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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	75.833	48.323	19.598	-	19.598	18.368	16.344	14.860	13.509	Continuing	Continuing
S49: <i>GROUND SOLDIER SYSTEM (GSS)</i>	55.951	36.093	0.020	-	0.020	0.022	-	-	-	Continuing	Continuing
S51: <i>AIRCREW INTEGRATED SYS AD</i>	2.136	0.141	0.134	-	0.134	0.139	0.146	0.153	0.155	Continuing	Continuing
S52: <i>SOLDIER SUPPORT EQUIPMENT - AD</i>	-	-	6.107	-	6.107	4.531	1.900	-	-	0.000	12.538
S53: <i>CLOTHING AND EQUIPMENT</i>	6.794	7.106	6.985	-	6.985	7.163	6.573	6.657	5.376	Continuing	Continuing
S54: <i>SMALL ARMS IMPROVEMENT</i>	5.085	4.983	4.506	-	4.506	4.640	4.853	5.100	5.040	Continuing	Continuing
S55: <i>Counter-Defilade Target Engagement</i>	5.867	-	-	-	-	-	-	-	-	Continuing	Continuing
VS4: <i>SOLDIER PROTECTIVE EQUIPMENT</i>	-	-	1.846	-	1.846	1.873	2.872	2.950	2.938	0.000	12.479

Note

Change Summary Explanation:

Fiscal Year 2010: Program Increase - \$2.048 million below threshold reprogramming from Program Element 654601 for Air Warrior Advanced Development.

Fiscal Year 2012: Program Decrease - \$38.163 million realigned to higher priority requirements.

A. Mission Description and Budget Item Justification

This Program Element (PE) for Advanced Component Development and Prototypes manages the Soldier as a system in order to increase combat effectiveness, test and deliver tangible products that save Soldier's lives, and improve Soldier's quality of life. It evaluates, develops, and tests emerging technologies and critical Soldier support systems to reduce technology risk.

Project S49 funding (Ground Soldier System) integrates multiple components and leverages emerging technologies to provide overmatching operational capabilities to ground combat Soldiers.

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>
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Project S51 funding (Aircrew Integrated Systems) supports component development and prototyping of critical Soldier support systems and other combat service support equipment that will improve unit sustainability and combat effectiveness.

Project S52 funding (Soldier Support Equipment) supports system development and testing for the Gunshot Detection (GSD) Program of Record commencing in FY 2012. The GSD will provide passive detection, computer based signal processing, aural and visual indication to help troops locate a hostile shooter.

Project S53 funding (Clothing and Equipment) supports development of state-of-the-art technology to improve tactical and non-tactical clothing and individual equipment to enhance the lethality, survivability, and mobility of the individual Soldier.

Project S54 funding (Small Arms Improvement) provides funds to develop, demonstrate and evaluate emerging technology for integration of systems, subcomponents and prototypes designed to enhance lethality, target acquisition, fire control, training effectiveness and reliability for current and future small arms weapon systems and ammunition.

Project S55 funding (Counter-Defilade Target Engagement) provides funds to develop, demonstrate and evaluate technology for integration of systems and subcomponents to enhance hit probability to defeat defilade and point area targets at the squad level.

Project VS4 funding (Soldier Protective Equipment) supports efforts to evaluate integrated technologies and representative or prototype systems that help expedite Individual Soldier Ballistic Protection technology transition from the laboratory to operational use.

B. Program Change Summary (\$ in Millions)	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	73.785	48.323	57.761	-	57.761
Current President's Budget	75.833	48.323	19.598	-	19.598
Total Adjustments	2.048	-	-38.163	-	-38.163
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	2.048	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-38.163	-	-38.163

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S49: GROUND SOLDIER SYSTEM (GSS)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
S49: GROUND SOLDIER SYSTEM (GSS)	55.951	36.093	0.020	-	0.020	0.022	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											
Note Not applicable for this item.											
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), is an integrated dismounted leader 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 equipment making them more effective, more lethal, and more survivable in the execution of their combat mission. The Increment I of the NW program focuses on the development of the SA system, improved navigation, and reduced fratricide through the visualization of friendly forces. Under this project three contractors are competing with different Nett Warrior prototype designs.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: Developmental Engineering, Prototyping, Systems Engineering and Program Management Support Articles: Description: Funding is provided for the following effort FY 2010 Accomplishments: Continued developmental engineering, competitive prototyping with three contractors, systems engineering, assessment, competitive contractor testing (with three contractors) and program management support for Nett Warrior (NW). FY 2011 Plans: Continue developmental engineering, competitive prototyping with three contractors, manufacturing, and systems engineering, assessment, competitive contractor testing (with three contractors) and program management support for Nett Warrior (NW). FY 2012 Plans: Development of smaller size and reduced weight technologies for selected Nett Warrior components.								42.852 0	11.000 0	0.020	
Title: Below Threshold Reprogramming Articles:								2.100 0	-	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S49: GROUND SOLDIER SYSTEM (GSS)					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010		FY 2011		FY 2012	
Description: Funding is provided for the following effort													
FY 2010 Accomplishments: Below Threshold Reprogramming (BTR) to provide funds to JPEO JTRS to modify SFF-B for NW integration.													
Title: Governmental Test and Evaluation (T&E) Activities								10.999		18.000		-	
Articles:								0		0			
Description: Funding is provided for the following effort													
FY 2010 Accomplishments: Continued Governmental T&E Activities by conducting Developmental Tests, Limited User Tests, and Operational Test.													
FY 2011 Plans: Continue Governmental T&E Activities by conducting Developmental Tests, Limited User Tests, and Operational Test.													
Title: Prepare for Milestone C								-		7.093		-	
Articles:										0			
Description: Funding is provided for the following effort													
FY 2011 Plans: Continue competitive testing with three contractors, assessment, and prepare for Milestone C.													
Accomplishments/Planned Programs Subtotals								55.951		36.093		0.020	
C. Other Program Funding Summary (\$ in Millions)													
Line Item		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost	
• OPA 3, R80501: OPA 3, R80501, Ground Soldier System		1.803	110.524	184.072		184.072		475.395	458.582	330.635	Continuing	Continuing	
• RDT&E, PE 0604827A S75: RDT&E, PE 0604827A S75 - Ground Soldier Ensemble				25.484		25.484		52.710	41.868	26.167	0.000	190.858	
D. Acquisition Strategy													
The NW Increment I acquisition concept, which implemented the Office of the Secretary of Defense (OSD) guidance on competition in prototyping, takes the NW program from the approved MS A through the current Technology Development (TD) Phase to a MS C allowing the maximum competition.													

