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| Exhibit R-2, RDT&E Budget Item 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 0604601A: Infantry Support Weapons | | | | | | | |
| 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 | - | 81.081 | 96.478 | 79.855 | - | 79.855 | 74.510 | 63.703 | 57.065 | 69.574 | Continuing | Continuing |
| 033: ADV CREW SVC WPN | - | 1.472 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| S58: Soldier Enhancement Program | - | 3.170 | 3.278 | 4.125 | - | 4.125 | 4.058 | 4.239 | 4.310 | 4.310 | Continuing | Continuing |
| S60: Clothing & Equipment | - | 6.119 | 5.537 | 5.450 | - | 5.450 | 4.563 | 3.683 | 6.065 | 10.965 | Continuing | Continuing |
| S61: Acis Engineering Development | - | 10.705 | 17.175 | 14.057 | - | 14.057 | 20.073 | 11.334 | 9.883 | 15.948 | Continuing | Continuing |
| S62: Counter-Defilade Target Engagement - SDD | - | 34.859 | 34.412 | 1.983 | - | 1.983 | 2.060 | 2.130 | 2.200 | 2.470 | Continuing | Continuing |
| S63: Small Arms Improvement | - | 17.759 | 19.617 | 18.201 | - | 18.201 | 14.479 | 14.494 | 14.608 | 14.691 | Continuing | Continuing |
| S64: Common Remotely Operated Wpn Sys (CROWS) | - | 0.173 | 0.000 | 14.864 | - | 14.864 | 15.000 | 15.000 | 10.000 | 12.191 | Continuing | Continuing |
| S70: Personnel Recovery Support System (PRSS) | - | 2.965 | 4.517 | 1.132 | - | 1.132 | 1.104 | 1.141 | 1.193 | 1.193 | Continuing | Continuing |
| VS5: Soldier Protective Equipment | - | 3.859 | 11.942 | 20.043 | - | 20.043 | 13.173 | 11.682 | 8.806 | 7.806 | 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 | | | | | | | | | | | | |
| Change Summary Explanation: | | | | | | | | | | | | |
| Fiscal Year 2012: Program decrease of \$2.314 million across all projects to higher priority Army efforts. | | | | | | | | | | | | |
| Fiscal Year 2014: Program increases of \$14.864 million to Project S64 for the Common Remotely Operated Weapon System, \$6.880 million to Project VS5 for Soldier Protective Equipment engineering development efforts and \$3.551 million to Project S60 for Clothing and Equipment development efforts. Program decreases of \$4.760 million to Project S61 for ACIS Engineering development efforts and \$0.088 million to Project S63 for Small Arms improvement efforts. | | | | | | | | | | | | |

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| Exhibit R-2, RDT&E Budget Item 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 0604601A: <i>Infantry Support Weapons</i> |
| <p>A. Mission Description and Budget Item Justification</p> <p>FY 2014 budget request funds Infantry Support Weapons. This program element (PE) Engineering and Manufacturing Development (EMD) manages the Soldier as a system, with the goal of increasing Soldiers' combat effectiveness, increasing survivability, and improving the Soldiers' quality of life. It develops and tests prototypes of weapons, clothing, equipment, and other items useful to support the Soldier.</p> <p>Project 033 (Advanced Crew Served Weapon) develops the Lightweight .50 Caliber Machine Gun which enables the Soldier to effectively suppress and incapacitate exposed personnel targets out to 2,000 meters as well as providing a capability to defeat light armored vehicles out to 1,500 meters. The new .50 Caliber weapon will reduce weight and recoil, and eliminate manual adjustment of headspace and timing.</p> <p>Project S58 (Soldier Enhancement Program) supports accelerated integration, modernization, and enhancement efforts of lighter, more lethal weapons, and improved Soldier items including lighter, more comfortable load-bearing equipment, field gear, survivability items, communications equipment, and navigational aids.</p> <p>Project S59 (Soldier Support Equipment) supports system development and prototyping of critical Soldier support systems and other combat service support equipment that will improve unit sustainability and combat effectiveness.</p> <p>Project S60 (Clothing and Equipment) supports pre-production development of state-of-the-art individual clothing and equipment to improve the survivability, mobility and sustainment affecting the quality of life of the individual Soldier.</p> <p>Project S61 (Aircrew Integrated Systems) provides System Development programs with improved aviator 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, Light Utility Helicopter, and Armed Reconnaissance Helicopter.</p> <p>Project S62 (Counter-Defilade Target Engagement) the XM25, Individual Airburst Weapon System (IAWS) delivers a 25mm programmable high explosive airburst (HEAB) round to defeat defilade and point areas targets out to approximately 600 meters. Accurate and lethal engagement of defilade targets at the squad level is the number one capability gap identified by the United States Army Infantry Center (USAIC).</p> <p>Project S63 (Small Arms Improvements) demonstrates engineering development models or integrated commercial items designed to enhance lethality, target acquisition, fire control, training effectiveness, and reliability for small arms weapon systems and ammunition. FY2011 new programs include Improved Weapons Coatings, Personal Defense Weapon, 30 Round 5.56mm Magazine, Modular Handgun and Precision Sniper Rifle.</p> <p>Project S64 (CROWS) continue enhancing CROWS capability and reliability, and to increase its application across combat and tactical platforms. This capability will enhance the Soldier's survivability, lethality and situational awareness.</p> <p>Project S70 (Personnel Recovery Support System) provides system research, development and testing of the Personal Recovery Support System/Personnel Recovery Support Equipment supporting operations to report and locate isolated, missing, detained or captured Soldiers.</p> | | |

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army | DATE: April 2013 |
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| APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>System Development & Demonstration (SDD)</i> | R-1 ITEM NOMENCLATURE PE 0604601A: <i>Infantry Support Weapons</i> |
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Project VS5 (Soldier Protective Equipment) supports engineering and manufacturing development of Individual Soldier Ballistic Protection equipment. It will leverage advancements in technology to continue incremental improvements to body armor (to include improved outer tactical vests, plate carriers, and helmets) and other personal protective equipment.

| <u>B. Program Change Summary (\$ in Millions)</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>FY 2014 Base</u> | <u>FY 2014 OCO</u> | <u>FY 2014 Total</u> |
|--|-----------------------|-----------------------|----------------------------|---------------------------|-----------------------------|
| Previous President's Budget | 83.395 | 96.478 | 59.408 | - | 59.408 |
| Current President's Budget | 81.081 | 96.478 | 79.855 | - | 79.855 |
| Total Adjustments | -2.314 | 0.000 | 20.447 | - | 20.447 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | - | - | | | |
| • Adjustments to Budget Years | -2.314 | - | 20.447 | - | 20.447 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT 033: ADV CREW SVC WPN | | | | | | | | | | |
| 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 | | | | | | | |
| 033: ADV CREW SVC WPN | - | 1.472 | 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 | | | | | | | | | | | | | | | | | | | |
| Type Classification-Limited Production and Milestone C were achieved June 2012. The termination plan was approved by the Army Acquisition Executive on September 27, 2012. Termination activities are ongoing. | | | | | | | | | | | | | | | | | | | |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | | | | | | | | | |
| This project developed the Lightweight .50 Caliber Machine Gun which met the U.S. Army/SOCOM requirements for a Lightweight Enhanced .50 Caliber Machine Gun. The lightweight .50 Caliber machine gun system enables the Soldier to effectively suppress and incapacitate exposed personnel targets out to 2,000 meters, as well as providing a capability to defeat lightly armored vehicles out to 1,500 meters. The weapon system increases the warfighter's lethality while significantly reducing tactical load and supportability costs. The new .50 Caliber weapon reduces weight and recoil, and eliminates manual adjustment of headspace and timing. | | | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 | | | | | | | |
| Title: Integrated Logistics Support (ILS) Articles: Description: Description: Provide ILS for the Lightweight .50 Caliber Machine Gun. FY 2012 Accomplishments: Completed ILS technical documentation, conducted logistics demonstration and provisioning conference for the weapon. ILS technical documentation for both the Blank Ammunition Firing Adapter (BFA) and the cradle stopped due to program termination. | | | | | | | | | | 0.200 0 | 0.000 | 0.000 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Title: Weapon System Design Test Articles: Description: Description: Conduct weapon system design test. FY 2012 Accomplishments: | | | | | | | | | | 1.272 0 | 0.000 | 0.000 | | | | | | | |
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| 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 0604601A: <i>Infantry Support Weapons</i> | | | PROJECT 033: <i>ADV CREW SVC WPN</i> | | |

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|--|----------------|----------------|----------------|
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
| Completed Pre-Production Qualification Test to validate weapon design parameters and reliability. Completed Limited User Test to evaluate operational effectiveness of the XM806 weapon system. BFA design and build completed but testing stopped due to program termination. | | | |
| Accomplishments/Planned Programs Subtotals | 1.472 | 0.000 | 0.000 |

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 |
|---|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|---------------------|------------|
| • G12800 Lightweight .50 Caliber MG: <i>Lightweight .50 Caliber</i> <i>Machine Gun (W&TCV G12800)</i> | | 25.183 | | | | | | | | 0.000 | 25.183 |
| Remarks | | | | | | | | | | | |

D. Acquisition Strategy

The Lightweight .50 Caliber Machine Gun was developed to meet the US Army Infantry Center (USAIC) Capability Production Document (CPD) for Enhanced .50 Caliber Machine Gun (M2A1). The development contractor was General Dynamics Armament and Technical Products (GDATP) of Williston, Vermont. Milestone C was approved by the Milestone Decision Authority (MDA) on June 19, 2012. The termination plan was approved by the Army Acquisition Executive on September 27, 2012. Termination activities are ongoing.

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 2014 Army | | | | | | | | | | | | DATE: April 2013 | | | |
|--|------------------------|---|-----------------|---------|------------|---------------------------------------|------------|--------------|------------|-----------------------|------------|------------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | | | | R-1 ITEM NOMENCLATURE | | | | PROJECT | | | | | |
| 2040: Research, Development, Test & Evaluation, Army | | | | | | PE 0604601A: Infantry Support Weapons | | | | 033: ADV CREW SVC WPN | | | | | |
| BA 5: System Development & Demonstration (SDD) | | | | | | | | | | | | | | | |
| 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 |
| Program Management | MIPR | PM Soldier Weapons:Picatinny Arsenal, NJ | 0.290 | 0.250 | Jul 2012 | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Travel | Various | PM Soldier Weapons:Picatinny Arsenal, NJ | 0.063 | - | | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 0.353 | 0.250 | | 0.000 | | 0.000 | | 0.000 | | 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 |
| Primary Hardware | Various | Gen Dyn and Arm Tech Prod.,Burlington, VT | 6.515 | - | | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 6.515 | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 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 |
| Development (Weapon and Mount) | MIPR | ARDEC:Picatinny Arsenal, NJ | 2.102 | 1.222 | Mar 2012 | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 2.102 | 1.222 | | 0.000 | | 0.000 | | 0.000 | | 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 |
| Development Test/Limited User Test (DT/LUT) | Various | ATC:Aberdeen PG, MD | 0.961 | - | | - | | - | | - | | - | Continuing | Continuing | Continuing |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | | PROJECT 033: <i>ADV CREW SVC WPN</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 |
| Subtotal | | | 0.961 | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 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 | 9.931 | 1.472 | 0.000 | 0.000 | 0.000 | 0.000 | | | |

Remarks

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S58: Soldier Enhancement Program | | | |
| 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 |
| S58: Soldier Enhancement Program | - | 3.170 | 3.278 | 4.125 | - | 4.125 | 4.058 | 4.239 | 4.310 | 4.310 | 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 | | | | | | | | | | | | |
| The Soldier Enhancement Program (SEP) was established in accordance with Congressional language in the National Defense Authorization Act for Fiscal Year 1990 and 1991. The purpose of the SEP is to increase the combat effectiveness of our Soldiers through the test and evaluation of lighter, more lethal infantry weapons and improved equipment. The SEP uses a Buy, Try and Decide methodology to evaluate Commercial Off The Shelf (COTS), Government Off The Shelf (GOTS) and Non-Developmental Items (NDI) that have the potential to enhance Soldier combat effectiveness. The SEP provides accelerated integration, modernization, and capability enhancement efforts of lighter, more lethal weapons and munitions; improved engagement optics; sights, lasers and fire controls; improved lighter more comfortable and versatile Soldier individual equipment; survivability enhancement gear; communications equipment and situational awareness aids. Initiatives are submitted by Soldiers and others via the SEP submission web application and are evaluated twice a year. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | FY 2012 | FY 2013 | FY 2014 | |
| Title: Soldier Enhancement Program (SEP). | | | | | | | | | 2.851 | 2.819 | 3.666 | |
| | | | | | | | | | Articles: 0 | 0 | | |
| Description: Evaluate COTS/GOTS/NDI items with potential to enhance Soldier combat effectiveness. | | | | | | | | | | | | |
| FY 2012 Accomplishments: | | | | | | | | | | | | |
| On 18 May the SEP council approved 15 initiatives for evaluation with several others approved after the council meeting. These included Soldier Worn Integrated Power Equipment System (SWIPES), Soldier Power Manager (SPM), Modular Universal Battery Charger (MUBC), JP-8 Generator Set, M320 Grenade Launcher Holster, Squad Common Optic, Ice Cleats, Machine Gun Holographic Sight, Binocular Night Vision Device, general purpose lights, clip on thermal imager, Drop Zone Assembly Navigational Aid, Bunker Defeat Munitions Extended Range Sight, Tactical Communications and Protective System (TCAPS) and others. | | | | | | | | | | | | |
| FY 2013 Plans: | | | | | | | | | | | | |
| On 23 October the SEP council approved 6 initiatives for evaluation. These include Quick Release Mount, Thermal Weapon Sight clip-on adapter, Mortarmen Carrying Backpack, All purpose Adhesive light, Radio Super-capacitor adapter, and Hands Free Heads up display. These items are currently undergoing purchase and evaluation. Product evaluations will include safety testing | | | | | | | | | | | | |

