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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 0604808A: Landmine Warfare/Barrier - Eng Dev | | | | | | | |
| 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 | - | 73.955 | 104.971 | 92.285 | - | 92.285 | 50.603 | 16.400 | 4.000 | 4.000 | Continuing | Continuing |
| 415: Mine Neutral/Detection | - | 65.228 | 90.861 | 65.085 | - | 65.085 | 33.218 | 12.000 | 4.000 | 4.000 | Continuing | Continuing |
| 434: Anti-Personnel Landmine Alternatives (NSD) | - | 8.727 | 14.110 | 27.200 | - | 27.200 | 17.385 | 4.400 | 0.000 | 0.000 | 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 | | | | | | | | | | | | |
| FY12: Difference from previous President's Budget (FY 2013) to Current BES/President's Budget (FY 2014) are the adjustments for the Small Business Innovation Research (SBIR), SBIR Technology Transfer Research (STTR), and Federal Funded Research and Development Centers (FFRDC). | | | | | | | | | | | | |
| FY 2014: Budget supports Project 415, Mine Neutral/Detection and Project 434, Anti-Personnel Landmine Alternatives (NSD). | | | | | | | | | | | | |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | | |
| This program element (PE) provides for the technology development and demonstration of networked munitions, countermine systems, and counter improvised explosive devices. This PE implements the National Landmine Policy to develop alternatives to the non-self-destructing anti-vehicle and anti-personnel landmine systems. | | | | | | | | | | | | |
| Project 016, Close Combat Capabilities Engineering Development, provided for the development of the anti-vehicle mine replacement, in accordance with landmine policy. A more cost effective anti-vehicular capability will be developed under a Spider Increment IA program starting in FY 2012. | | | | | | | | | | | | |
| Project 415, Mine Neutralization/Detection provides for development of next generation standoff detection capability programs such as Husky Mounted Detection System (HMDS), Route Clearance & Interrogation System (RCIS), Vehicle Optics Sensor System (VOSS), Route Clearance Vehicles (RCV), Multi-Function Display (MFD), development of interface kits and the Autonomous Mine Detection System (AMDS). It also supports development of training devices for Military Working Dogs involved in mine/Improvised Explosive Device (IED) detection and Explosive Hazard Pre-Detonation (EHP) capability to neutralize/detonate a broad spectrum of improvised explosive hazards while on the move, to support the route clearance mission. | | | | | | | | | | | | |
| Project 434, Spider Networked Munitions (NM) is an integrated system of effects (lethal and non-lethal Anti Personnel (AP), existing anti-vehicle (AV) munition), software, and communications. The Spider system is a hand emplaced, remotely controlled (Man-In-The Loop) system that provides highly responsive terrain-shaping and protection capabilities. Spider Inc 1 replaces persistent anti-personnel landmines, is compliant with US National Landmine policy, and has been fielded to Afghanistan. Spider Inc 1A will build upon the existing Spider system, develop additional capabilities to enhance the Spider Remote Control Station and demonstrate the ability to employ legacy Government-Off-The-Shelf (GOTS) lethal and non-lethal AP, lethal AV munitions, and the Spider Non-Lethal Launcher (NLL). | | | | | | | | | | | | |

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army | | | | DATE: April 2013 | | |
| APPROPRIATION/BUDGET ACTIVITY | | R-1 ITEM NOMENCLATURE | | | | |
| 2040: Research, Development, Test & Evaluation, Army | | PE 0604808A: Landmine Warfare/Barrier - Eng Dev | | | | |
| BA 5: System Development & Demonstration (SDD) | | | | | | |
| B. Program Change Summary (\$ in Millions) | | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total |
| Previous President's Budget | | 76.248 | 104.983 | 67.977 | - | 67.977 |
| Current President's Budget | | 73.955 | 104.971 | 92.285 | - | 92.285 |
| Total Adjustments | | -2.293 | -0.012 | 24.308 | - | 24.308 |
| • Congressional General Reductions | | - | - | | | |
| • Congressional Directed Reductions | | - | - | | | |
| • Congressional Rescissions | | - | - | | | |
| • Congressional Adds | | - | - | | | |
| • Congressional Directed Transfers | | - | - | | | |
| • Reprogrammings | | - | - | | | |
| • SBIR/STTR Transfer | | - | - | | | |
| • Adjustments to Budget Years | | -2.293 | - | 24.308 | - | 24.308 |