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S49: <i>GROUND SOLDIER SYSTEM (GSS)</i>
<p>Following the MS A Decision on February 19, 2009, three contracts were awarded on April 15, 2009 for the TD Phase. The TD Phase consisted of two parts: Part 1 - prototyping, Part 2 - integration/refinement. During Part 1 of TD, three contractors designed and fabricated Contractor Furnished Equipment, integrated Government Furnished Property and tested their systems during contractor and government testing to prove compliance with performance requirements. During Part 2 of TD, the contractors' systems underwent formal ATEC Developmental Testing (DT) to evaluate the ability to achieve technical requirements, and a Limited User Test (LUT) was conducted to gain an operational assessment of operational requirements. Based on the results of the testing and FY11 CRA impacts to Other Procurement Army funding, Nett Warrior will continue development to reduce size, weight and power, conduct an abbreviated operational assessment, and adjust the Milestone C to FY12.</p> <p><u>E. Performance Metrics</u></p> <p>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.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S49: GROUND SOLDIER SYSTEM (GSS)					
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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 oversight of NW program	MIPR	PM Soldier Warrior:Ft. Belvoir, VA	7.125	13.403		0.020		-		0.020	Continuing	Continuing	Continuing
PM Soldier Warrior software integration of NW program	MIPR	Various:Various	-	3.640		-		-		-	Continuing	Continuing	0.000
SBIR/SBTTR	TBD	N/A:N/A	0.698	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			7.823	17.043		0.020		-		0.020			
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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, Integrate and Prototype NW Increment I	C/CPFF	Raytheon Company,:McKinney, TX 75071-2813	5.494	-		-		-		-	Continuing	Continuing	Continuing
Develop, Integrate and Prototype NW Increment I	C/CPFF	General Dynamics C4 Systems, Inc,:Scottsdale, AZ 85257-3812	4.993	-		-		-		-	Continuing	Continuing	Continuing
Develop, Integrate and Prototype NW Increment I	C/CPFF	Rockwell Collins, Inc,:Cedar Rapids, IA 52498-0505	5.345	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			15.832	-		-		-		-			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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 Nett Warrior support	MIPR	Various:Various	1.490	1.050		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.490	1.050		-		-		-			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>				PROJECT S49: <i>GROUND SOLDIER SYSTEM (GSS)</i>					

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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/EPT/ARL-SLAD, etc.:Various	1.412	18.000		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.412	18.000		-		-		-			

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	26.557	36.093		0.020		-		0.020			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army			DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>		PROJECT S49: <i>GROUND SOLDIER SYSTEM (GSS)</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Developmental Test (DT) Increment I (PE 0603827A/S49)																												
Limited User Test (LUT) Increment I (PE 0603827A/S49)																												
Operational Assessment Increment I																												
Milestone C Decision Increment I																												
Low Rate Initial Production (LRIP) Increment I																												
Developmental Test (DT) Increment I																												
Initial Operational Test and Evaluation (IOTE) Increment I																												
Full Rate Production (FRP) Decision Increment I																												
Full Rate Production (FRP) Increment I																												
P3I (JTRS, SFF-B) Integration/Test																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S49: <i>GROUND SOLDIER SYSTEM (GSS)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Developmental Test (DT) Increment I (PE 0603827A/S49)	2	2010	3	2010
Limited User Test (LUT) Increment I (PE 0603827A/S49)	3	2010	4	2010
Operational Assessment Increment I	1	2012	1	2012
Milestone C Decision Increment I	2	2012	2	2012
Low Rate Initial Production (LRIP) Increment I	2	2012	2	2014
Developmental Test (DT) Increment I	2	2013	4	2013
Initial Operational Test and Evaluation (IOTE) Increment I	4	2013	4	2013
Full Rate Production (FRP) Decision Increment I	2	2014	2	2014
Full Rate Production (FRP) Increment I	2	2014	3	2016
P3I (JTRS, SFF-B) Integration/Test	2	2012	1	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S51: AIRCREW INTEGRATED SYS AD			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
S51: AIRCREW INTEGRATED SYS AD	2.136	0.141	0.134	-	0.134	0.139	0.146	0.153	0.155	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
This project supports the transition to Engineering Manufacturing Development from advanced component development and prototyping of critical aircrew support systems with improved safety, survivability, and human performance that amplify the warfighting effectiveness, and facilitates full-spectrum dominance of the Army aircraft including the AH-64 Apache/Longbow, CH-47 Chinook, UH/HH-60 Blackhawk, and Light Utility Helicopter. These programs include Air Soldier System and equipment which are unique and necessary for the sustainment, survivability, and performance of Army aircrews and troops on the future integrated battlefield by reduction of aviator equipment weight and bulk and improved situational awareness tools development that are required based upon capabilities gaps identified during recent combat operations.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: Aircrew Integrated Systems (ACIS) Advanced Development Articles: Description: Continue advanced component development and prototyping of critical aircrew support systems technology improvements and advanced development and risk reduction effort required for transition to engineering development. FY 2010 Accomplishments: Continued advanced component development of Air Soldier System technology improvements and advanced development effort transition to engineering development to include Wearable Environmental Cooling, Integrated Wearable Power, additional fixed wavelengths of Laser Eye Protection, and improved helmet technologies for concentration of the early developmental effort. FY 2011 Plans: Continue advanced component development of Air Soldier System technology improvements and advanced development effort transition to engineering development to include Wearable Environmental Cooling, Integrated Wearable Power, additional fixed wavelengths of Laser Eye Protection, and improved helmet technologies. FY 2012 Plans: Continue advanced component development of Air Soldier System technology improvements and advanced development effort transition to engineering development to include Wearable Environmental Cooling, Integrated Wearable Power, additional fixed								2.136	0.141	0.134	
								0	0		