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| APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>System Development & Demonstration (SDD)</i> | | R-1 ITEM NOMENCLATURE PE 0604601A: <i>Infantry Support Weapons</i> | | PROJECT S58: <i>Soldier Enhancement Program</i> | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | FY 2012 | FY 2013 | FY 2014 |
| and confirmation (if needed), purchase of up to a Brigade Combat Team quantity of hardware, and collection and analysis of user feedback/results. Since the last SEP Council over 50 proposals were submitted for consideration. These included stabilized binoculars, machine gun optic recoil rails, machine gun accessory bags, mandible protector for crew personnel, helmet retention system, aviation life support equipment tester, 40mm extended Range munitions, and others. These proposals were screened using the SEP Criteria (COTS/GOTS/NDI, Soldier Worn/Carried) by the SEP Council to determine which proposals merit further evaluation as new SEP initiatives. Product evaluations included safety testing and confirmation (as needed), purchase of up to a Brigade Combat Team quantity of hardware, and collection and analysis of user feedback/results. | | | | | |
| FY 2014 Plans: Anticipate over 100 proposals to be submitted. Those proposals that meet the SEP criteria will be considered by the SEP council for evaluation as new initiatives. Product evaluations will include safety testing and confirmation (if needed), purchase of up to a Brigade Combat Team quantity of hardware, and collection and analysis of user feedback/results. Anticipate approving and evaluating 21 initiatives. | | | | | |
| Title: Systems Engineering and Program Management. | | | 0.319 | 0.459 | 0.459 |
| Articles: | | | 0 | 0 | |
| Description: Systems Engineering and Program Management. | | | | | |
| FY 2012 Accomplishments: Provided technical evaluation of incoming SEP proposals received via the SEP submission web application. New proposals were screened to ensure that they met the basic SEP criteria of being COTS/GOTS/NDI that are worn or carried by Soldiers, as well as meeting user capability needs. Coordination with proponent schools and acquiring activities was conducted to support the May 2012 SEP Council meeting and post-SEP council product evaluations. Monitored prior year initiative execution such as the Modular Weapons Case, 5.56mm Dim Tracer, Army Emergency Bailout Parachute, AN/PEQ-16B Light Emitting Diode Mini-Integrated Illuminator Module and others to ensure adequate resourcing for completion and closeout. | | | | | |
| FY 2013 Plans: The SEP team monitors incoming proposals submitted via the SEP web application. To date proposals received include stabilized binoculars, machine guns optic recoil rails, machine gun accessory bags, mandible protector for crew personnel, helmet retention system, aviation life support equipment tester, 40mm extended Range munitions, and others. The SEP team coordinates with industry and the field to ensure that proposals submitted satisfy user needs and that the materiel alternatives are COTS/GTS/NDI solutions that can be readily purchased and evaluated. The SEP team performs analysis of incoming proposals in preparation for the FY13 SEP Council meetings to determine which proposals will be evaluated as SEP initiatives. Initiatives completing evaluations received recommendations to either transition the capability to the field or terminate the effort. The SEP team | | | | | |

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| | | | |
|--|----------------|----------------|----------------|
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
| conducts coordination with proponent schools as part of the proposal screening process to ensure that SEP initiative evaluations inform the requirements process. | | | |
| <i>FY 2014 Plans:</i> The SEP team will monitor incoming proposals that are submitted via the SEP web application. Additionally, coordination will be performed with industry and the field to ensure that proposals submitted can satisfy user needs and that the materiel alternatives are COTS/GOTS/NDI solutions that can be readily purchased and evaluated. Analysis of incoming proposals will be performed in preparation for the FY14 SEP Council meetings to determine which proposals will be evaluated as SEP initiatives. Ongoing initiatives completing evaluations will receive recommendations as to whether the capability should transition to become an eventual fielded capability or the effort should be terminated. Coordination with proponent schools will also be conducted as part of the proposal screening process as well as to help ensure that SEP initiative evaluations inform the requirements process. | | | |
| Accomplishments/Planned Programs Subtotals | 3.170 | 3.278 | 4.125 |

| 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> |
| • OPA3 MA6800: <i>Soldier Enhancement - Other Support Equipment - MA6800</i> | 1.421 | 1.444 | 1.468 | | 1.468 | 1.698 | 0.324 | 0.330 | 0.500 | Continuing | Continuing |
| • OPA2 BA5300: <i>Soldier Enhancement - Comms & Electronics Equipment - BA5300</i> | 1.843 | 1.843 | 1.030 | | 1.030 | 2.223 | 2.141 | 1.893 | 2.000 | Continuing | Continuing |
| • WTCV GC0076: <i>Soldier Enhancement - Small Arms Weapons - GC0076</i> | 2.453 | 2.378 | 1.267 | | 1.267 | 3.173 | 3.016 | 2.572 | 2.800 | Continuing | Continuing |
| Remarks | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| The Soldier Enhancement Program (SEP) focuses on Commercial Off The Shelf (COTS) and Government Off The Shelf (GOTS) initiatives, Soldier capability enhancements and integration efforts that lend themselves to accelerated acquisition and limited fielding in the near term (three years or less). New SEP candidates are reviewed and approved semi-annually. SEP items are procured from multiple appropriations, i.e., Other Procurement Army (OPA) and Weapons and Tracked Combat Vehicles (WTCV). | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S58: <i>Soldier Enhancement Program</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.

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|---|-----------------------------------|---|------------------------|----------------|-------------------|--|-------------------|---------------------|-------------------|--------------------|-------------------|---|-------------------------|-------------------|---------------------------------|
| 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 0604601A: <i>Infantry Support Weapons</i> | | | | | | PROJECT S58: <i>Soldier Enhancement Program</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 |
| Various | MIPR | PEO Soldier:Ft. Belvoir, VA | 11.146 | 0.319 | Dec 2011 | 0.459 | Mar 2013 | 0.459 | Mar 2014 | - | | 0.459 | Continuing | Continuing | Continuing |
| Subtotal | | | 11.146 | 0.319 | | 0.459 | | 0.459 | | 0.000 | | 0.459 | | | |
| Remarks Systems Engineering and Program Management includes in-house engineering support and integration services, conducting technical evaluations, market research and program reviews. | | | | | | | | | | | | | | | |
| 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 |
| Various | MIPR | PEO Soldier:Ft. Belvoir, VA | 35.887 | 1.911 | Dec 2011 | 1.879 | Jun 2013 | 2.484 | Jun 2014 | - | | 2.484 | Continuing | Continuing | Continuing |
| Subtotal | | | 35.887 | 1.911 | | 1.879 | | 2.484 | | 0.000 | | 2.484 | | | |
| Remarks Candidates for the Soldier Enhancement Program are received, reviewed, and approved semi-annually. Contractual efforts are focused on procuring prototypes for testing. | | | | | | | | | | | | | | | |
| 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 |
| Various | MIPR | PEO Soldier:Ft. Belvoir, VA | 6.424 | - | | - | | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 6.424 | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | | PROJECT S58: <i>Soldier Enhancement Program</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 | MIPR | PEO Soldier:Ft. Belvoir, VA | 11.806 | 0.940 | Dec 2011 | 0.940 | Aug 2013 | 1.182 | Aug 2014 | - | | 1.182 | Continuing | Continuing | Continuing |
| Subtotal | | | 11.806 | 0.940 | | 0.940 | | 1.182 | | 0.000 | | 1.182 | | | |

Remarks
Testing costs vary annually depending on number and type of items being evaluated.

| | 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 | 65.263 | 3.170 | 3.278 | 4.125 | 0.000 | 4.125 | | | |

Remarks

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT S58: <i>Soldier Enhancement Program</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 |
| SEP council proposal approval/prioritization 3Q FY12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 1Q FY13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 1-2Q FY13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 3Q FY13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 3-4Q FY13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 4QFY13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 1-2Q FY14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 3Q FY14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 3-4Q FY14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 4QFY14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 1-2Q FY15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 3Q FY15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 3-4Q FY15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 4QFY15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: Infantry Support Weapons | | | | | | | | | | PROJECT S58: Soldier Enhancement Program | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 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 | | | | |
| Purchase and Test approved proposals 1-2Q FY16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 3Q FY16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 3-4Q FY16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 4QFY16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 1-2Q FY17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 3Q FY17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 3-4Q FY17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 4QFY17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 1-2Q FY18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEP council proposal approval/prioritization 3Q FY18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchase and Test approved proposals 3-4Q FY18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S58: <i>Soldier Enhancement Program</i> | |