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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 0604808A: Landmine Warfare/Barrier - Eng Dev | | | | PROJECT 415: Mine Neutral/Detection | | | |
| 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 |
| 415: Mine Neutral/Detection | - | 65.228 | 90.861 | 65.085 | - | 65.085 | 33.218 | 12.000 | 4.000 | 4.000 | Continuing | Continuing |
| Quantity of RDT&E Articles | | | | | | | | | | | | |

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

This Project provides for Engineering Manufacturing and Development (EMD) for the next generation of capabilities to detect, identify and neutralize explosive hazards such as Improvised Explosive Devices (IEDs) and landmines. These capabilities are a Family of Systems (FOS) encompassing handheld, vehicle mounted, small robotic mounted, aerial platform mounted and area clearance systems operating in manned, remotely controlled, semi-autonomous or fully autonomous modes. Continued development of this FOS is necessary to support Route Clearance Platoons located within both Engineer Companies, and Brigade Combat Teams.

The Husky Mounted Detection System (HMDS) is a mission equipment package mounted on Husky route clearance vehicles in support of Route Clearance Platoons. The HMDS provides a Ground Penetrating Radar (GPR) to detect surface-laid and shallow-buried explosive hazards, including landmines and improvised explosive devices (IEDs); a large-loop metal detector for deep-buried detection (DBD) of metallic explosive hazards and caches; a semi-autonomous control payload for the Husky vehicle and its detection payloads; and associated training devices.

The Route Clearance & Interrogation System (RCIS) is a two vehicle system plus designated control vehicles which provides a standoff capability to detect and neutralize the full spectrum of explosive hazards using semi-autonomous, teleoperated controls on the existing base vehicles of the High Mobility Engineering Excavator (HMEE) and the RG31. RCIS Type 1 will be based on the HMEE and be capable of interrogating and classifying explosive hazards. RCIS Type 2 will be based on the RG-31 and be able to detect, neutralize and proof explosive hazards. RCIS capabilities will be employed on Route Clearance Squads and Engineer Platoons. Beginning in FY 2013, funding will also be used for interoperability and comparative testing to support a letter of sufficiency for the MTRS Inc II program.

The Vehicle Optics Sensor System (VOSS) provides a telescoping, gyro-stabilized, high-resolution, triple sensor (daylight, night-vision, and thermal-imaging) surveillance system to optically detect from standoff distances, explosive hazards (IEDs and landmines) and their trigger sources. VOSS is mounted on Medium Mine Protected Vehicles (MMPV) and the Joint EOD Rapid Response Vehicle (JERRV) located within Route Clearance Platoons and Explosive Ordinance Disposal (EOD) Companies.

The Multi-Function Display (MFD) provides view/control capability of the enablers (Interrogation Arms, VOSS, Man Transportable Robotic System, Drivers Vision Enhancement, Vehicle Situational Awareness Cameras) in the Medium Mine Protected Vehicle (MMPV) to all Operators. New capabilities will be added into that display to view and control future Unmanned Ground Vehicle Systems (UGVs) programs Route Clearance & Integration System (RCIS) and Husky Mounted Detection System (HMDS) and view Unmanned Aerial Vehicles video feeds. Additional software will need to be developed to add these capabilities. In addition, a new capability