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army										DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S51: AIRCREW INTEGRATED SYS AD				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2010	FY 2011	FY 2012
wavelengths of Laser Eye Protection, and improved helmet technologies and begin 3-Dimensional Audio and Head Tracking developmenal effort.												
Accomplishments/Planned Programs Subtotals										2.136	0.141	0.134
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost	
• RDTE, Engineering Manufacturing Dev: RDTE, A PE 0604601A PROJ S61-SDD	12.181	10.295	18.946		18.946		19.253	22.280	12.760	Continuing	Continuing	
• Procurement, APA: Aircraft Procurement, Army SSN AZ3110 - ACIS	66.053	52.423	82.883		82.883		47.670	102.011	116.056	Continuing	Continuing	
D. Acquisition Strategy												
In a series of developmental program increments, technologies developed under the Air Soldier System program integrate capabilities including optimized survival equipment, Wearable Environmental Control System with integrated portable power, integrated Soldier-worn electronics suite, wireless aircraft and survival and evasion communications cabability, a fully compliant Modular Integrated Helmet and Display System (MIHDS), Chemical, Biological (CB) eye and respiratory protection, digital day/night Heads Up Display common to all Army aircraft platforms and optimized laser eye protection, waste disposal system and reduced weight and bulk. The MIHDS will provide a day (as well as night) heads up display, external audio, don in flight CB protection and advanced laser eye protection. This development effort is accomplished through a combination of contractor and governmental agencies managed within the Air Warrior Product Manager's Office. Continued effort provides for Air Warrior Product Manager's Office analysis and evaluation of emerging aircrew safety, survivability, and human performance improvement technologies for application to Army aircrew requirements. These programs are planned to transition into Engineering Manufacturing Development as the Advanced Development effort is completed.												
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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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S52: SOLDIER SUPPORT EQUIPMENT - AD			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
S52: SOLDIER SUPPORT EQUIPMENT - AD	-	-	6.107	-	6.107	4.531	1.900	-	-	0.000	12.538
Quantity of RDT&E Articles											
Note New start in FY 2012											
A. Mission Description and Budget Item Justification The system provides passive detection, computer-based signal processing, and both aural and visual indications to help troops locate a hostile shooter. The GDS reports relative shooter azimuth, range, and elevation from incoming small arms fire. The GDS is able to detect shots fired while stationary and mobile up to 35 mph in open terrain. The system displays shooter detection data, in terms of distance, azimuth and elevation to target, by both visual and aural means. The FY12 funds will be used for System Characterization and Technology Readiness Level (TRL) determination. The System Characterization Study will ascertain the performance of industry systems, will enhance Government knowledge of the benefits of Acoustic, RADAR and Infrared (IR) technologies with respect to detecting incoming gunshots. The study will aid the Government in determining Technology maturity and readiness. The information will feed the development of all the engineering documentation and the Acquisition Requirements Package (ARP).											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: System Characterization Study Description: Study to be conducted to ascertain system performance, Technology Readiness Level (TRL) and Analysis of Alternatives (AoA) and associated PMO. FY 2012 Plans: The FY12 funds will be used for a System Characterization study to be conducted by the Armament Research Development & Engineering Center (ARDEC) Acoustic Center of Excellence (ACoE). This study will ascertain system performance, Technology Readiness Level (TRL) and Analysis of Alternatives (AoA). This information will be used in development mature Engineering Documentation.								-	-	3.177	
								-	-	1.749	
Title: Engineering Documentation Description: Development of required engineering documentation for this POR and associated PMO. FY 2012 Plans:											

