guards as technology changes over time. Will integrate vehicle integration kits into Army Mine Resistant Ambush Protected (military vehicle) platforms.				
Title: Conduct Systems Engineering and Program Management Support to Nett Warrior <div>Articles:</div> Description: Funding is provided for the following effort FY 2012 Accomplishments: Conducted government systems engineering and program management support for NW program including documentation preparation for Milestone C. Integrated evolving commercial smart devices and technology for test and evaluation. Collected 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. Conducted 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: Conduct government systems engineering and program management support for NW program including documentation preparation for Full Rate Production decision. Integrate the latest commercial smart devices, software applications 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 (DT/OT) events. FY 2014 Plans: Will continue to conduct government systems engineering and program management support for NW program. Will develop advanced electronic training materials for improved Leader training. Will collect input from Soldiers at semi-annual NIE events		10.566 0	8.846 0	8.398

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior Dem/Val			PROJECT S75: Ground Soldier Ensemble				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
to improve NW size, weight, power, fightability, safety and effectiveness via surveys and electronic data monitoring from Developmental and Operational Testing (DT/OT) events.												
Title: Soldier System and Integration (SSI) Below Threshold Reprogramming (BTR)										0.258	0.000	0.000
Articles:										0		
Description: BTR funds provided for the following effort.												
FY 2012 Accomplishments: Supported 3D Computer Aided Design/Computer Aided Modeling and rapid prototyping efforts, to support Soldier/Squad configuration management and to provide live and virtual system level product visualization and hardware integration evaluation capabilities.												
Accomplishments/Planned Programs Subtotals										37.604	46.797	41.063
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• OPA 3, R80501: OPA 3, R80501, Ground Soldier System	63.500	103.317	81.680		81.680	100.724	103.416	50.246	50.298	Continuing	Continuing	
• RDT&E, PE 0603827A S49: RDT&E, PE 0603827A S49 - Ground Soldier System (GSS)									44.500	Continuing	Continuing	
Remarks												
D. Acquisition Strategy The Nett Warrior (NW) program provides unparalleled situational awareness and mission 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. A Configuration Steering Board (CSB) was held August 2011 which restructured the program to implement COTS-based technology. Twice a year technology maturation and integration is assessed at NIE events. The NW MS C was approved 3 April 2012 followed by a low rate Capability Set (CS) 14 production award. Will conduct Developmental Test and Evaluation planned for 4QFY12-1QFY13, followed by 1QFY13 Operational Test (OT) 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. While in production NW also continues to reduce size, weight and power through a semi-annual integration and evaluation and test of the latest commercial smart device technologies which evolve continuously.												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: 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 0604827A: <i>Soldier Systems - Warrior</i> <i>Dem/Val</i>	PROJECT S75: <i>Ground Soldier Ensemble</i>

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.

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>						PROJECT S75: <i>Ground Soldier Ensemble</i>			
Management Services (\$ 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
PM Soldier Warrior hardware and software integration and evaluation	MIPR	Various:Various	0.000	12.422		9.004		8.816		-		8.816	Continuing	Continuing	Continuing
PM Soldier Warrior Systems Engineering and program management support	Various	Various:Various	0.000	10.566		8.846		8.398		-		8.398	Continuing	Continuing	Continuing
SSI BTR	Various	Various:Various	0.000	0.258		-		-		-		-	0.000	0.258	0.000
Subtotal			0.000	23.246		17.850		17.214		0.000		17.214			
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
Integration with Joint Tactical Radio Systems (JTRS) and Vehicle Platforms	MIPR	Various:Various	0.000	1.882		8.988		5.659		-		5.659	Continuing	Continuing	Continuing
Subtotal			0.000	1.882		8.988		5.659		0.000		5.659			
Support (\$ 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
Software Development and Integration	MIPR	Various:Various	0.000	3.696		5.636		5.518		-		5.518	Continuing	Continuing	Continuing
Subtotal			0.000	3.696		5.636		5.518		0.000		5.518			

UNCLASSIFIED

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 0604827A: <i>Soldier Systems - Warrior Dem/Val</i>				PROJECT S75: <i>Ground Soldier Ensemble</i>					
Test and Evaluation (\$ 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
Various Testing Organizations	MIPR	Various:Various	0.000	8.780		14.323		12.672		-		12.672	Continuing	Continuing	Continuing
Subtotal			0.000	8.780		14.323		12.672		0.000		12.672			
			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	37.604		46.797		41.063		0.000		41.063			
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: 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 0604827A: *Soldier Systems - Warrior
Dem/Val*

PROJECT

S75: Ground Soldier Ensemble

[illegible]

PE 0604827A: *Soldier Systems - Warrior Dem/Val*
Army

UNCLASSIFIED

Page 28 of 31

R-1 Line #113

UNCLASSIFIED

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 BA 5: System Development & Demonstration (SDD)												PE 0604827A: Soldier Systems - Warrior Dem/Val												S75: Ground Soldier Ensemble															
												FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
												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
CS17 Production																																							
CS17 Fielding																																							

UNCLASSIFIED

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 0604827A: *Soldier Systems - Warrior*
Dem/Val

PROJECT

S75: *Ground Soldier Ensemble*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NW Milestone C Decision	3	2012	3	2012
Low Rate Initial Production (LRIP) Contract Awards	3	2012	4	2012
NW Low Rate Initial Production (LRIP)	3	2012	4	2014
Network Integration Evaluation (NIE 12.2)	3	2012	3	2012
NW Developmental Test (DT)	4	2012	1	2013
Network Integration Evaluation (NIE 13.1)	1	2013	1	2013
NW First Unit Equipment (FUE)	1	2014	1	2014
Network Integration Evaluation (NIE 13.2)	3	2013	3	2013
CS14 Contract Awards	3	2013	1	2014
CS14 Production	3	2013	4	2013
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 Awards	3	2014	4	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 Awards	3	2015	4	2015
CS16 Production	3	2015	2	2016
CS16 Fielding	4	2015	4	2016
Network Integration Evaluation (CIE 16.1)	1	2016	1	2016

UNCLASSIFIED

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 0604827A: Soldier Systems - Warrior
Dem/Val

PROJECT

S75: Ground Soldier Ensemble

	Start		End	
Events	Quarter	Year	Quarter	Year
Network Integration Evaluation (CIE 16.2)	3	2016	3	2016
CS17 Contract Awards	3	2016	4	2016
CS17 Production	3	2016	2	2017
CS17 Fielding	4	2016	4	2017