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| to push the video feeds of all of the enablers (Interrogation Arms, VOSS, Man Transportable Robotic System, Drivers Vision Enhancement, Vehicle Situational Awareness Cameras) from various vehicles within a Route Clearance Patrol will be developed. | | | | | |
| The following Route Clearance Vehicles (RCV) enablers will require a full system integration design cycle to ensure suitability and compatibility with various RCV's: - Wire Neutralization System on the Medium Mine Protected Vehicle (MMPV) Type II - Debris Blower on the Buffalo Mine Protected Clearance Vehicle (MPCV) - RCIS on the MMPV Type I & II and Buffalo MPCV - HMDS on the Husky and MMPV Type I & II - An interface kit (A-Kit) for all RCVs for the next generation Add-on-Armor (AoA) kits. - MMPV Type II ROLLER/WNS kits - Husky WNS - Storage optimization | | | | | |
| The Military Working Dogs (MWD) will fund development of training devices and a worldwide deployable kennel for transporting/housing of the animals involved in explosive hazard detection and qualification of new explosive scents as part of kits procured. | | | | | |
| Explosive Hazard Pre-Detonation (EHP) capability to include a roller, debris blower, and Wire Neutralization System (WNS) to neutralize/detonate a broad spectrum of improvised explosive hazards while on the move, to support route clearance mission. | | | | | |
| Autonomous Mine Detection System (AMDS) provides mine and explosive hazards stand-off detection, marking and neutralization capability for the dismounted soldier. AMDS consists of payload modules to be mounted on man-portable unmanned ground vehicles. The payloads are for surface laid and buried threats to include mines and explosive hazards. AMDS will transition from Technical Development to Engineering and Manufacturing Development (EMD) in FY 2013. | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | FY 2012 | FY 2013 | FY 2014 |
| Title: AMDS | | | 0.000 | 14.445 | 21.335 |
| Articles: | | | | 0 | |
| Description: AMDS | | | | | |
| FY 2013 Plans: Program documentation preparation, pre-Engineering and Manufacturing Development (EMD) In-Process Review (IPR), and Milestone (MS) B. | | | | | |
| FY 2014 Plans: EMD Contract Award, Preliminary Design Review (PDR). | | | | | |
| Title: HMDS Program of Record (POR) and HMDS Increment A GPR Testing. | | | 36.580 | 40.522 | 8.250 |

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| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 | FY 2014 |
| Articles: Description: HMDS POR Activities. FY 2012 Accomplishments: HMDS Materiel Development Decision (MDD). Pre-EMD review for Increment A. Pre-award activities for Increment A. Testing of individual sensors. FY 2013 Plans: HMDS Increment A: Source selection and contract award for EMD. HMDS Increment B: Risk reduction effort for semi-autonomous payload. FY 2014 Plans: Contract and other activities for HMDS Increment A GPR Testing. | | 0 | 0 | |
| Title: HMDS Increment A GPR Type Classification and Materiel Release. Description: HMDS Increment A GPR Type Classification and Materiel Release. FY 2014 Plans: Contract for Increment A GPR data and logistics / complete type classification and materiel release activites. | | 0.000 | 0.000 | 9.350 |
| Title: HMDS Increment A Development / Integration of DBD and Training Devices. Description: HMDS Increment A Development / Integration of DBD and Training Devices. FY 2014 Plans: Increment A contract for integration and testing of Deep Buried Detection (DBD) sensor and DBD Trainer with existing urgently fielded GPR and GPR Trainer. Pre-award activities for Increment B contract. | | 0.000 | 0.000 | 17.300 |
| Title: HMDS Increment B Integration of Semi-autonomous Control. Description: HMDS Increment B Integration of Semi-autonomous Control. FY 2014 Plans: Pre-award activities for Increment B. | | 0.000 | 0.000 | 2.000 |
| Title: Military Working Dog Support. Articles: | | 0.703 0 | 0.000 | 0.000 |