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B. Accomplishments/Planned Programs (\$ in Millions)											
							FY 2010	FY 2011	FY 2012		
The FY12 funds will be used for the development of a Performance Specification, Interface Control Document (ICD) and Performance Work Statement (PWS).											
Title: Engineering Services and Test Support							-	-	1.181		
Description: Acquire engineering services to support the study to ascertain TRL level and associated PMO.											
FY 2012 Plans: The FY12 funds will be used to support the System Characterization Study. Additionally, the funds will support Subject Matter Experts (SME) in RADAR, IR and Acoustic technologies to provide analysis and support to the System Characterization.											
Accomplishments/Planned Programs Subtotals							-	-	6.107		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• BA3301 Gunshot Detection OPA2: SSN: BA3301 Gunshot Detection System (GDS) Program of Record			3.921		3.921		9.067	3.709	42.641	890.900	952.517
D. Acquisition Strategy											
The FY12 funds will be used for System Characterization and Technology Readiness Level (TRL) determination. The System Characterization Study will ascertain the performance of industry systems, will enhance Government knowledge of the benefits of Acoustic, RADAR and Infrared (IR) technologies with respect to detecting incoming gunshots. The study will aid the Government in determining Technology maturity and readiness. The information will feed the development of all the engineering documentation and the Acquisition Requirements Package (ARP). Based upon outcome from this RDTE effort, PM FLIR intends to conduct a Full and Open Competition and award an FFP production contract to support the Program of Record.											
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 2012 Army											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S52: SOLDIER SUPPORT EQUIPMENT - AD						
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Program Management Office Support Services	TBD	PM FLIR:Ft. Belvoir, VA	-	-		0.947		-		0.947	0.000	0.947	0.000	
Subtotal			-	-		0.947		-		0.947	0.000	0.947	0.000	
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
System Characterization Study	MIPR	ARDEC Acoustic Center of Excellence:Picatinny, NJ	-	-		2.230		-		2.230	0.000	2.230	0.000	
Subtotal			-	-		2.230		-		2.230	0.000	2.230	0.000	
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Engineering Documentation	Various	TBD:TBD	-	-		1.749		-		1.749	0.000	1.749	0.000	
Engineering Services and Test Support	Various	TBD:TBD	-	-		1.181		-		1.181	0.000	1.181	0.000	
Subtotal			-	-		2.930		-		2.930	0.000	2.930	0.000	
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			-	-		6.107		-		6.107	0.000	6.107	0.000	
Remarks														

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army			DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>		PROJECT S52: <i>SOLDIER SUPPORT EQUIPMENT - AD</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
System Characterization Study																												
Engineering Documentation																												
Engineering Services and Test Support																												
RFP Release																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S52: <i>SOLDIER SUPPORT EQUIPMENT - AD</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
System Characterization Study	1	2012	1	2013
Engineering Documentation	4	2012	3	2013
Engineering Services and Test Support	4	2011	3	2014
RFP Release	1	2013	1	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT S53: CLOTHING AND EQUIPMENT			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
S53: CLOTHING AND EQUIPMENT	6.794	7.106	6.985	-	6.985	7.163	6.573	6.657	5.376	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
This funding supports efforts to evaluate and integrate technologies and representative or prototype systems that help expedite Soldier uniform and clothing technology transition from the laboratory to operational use. Efforts will focus on proving out commonality across as broad a spectrum of users as possible to provide a modular, integrated uniform/clothing system from skin out and head-to-toe. It funds efforts to investigate new technologies and domestically available fabrics with Flame Resistance, moisture wicking and insect protection technologies. New technologies will be investigated to monitor health and improve Soldier lethality, survivability, reduce weight, and improve affordability, mobility and comfort in combat and training/admin environments.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: Individual Soldier Ballistic Protection Moves to Program Element 0603827 VS4 in FY12 Articles: Description: Increase the Warfighter lethality and mobility by optimizing Soldier protection while effectively managing all life cycle aspects of Personal Protective Equipment (PPE). FY 2010 Accomplishments: Continued to design, test and evaluate modular hard body armor solutions for mission tailorable PPE. Purchased new room-temperature clay prototypes that are at Army Test Command (ATC) for testing and evaluation. Completed initial ceramic residual stress testing on selected prototypes. Data will help manufacturers reduce cracking after impact by projectiles. Completed dynamic testing on ballistic materials. Data will further improve the ballistic performance and help manufacturers to understand dynamic response to their fibers. FY 2011 Plans: Continue to design, test and evaluate modular hard and soft armor solutions for mission tailorable PPE including Plate Carriers and Concealable Body Armor. Develop, test and evaluate self-diagnostic capability for ballistic insert integrity and transiton to Engineering and Manufacturing Development (EMD). Continue to evaluate and improve Soldier PPE including extremity protection from emerging ballistic/blast threats. Conduct extensive Enhanced Combat helmet (ECH) characterization (ballistic, compression, impact, accelerated aging, composite integrity and durability) testing. Continue to assess Advanced Combat Helmet/Enhanced Combat Helmet (ACH/ECH) non-ballistic impact preotection technology. Continue to assess helmet sensor technologies to improve accuracy, reliability of data capture, storage and distribution.								4.233	3.818	-	
								0	0		
Title: Soldier Uniforms and Clothing								1.405	2.153	4.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S53: <i>CLOTHING AND EQUIPMENT</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
<p align="right">Articles:</p> <p>Description: Develop and provide superior and sustainable integrated clothing for the Soldier in a rapidly changing global environment.</p> <p>FY 2010 Accomplishments: Conducted permethrin treatment and Pyroman testing on the Army Combat Uniform (ACU) for inclusion in the FY13 Clothing bag, and Operation Enduring Freedom Camouflage Pattern (OCP) Flame Resistant (FR) ACUs. Conducted user evaluation on permethrin treated FR ACUs (at Ft Polk). Conducted quality assurance burn testing from random prototype samples. Conducted commercial of-the-shelf (COTS) burns on developmental materials. Conducted system level burns with integrated products.</p> <p>FY 2011 Plans: Investigate new technologies and domestically available fabrics relevant to flame resistance, Fire Resistant Environmental Ensemble (FREE) improvements and T-shirts. Investigate new technologies to monitor health and improve Soldier lethality, survivability, reduce weight and improve affordability and mobility and comfort in combat and training/admin environments. Perform FR and permethrin testing. Investigate mountain combat boot improvements.</p> <p>FY 2012 Plans: Continue to mature new technology to reduce Soldier load and weight. Science & Technology (S&T) efforts are on-going to test prototypes made of fine gauge domestic wool to provide a natural Flame Resistant (FR) and no melt, no drip fabric that provides warmth when wet. S&T effort will transition to S53 in FY 12. Improve infrared performance and colorfastness of clothing to improve signature management. Test Permethrin treatment for use in the Improved Combat Vehicle Crewman Coverall (iCVC) and non-FR Army Combat Uniforms.</p>		0	0	
<p>Title: Individual Equipment</p> <p align="right">Articles:</p> <p>Description: Develop and provide superior and sustainable integrated individual equipment for the Soldier in a rapidly changing global environment.</p> <p>FY 2010 Accomplishments: Investigated new technologies to improve survivability, reduced weight and improve affordability, mobility and comfort of individual equipment both in combat and training/admin environments.</p> <p>FY 2011 Plans:</p>		0.979 0	0.900 0	2.985