Schedule Details

| Events | Start | | End | |
|--|----------------|-------------|----------------|-------------|
| | Quarter | Year | Quarter | Year |
| SEP council proposal approval/prioritization 3Q FY12 | 3 | 2012 | 3 | 2012 |
| SEP council proposal approval/prioritization 1Q FY13 | 1 | 2013 | 1 | 2013 |
| Purchase and Test approved proposals 1-2Q FY13 | 1 | 2013 | 2 | 2013 |
| SEP council proposal approval/prioritization 3Q FY13 | 3 | 2013 | 3 | 2013 |
| Purchase and Test approved proposals 3-4Q FY13 | 3 | 2013 | 1 | 2014 |
| SEP council proposal approval/prioritization 4QFY13 | 4 | 2013 | 4 | 2013 |
| Purchase and Test approved proposals 1-2Q FY14 | 4 | 2013 | 2 | 2014 |
| SEP council proposal approval/prioritization 3Q FY14 | 3 | 2014 | 3 | 2014 |
| Purchase and Test approved proposals 3-4Q FY14 | 3 | 2014 | 1 | 2015 |
| SEP council proposal approval/prioritization 4QFY14 | 4 | 2014 | 4 | 2014 |
| Purchase and Test approved proposals 1-2Q FY15 | 4 | 2014 | 2 | 2015 |
| SEP council proposal approval/prioritization 3Q FY15 | 3 | 2015 | 3 | 2015 |
| Purchase and Test approved proposals 3-4Q FY15 | 3 | 2015 | 1 | 2016 |
| SEP council proposal approval/prioritization 4QFY15 | 1 | 2016 | 1 | 2016 |
| Purchase and Test approved proposals 1-2Q FY16 | 1 | 2016 | 2 | 2016 |
| SEP council proposal approval/prioritization 3Q FY16 | 3 | 2016 | 3 | 2016 |
| Purchase and Test approved proposals 3-4Q FY16 | 3 | 2016 | 1 | 2017 |
| SEP council proposal approval/prioritization 4QFY16 | 4 | 2016 | 4 | 2016 |
| Purchase and Test approved proposals 1-2Q FY17 | 4 | 2016 | 2 | 2017 |
| SEP council proposal approval/prioritization 3Q FY17 | 3 | 2017 | 3 | 2017 |
| Purchase and Test approved proposals 3-4Q FY17 | 3 | 2017 | 1 | 2018 |
| SEP council proposal approval/prioritization 4QFY17 | 4 | 2017 | 4 | 2017 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | PROJECT S58: <i>Soldier Enhancement Program</i> |
| | | Start | | End |
| Events | | Quarter | Year | Quarter |
| Purchase and Test approved proposals 1-2Q FY18 | | 4 | 2017 | 2 |
| SEP council proposal approval/prioritization 3Q FY18 | | 3 | 2018 | 3 |
| Purchase and Test approved proposals 3-4Q FY18 | | 3 | 2018 | 4 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S60: Clothing & Equipment | | | |
| 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 |
| S60: Clothing & Equipment | - | 6.119 | 5.537 | 5.450 | - | 5.450 | 4.563 | 3.683 | 6.065 | 10.965 | 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 | | | | | | | | | | | | |
| This funding supports engineering and manufacturing development tasks related to individual clothing, equipment and personnel parachutes with the goal of enhancing the survivability, mobility and quality of life of the individual Soldier. It funds system integration and formal Developmental Testing/Operational Testing of preproduction and production representative systems leveraging advancements in materials, fabrication techniques, moisture management, flame resistance, antimicrobial treatments, insect protection, extreme environmental protection and chemical/biological protection to increase the capabilities and durability of tactical and non-tactical clothing and individual equipment. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | FY 2012 | FY 2013 | FY 2014 | |
| Title: Soldier Uniforms and Clothing | | | | | | | | | 3.134 | 3.537 | 3.659 | |
| | | | | | | | | | Articles: 0 | 0 | | |
| Description: Develop and provide superior and sustainable integrated clothing for the Soldier in a rapidly changing global environment. | | | | | | | | | | | | |
| FY 2012 Accomplishments: Environmental Clothing and Equipment. Conducted user evaluation for Extended Cold Weather Clothing System (ECWCS) Generation (GEN) III product improvement to incorporate flame resistant (FR) capabilities. Developed Memorandum of Agreement (MOA) with Users on Flame Resistant Environmental Ensemble (FREE) requirements, conducted final pattern prove out of Program of Record material solution and obtained Milestone C decision. Conducted user evaluation of the Hot Weather Mountain Combat Boot. Downselected Program of Record Mountain Combat Boot. | | | | | | | | | | | | |
| FY 2013 Plans: Environmental Clothing and Equipment: Environmental Clothing and Equipment. Will conduct efforts to improve components of the Extended Cold Weather Clothing System (ECWCS) to provide protection to Military Free Fall (MFF) parachutists due to increased altitudes and duration of MFF flights. Test alternate flame resistant fabrics for use in ECWCS Layer 5. | | | | | | | | | | | | |
| Flame Resistant Clothing. Will complete technical development of printing and color shade standards required for all uniform fabrics and findings to potentially implement a family of camouflage patterns to replace the current Universal Camouflage Pattern. | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S60: <i>Clothing & Equipment</i> | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 |
| <p>Will complete testing to support transition of Rapid Fielding Initiative Army Combat Pant (ACP) and Army Combat Shirt (ACS) to Programs of Record. Will test improvements to Army Aircrew Combat Uniform (A2CU) to include collar height to clear skin gap, replacing velcro on pockets to eliminate foreign objects/debris hazards. Evaluating A2CU female variant.</p> <p>Clothing Bag. Will continue to refine designs and incorporate new materials into the clothing bag, including the Army Service Uniform (ASU), following results of the FY12/13 web survey. Conduct user evaluation of the Improved Physical Fitness Uniform (IPFU) ensemble. Will initiate development of an improved garrison Food Service Uniform that incorporates commercial standards for burn protection, stain resistance and professional appearance.</p> <p>FY 2014 Plans: Environmental Clothing and Equipment. Conduct market survey, technical testing, procure prototypes and user evaluation garments, conduct user evaluation, conduct Cold Chamber tests, and procure user evaluation items for the Intermediate Cold Wet Boot (ICWB) to resolve sole traction concerns at the lower end of its performance range to prevent slippage. Finalize production specifications for the Mountain Combat Boot, Hot Weather and Temperate Weather variants.</p> <p>Flame Resistant Clothing. Will conduct market survey, technical testing, procure prototypes and user evaluation garments, conduct user evaluation, conduct Pyroman burn tests, and develop patterns for the Enhanced Combat Vehicle Crewmember Coveralls (eCVC). Will conduct market survey, technical testing, procure prototypes and user evaluation garments, conduct user evaluation, conduct Pyroman burn tests, and develop patterns for the Army Aircrew Combat Uniform–Alternate (A2CU-A); and transfer to sustainment in 4Q FY14. Optimize performance of selected Phase IV camouflage family across Near Infrared spectrum.</p> <p>Clothing Bag. Will continue to refine designs and incorporate new materials and designs into clothing bag items. Will finalize patterns and Technical Data Package for the next Generation Physical Fitness Uniform providing improved fit, moisture wicking and antimicrobial capabilities. Will develop patterns, obtain fit test of Army Service Uniform (ASU) garments and conduct fit test to address women's concerns in fit and function of the ASU. Will procure prototypes garments of the Garrison Food Service Uniform. Conduct technical testing and user evaluation that incorporates commercial standards for burn protection, stain resistance and professional appearance.</p> | | | |
| <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 2012 Accomplishments:</p> | | 2.985 0 | 2.000 0 |
| | | | 1.791 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S60: <i>Clothing & Equipment</i> | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 |
| <p>Load Carriage/NBC/Hydration. Conducted limited user evaluation of Modular Lightweight Load-carrying Equipment (MOLLE) components, including improved medic set, various pouches, and hydration carrier, for transition to sustainment in 3Q FY13. Completed a Family of Camouflage testing for use on Organizational Clothing and Individual Equipment.</p> <p>Personnel Airdrop. Completed developmental testing of the Advanced RAM Air Parachute System (ARAPS).</p> <p>FY 2013 Plans:</p> <p>Load Carriage/NBC/Hydration. Will continue to refine design and incorporate new material/technologies that pertain to form, fit and function of load bearing equipment with intent to lighten Soldier load. Will complete technical development of printing and color shade standards required for all equipment fabrics and findings to implement the Phase IV effort for a family of global camouflage. Will complete technical development of the Army Mountaineering Kit (AMK) with MS C planned for 3Q FY13. Will conduct limited user evaluation of Improved MOLLE medic bag with incorporated changes for user community and plan to transition to sustainment in 3Q FY13. Will complete technical development of the Individual Water treatment Device (Phase I, Filtration) with transition with MS C in 1Q FY14.</p> <p>Personnel Airdrop. Will conduct testing to evaluate the minimum opening altitude for the Advanced Emergency Bailout Parachute. Will Complete Operational Testing (OT) of the Military Free Fall (MFF) Advanced Ram Air Parachute (ARAPS), which significantly increase MFF altitude and flight duration, increasing range of MFF operations achieve MS C in 1Q FY14.</p> <p>FY 2014 Plans:</p> <p>Load Carriage/NBC/Hydration. Will continue to refine design and incorporate new material/technology that pertain to form, fit, and function of load bearing equipment with intent to lighten the load. Will conduct market survey, conduct technical testing, and procure prototypes and conduct limited user evaluation of the Airborne Medium Rucksack to provide a riggable rucksack to enhance the mobility of all airborne Soldiers immediately upon landing on drop zones.</p> <p>Personnel Airdrop. Will develop and test alternate solutions to improve reliability of the curve pin used on T-11 and MC-6 parachutes to hold the parachute into pack tray assembly. Will procure assets and conduct Developmental testing (DT) and down select the Parachutist Navigational System (PARANAVSYS) which provides Global Positioning System (GPS) navigation capability to MFF Parachutists. Will procure DT assets and conduct DT on MC-6 Control Lines to improve durability and reduce control line breakages under High Performance turns by MFF Parachutists.</p> | | | |
| Accomplishments/Planned Programs Subtotals | | 6.119 | 5.537 |
| | | | 5.450 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | | PROJECT S60: <i>Clothing & Equipment</i> | | | |
| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
| | | | FY 2014 | FY 2014 | FY 2014 | | | | | Cost To | |
| Line Item | FY 2012 | FY 2013 | Base | OCO | Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Complete | Total Cost |
| • Clothing and Individual Eqp S53: <i>RDTE, 0603827.S53, Clothing and Equipment</i> | 11.307 | 7.189 | 5.637 | | 5.637 | 7.836 | 5.548 | 5.096 | 7.153 | Continuing | Continuing |
| • Central Funding and Fiedling: <i>OMA, 121017, Central Funding and Fielding</i> | 67.248 | 73.639 | 103.484 | | 103.484 | 161.773 | 165.014 | 217.679 | 205.582 | Continuing | Continuing |
| • Advanced Tactical Parachute System: <i>OPA, MA7801, Advanced Tactical Parachute System</i> | 52.185 | 46.130 | 46.650 | | 46.650 | 44.939 | 42.656 | 40.859 | 12.000 | Continuing | Continuing |
| Remarks | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| Acquisition strategies for these programs vary in methods to include the following: (1) Quick fixes in 12-24 months or less from concept to Type Classification (TC); (2) modernization improvements which require limited RDT&E and are completed in more than 24-48 months from inception to Type Classification; and (3) fully integrated development that requires substantial RDT&E funding and is completed in four years or more. | | | | | | | | | | | |
| 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 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 0604601A: Infantry Support Weapons | | | | | | PROJECT S60: Clothing & Equipment | | | |
| 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 |
| In-House Support | Various | PM SPIE:Various | 6.825 | 0.750 | | 0.478 | | 0.400 | | - | | 0.400 | Continuing | Continuing | Continuing |
| Subtotal | | | 6.825 | 0.750 | | 0.478 | | 0.400 | | 0.000 | | 0.400 | | | |
| 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 |
| Engineering Support | Various | NSRDEC:Natick, MA | 12.169 | 0.878 | | 1.000 | | 1.000 | | - | | 1.000 | Continuing | Continuing | Continuing |
| Development Contracts | Various | Various:Various | 34.814 | 2.098 | | 2.000 | | 2.000 | | - | | 2.000 | Continuing | Continuing | Continuing |
| Subtotal | | | 46.983 | 2.976 | | 3.000 | | 3.000 | | 0.000 | | 3.000 | | | |
| 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 |
| Misc Support Costs | Various | Various:Various | 13.723 | 0.973 | | 0.859 | | 0.850 | | - | | 0.850 | Continuing | Continuing | Continuing |
| Subtotal | | | 13.723 | 0.973 | | 0.859 | | 0.850 | | 0.000 | | 0.850 | | | |
| 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 |
| Developmental Testing | Various | Various:Various | 13.638 | 1.420 | | 1.200 | | 1.200 | | - | | 1.200 | Continuing | Continuing | Continuing |
| Subtotal | | | 13.638 | 1.420 | | 1.200 | | 1.200 | | 0.000 | | 1.200 | | | |
| Project Cost Totals | | | 81.169 | 6.119 | | 5.537 | | 5.450 | | 0.000 | | 5.450 | | | |
| Remarks | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT S60: <i>Clothing & Equipment</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 |
| Camo Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Transition FREE to Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Garrison Food Service Uniform Improvements | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Garrison Food Service Uniform Milestone C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Transition A2CU improvements to DLA Troop Support | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mountain Combat Boot MS C & transition to sustainment | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Military Free Fall Environmental Protection Improvements | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARAPS DV Testing | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARAPS Operational Testing | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARAPS MS-C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MOLLE Upgrades | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mountaineering Kit User Eval | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mountaineering Kit MS-C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Improved Medic Bag Transition to DLA Troop Support | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Next Gen MOLLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IWTD Incr I Tech Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IWTD Incr 1 Milestone C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IWTD II Product Prove Out | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S60: <i>Clothing & Equipment</i> | |