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| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | FY 2012 | FY 2013 | FY 2014 |
| Description: Military Working Dog Support. | | | | | |
| FY 2012 Accomplishments: Military Working Dog Support Equipment - Engineering Support & Testing. | | | | | |
| Title: Military Working Dog Kit Development. | | | 0.326 | 0.000 | 0.000 |
| Articles: | | | 0 | | |
| Description: FY 2011 Military Working Dog Kit Development. | | | | | |
| FY 2012 Accomplishments: FY 2012 Military Working Dog Kit Development. | | | | | |
| Title: Military Working Dog Program Mgmt. Support. | | | 0.220 | 0.000 | 0.000 |
| Articles: | | | 0 | | |
| Description: FY2011: Military Working Dog Support. | | | | | |
| FY 2012 Accomplishments: Military Working Dog - Program Mgmt. | | | | | |
| Title: AMPS MDD and MS B Preparation. | | | 7.719 | 0.000 | 0.000 |
| Articles: | | | 0 | | |
| Description: AMPS MDD and MS B Preparation. | | | | | |
| FY 2012 Accomplishments: AMPS MDD and MS B Preparation. | | | | | |
| Title: EHP | | | 9.956 | 21.300 | 0.000 |
| Articles: | | | 0 | 0 | |
| Description: FY 2012: EHP Contract Award. | | | | | |
| FY 2012 Accomplishments: EHP Contract Award. | | | | | |
| FY 2013 Plans: | | | | | |

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| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | FY 2012 | FY 2013 | FY 2014 |
| EHP Debris Blower and Wire Neutralization System (WNS) Technical Insertion Contract Awards. | | | | |
| <div>Title: RCIS</div> <div>Articles:</div> <div>Description: FY 2012: RCIS MDD, Program Documentation Prep.</div> <div>FY 2012 Accomplishments: RCIS MDD, Program Documentation Prep.</div> <div>FY 2013 Plans: RCIS MDD, Program Documentation Prep.</div> <div>FY 2014 Plans: MS B Preparation and Contract Award and Interoperability, Man Transportable Robotic Systems (MTRS) Increment II production verification and limited user testing.</div> | | 5.364 0 | 7.960 0 | 3.100 |
| <div>Title: Multifunctional Display (MFD).</div> <div>Description: Multifunctional Display (MFD).</div> <div>FY 2014 Plans: MFD Prototype Development.</div> | | 0.000 | 0.000 | 3.300 |
| <div>Title: Interface Kits.</div> <div>Description: Interface Kits.</div> <div>FY 2014 Plans: Prototype Development, LRIP and LRIP testing.</div> | | 0.000 | 0.000 | 0.450 |
| <div>Title: VOSS MDD & Milestone C Prep.</div> <div>Articles:</div> <div>Description: VOSS MDD & Milestone C Prep.</div> <div>FY 2012 Accomplishments: VOSS MDD & Milestone C prep.</div> <div>FY 2013 Plans:</div> | | 4.360 0 | 5.862 0 | 0.000 |