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army							DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)			R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development			PROJECT S53: CLOTHING AND EQUIPMENT					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2010	FY 2011	FY 2012		
Investigate new technologies and fabrics relative to Soldier equipment such as load bearing equipment, gloves and Nuclear, Biological, Chemical (NBC) gear. Conduct early user evaluation of Soldier on-the-move hydration systems. Conduct Limited user Evaluation (LUE) on improved Soldier Knee and Elbow protection System (SKEPS). FY 2012 Plans: Materiel change effort to update universal parachutist's kit to accommodate the larger T-11 parachute. Materiel change development of Knee and Elbow pads to improve durability, fit and comfort while reducing weight. Improve concealment through integration of new technologies to manage infrared signature of fabrics, including nylon used in existing individual equipment. Testing of the Individual Water Treatment Device (IWTD) Increment II (desalinization of sea water or salt water) will support transition of technology to EMD in FY13.											
Title: Small Business Innovative Research/Small Business Technology Transfer Programs Description: Small Business Innovative Research/Small Business Technology Transfer Programs FY 2010 Accomplishments: Small Business Innovative Research/Small Business Technology Transfer Programs							Articles: 0.177 0	-	-		
Title: Soldier Cooling Description: Soldier Cooling FY 2011 Plans: Conducted trade-off analysis and initial integration providing Soldiers enhanced ability to conduct extended mission in extreme (hot) environments.							Articles: -	0.235 0	-		
Accomplishments/Planned Programs Subtotals							6.794	7.106	6.985		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 0604601A/S60: Clothing and Equipment	10.942	9.711	5.951		5.951		1.915	1.967	2.057	Continuing	Continuing
• 121017: Central Funding and Fielding	70.305	71.664	74.940		74.940		78.177	80.240	93.221	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>				PROJECT S53: <i>CLOTHING AND EQUIPMENT</i>			
C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• MA7801: <i>Advanced Tactical Parachute System</i>	39.066	41.591	52.185		52.185		45.922	44.234	29.729	Continuing	Continuing
D. Acquisition Strategy											
Programs will pursue normal transition to Engineering and Manufacturing Development (EMD) and production. This Project will continue to exercise competitively awarded contracts using best value source selection procedures.											
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 2012 Army											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0603827A: Soldier Systems - Advanced Development				S53: CLOTHING AND EQUIPMENT					
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
In-House Support	TBD	PM SPIE:Ft. Belvoir, VA	9.195	1.390		1.438		-		1.438	Continuing	Continuing	Continuing
Subtotal			9.195	1.390		1.438		-		1.438			
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Engineering Support	Various	NSRDEC:Natdic, MA	9.195	1.020		1.152		-		1.152	Continuing	Continuing	Continuing
Development Contracts	TBD	Various:Various	13.887	2.830		3.000		-		3.000	Continuing	Continuing	Continuing
Subtotal			23.082	3.850		4.152		-		4.152			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Misc Support Costs	MIPR	Various:Various	5.048	0.550		-		-		-	Continuing	Continuing	Continuing
Subtotal			5.048	0.550		-		-		-			
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Testing Costs	TBD	various:Various	9.195	1.316		1.395		-		1.395	Continuing	Continuing	Continuing
Subtotal			9.195	1.316		1.395		-		1.395			
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			46.520	7.106		6.985		-		6.985			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army						DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>			R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>			PROJECT S53: <i>CLOTHING AND EQUIPMENT</i>			
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S53: <i>CLOTHING AND EQUIPMENT</i>
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	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Transition Spiral to EMD																												
Integrate advanced materials & components - Spiral II into EMD																												
Evaluate non-ceramic systems																												
Transition improved non-ballistic impact protection to EMD																												
Develop and Test NDTE Software Upgrades and Transition to EMD - Spiral I																												
Permethrin Testing																												
Pulse & Respiration Shirt Prototype																												
Combat Boot Improvements																												
Improve Signature Mgmt (IR) Evaluation in Clothing & Equipment																												
IWTD Development and Test																												
ATEC Evaluation - IWTD																												
Transition IWTD I to EMD																												
ATEC Evaluation - MPHS Increment I Water Purification and Refill in Field																												
IWTD - Increment II Desalinization Testing																												
IWTD - Increment II transition to EMD																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S53: <i>CLOTHING AND EQUIPMENT</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Transition Spiral to EMD	1	2011	1	2011
Integrate advanced materials & components - Spiral II into EMD	2	2011	3	2011
Evaluate non-ceramic systems	3	2011	3	2011
Transition improved non-ballistic impact protection to EMD	1	2010	1	2010
Develop and Test NDTE Software Upgrades and Transition to EMD - Spiral I	4	2010	3	2011
Permethrin Testing	4	2011	3	2014
Pulse & Respiration Shirt Prototype	2	2011	3	2011
Combat Boot Improvements	1	2010	2	2011
Improve Signature Mgmt (IR) Evaluation in Clothing & Equipment	1	2012	3	2013
IWTD Development and Test	1	2010	3	2011
ATEC Evaluation - IWTD	1	2010	3	2011
Transition IWTD I to EMD	3	2011	3	2011
ATEC Evaluation - MPHS Increment I Water Purification and Refill in Field	3	2010	1	2011
IWTD - Increment II Desalinization Testing	4	2011	1	2013
IWTD - Increment II transition to EMD	2	2013	2	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0603827A: Soldier Systems - Advanced Development				S54: SMALL ARMS IMPROVEMENT			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
S54: SMALL ARMS IMPROVEMENT	5.085	4.983	4.506	-	4.506	4.640	4.853	5.100	5.040	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Small Arms Improvement program provides funds to study, develop, demonstrate and evaluate emerging technology for integration of systems, subcomponents and prototypes with weapons/ammunition. Small arms include weapons/ammunition ranging up to 40 millimeter. Current and future efforts focus on improvements designed to enhance lethality, target acquisition, fire control, training effectiveness and reliability of weapons/ammunition. Focus areas include studying, developing, demonstrating and evaluating light-weight materials, concealants, scouting, observation, lethal and non-lethal ammunition, and equipment. Benefits include continuous improvements to weapons, fire control equipment, optics, training devices, component mounts, weapon mounts, ammunition, Modular Handgun, Suppressors, Lead Free Barrel Twist, Light Weight Machine Gun and Sub-Compact Weapons. New starts in FY2012 consists of the following new initiative; Weapon Design of Caseless/Cased Telescoped Ammunition Technologies, Lightweight Weapons, Modular Handgun Systems testing, development and competition and recomplete of Rifle Combat Optics.