Schedule Details

| Events | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Camo Decision | 3 | 2013 | 3 | 2013 |
| Transition FREE to Production | 3 | 2012 | 3 | 2012 |
| Garrison Food Service Uniform Improvements | 1 | 2014 | 4 | 2015 |
| Garrison Food Service Uniform Milestone C | 1 | 2016 | 1 | 2016 |
| Transition A2CU improvements to DLA Troop Support | 3 | 2015 | 3 | 2015 |
| Mountain Combat Boot MS C & transition to sustainment | 2 | 2014 | 2 | 2014 |
| Military Free Fall Environmental Protection Improvements | 1 | 2017 | 4 | 2018 |
| ARAPS DV Testing | 2 | 2012 | 4 | 2012 |
| ARAPS Operational Testing | 1 | 2013 | 3 | 2013 |
| ARAPS MS-C | 1 | 2014 | 1 | 2014 |
| MOLLE Upgrades | 1 | 2013 | 4 | 2013 |
| Mountaineering Kit User Eval | 1 | 2013 | 3 | 2013 |
| Mountaineering Kit MS-C | 3 | 2013 | 3 | 2013 |
| Improved Medic Bag Transition to DLA Troop Support | 3 | 2013 | 3 | 2013 |
| Next Gen MOLLE | 1 | 2014 | 2 | 2015 |
| IWTD Incr I Tech Development | 1 | 2013 | 4 | 2013 |
| IWTD Incr 1 Milestone C | 1 | 2014 | 1 | 2014 |
| IWTD II Product Prove Out | 1 | 2018 | 4 | 2018 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S61: Acis Engineering Development | | | |
| 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 |
| S61: Acis Engineering Development | - | 10.705 | 17.175 | 14.057 | - | 14.057 | 20.073 | 11.334 | 9.883 | 15.948 | 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 | | | | | | | | | | | | |
| This project conducts Engineering and Manufacturing Development (EMD) for improved Army aircrew safety, survivability, and human performance capabilities. These funds resource the integration and qualification of the Air Soldier System (Air SS) program. The Air SS addresses capability gaps identified during combat operations in Iraq and Afghanistan including the effects of weight and bulk, limited situational awareness, and lack of functionally integrated aircrew life support equipment. Currently Army aircrews must trade off Air Warrior life support capabilities to ensure compatibility with the confined space of rotary wing crew stations. The Air SS addresses these and other gaps defined in the Air SS CDD using a Soldier as a System approach to provide improved situational awareness; provide terrain, weather, threat, and obstacle avoidance information to reduce aircraft mishaps and fatalities; provide modern heads-up display technologies that increase the Soldier's ability to operate safely in degraded visual environments; and provide the capability to perform missions up to 11.0 hours in extreme environmental and chemical/biological threat conditions. The Air SS follows an evolutionary acquisition approach with two sub-increments that build to the full capability. Sub-increment 1a provides optimized survival equipment and integrated lightweight body armor reducing bulk and increasing mobility and crew member performance; layered clothing ensemble with active thermal regulation and chemical/biological protection for aviation Soldiers in all aircraft platforms; an integrated Soldier-worn electronics suite with integrated portable power that combines the functionality of bulky and separate situational/spatial awareness and life support systems and their separate batteries. Sub-increment 1b is the final and full Air SS capability that completely replaces the legacy Air Warrior system. This is the full integration of Air Soldier System capabilities necessary to meet the Air SS KPP threshold requirement for a 25% weight and bulk reduction over the legacy Air Warrior Aviation Life Support Equipment system. Sub-increment 1b provides improved safety and Soldier survivability, increased situational awareness, and reduced pilot/crew member workload through an integrated gear carriage and extraction system that builds upon the Air SS capabilities developed under sub-increment 1a. Sub-increment 1b also enhances the previous Air SS integrated electronics suite by adding an integrated wireless aircraft and survival communications capability to reduce weight and bulk; a wide field of view high resolution day/night helmet mounted display for the AH-64 platforms; and optimized laser eye protection. This program does not duplicate any aircraft platform program efforts. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| Title: Aircrew Integrated Systems (ACIS) Engineering Development | | | | | | | | | | 10.705 | 17.175 | 14.057 |
| | | | | | | | | | | Articles: 0 | 0 | |
| Description: Integration, evaluation, testing, and qualification of Air Soldier System multi-phased capabilities as technologies mature. | | | | | | | | | | | | |
| FY 2012 Accomplishments: | | | | | | | | | | | | |

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| 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 0604601A: Infantry Support Weapons | | | PROJECT S61: Acis Engineering Development | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | FY 2012 | FY 2013 | FY 2014 | | |
| Continued development of initial Air SS sub-increment 1a capabilities including the integration and evaluation of improved cooling and integrated Soldier and power data system. Began head tracking, Soldier display, aircraft-mounted mission display, Soldier computer module integration and evaluation, integrated layered clothing system, and aircraft integration. Primary activities included the finalization of subsystem and component specifications and interface control documents, manufacture and evaluation of early design prototypes, and the development and delivery of initial technical and logistics documentation. | | | | | | | | | | | |
| FY 2013 Plans: Continues Air Soldier System improvements, integration, evaluation, testing, and qualification including head tracking, Soldier display, aircraft-mounted mission display, Soldier computer module, integrated layered clothing system, and aircraft integration. Primary activities include completion of detail design, manufacture of production representative prototypes and laboratory qualification test activities. | | | | | | | | | | | |
| FY 2014 Plans: Will develop Air Soldier System sub increment 1b capabilities and will complete development of Air Soldier System sub increment 1a capabilities including the manufacture and delivery of additional production representative prototypes, completion of system level qualification activities, and the final delivery of technical, programmatic, and logistics support documentation. System level tests will include the formal developmental and operational flight test activities and formal logistics/maintenance demonstrations. | | | | | | | | | | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | 10.705 | 17.175 | 14.057 | | |
| 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 |
| • Aircrew Integrated Sys Adv Dev: RDTE, A PE 0603827A, PROJ S51 - Adv Dev | 0.150 | 0.141 | 0.164 | | 0.164 | 0.164 | 0.157 | 0.160 | 2.157 | Continuing | Continuing |
| • Aircrew Integrated Systems: Aircraft Procurement, Army SSN AZ3110 - ACIS | 62.746 | 77.381 | 45.841 | | 45.841 | 16.347 | 14.080 | 0.008 | 2.920 | Continuing | Continuing |
| Remarks | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| The Engineering and Manufacturing Development (EMD) phase efforts for the Aircrew Integrated Systems program includes integration, evaluation, testing, and qualification of select Air Soldier System subsystems and components as technologies mature. The Air Soldier System follows an evolutionary acquisition approach with two sub-increments that build to the full capability. Through the two sub-increments, the Air Soldier System program focuses on reducing weight and bulk | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S61: <i>Acis Engineering Development</i> |
| <p>while integrating capabilities tailorable for aircrew on all Army aircraft platforms including optimized survival equipment, suite of integrated Soldier-worn electronics, integrated wireless aircraft and survival communications capability, and reduced clothing layers. A day and night heads-up display, external audio, and enhanced laser eye protection against multiple wavelengths of laser threats will be integrated onto the common HGU-56/P helmet. Integration, testing, and qualification efforts are accomplished through a combination of contracts with industry and by Military Interdepartmental Purchase Requests (MIPRs) to other government agencies. Contracts with industry include competed CPFF and FFP designed to appropriately share risk between industry and the government.</p> <p>E. Performance Metrics</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 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 0604601A: Infantry Support Weapons | | | | S61: Acis Engineering Development | | | | | |
| 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 Administration | Allot | Various Government:Huntsville, Alabama | 1.503 | 0.359 | | 0.278 | | 0.712 | | - | | 0.712 | Continuing | Continuing | Continuing |
| Subtotal | | | 1.503 | 0.359 | | 0.278 | | 0.712 | | 0.000 | | 0.712 | | | |
| 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 |
| Air Warrior and Air Soldier System Development | C/TBD | Various Government:Various Locations | 29.983 | 9.399 | | 14.329 | | 9.967 | | - | | 9.967 | Continuing | Continuing | Continuing |
| Subtotal | | | 29.983 | 9.399 | | 14.329 | | 9.967 | | 0.000 | | 9.967 | | | |
| 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 |
| Matrix Support | RO | Various Government:Various Locations | 1.137 | 0.947 | | 0.754 | | 0.626 | | - | | 0.626 | Continuing | Continuing | Continuing |
| Subtotal | | | 1.137 | 0.947 | | 0.754 | | 0.626 | | 0.000 | | 0.626 | | | |
| 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 |
| Developmental and Operational Testing | RO | Various Activities:Various Locations | 6.035 | - | | 1.814 | | 2.752 | | - | | 2.752 | Continuing | Continuing | Continuing |
| Subtotal | | | 6.035 | 0.000 | | 1.814 | | 2.752 | | 0.000 | | 2.752 | | | |

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| 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 0604601A: Infantry Support Weapons | | | | | PROJECT S61: Acis Engineering Development | | | | |
| | 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 | 38.658 | 10.705 | | 17.175 | | 14.057 | | 0.000 | | 14.057 | | | | |

Remarks

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT S61: <i>Acis Engineering Development</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 |
| Air SS Prelim Design Review (PDR), Sub-increment 1a | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Critical Design Review (CDR), Sub-increment 1a | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Developmental Testing (DT), Sub-increment 1a | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Operational Test (OT), Sub-increment 1a | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Milestone C/Full Rate Product (FRP), Sub-increment 1a | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Prelim Design Review (PDR), Sub-increment 1b | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Critical Design Review (CDR), Sub-increment 1b | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Develop Testing Sub-increment 1b | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Milestone C/Low Rate Initial Product, Sub-increment 1b | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air SS Initial Operat Test & Eval, Sub-increment 1b | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S61: <i>Acis Engineering Development</i> | |

Schedule Details

| Events | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Air SS Prelim Design Review (PDR), Sub-increment 1a | 1 | 2013 | 1 | 2013 |
| Air SS Critical Design Review (CDR), Sub-increment 1a | 4 | 2013 | 4 | 2013 |
| Air SS Developmental Testing (DT), Sub-increment 1a | 2 | 2014 | 2 | 2014 |
| Air SS Operational Test (OT), Sub-increment 1a | 2 | 2014 | 3 | 2014 |
| Air SS Milestone C/Full Rate Product (FRP), Sub-increment 1a | 3 | 2014 | 3 | 2014 |
| Air SS Prelim Design Review (PDR), Sub-increment 1b | 1 | 2015 | 1 | 2015 |
| Air SS Critical Design Review (CDR), Sub-increment 1b | 3 | 2015 | 3 | 2015 |
| Air SS Develop Testing Sub-increment 1b | 4 | 2015 | 1 | 2016 |
| Air SS Milestone C/Low Rate Initial Product, Sub-increment 1b | 3 | 2016 | 3 | 2016 |
| Air SS Initial Operat Test & Eval, Sub-increment 1b | 1 | 2017 | 3 | 2017 |