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| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | FY 2012 | FY 2013 | FY 2014 | |
| Spec Development, plot build & test. and sustainment planning in preparation for Milestone C. | | | | | | | | | | | |
| Title: Interrogation Arms. Description: Interrogation Arms. FY 2013 Plans: Integration & Testing Verification. | | | | | | | | Articles: 0.000 | 0.772 0 | 0.000 | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | 65.228 | 90.861 | 65.085 | |
| 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 |
| • 606: <i>Countermines/Barrier Advanced Dev</i> | 16.399 | 5.054 | 10.625 | | 10.625 | 20.225 | 7.150 | 2.500 | 2.500 | Continuing | Continuing |
| • R68102: <i>GSTAMIDS</i> | 14.078 | | 50.465 | | 50.465 | 83.976 | 88.264 | 132.958 | 151.347 | Continuing | Continuing |
| • MA7700: <i><\$5M, Countermines Equipment</i> | 7.352 | 3.698 | 4.271 | | 4.271 | 4.581 | 3.760 | 3.826 | | Continuing | Continuing |
| Remarks | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | |
| <p>AMDS, HMDS, RCIS, A-Kits, AMPS and MWD will all be competitively solicited to the maximum extent possible for contract awards projected in FY 2012-2014. EHP Roller, Debris Blower and Wire Neutralization System technology insertion effort is intended to meet the Explosive Hazards Pre-detonation KSA and KPP requirements. AMDS is currently a technology development effort and will transition to Engineering Manufacturing Development in FY 2013.</p> <p>The HMDS acquisition strategy is evolutionary with two increments. Increment A consists of two configurations, (1) GPR only, leveraging rapid acquisition investment currently supporting Operation Enduring Freedom (OEF), and (2) GPR with an integrated Deep Buried Detection (DBD) capability and associated GPR and DBD training devices. These two configurations may be fielded independently and on non-concurrent timelines. Increment B consists of an integrated semi-autonomous control payload for remote operation of the Husky vehicle and Increment A payloads.</p> <p>VOSS will transition to a procurement funded program in FY2014. PM Ground Sensors is pursuing a two phase acquisition approach which harvests Quick Reaction Capability (QRC) procured systems for refresh and insertion into the Program of Record (POR), followed by a full and open procurement for the remaining systems.</p> | | | | | | | | | | | |