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

	FY 2010	FY 2011	FY 2012
Title: New Weapons Articles: Description: Description: Development of new small arms weapons FY 2011 Plans: Evaluate on-going weapon initiatives. Plans: Evaluate on-going initiatives of the Joint Service Small Arms Program (JSSSAP). Provide program management guidance to support future Capability Development Documents. FY 2012 Plans: Initiate new weapons program. Plans: Transition Advanced Technology Development of Caseless/Cased Telescoped Ammunition and/or Lightweight weapons initiatives from Joint Service Small Arms Program to PM Soldier Weapons.	-	0.058 0	0.005
Title: Small Arms Weapons Enhancements Articles: Description: Description: Enhancement developments of Small Arms Weapons	1.439 0	1.925 0	2.558

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>		PROJECT S54: <i>SMALL ARMS IMPROVEMENT</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
<i>FY 2010 Accomplishments:</i> Initiated new activities to enhance Small Arms Weapons FY 2010 Accomplishments: Initiated the evaluation of a Machine Gun Coolant and started a Recoil Mitigation Study program.					
<i>FY 2011 Plans:</i> Continue on-going and initiate new activities to enhance Small Arms Weapons FY 2011 Plans: Continue evaluation of machine gun coolant and recoil mitigation. Initiate new evaluation of barrel twist to enhance the performance of small arms weapons using lead free ammunition. Initiate small arms suppressors program.					
<i>FY 2012 Plans:</i> Continue on-going and initiate new activities to enhance Small Arms Weapons FY 2012 Plans: Conduct simulation and limited tests of barrel twist to optimize lead free ammunition. Continue engineering, development and evaluation of suppressors, modular handguns and sniper weapons.					
<i>Title:</i> Ammunition <i>Description:</i> Description: Small arms ammunition improvement.			0.060 0	0.025 0	-
<i>FY 2010 Accomplishments:</i> Improvement of Small Caliber Cartridge and High Explosive Air Burst munitions. FY 2010 Accomplishments: Transitioned the improved Small Caliber 9mm program to PEO Ammunition. Continued on-going High Explosive Air Burst munitions activities to improve engineering designs and fuze performance.					
<i>FY 2011 Plans:</i> High Explosive Air Burst (HEAB) munitions. FY 2011 Plans: Transition HEAB fuze enhancements to Engineering Manufacturing Development.					
<i>Title:</i> Combat Optics <i>Description:</i> Description: Improvement of Small Arms Combat Optics			0.069 0	0.025 0	-
<i>FY 2010 Accomplishments:</i> Reticule evaluation FY 2010 Accomplishments: Evaluated new reticules for combat optics					
<i>FY 2011 Plans:</i>					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army							DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)			R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development			PROJECT S54: SMALL ARMS IMPROVEMENT					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2010	FY 2011	FY 2012		
Reticule evaluation Plans: Transition potential reticule upgrades to Small Arms Improvements Engineering Manufacturing Development program.											
Title: Fire Control Description: Description: Small Arms Fire Control FY 2010 Accomplishments: Integrated small arms fire control program. Accomplishments: Leveraged technology from the Counter Defilade Target Engagement (CDTE) Weapon System to initiate an enhanced integrated small arms fire control system. FY 2011 Plans: Integrated small arms fire control program. Plans: Continue development and engineering of the integrated small arms fire control system. FY 2012 Plans: Integrated small arms fire control program. Plans: Test and evaluate prototype designs.							Articles: 3.376 0	2.950 0	1.943		
Title: Small Business Innovative Research/Small Business Technology Transfer Programs. Description: Description: Small Business Innovative Research/Small Business Technology Transfer Programs. FY 2010 Accomplishments: Small Business Innovative Research/Small Business Technology Transfer Programs (SBIR/STTR) Accomplishments: Army allocation to SBIR/STTR program.							Articles: 0.141 0	-	-		
Accomplishments/Planned Programs Subtotals							5.085	4.983	4.506		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• RDTE S63: RDTE S63, Program Element 0604601A - Infantry Support Weapons	9.653	19.805	18.168		18.168		14.364	14.207	14.374	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>				PROJECT S54: <i>SMALL ARMS IMPROVEMENT</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2012</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Complete</u>	<u>Total Cost</u>