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|---|-----------------|---------|----------------------|--------------|--|---------------|---------|---------|--|------------------|------------------|------------|
| 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 0604601A: Infantry Support Weapons | | | | PROJECT S62: Counter-Defilade Target Engagement - SDD | | | |
| 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 |
| S62: Counter-Defilade Target Engagement - SDD | - | 34.859 | 34.412 | 1.983 | - | 1.983 | 2.060 | 2.130 | 2.200 | 2.470 | 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 | | | | | | | | | | | | |
| The Maneuver Center of Excellence (MCoE), FT Benning, GA (User Community) identifies the Counter Defilade Target Engagement (CDTE) as a critical capability gap for our Soldiers in combat. The number one materiel solution to mitigate the critical capability gap (defeating defilade (hidden) targets from 15-500m) is the XM25. The XM25 provides the Infantry Soldier with a leap-ahead overmatch capability that dramatically increases lethality, range, and capability through the use of a family of low-velocity programmable 25mm ammunition and allows the Soldier to engage defilade targets with a high degree of accuracy while posing minimal burden, in terms of weight and size. The XM25 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, and internal display. The XM25 has a 500-meter point target range and a 700-meter area target range capable of defeating defilade targets. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| Title: Engineering and Manufacturing Development/Fabricate | | | | | | | | | | 26.769 | 23.120 | 0.000 |
| | | | | | | | | | | Articles: 0 | 0 | |
| Description: Description: Engineering Development and Fabrication | | | | | | | | | | | | |
| FY 2012 Accomplishments: Completed producibility design improvements specific to weight reduction, reliability and survivability of the weapon system, ammunition, the weapon system battery, target acquisition/fire control (TA/FC), and the ammunition magazine based on user feedback of the early prototypes in Afghanistan's Forward Operational Assessment (FOA) 1B. Initiated prototype manufacturing tooling. Built ten (10) weapon prototypes to support contractor weapon system assessments and verification testing. Initiated build of twenty-five (25) additional weapon prototypes for government qualification testing. Finalized weapon system design for Critical Design Review (CDR). | | | | | | | | | | | | |
| FY 2013 Plans: Fabricate and integrate design enhancements to the weapons system and subsystems, target acquisition/fire control (TA/FC) and ammunition identified through contractor subsystem testing and the Forward Operational Assessment (FOA). Assemble prototype | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S62: <i>Counter-Defilade Target Engagement - SDD</i> | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 |
| systems to include weapon, TA/FC and ammunition for additional government testing. Complete build of thirty-six (36) weapon system for the second Forward Operational Assessment (FOA) 2. | | | FY 2014 |
| Title: Engineering and Training Development Description: Description: Engineering and Training Development FY 2012 Accomplishments: Provided engineering support required for producibility design improvements specific to reliability and survivability of the weapon system battery, ammunition, target acquisition/fire control (TA/FC) and ammunition magazine. Engineering support was necessary for all testing to meet Army performance objectives. Prepared documentation to perform technical design, performance and safety reviews. FY 2013 Plans: Provide engineering support for weapons systems, subsystems, target acquisition/fire control (TA/FC) and software design enhancements required to perform technical design reviews to include, combined system verification reviews, and production readiness review to update system engineering master plans and integrate technical design efforts. Conduct training efforts for Limited User Test (LUT). Development of new equipment training (NET) and training materials. FY 2014 Plans: Will continue to provide engineering support for engineering changes and pre-planned product improvements to the weapon system. | | 2.300 0 | 2.500 0 |
| Title: Development / Operational Test and Evaluation Activities Description: Description: Test and Evaluate FY 2012 Accomplishments: Contractor conducted weapon system and subsystem performance testing for reliability, simulated natural environments (hot, cold, sand, and rain), electromagnetic environmental effects (E3) testing, human factors and rough handling tests. Weapon also sustained various prequalification testing. The target acquisition/fire control (TA/FC) and all ammunition variants completed developmental and safety testing and evaluation. FY 2013 Plans: Conduct Government and contractor test efforts of weapon system including the target acquisition/fire control (TA/FC) and ammunition that include the following: Enhancements to address safety risks, Pre-Production Qualification tests, Electromagnetic | | 5.481 0 | 8.000 0 |
| | | 0.100 | 1.633 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S62: Counter-Defilade Target Engagement - SDD | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | FY 2012 | | FY 2013 | | FY 2014 | |
| Environmental Effects (E3) testing, Simulated Natural Environment Test, Limited User Testing (LUT). Plan, coordinate, and resource Initial Operational Test and Evaluation (IOT&E) and Live Fire Test and Evaluation (LFT&E). FY 2014 Plans: Will continue to conduct Government test efforts to evaluate engineering changes and pre-planned product improvements to the weapons system. | | | | | | | | | | | | | |
| Title: Program Management Description: Description: Program Management FY 2012 Accomplishments: The Program Management office provided oversight of all engineering support and test activities throughout the fiscal year. Managed the life cycle mission of the program to include future acquisition and sustainment plans. Provided oversight of design improvements, weapon system assessments, developmental, verification and prequalification testing. Prepared documentation to perform technical design, performance and safety reviews. FY 2013 Plans: Continue Program Management oversight to achieve Milestone C and transition to Low Rate Initial Production (LRIP). FY 2014 Plans: Will continue to provide Program Management oversight post Milestone C required to test and evaluate engineering changes and pre-planned product improvements to weapon system. | | | | | | | | Articles: 0.309 0 | | 0.792 0 | | 0.250 | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | 34.859 | | 34.412 | | 1.983 | |
| 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 | | |
| • G16101: (G16101) Integrated Air Burst Weapon System Family | | 0.506 | 69.147 | | 69.147 | 71.208 | 71.196 | 72.387 | 87.784 | Continuing | Continuing | | |
| • E92500: (E92500) CTG, 25MM, XM1083 High Explosive Air Burst (HEAB) | | 4.506 | 8.801 | | 8.801 | 14.392 | 31.108 | 31.663 | | 0.000 | 90.470 | | |
| • E92510: (E92510) CTG, 24MM, XM1081 Target Practice (TP) | | | 1.500 | | 1.500 | 1.500 | 1.500 | 1.500 | | 0.000 | 6.000 | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | PROJECT S62: <i>Counter-Defilade Target Engagement - SDD</i> | | | |
| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
| | | | <u>FY 2014</u> | <u>FY 2014</u> | <u>FY 2014</u> | | | | | <u>Cost To</u> | |
| <u>Line Item</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>Base</u> | <u>OCO</u> | <u>Total</u> | <u>FY 2015</u> | <u>FY 2016</u> | <u>FY 2017</u> | <u>FY 2018</u> | <u>Complete</u> | <u>Total Cost</u> |
| <u>Remarks</u> | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| <p>The XM25 transitioned from the Technology and Development phase to Engineering and Manufacturing Development (EMD) phase by achieving Milestone B in December 2010. The EMD phase completes development of the XM25 and verifies training solutions for the Milestone C approval in FY 2014. Research and Development acquisition strategy is to use sole source contracting with ATK (formerly known as Alliant Techsystems), Plymouth, MN. RDT&E initiatives will continue post Milestone C for engineering changes and pre-planned product improvements to include family of munitions and target acquisition/fire control development.</p> | | | | | | | | | | | |
| E. Performance Metrics | | | | | | | | | | | |
| <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 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 0604601A: <i>Infantry Support Weapons</i> | | | | | | PROJECT S62: <i>Counter-Defilade Target Engagement - SDD</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 |
| Program Management | Various | Performed by Government:Various Activities | 1.906 | 0.309 | Feb 2012 | 0.792 | Feb 2013 | 0.250 | Feb 2014 | - | | 0.250 | Continuing | Continuing | Continuing |
| Subtotal | | | 1.906 | 0.309 | | 0.792 | | 0.250 | | 0.000 | | 0.250 | | | |
| 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 |
| Design, Develop & Fabricate | SS/CPFF | ATK:Plymouth, MN | 38.566 | 26.769 | Feb 2012 | 23.120 | Feb 2013 | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 38.566 | 26.769 | | 23.120 | | 0.000 | | 0.000 | | 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 |
| Engineering Support | Various | Various:Multiple | 4.130 | 2.100 | Feb 2012 | 2.300 | Feb 2013 | 0.100 | Feb 2014 | - | | 0.100 | Continuing | Continuing | Continuing |
| Training Development Support | MIPR | PEO STRI:PEO STRI | 0.400 | 0.200 | Feb 2012 | 0.200 | Feb 2013 | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 4.530 | 2.300 | | 2.500 | | 0.100 | | 0.000 | | 0.100 | | | |
| 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 |
| Developmental/System Tests and Articles | SS/CPFF | Performed by Contractor:ATK, Plymouth, MN | 14.854 | - | | - | | - | | - | | - | 0.000 | 14.854 | 0.000 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | | PROJECT S62: <i>Counter-Defilade Target Engagement - SDD</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 |
| Developmental/ Operational Tests | Various | Performed by Government:Various Activities | 0.000 | 5.481 | Feb 2012 | 8.000 | Feb 2013 | 1.633 | Feb 2014 | - | | 1.633 | Continuing | Continuing | Continuing |
| Subtotal | | | 14.854 | 5.481 | | 8.000 | | 1.633 | | 0.000 | | 1.633 | | | |

Remarks
In FY 2014, funding will be used to continue target acquisition/fire control and family of munitions development and operational test efforts on engineering changes to weapon systems.

| | 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 | 59.856 | 34.859 | | 34.412 | | 1.983 | | 0.000 | | 1.983 | | | |

Remarks

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT S62: <i>Counter-Defilade Target Engagement - SDD</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 |
| Forward Operational Assessment (FOA) 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MS C/Type Classification-Limited Procurement | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Production Qualification Test (PQT) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initial Operational Test & Evaluation (IOT&E) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low Rate Initial Production (LRIP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type Classification - Standard | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Full Rate Production (FRP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S62: <i>Counter-Defilade Target Engagement - SDD</i> | |

Schedule Details

| Events | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Forward Operational Assessment (FOA) 2 | 2 | 2013 | 3 | 2013 |
| MS C/Type Classification-Limited Procurement | 1 | 2014 | 2 | 2014 |
| Production Qualification Test (PQT) | 2 | 2014 | 2 | 2014 |
| Initial Operational Test & Evaluation (IOT&E) | 2 | 2014 | 1 | 2015 |
| Low Rate Initial Production (LRIP) | 1 | 2014 | 1 | 2015 |
| Type Classification - Standard | 1 | 2015 | 1 | 2015 |
| Full Rate Production (FRP) | 2 | 2015 | 4 | 2018 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S63: Small Arms Improvement | | | |
| 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 |
| S63: Small Arms Improvement | - | 17.759 | 19.617 | 18.201 | - | 18.201 | 14.479 | 14.494 | 14.608 | 14.691 | 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 | | | | | | | | | | | | |
| New starts in FY 2014 include M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS), Squad Designated Marksman Rifle (SDM), Gain Twist Rifling, Powered Rail, Mounted Machine Gun Optic, Advanced Coatings, XM1116 12 Gauge Non-Lethal Extended Range and transitions Squad Common Optic and Integrated Fire Control for Small Arms from Advanced Component Development and Prototypes, Project S54, Program Element 0603827A Project S54. | | | | | | | | | | | | |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | | |
| The Small Arms Improvement Engineering and Manufacturing Development (EMD) program provides funds to transition components or prototypes from Small Arms Improvement, Project S54, Program Element 0603827A, (Budget Activity 4) and other domestic and foreign sources of small arms weapons to demonstrate, test and evaluate capability near or at planned operational requirements. Small arms systems include weapons ranging up to 40 millimeter in caliber. Current and future efforts focus on system improvements designed to enhance lethality, target acquisition, fire control, training effectiveness and reliability of weapons to include ammunition when developing and/or evaluating standard and non-standard weapons. Focus areas include system development, integration, demonstration, test and evaluate components, prototypes and operational system prototypes of small arms weapons and/or enhancements. Benefits include continuous improvements to small arms weapons, fire control equipment, optics, gun barrels, ancillary equipment, training devices, component mounts, weapon mounts, and weapon/ammunition interface of current small arms fleet or new weapon systems. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | FY 2012 | FY 2013 | FY 2014 | |
| Title: New Weapons | | | | | | | | | 10.687 | 9.545 | 6.289 | |
| | | | | | | | | | 0 | 0 | | |
| Description: Description: Development of new weapons | | | | | | | | | | | | |
| FY 2012 Accomplishments: | | | | | | | | | | | | |
| Individual Carbine Competition (ICC): Completed Phase I and initiated Phase II of competitive test and inspection program. | | | | | | | | | | | | |
| Conducted scoring conferences of test data for source selection process. | | | | | | | | | | | | |
| Precision Sniper Rifle (PSR): Evaluated PSR acquisition options and strategies. | | | | | | | | | | | | |

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| 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 0604601A: Infantry Support Weapons | PROJECT S63: Small Arms Improvement | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 | FY 2014 |
| Modular Handgun System (MHS): Conducted meetings to discuss, plan and prepare program documentation; initiated integrated product team charter and acquisition plan; planned and conducted terminal effects test; released Request for Information (RFI) to industry, received and sorted all responses to RFI. FY 2013 Plans: ICC: Down select individual carbine competitors from competitive evaluation/testing phase to conduct system testing and user evaluation of remaining weapons. Perform down-selection of most qualified vendors and award three competitive contracts. PSR: Evaluate on-going initiatives of the Precision Sniper Rifle. Initiate development and engineering testing efforts to support new Capability Development Documents. FY 2014 Plans: ICC: Complete the source selection efforts, down selecting to a single Individual Carbine. Complete the cost benefit analysis in support of Milestone C and initiate low rate initial production. Will complete Production Qualification Testing and Initial Operational Test & Evaluation and transition program to Full Rate Production. PSR: Will continue development and engineering testing efforts to support new Capability Development Documents. FY2014 New Start Squad Designated Marksman Rifle (SDM) supports requirement definition and analysis process. MHS: Will select commercially available Modular Handgun System (MHS) for the Army. Will conduct Developmental and Operational Testing on the selected MHS. Will review and reduce test data. Will prepare and plan for transition from research, development, test and evaluation (RDT&E) to low rate initial production (LRIP). Will update Acquisition Plan and Systems Engineering Plan as required. FY2014 New Start M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS): Will conduct testing, evaluation, and documentation required for Type Classification Standard. | | | | |
| Title: Small Arms Weapons Enhancements Articles: Description: Description: Enhancements and developments of small arms weapons FY 2012 Accomplishments: M4 Carbine Product Improvement Program (PIP): Completed technical testing and evaluation of the rail system hardware bid samples. Completed testing of new bolt bid samples and based upon the cost/performance findings the bolt initiative was cancelled. Suppressors: Completed Test Operational Procedures for measurement of suppressor performances. Developed draft operational relevant human perception (detection and localization) model for suppressor performances. Developed draft Capability Development Document. | | 4.622 0 | 7.597 0 | 4.512 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S63: <i>Small Arms Improvement</i> | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 |
| <p>Improved Cleaning Kits: Divided cleaning kits components into two separate kits for the individual and team to reduce size and cost.</p> <p>Sniper Upgrades: Conducted system testing and evaluation of components enhancements of the M110 Semi-Automatic Sniper System. Initiated characterization testing of the Compact Semi-Automatic Sniper System. Conducted technical and operational testing of XM2010 Enhanced Sniper Rifle.</p> <p>XM205 Tripod: Submitted final report for Milestone C and transitioned program to production.</p> <p>Shock Reduction: Developed and finalized scope of work to measure recoil.</p> <p>FY 2013 Plans:</p> <p>M4 Carbine Product Improvement Program: Award hardware delivery orders to conduct final test and evaluation of the rail system.</p> <p>Weapons Reliability Program: Transition initiative from Small Arms Improvement, Project S54, Program Element 0603827A (Budget Activity 4).</p> <p>Suppressors: Complete test plan of small arms suppressors.</p> <p>Improved Cleaning Kits: Award competitive contract for the updated cleaning kits.</p> <p>Sniper Upgrades: Continue system testing and evaluation of components enhancements of the M110 Semi-Automatic Sniper System, M110E1 Compact Semi-Automatic Sniper Systems and XM2010 Enhanced Sniper Rifle.</p> <p>Shock Reduction: Complete assessment of 3D recoil and shock spectrum measurement techniques to determine viability of introducing new standard for testing small arms weapons for felt recoil and weapon device shock survivability.</p> <p>FY 2014 Plans:</p> <p>M4 Carbine PIP: Will transition M4 Carbine Product Improvements initiatives to M4 Carbine Modification procurement program.</p> <p>Suppressors: Will conduct test and evaluation of small arms suppressors.</p> <p>Sniper Upgrades: Will perform, evaluate and analyze engineering, development and testing of sniper upgrades.</p> <p>Weapons Reliability Program: Will complete design of experiments test cycle to determine root cause of weapon reliability. Initiate modeling, prototyping and assessment of component upgrades. Will conduct performance verification testing of proposed weapon system modifications.</p> <p>Will implement new test standard of measuring small arms felt recoil. Will continue studies and evaluate increased barrel life/ chrome replacement, protective coatings, reduced recoil, 3D/Additive manufacturing methods. Will assess weapons reliability testing of functional impact with the introduction of enhanced performance ammunition on current small caliber weapon designs. Areas of potential impact include weapon system reliability, durability, and maintainability. Will transition barrel twist optimization from Small Arms Improvement, Project S54, Program Element 0603827A (Budget Activity 4).</p> <p>FY2014 New Start Powered Rail, Gain Twist Rifling and Advanced Coatings.</p> | | | |
| Title: Ammunition | | 1.600 | 1.632 |
| | | | 0.200 |