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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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | | | | | PROJECT 415: <i>Mine Neutral/Detection</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 - HMDS & AMDS | MIPR | PM-CCS:Picatinny Arsenal, NJ | 11.154 | 13.221 | Sep 2013 | 5.327 | | 3.745 | Mar 2014 | - | | 3.745 | Continuing | Continuing | 0.000 |
| MFD | MIPR | Various:Various | 0.000 | - | | - | | - | | - | | - | 0.930 | 0.930 | 0.930 |
| Interface Kits | MIPR | Various:Various | 0.000 | - | | - | | - | | - | | - | 0.100 | 0.100 | 0.100 |
| Subtotal | | | 11.154 | 13.221 | | 5.327 | | 3.745 | | 0.000 | | 3.745 | | | 1.030 |
| 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 |
| AMDS | TBD | TBD:TBD | 0.000 | - | | 8.886 | | 15.401 | Dec 2014 | - | | 15.401 | Continuing | Continuing | Continuing |
| HMDS | TBD | TBD:TBD | 0.000 | 6.990 | Jun 2013 | 18.380 | Jun 2013 | - | | - | | - | 0.000 | 25.370 | 0.000 |
| HMDS Inc A - Integration with DBD and Training Devices | C/CPFF | TBD:TBD | 0.000 | - | | - | | 12.100 | Mar 2014 | - | | 12.100 | 0.000 | 12.100 | 0.000 |
| HMDS | C/FFP | EOIR:Fredericksburg, Virginia | 0.000 | 0.500 | Jul 2012 | - | | - | | - | | - | 0.000 | 0.500 | 0.000 |
| HMDS Inc A GPR Data and Logisitcs Activities | C/FFP | TBD:TBD | 0.000 | - | | - | | 6.850 | Mar 2014 | - | | 6.850 | 0.000 | 6.850 | 0.000 |
| HMDS | C/CPFF | Fibertek:Herndon, Virginia | 0.000 | 0.300 | Jul 2012 | - | | - | | - | | - | 0.000 | 0.300 | 0.000 |
| HMDS | C/CPFF | DCS:Alexandria, Virginia | 0.000 | 0.845 | Jun 2012 | - | | - | | - | | - | 0.000 | 0.845 | 0.000 |
| HMDS Inc A GPR Testing | C/FFP | TBD:TBD | 0.000 | - | | - | | 4.750 | Mar 2014 | - | | 4.750 | 0.000 | 4.750 | 0.000 |
| HMDS | C/CPFF | CACI:Chantilly, Virginia | 0.000 | 0.520 | Jul 2012 | - | | - | | - | | - | 0.000 | 0.520 | 0.000 |
| MWD | C/CPFF | S3:Huntsville, Al | 1.300 | 0.326 | Sep 2012 | - | | - | | - | | - | Continuing | Continuing | Continuing |
| AMPS | C/CPFF | TBD:TBD | 0.000 | 6.572 | May 2012 | - | | - | | - | | - | Continuing | Continuing | Continuing |
| EHP Debris Blower/WNS | C/CPFF | TBD:TBD | 0.000 | - | | 16.300 | | - | | - | | - | Continuing | Continuing | 0.000 |
| RCIS | C/CPFF | TBD:TBD | 0.000 | 4.878 | May 2012 | 8.936 | Jul 2014 | - | | - | | - | Continuing | Continuing | Continuing |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army | | | | | | | | | | | | DATE: April 2013 | | | |
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| 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 |
| Interface Kits | C/CPFF | TBD:TBD | 0.000 | - | | - | | 0.450 | May 2014 | - | | 0.450 | 1.830 | 2.280 | 1.830 |
| Multi Functional Display | C/CPFF | TBD:TBD | 0.000 | - | | - | | 3.300 | May 2014 | - | | 3.300 | 3.045 | 6.345 | 3.045 |
| VOSS | C/CPFF | Various:Ft. Belvoir, VA | 0.000 | 0.670 | Mar 2012 | 0.600 | | - | | - | | - | Continuing | Continuing | Continuing |
| EHP Roller | C/CPFF | TBD:TBD | 0.000 | 8.061 | May 2013 | - | | - | | - | | - | 0.000 | 8.061 | 0.000 |
| Subtotal | | | 1.300 | 29.662 | | 53.102 | | 42.851 | | 0.000 | | 42.851 | | | |
| 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 |
| AMDS | MIPR | Various:Various | 0.000 | - | | 3.270 | | 2.950 | Mar 2014 | - | | 2.950 | Continuing | Continuing | Continuing |
| HMDS | MIPR | NVESD/CECOM:Fort Belvoir, VA | 0.000 | 5.452 | Feb 2012 | 15.700 | | 1.300 | Mar 2014 | - | | 1.300 | Continuing | Continuing | 0.000 |
| HMDS | MIPR | ATEC:MD | 0.000 | 2.000 | Jun 2013 | - | | - | | - | | - | 0.000 | 2.000 | 0.000 |
| HMDS | MIPR | Joint Products Office (JPO) Robotics Systems:Warren, MI | 0.000 | 1.994 | Mar 2013 | - | | 1.500 | Jan 2014 | - | | 1.500 | 0.000 | 3.494 | 0.000 |
| HMDS | MIPR | TARDEC:Warren, MI | 0.000 | 0.545 | Jun 2012 | - | | 0.400 | Jan 2014 | - | | 0.400 | 0.000 | 0.945 | 0.000 |
| HMDS | MIPR | Various:Various locations | 0.000 | 2.290 | Jul 2012 | - | | 0.900 | Jan 2014 | - | | 0.900 | 0.000 | 3.190 | 0.000 |
| HMDS | MIPR | ARDEC:Picatinny Arsenal, NJ | 0.000 | 0.861 | Feb 2013 | - | | 0.400 | Jan 2014 | - | | 0.400 | 0.000 | 1.261 | 0.000 |
| HMDS | MIPR | PEO STRI:FL | 0.000 | 0.835 | Jul 2013 | - | | - | | - | | - | 0.000 | 0.835 | 0.000 |
| Military Working Dogs | MIPR | Various:Various | 0.000 | 0.703 | Jan 2013 | - | | - | | - | | - | 0.000 | 0.703 | 0.000 |