• RDTE 627: <i>RDTE 627, Program Element 0603607A - Joint Service Small Arms Program</i>	8.683	9.151	7.686		7.686		7.729	7.866	8.012	Continuing	Continuing
D. Acquisition Strategy											
Primary strategy is to study, develop, demonstrate and evaluate emerging technologies that will ultimately lead to enhancing/improving the small arms inventory.											
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 2012 Army											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0603827A: Soldier Systems - Advanced Development				S54: SMALL ARMS IMPROVEMENT					
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Program Management	Allot	PM Soldier Weapons:PM Soldier Weapons	0.705	0.370		0.340		-		0.340	Continuing	Continuing	Continuing
Subtotal			0.705	0.370		0.340		-		0.340			
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Hardware Development	Various	Various:Various	4.076	1.468		1.302		-		1.302	Continuing	Continuing	Continuing
Subtotal			4.076	1.468		1.302		-		1.302			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Engineering	PO	Various:Various	2.299	1.890		1.688		-		1.688	Continuing	Continuing	Continuing
Subtotal			2.299	1.890		1.688		-		1.688			
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Developmental Testing	MIPR	Various:Various	2.066	1.255		1.176		-		1.176	Continuing	Continuing	Continuing
Subtotal			2.066	1.255		1.176		-		1.176			
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			9.146	4.983		4.506		-		4.506			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army						DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>			R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>			PROJECT S54: <i>SMALL ARMS IMPROVEMENT</i>			
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army																DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE								PROJECT			
2040: Research, Development, Test & Evaluation, Army								PE 0603827A: Soldier Systems - Advanced Development								S54: SMALL ARMS IMPROVEMENT			
BA 4: Advanced Component Development & Prototypes (ACD&P)																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT S54: <i>SMALL ARMS IMPROVEMENT</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Lead Free Barrel Twist	4	2010	1	2013
Suppressors	4	2010	1	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0603827A: Soldier Systems - Advanced Development				S55: Counter-Defilade Target Engagement			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
S55: Counter-Defilade Target Engagement	5.867	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
The Maneuver Center of Excellence (MCoE), FT Benning, GA (User Community) identifies the Counter Defilade Target Engagement (CDTE) as their number one material solution to mitigate a critical capability gap for our Soldiers in combat (defeating defilade targets from 15-500m). The XM25 CDTE system provides the Infantry Soldier with a leap-ahead overmatch capability that will dramatically increase lethality, range, and capability through the use of a family of low-velocity programmable 25mm ammunition. The XM25 CDTE fires 25mm munitions including high-explosive airburst (HEAB), armor-piercing, breaching, less-than-lethal, and training rounds. The XM25 comes with a target acquisition/fire control that integrates thermal capability with direct-view optics laser rangefinder, compass, fuze setter, ballistic computer, laser pointer and illuminator and internal display. The XM25 has a 500-meter point target range and a 700-meter area target range capable of defeating defilade (hidden) targets.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: Design, Develop and Fabricate								5.190	-	-	
Articles:								0			
Description: Design, Develop and Fabricate											
FY 2010 Accomplishments: Design, Develop and Fabricate											
FY2010 Accomplishments: Design, develop, fabricate and implement technical and producible improvements to the CDTE weapon system design to achieve Milestone B.											
Title: Engineering Evaluation and Training Development								0.553	-	-	
Articles:								0			
Description: Engineering Evaluation and Training Development											
FY 2010 Accomplishments: Engineering Evaluation and Training Development											