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| 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 0604601A: Infantry Support Weapons | PROJECT S63: Small Arms Improvement | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 | FY 2014 |
| Articles: Description: Improvement of small arms ammunition FY 2012 Accomplishments: Completed root cause analysis testing for Indiana Ordnance incident of the XM1112 40mm Low Velocity Airburst Non-Lethal Munitions (ANLM). Transitioned Micro Electro-Mechanical System (MEMS) safe and arm mechanisms to Program Executive Office Ammunition. FY 2013 Plans: Build hardware and complete developmental testing and evaluation of the XM1112 ANLM. Transition the ANLM program to Program Executive Office Ammunition. FY2014 New Start XM1116 12 Gauge Non-Lethal Extended Range. FY 2014 Plans: Will evaluate effect of new ammunition on small arms weapons. | | 0 | 0 | |
| Title: Combat Optics Articles: Description: Improvement of combat optics FY 2012 Accomplishments: Conducted market research of optics industry. Initiated engineering support and evaluation of weapon optics performance requirements. Developed test plans and scheduled human factors testing of continuous variable systems in support of Squad Common Optic Capability Development Document. FY 2013 Plans: Transition Squad Common Optic from Small Arms Improvement, Project S54, Program Element 0603827A, (Budget Activity 4). Draft acquisition plan and operational assessment of commercial of the shelf optics to validate a common power optic across weapon platforms. FY 2014 Plans: Will continue engineering support and services to include engineering evaluations, verification and validation of weapon optics performance requirements to include protective and anti-reflective coatings. Will obtain and test bid samples of a Squad Common Optic. FY2014 New Start Mounted Machine Gun Optic. Transition Squad Common Optic from Small Arms Improvement, Project S54, Program Element 0603827A, (Budget Activity 4). | | 0.100 0 | 0.100 0 | 0.700 |
| Title: Fire Control | | 0.750 | 0.743 | 6.500 |

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|---|---------|---------|-----------------|--|------------------|---------|---------|--|------------------|---------------------|------------|
| 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 0604601A: Infantry Support Weapons | | | | PROJECT S63: Small Arms Improvement | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| Articles: | | | | | | | | | 0 | 0 | |
| Description: Description: Improvement of small arms fire control | | | | | | | | | | | |
| FY 2012 Accomplishments: M320 Grenade Launcher: Completed market survey and documentation to initiate a new Grenadier Sighting System (GSS). Completed market survey to evaluate industrail base for a Build to Print capability for M320 production. | | | | | | | | | | | |
| FY 2013 Plans: M320 Grenade Launcher: Complete acquisition plan and strategy of a new Grenadier Sighting System (GSS). | | | | | | | | | | | |
| FY 2014 Plans: M320 Grenade Launcher: Will complete bid sample test of GSS and award competitive contract. Integrated Fire Control for Small Arms: Will complete transition of the integrated fire control for small arms program from Small Arms Improvement, Project S54, Program Element 0603827A, (Budget Activity 4) and initiate engineering manufacturing development phase. Will evaluate hyperspectral tracking of targets. | | | | | | | | | | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | | 17.759 | 19.617 | 18.201 |
| 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 |
| • Small Arms Improvement: RDTE S54, Program Element 0603827A - Soldier Systems - Advanced Development | 4.362 | 4.690 | 4.690 | | 4.690 | 6.172 | 5.569 | 5.186 | 5.700 | Continuing | Continuing |
| • M4 Carbine MODS: WTCV, GB3007, M4 Carbine MODS | 41.892 | 27.243 | 10.300 | | 10.300 | 16.128 | 16.152 | 8.800 | 18.491 | Continuing | Continuing |
| • M16 Rifle Mods: WTCV, GZ2800, M16 Rifle MODS | 3.476 | 18.728 | 2.136 | | 2.136 | 3.974 | 3.798 | 3.394 | 3.500 | Continuing | Continuing |
| • Sniper Rifle MODS: WTCV, GZ1500, Sniper Rifle MODS | 1.994 | 14.113 | 7.017 | | 7.017 | 2.018 | 2.019 | 2.053 | 3.986 | Continuing | Continuing |
| • M249 SAW MODS: WTCV, GZ1290, M249 Squad Automatic Weapon (SAW) MODS | 8.480 | 4.996 | 7.608 | | 7.608 | 7.607 | 6.201 | 6.368 | 5.800 | Continuing | Continuing |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S63: Small Arms Improvement | | | |
| 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 |
| • M240 Medium Machine Gun MODS: WTCV, GZ1300, M240 Medium Machine Gun MODS | 15.718 | 6.806 | 2.719 | | 2.719 | 5.885 | 5.568 | 4.847 | 5.000 | Continuing | Continuing |
| • M2 .50 CAL Heavy Machine Gun MODS: WTCV, GB4000, M2 .50 CAL Heavy Machine Gun MODS | 48.856 | 39.974 | 33.691 | | 33.691 | 48.553 | 59.199 | 63.570 | 53.961 | Continuing | Continuing |
| • Modification Less Than \$5.0M: WTCV, GC0925, Modifications Less Than \$5.0M | 2.973 | 3.072 | 1.569 | | 1.569 | 4.048 | 3.796 | 3.232 | 3.548 | Continuing | Continuing |
| Remarks | | | | | | | | | | | |
| In support of Small Arms Requirements, components or prototypes developed in Small Arms Improvement, Project S54, Program Element 0603827A, (Budget Activity 4) is transitioned to Small Arms Improvement, Project S63, Program Element 0604601A, (Budget Activity 5) to conduct engineering and manufacturing development. Once the component, prototype or operational prototype achieves Milestone C and type classification the item transitions to small arms weapon production or modification program. | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| Primary strategy is to mature and finalize design efforts, award Research, Development, Test and Evaluation (RDT&E) hardware contracts, and test and evaluate systems that result in type classification and follow-on production contract awards. | | | | | | | | | | | |
| 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 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 0604601A: <i>Infantry Support Weapons</i> | | | | | | PROJECT S63: <i>Small Arms Improvement</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 |
| Program Management | Allot | PM Soldier Weapons,:Picatinny Arsenal | 4.042 | 2.475 | Jan 2012 | 2.904 | Apr 2013 | 0.500 | Mar 2014 | - | | 0.500 | Continuing | Continuing | Continuing |
| Travel | MIPR | PM Soldier Weapons,:Picatinny Arsenal | 0.579 | 0.205 | Jan 2012 | 0.250 | May 2013 | 0.139 | Mar 2014 | - | | 0.139 | Continuing | Continuing | Continuing |
| Subtotal | | | 4.621 | 2.680 | | 3.154 | | 0.639 | | 0.000 | | 0.639 | | | |
| 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 |
| Fabrication | C/CPFF | Various,:Multiple | 0.000 | - | | 0.300 | May 2013 | 1.200 | Mar 2014 | - | | 1.200 | Continuing | Continuing | Continuing |
| Hardware Development | MIPR | Army Research Development Engineering Centers,:Multiple | 6.741 | 0.388 | Feb 2012 | 0.100 | Feb 2013 | 0.750 | Mar 2014 | - | | 0.750 | Continuing | Continuing | Continuing |
| Subtotal | | | 6.741 | 0.388 | | 0.400 | | 1.950 | | 0.000 | | 1.950 | | | |
| 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 |
| Engineering | MIPR | Army Research Development Engineering Centers,:Multiple | 18.934 | 7.888 | Jan 2012 | 8.380 | Apr 2013 | 8.412 | Mar 2014 | - | | 8.412 | Continuing | Continuing | Continuing |
| Logistics | MIPR | TACOM,:Warren | 1.304 | 1.291 | Jan 2012 | 1.383 | Apr 2013 | 1.200 | Mar 2014 | - | | 1.200 | Continuing | Continuing | Continuing |
| Human Research and Engineering | MIPR | Army Research Laboratory,:Aberdeen Proving Ground | 1.724 | 0.598 | Dec 2011 | 0.600 | Apr 2013 | 0.500 | Mar 2014 | - | | 0.500 | Continuing | Continuing | Continuing |
| Subtotal | | | 21.962 | 9.777 | | 10.363 | | 10.112 | | 0.000 | | 10.112 | | | |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S63: Small Arms Improvement | | | | | |
| 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 |
| Developmental Testing | MIPR | Army Developmental Test Command,:Aberdeen Proving Ground | 10.581 | 3.767 | Feb 2012 | 4.200 | Apr 2013 | 4.500 | Mar 2014 | - | | 4.500 | Continuing | Continuing | Continuing |
| Operational Testing | MIPR | Army Test and Evaluation Command,:Aberdeen Proving Ground | 5.024 | 1.047 | Feb 2012 | 1.200 | May 2013 | 0.800 | Mar 2014 | - | | 0.800 | Continuing | Continuing | Continuing |
| Validation Testing | MIPR | Army Test and Evaluation Centers,:Multiple | 4.612 | 0.100 | Dec 2011 | 0.300 | May 2013 | 0.200 | Mar 2014 | - | | 0.200 | Continuing | Continuing | Continuing |
| Subtotal | | | 20.217 | 4.914 | | 5.700 | | 5.500 | | 0.000 | | 5.500 | | | |
| | | | 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 | | | 53.541 | 17.759 | | 19.617 | | 18.201 | | 0.000 | | 18.201 | | | |
| Remarks | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT S63: <i>Small Arms Improvement</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 |
| M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squad Designated Marksman Rifle (SDM) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sub-Compact Weapon | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lightweight Machine Gun | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gain Twist Rifling | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Powered Rail | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squad Common Optic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mounted Machine Gun Optic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integrated Fire Control for Small Arms | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S63: <i>Small Arms Improvement</i> | |