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army						DATE: February 2011					
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>				PROJECT S55: <i>Counter-Defilade Target Engagement</i>			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
								FY 2010	FY 2011	FY 2012	
FY 2010 Accomplishments: Engineering evaluation to include, verification and validation of system performance requirements; and for the development of training solutions and it's successful implementation.											
Title: Program Management Description: Description: Program Management FY 2010 Accomplishments: Program Management FY2010 Accomplishments: Program management, organize,coordinate and control program activities to comply with contract requirements and timely delivery of the required products and services.								Articles: 0.124 0	-	-	
Accomplishments/Planned Programs Subtotals								5.867	-	-	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• RDTE: PE 0604601A, Project S62: <i>RDTE: PE 0604601A, Project S62</i>	7.276	34.416	18.798		18.798					0.000	61.093
• WTCV: G16100: <i>WTCV: G16100</i>			16.046		16.046		70.321	70.285	70.217	0.000	260.959
• AMMO: E92500: <i>AMMO: E92500</i>			3.399		3.399		10.166	15.676	32.162	0.000	65.851
D. Acquisition Strategy											
The XM25 CDTE achieved Milestone B December 2010, transitioning to Engineering and Manufacturing Development (EMD) phase. The EMD phase will complete development of the XM25 CDTE and verify training solution for Milestone C approval in FY 2013. Research and Development acquisition strategy is to use sole source contracting with ATK (formerly known as Alliant Techsystems), Plymouth, MN.											
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-2A, RDT&E Project Justification: PB 2012 Army								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT VS4: SOLDIER PROTECTIVE EQUIPMENT			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
VS4: SOLDIER PROTECTIVE EQUIPMENT	-	-	1.846	-	1.846	1.873	2.872	2.950	2.938	0.000	12.479
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
This funding supports efforts to evaluate and integrate technologies and representative or prototype systems that help expedite Individual Soldier Ballistic Protection technology transition from the laboratory to operational use. It continues incremental improvement of body armor to reduce Soldier load and improve comfort/ functionality based on operational feedback. It will advance efforts to mature manufacturing readiness levels of advanced high performance fibers and composites for next-generation combat helmets, and support transition to Engineering and Manufacturing Development. It continues to increase eyewear ballistics/blast protection, and incorporate advancements in laser eye protection as well as advancements in variable transition lens technology into ballistic goggles and spectacles.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: Soldier Protective Equipment								-	-	1.846	
Description: Newly established funding line. Effort was previously executed in Program Element 0603827 S53. Effort is to increase the Warfighter lethality and mobility by optimizing Soldier protection while effectively managing all life cycle aspects of Personal Protective Equipment (PPE)											
FY 2012 Plans: Initiate Integrated Systems Design (ISD) of Soldier Protection Mission Tailorable Body Armor (MTBA) to replace current generation of Improved Outer Tactical Vest (IOTV), Plate Carrier and Helmets for transition to EMD in FY13. Conduct technology demonstrations (Soldier Protection Demonstrations, blast & ballistic characterization, etc.) to support refinement of critical system characteristics, including system performance (weight, ballistic/blast protection, flexibility and modularity) for integrated head & face protection capability. Continue to evaluate subsystem technologies across Soldier PPE including extremity protection from emerging ballistic/blast threats, reduce weight, bulk and increase durability and reliability and transition maturing technologies to EMD.											
Accomplishments/Planned Programs Subtotals								-	-	1.846	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 654601: Soldier Protective Equipment VS5			3.986		3.986		3.967	3.784	3.762	0.000	19.487

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>				PROJECT VS4: <i>SOLDIER PROTECTIVE EQUIPMENT</i>			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 121017: <i>Central Funding & Fielding CFF</i>			74.940		74.940		78.177	80.240	93.221	0.000	405.291
D. Acquisition Strategy											
Programs will pursue normal transition to Engineering and Manufacturing Development (EMD) and production. This Project will continue to exercise competitively awarded contracts using best value source selection procedures.											
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 2012 Army											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603827A: Soldier Systems - Advanced Development				PROJECT VS4: SOLDIER PROTECTIVE EQUIPMENT						
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
In House Support	TBD	PM SPE:Ft. Belvoir, VA	-	-		0.100		-		0.100	0.000	0.100	0.000	
Subtotal			-	-		0.100		-		0.100	0.000	0.100	0.000	
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Engineering Spt	MIPR	NSRDEC:NSRDEC Natick, MA	-	-		0.346		-		0.346	Continuing	Continuing	0.000	
Development Contracts	TBD	Various:various	-	-		0.700		-		0.700	0.000	0.700	0.000	
Subtotal			-	-		1.046		-		1.046			0.000	
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Misc Support Costs	TBD	Various:various	-	-		0.300		-		0.300	0.000	0.300	0.000	
Subtotal			-	-		0.300		-		0.300	0.000	0.300	0.000	
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	
Testing Costs	TBD	Various:Various	-	-		0.400		-		0.400	0.000	0.400	0.000	
Subtotal			-	-		0.400		-		0.400	0.000	0.400	0.000	
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			-	-		1.846		-		1.846			0.000	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army						DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>			R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>			PROJECT VS4: <i>SOLDIER PROTECTIVE EQUIPMENT</i>			
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army			DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>		PROJECT VS4: <i>SOLDIER PROTECTIVE EQUIPMENT</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Initiate integrated systems design of Soldier Protection MTBA																												
Transition Soldier Protection MTBA to EMD																												
Initiate integrated systems design of EOD Bomb Suit																												
Transition EOD Bomb Suit to EMD																												
Head Protection Phase 1 (ACH Non-ballistic impact)																												
Head Protection Phase II (Combat Veh Crewman Helmet)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603827A: <i>Soldier Systems - Advanced Development</i>	PROJECT VS4: <i>SOLDIER PROTECTIVE EQUIPMENT</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Initiate integrated systems design of Soldier Protection MTBA	4	2011	1	2013
Transition Soldier Protection MTBA to EMD	2	2013	2	2013
Initiate integrated systems design of EOD Bomb Suit	4	2012	3	2013
Transition EOD Bomb Suit to EMD	4	2013	4	2013
Head Protection Phase 1 (ACH Non-ballistic impact)	2	2012	1	2013
Head Protection Phase II (Combat Veh Crewman Helmet)	2	2013	1	2014