Schedule Details

| Events | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS) | 1 | 2014 | 4 | 2016 |
| Squad Designated Marksman Rifle (SDM) | 1 | 2014 | 4 | 2017 |
| Sub-Compact Weapon | 1 | 2015 | 4 | 2017 |
| Lightweight Machine Gun | 1 | 2015 | 4 | 2018 |
| Gain Twist Rifling | 1 | 2014 | 4 | 2014 |
| Powered Rail | 1 | 2014 | 4 | 2017 |
| Squad Common Optic | 1 | 2014 | 4 | 2015 |
| Mounted Machine Gun Optic | 1 | 2014 | 4 | 2016 |
| Integrated Fire Control for Small Arms | 1 | 2014 | 4 | 2016 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S64: Common Remotely Operated Wpn Sys (CROWS) | | | |
| 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 |
| S64: Common Remotely Operated Wpn Sys (CROWS) | - | 0.173 | 0.000 | 14.864 | - | 14.864 | 15.000 | 15.000 | 10.000 | 12.191 | 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 | | | | | | | | | | | | |
| Project S64 is a new start in FY 2014. | | | | | | | | | | | | |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | | |
| The Maneuver Support Center of Excellence (MSCoE) at FT Leonard Wood, MO (user community) has identified development of the next increment of the Common Remotely Operated Weapon Station (CROWS) as a critical improvement for the Soldier in the combat environment. By addressing the capability gap of non-turreted, lightly armored vehicles where the gunner is exposed to enemy fire, the current CROWS system provides the ability to rapidly and accurately locate and engage the enemy while allowing platform gunners to remain under armor, thereby providing greater protection and increasing overall lethality. Additional capabilities pursued in Increment Two (2) include: increased accuracy of weapons fire; improved system survivability from direct fire and fragmentation weapons; vehicle commander display and firing override ability; laser designator; future generation Forward Looking Infrared (FLIR); auto-zoom; auto-tracking; auto-detection and targeting; net-ready capabilities; integration of future weapon systems; additional sensors for simultaneous 360-degree situational awareness; through-sight video recording; increased elevation and depression of weapon muzzle limits; fixed-site emplacement capability; gunshot detection sensors; an objective requirement for wireless remote operation of the CROWS and the application of external targeting data for precision engagement. In addition to these capabilities, parallel development efforts will be pursued for the current increment, to include improvements to component reliability that will extend system life and value engineering design changes that will limit the cost and quantity of parts and reduce the system's logistics footprint. New start in FY 2014. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | FY 2012 | FY 2013 | FY 2014 | |
| Title: Design, Develop & Fabricate CROWS Increment II | | | | | | | | | 0.000 | 0.000 | 9.867 | |
| Description: Description: Design, Develop & Fabricate | | | | | | | | | | | | |
| FY 2014 Plans: | | | | | | | | | | | | |
| As a prerequisite to developing improvements involving enhanced sensors, infrared sights, video capabilities and situational awareness, the contractor will design and fabricate an improved fire control unit (FCU) processor, to include ethernet channels in the system's slip ring, in order to facilitate the greater data through-put required. | | | | | | | | | | | | |
| Title: Engineering Support | | | | | | | | | 0.103 | 0.000 | 2.150 | |
| Articles: | | | | | | | | | 0 | | | |

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| 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 0604601A: Infantry Support Weapons | PROJECT S64: Common Remotely Operated Wpn Sys (CROWS) | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 | FY 2014 |
| Description: Description: Government Engineering Support. FY 2012 Accomplishments: Provided engineering support and oversight of design improvements; preparation of the performance specifications for increased elevation and other system improvements. FY 2014 Plans: Will provide engineering support and oversight of design improvements; preparation of the performance specifications for the contractor; development of new processor and slip-ring that facilitates target acquisition and designation, command override, infrared and video capabilities. | | | | |
| Title: Development Test and Evaluation Articles: Description: Description: Test and Evaluation FY 2012 Accomplishments: Conducted human research and engineering development testing and evaluation of increased elevation and other system improvement. FY 2014 Plans: Will develop testing and evaluation criteria and documentation, to include a Test and Evaluation Master Plan (TEMP). Will conduct initial developmental testing and evaluation of improvements. | | 0.017 0 | 0.000 | 0.852 |
| Title: Program Management Articles: Description: Description: Program Management. FY 2012 Accomplishments: Provided management oversight of increased elevation design and development, to include engineering support, contract actions and test activities throughout the fiscal year. FY 2014 Plans: The program management office and the proponents in the user community at the Maneuver Support Center will provide oversight of product design and development, to include engineering support, contract actions and test activities throughout the fiscal year. Will facilitate approximately six test events at various government laboratories to test prototype units of the improved fire control | | 0.053 0 | 0.000 | 1.995 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | PROJECT S64: <i>Common Remotely Operated Wpn Sys (CROWS)</i> | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| unit processor and system slip ring, in order to quantify performance with the most current sensors and effectors. Will manage the life cycle of the program to include future acquisition and sustainment plans. | | | | | | | | | | | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | | | 0.173 | 0.000 | 14.864 |
| 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 | |
| • CROWS (G04700, W&TCV): W&TCV, G04700, CROWS | 14.890 | 56.725 | 56.580 | | 56.580 | 56.911 | 56.945 | 57.898 | 59.250 | 0.000 | 359.199 | |
| Remarks | | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | | |
| The Common Remotely Operated Weapon Station (CROWS) uses a single-step acquisition approach in its strategy. The CROWS achieved Type Classification Standard in 3QFY11, Full Materiel Release in 3QFY12, with Full Rate Production scheduled 4QFY12, in accordance with the Capability Production Document (CPD) Increment One (1), as clarified in June 2009. | | | | | | | | | | | | |
| The program objective is to continue developing, improving and fielding the CROWS on Up-Armored High Mobility Multipurpose Wheeled Vehicles (UA-HMMWV), M1A2 Abrams Main Battle Tank and other combat vehicles to the Army Acquisition Objective (AAO) in accordance with the Basis of Issue Plan (BOIP). In addition, the program supports new and emerging urgent requirements like the integration of the Mine Resistant Ambush Protected (MRAP) family of vehicles, Ground Combat Vehicles, Joint Lightweight Tactical Vehicles (JLTV) and fixed site mounting systems. | | | | | | | | | | | | |
| 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 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 0604601A: <i>Infantry Support Weapons</i> | | | | | | PROJECT S64: <i>Common Remotely Operated Wpn Sys (CROWS)</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 |
| Program Management | MIPR | PM Soldier Weapons:Picatinny Arsenal, NJ | 0.000 | 0.053 | Sep 2012 | - | | 1.012 | Jan 2014 | - | | 1.012 | Continuing | Continuing | 0.000 |
| User Community/ Proponency | MIPR | Maneuver Support Center of Excellence (MSCoE):FT Leonard Wood, MO | 0.000 | - | | - | | 0.983 | Jan 2014 | - | | 0.983 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.053 | | 0.000 | | 1.995 | | 0.000 | | 1.995 | | | 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 |
| Design, Develop and Fabricate | SS/ FFPLOE | TBD Contractor:TBD | 0.000 | - | | - | | 9.867 | Jun 2014 | - | | 9.867 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.000 | | 0.000 | | 9.867 | | 0.000 | | 9.867 | | | 0.000 |
| Remarks Contractor for this effort will be the winner of the full and open competitive contract, scheduled for award 4QFY2012 for production and sustainment. | | | | | | | | | | | | | | | |
| 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 |
| Engineering Support | MIPR | ARDEC:Picatinny Arsenal, NJ | 0.000 | 0.103 | Sep 2012 | - | | 2.150 | Jan 2014 | - | | 2.150 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.103 | | 0.000 | | 2.150 | | 0.000 | | 2.150 | | | 0.000 |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | | | PROJECT S64: <i>Common Remotely Operated Wpn Sys (CROWS)</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 |
| Test Planning and Execution | Various | Various:Multiple | 0.000 | 0.017 | Oct 2012 | - | | 0.852 | Jan 2014 | - | | 0.852 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.017 | | 0.000 | | 0.852 | | 0.000 | | 0.852 | | | 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 | 0.173 | 0.000 | 14.864 | 0.000 | 14.864 | | | 0.000 |

Remarks

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT S64: <i>Common Remotely Operated Wpn Sys (CROWS)</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 |
| Design, Develop & Fabricate | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Engineering Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Engineering Development - Increased Elevation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development Test & Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development Test & Evaluation - Increased Elevation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Program Management | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Program Management - Increased Elevation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milestone C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low Rate Initial Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S64: <i>Common Remotely Operated Wpn Sys (CROWS)</i> | |

Schedule Details

| Events | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Design, Develop & Fabricate | 3 | 2014 | 2 | 2018 |
| Engineering Development | 2 | 2014 | 2 | 2018 |
| Engineering Development - Increased Elevation | 4 | 2012 | 2 | 2013 |
| Development Test & Evaluation | 2 | 2014 | 2 | 2018 |
| Development Test & Evaluation - Increased Elevation | 1 | 2013 | 1 | 2013 |
| Program Management | 2 | 2014 | 4 | 2018 |
| Program Management - Increased Elevation | 4 | 2012 | 2 | 2013 |
| Milestone C | 2 | 2018 | 2 | 2018 |
| Low Rate Initial Production | 2 | 2018 | 4 | 2018 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S70: Personnel Recovery Support System (PRSS) | | | |
| 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 |
| S70: Personnel Recovery Support System (PRSS) | - | 2.965 | 4.517 | 1.132 | - | 1.132 | 1.104 | 1.141 | 1.193 | 1.193 | 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 This project provides the continued maturation of PRSS products that enable operations to report and locate isolated, missing, detained or captured Soldiers. The PRSS program consists of the enhancement of existing products to ensure continued successful interoperability within the relevant theater of operations, and the demonstration of a prototype encrypted Personal Reporting Device (PRD) that operates over a secure architecture. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | FY 2012 | FY 2013 | FY 2014 | |
| Title: Development of Personnel Recovery Support System (PRSS) Articles: Description: Integration, evaluation, testing, and qualification of PRSS products to ensure continued successful interoperability within the relevant theater of operation, and development of a PRD that operates over a secure architecture. FY 2012 Accomplishments: Successfully completed developmental, operational, and OCONUS testing and validated PRSS system enhancements. Developed next-generation PRSS 1b software, firmware, and waveform and began developmental testing of prototype PRD and receiver. FY 2013 Plans: Complete development of prototype PRD and receiver and conduct PRSS 1b system level test and evaluation, including system integration. FY 2014 Plans: Complete PRSS 1b system level test and evaluation, to include end-to-end network testing and operational testing. | | | | | | | | | 2.965 | 4.517 | 1.132 | |
| | | | | | | | | | 0 | 0 | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | | 2.965 | 4.517 | 1.132 | |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT S70: Personnel Recovery Support System (PRSS) | | | |
| 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 |
| • Personnel Recovery Support Sys OPA: Other Procurement, Army, G01101-Personnel Recovery Support System (PRSS) | 8.509 | 11.222 | 26.526 | | 26.526 | 25.938 | 17.369 | 11.793 | 9.187 | Continuing | Continuing |
| • Aircrew Integrated Systems APA: Aircraft Procurement, Army AZ3110-ACIS includes funding of Personnel Recovery Support Equipment aircraft mods | 62.746 | 77.381 | 45.841 | | 45.841 | | | | | 0.000 | 185.968 |
| Remarks | | | | | | | | | | | |
| Aircraft Procurement, Army SSN of AZ3110 - ACIS primarily includes the funding of traditional Aircrew Integrated Systems efforts including Air Warrior and Air Soldier System requirements as well as support Personnel Recovery Support System (PRSS) platform interoperability production program. | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| Execute PRSS program development effort for performance optimization through contracts with industry and Military Interdepartmental Purchase Requests to other Governmental agencies. Perform continuing development and test of new waveforms on an annual basis to mitigate potential security compromises to the PRSS system. | | | | | | | | | | | |
| 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 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 0604601A: Infantry Support Weapons | | | | | | PROJECT S70: Personnel Recovery Support System (PRSS) | | | |
| 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 Administration | Allot | Various Government:Huntsville, Alabama | 0.243 | 0.338 | | 0.343 | | 0.285 | | - | | 0.285 | Continuing | Continuing | Continuing |
| Subtotal | | | 0.243 | 0.338 | | 0.343 | | 0.285 | | 0.000 | | 0.285 | | | |
| 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 |
| Personnel Recovery Support System Development Systems Engineering | SS/FP | Various:Product Development | 1.451 | 1.844 | | 3.347 | | 0.310 | | - | | 0.310 | Continuing | Continuing | Continuing |
| Subtotal | | | 1.451 | 1.844 | | 3.347 | | 0.310 | | 0.000 | | 0.310 | | | |
| 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 |
| Matrix Support | RO | Various Organizations:Various Locations | 0.389 | 0.583 | | 0.452 | | 0.337 | | - | | 0.337 | Continuing | Continuing | Continuing |
| Subtotal | | | 0.389 | 0.583 | | 0.452 | | 0.337 | | 0.000 | | 0.337 | | | |
| 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 |
| Developmental Testing | RO | Various Organizations:Various Locations | 0.400 | 0.200 | | 0.375 | | 0.200 | | - | | 0.200 | Continuing | Continuing | Continuing |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | | | PROJECT S70: <i>Personnel Recovery Support System (PRSS)</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 |
| Subtotal | | | 0.400 | 0.200 | | 0.375 | | 0.200 | | 0.000 | | 0.200 | | | |

| | 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 | 2.483 | 2.965 | 4.517 | 1.132 | 0.000 | 1.132 | | | |

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| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army | | | DATE: April 2013 | | |
| APPROPRIATION/BUDGET ACTIVITY | | | R-1 ITEM NOMENCLATURE | | |
| 2040: Research, Development, Test & Evaluation, Army | | | PE 0604601A: Infantry Support Weapons | | |
| BA 5: System Development & Demonstration (SDD) | | | PROJECT | | |
| | | | S70: Personnel Recovery Support System (PRSS) | | |

| | 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 |
| PRSS Upgrades & Adaptations to New Platforms | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT S70: <i>Personnel Recovery Support System (PRSS)</i> |

Schedule Details

| Events | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| PRSS Upgrades & Adaptations to New Platforms | 1 | 2015 | 4 | 2018 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT VS5: Soldier Protective Equipment | | | |
| 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 |
| VS5: Soldier Protective Equipment | - | 3.859 | 11.942 | 20.043 | - | 20.043 | 13.173 | 11.682 | 8.806 | 7.806 | 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 | | | | | | | | | | | | |
| This funding supports the System Development and Demonstration (SDD) phase of Engineering and Manufacturing Development (EMD) tasks related to Individual Soldier Ballistic Protection. It funds system integration and formal Developmental Testing/Operational Testing (DT/OT) of production representative systems leveraging advancements in technology to continue incremental improvements (sizing, functionality, heat management and reduction of weight/bulk) of body armor, and the transition of new technologies into production as they mature. It funds efforts to assess head protection component technologies to mitigate the effects of ballistic/blast and non-ballistic impact (crash) threats. It also funds effort to increase eyewear ballistic/blast protection, and transition products to production. | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| Title: Soldier Protective Equipment | | | | | | | | | | 3.859 | 11.942 | 20.043 |
| | | | | | | | | | | Articles: 0 | 0 | |
| Description: Funding line established in FY12. Effort was previously executed in Program Element 0604601 S60. Effort is to increase the Warfighter lethality and mobility, by optimizing Soldier protection while effectively managing all life cycle aspect of Personal Protective Equipment (PPE). | | | | | | | | | | | | |
| FY 2012 Accomplishments: Completed incremental enhancements to the Improved Outer Tactical Vest (IOTV) (soft armor subsystem) of Interceptor Body Armor (IBA) system and transitioned to production in FY12. Design enhancements included a more robust quick-release technology for improved functionality. Additionally the IOTV (Gen III) included other design features to improve comfort, mobility and functionality, especially to female and small statured Soldiers. Continued efforts to evaluate and test Family of Concealable Body Armor (FoCBA) system. Awarded FoCBA Increment 1 prototype contracts in March 12, and completed Limited User Evaluations and initiated system characterization testing in August 12. Initiated eyewear characterization testing (laser testing, penetration testing, fielding of view/area of coverage testing) to support FY13 Authorized Protective Eyewear List (APEL) and Qualified Products List (QPL) requalification. Initiated and completed the protective eyewear head form development. Head form will support ballistic testing of eyewear development and production acceptance testing. Initiated and completed the Enhanced Combat Helmet (ECH) qualification testing. Obtained a Type Classified Limited Procurement decision and transitioned the ECH | | | | | | | | | | | | |

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| 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 0604601A: Infantry Support Weapons | | | PROJECT VS5: Soldier Protective Equipment | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | FY 2012 | FY 2013 | FY 2014 | | |
| to production (OMA, 121017, Central Funding & Fielding) in June 12. Initiated and conducted Soldier Protection Benchmark Evaluation (SPBE), Phase I. | | | | | | | | | | | |
| FY 2013 Plans: Complete System Capability & Manufacturing Process Demonstration (SC&MPD) phase for the Family of Concealable Body Armor (FoCBA) in 1Q FY13. Obtain a Milestone C Decision Type Classification Standard and transition to production (OMA, 121017, Central Funding & Fielding) for the FOCBA in 2Q FY13. Obtain 1QFY13 Materiel Development Decision (MDD) and initiate System Capability & Manufacturing Process Demonstration (SC&MPD) phase for the Soldier Protective System (SPS). FY13 efforts will focus on contract awards to support the integration of SPS Vital Torso, Extremity, Torso and Integrated head, face and eye protective subsystems. Additional FY13 efforts will concentrate the integration of more mature Vital Torso, soft armor (torso and extremities) subsystems to enhance SPS form, fit and comfort for female and small statured Soldiers. Will award SPS prototyping contracts, conduct preliminary design reviews, and initiate Characterization Testing including the Phase II Soldier Protective Benchmark Evaluation and Soldier System Integration Exercise through 1Q FY14. Initiate APEL/QPL requalification program (including Universal Prescription Lens Carrier) in 1Q FY13 and complete APEL/QPL requalification by 1Q FY14 | | | | | | | | | | | |
| FY 2014 Plans: Initiate and complete Phase II Soldier Protective Benchmark Evaluation and Soldier System Integration Exercises in 1Q FY14. Complete APEL/QPL requalification program (including Universal Prescription Lens Carrier) by 1Q FY14. Continue Soldier Protective System (SPS) System Capability & Manufacturing Process Demonstration (SC&MPD) efforts. FY14 efforts will focus on the completion of Characterization Testing by 1QFY14, and awarding contract options to support continued refinement and integration (build-test-fix-build) of the SPS subsystems (Vital Torso, Torso Protection, Head Protection, Extremity Protection and Integrated Soldier Sensor Suite transitioned from Integrated System Design/VS 4). Conduct Critical Design Reviews and award contract options for formal Developmental Test (DT) hardware, Human Factors and System-Level test items. Conduct DT in 4Q FY14 through 1Q FY15. Support development of the SPS Capability Production Document and prepare for a Milestone C Decision (Type Classification - Low Rate Initial Production (OMA, 121017, Central Funding and Fielding)) by 2Q FY15. | | | | | | | | | | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | 3.859 | 11.942 | 20.043 | | |
| 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 |
| • VS4 6.4 RDTE: RDTE, 0603827A.VS4, Soldier Protective Equipment | 1.786 | 14.984 | 3.688 | | 3.688 | 7.243 | 4.756 | 6.270 | 7.150 | 0.000 | 45.877 |

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| 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 0604601A: Infantry Support Weapons | | | | PROJECT VS5: Soldier Protective Equipment | | | |
| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
| | | | <u>FY 2014</u> | <u>FY 2014</u> | <u>FY 2014</u> | | | | | <u>Cost To</u> | |
| <u>Line Item</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>Base</u> | <u>OCO</u> | <u>Total</u> | <u>FY 2015</u> | <u>FY 2016</u> | <u>FY 2017</u> | <u>FY 2018</u> | <u>Complete</u> | <u>Total Cost</u> |
| • OMA: OMA, 121017, Central Funding & Fielding | 67.248 | 73.639 | 103.484 | | 103.484 | 161.773 | 165.014 | 217.679 | 205.582 | 0.000 | 994.419 |
| Remarks | | | | | | | | | | | |
| D. Acquisition Strategy Acquisition strategies vary in methods to include the following: (1) Low Risk Enhancements in 12-24 months or less to integrate, validate and make a production decision; (2) modernization (through spares) improvements which require limited RDT&E funding and are completed in 24-48 months and inserted as engineering changes to existing or pending production contracts; and (3) fully integrated development that requires substantial RDT&E funding and is completed in four years or more. | | | | | | | | | | | |
| 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 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 0604601A: Infantry Support Weapons | | | | | | PROJECT VS5: Soldier Protective Equipment | | | |
| 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 |
| SETA Support | Various | PM SPE:various | 0.000 | 0.200 | | 0.300 | | 0.400 | | - | | 0.400 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.200 | | 0.300 | | 0.400 | | 0.000 | | 0.400 | | | 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 |
| Dev/Integ Contracts | Various | Various:Various | 0.000 | 1.276 | | 8.714 | | 15.197 | | - | | 15.197 | Continuing | Continuing | 0.000 |
| Prod Sys Engineering Spt | MIPR | various:various | 0.000 | 0.669 | | 0.928 | | 1.096 | | - | | 1.096 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 1.945 | | 9.642 | | 16.293 | | 0.000 | | 16.293 | | | 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 |
| Misc Support Costs | MIPR | Various:Various | 0.000 | 0.600 | | 0.600 | | 0.600 | | - | | 0.600 | 0.000 | 1.800 | 0.000 |
| Subtotal | | | 0.000 | 0.600 | | 0.600 | | 0.600 | | 0.000 | | 0.600 | 0.000 | 1.800 | 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 |
| DT/Ballistic & OT Test Costs | MIPR | Various DTC & OTC:Various DTC & OTC | 0.000 | 1.114 | | 1.400 | | 2.750 | | - | | 2.750 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 1.114 | | 1.400 | | 2.750 | | 0.000 | | 2.750 | | | 0.000 |
| Project Cost Totals | | | 0.000 | 3.859 | | 11.942 | | 20.043 | | 0.000 | | 20.043 | | | 0.000 |

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|---|--------------------|---------|---------|--|----------------|------------------|--|---------------|--------------------------------|--|
| 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 0604601A: Infantry Support Weapons | | | PROJECT VS5: Soldier Protective Equipment | | | |
| | 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 | |
| Remarks | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | | |
| | | | PROJECT VS5: <i>Soldier Protective Equipment</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 |
| Complete development of Family of Concealable Body Army (FoCBA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FoCBA Milestone C Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initiate/complete APEL/QPL requalification Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soldier Protection Bench Mark Evaluation & Sldr Sys Integr Exercise | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soldier Protection System (SPS) Material Development Decision (MDD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS Milestone B Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS System Capability & Manufacturing Process Dev (SC&MPD) phase of EMD | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Award SPS component/subsystem contracts | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS Critical Design Review (CDR) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conduct Initial Characterization Testing (ballistic & non-dest eval) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Award SPS components/subsystem contract options | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conduct Developmental Test (ballistic & non dest eval) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS Milestone C Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initiate SPS Incr/SC&MPD Improvements thru FY19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS system testing (ballistic & non ballistic; IOT&E) thru FY19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS CDRs/PRRs - Transition mature subsystems to production FY15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | PE 0604601A: Infantry Support Weapons | | | | | | | | | | VS5: Soldier Protective Equipment | | | | | | | | | | | | | | | | | | | | | |
| BA 5: System Development & Demonstration (SDD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 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 | | | | |
| SPS CDRs/PRRs - Transition mature subsystems to production FY16 | | | | | | | | | | <div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS CDRs/PRRs - Transition mature subsystems to production FY17 | | | | | | | | | | <div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPS CDRs/PRRs - Transition mature subsystems to production FY18 | | | | | | | | | | <div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 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 0604601A: <i>Infantry Support Weapons</i> | PROJECT VS5: <i>Soldier Protective Equipment</i> | |

Schedule Details

| Events | Start | | End | |
|---|----------------|-------------|----------------|-------------|
| | Quarter | Year | Quarter | Year |
| Complete development of Family of Concealable Body Army (FoCBA) | 1 | 2013 | 1 | 2013 |
| FoCBA Milestone C Decision | 2 | 2013 | 2 | 2013 |
| Initiate/complete APEL/QPL requalification Program | 1 | 2013 | 1 | 2014 |
| Soldier Protection Bench Mark Evaluation & Sldr Sys Integr Exercise | 4 | 2013 | 1 | 2014 |
| Soldier Protection System (SPS) Material Development Decision (MDD) | 2 | 2013 | 2 | 2013 |
| SPS Milestone B Decision | 2 | 2013 | 2 | 2013 |
| SPS System Capability & Manufacturing Process Dev (SC&MPD) phase of EMD | 2 | 2013 | 1 | 2015 |
| Award SPS component/subsystem contracts | 3 | 2014 | 3 | 2014 |
| SPS Critical Design Review (CDR) | 2 | 2014 | 2 | 2014 |
| Conduct Initial Characterization Testing (ballistic & non-dest eval) | 1 | 2014 | 1 | 2015 |
| Award SPS components/subsystem contract options | 3 | 2014 | 3 | 2014 |
| Conduct Developmental Test (ballistic & non dest eval) | 4 | 2014 | 1 | 2015 |
| SPS Milestone C Decision | 2 | 2015 | 2 | 2015 |
| Initiate SPS Incr/SC&MPD Improvements thru FY19 | 3 | 2015 | 4 | 2018 |
| SPS system testing (ballistic & non ballistic; IOT&E) thru FY19 | 1 | 2016 | 4 | 2018 |
| SPS CDRs/PRRs - Transition mature subsystems to production FY15 | 3 | 2015 | 3 | 2015 |
| SPS CDRs/PRRs - Transition mature subsystems to production FY16 | 3 | 2016 | 3 | 2016 |
| SPS CDRs/PRRs - Transition mature subsystems to production FY17 | 3 | 2017 | 3 | 2017 |
| SPS CDRs/PRRs - Transition mature subsystems to production FY18 | 3 | 2018 | 3 | 2018 |