| EHP | MIPR | PM AMS:Warren, MI | 0.000 | 1.145 | Apr 2013 | 3.000 | | - | | - | | - | Continuing | Continuing | 0.000 |
| MFD | MIPR | PM AMS:Warren, MI | 0.000 | - | | - | | - | | - | | - | 0.705 | 0.705 | 0.705 |
| AMPS | MIPR | Various:Various | 0.000 | 0.772 | | - | | - | | - | | - | Continuing | Continuing | 0.000 |
| IA | MIPR | TBD:TBD | 0.000 | - | | 0.600 | | - | | - | | - | Continuing | Continuing | 0.000 |
| RCIS | MIPR | RSJPO:Warren, MI | 0.000 | 0.350 | | - | | 0.900 | Jun 2014 | - | | 0.900 | Continuing | Continuing | 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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | | | | | PROJECT 415: <i>Mine Neutral/Detection</i> | | | |
| Support (\$ in Millions) | | | | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Interface Kits | MIPR | Various:Various | 0.000 | - | | - | | - | | - | | - | 0.380 | 0.380 | 0.380 |
| VOSS | MIPR | NVESD/CECOM:Fort Belvoir, VA | 0.000 | 2.922 | | - | | - | | - | | - | Continuing | Continuing | 0.000 |
| RCIS Interoperability | MIPR | RSJPO:Warren, MI | 0.000 | - | | - | | 1.000 | Jan 2014 | - | | 1.000 | 0.000 | 1.000 | 0.000 |
| VOSS | MIPR | Various:Various | 0.000 | 0.768 | Mar 2012 | 1.608 | | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 0.000 | 20.637 | | 24.178 | | 9.350 | | 0.000 | | 9.350 | | | |
| 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 |
| AMDS | MIPR | TBD:TBD | 0.000 | - | | - | | 1.239 | Mar 2014 | - | | 1.239 | 0.000 | 1.239 | 0.000 |
| HMDS | MIPR | ATEC:Alexandria, VA | 0.000 | 0.362 | Oct 2012 | 3.000 | | 6.700 | Mar 2014 | - | | 6.700 | Continuing | Continuing | Continuing |
| AMDS | MIPR | ATEC:Alexandria, VA | 0.000 | - | | 0.850 | | - | | - | | - | Continuing | Continuing | Continuing |
| MWD | MIPR | ATEC:Alexandria, VA | 0.050 | 0.085 | Jun 2013 | - | | - | | - | | - | 0.000 | 0.135 | 0.000 |
| AMPS | MIPR | ATEC:Alexandria, VA | 0.000 | 0.375 | | - | | - | | - | | - | 0.000 | 0.375 | 0.000 |
| EHP | MIPR | ATEC:APG, MD | 0.000 | 0.750 | Mar 2013 | 1.250 | | - | | - | | - | Continuing | Continuing | Continuing |
| MFD | MIPR | ATEC:APG, MD | 0.000 | - | | - | | - | | - | | - | 1.620 | 1.620 | 1.620 |
| RCIS | MIPR | ATEC:Alexandria, VA | 0.000 | 0.136 | | - | | 1.200 | | - | | 1.200 | 0.000 | 1.336 | 0.000 |
| VOSS | MIPR | ATEC:Alexandria, VA | 0.000 | - | | 3.154 | | - | | - | | - | Continuing | Continuing | Continuing |
| Subtotal | | | 0.050 | 1.708 | | 8.254 | | 9.139 | | 0.000 | | 9.139 | | | |

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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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | | | | PROJECT 415: <i>Mine Neutral/Detection</i> | | | |
| | 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 | 12.504 | 65.228 | | 90.861 | | 65.085 | | 0.000 | | 65.085 | | | |
| 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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | |
| | | | PROJECT 415: <i>Mine Neutral/Detection</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 |
| HMDS Material Development Decision (MDD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment A - MS B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Critical Design Review (CDR) Inc A | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Limited User Testing (LUT) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment A GPR - MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment B - MS B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment A - MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment B - MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment A - Full Rate Production Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment B - Full Rate Production Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment A - FUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HMDS Increment B - FUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EHP | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EHP Roller Material Development Decision (MDD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EHP Roller MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EHP Roller Low Rate Initial Production (LRIP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EHP Roller Full Rate Production (FRP) Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VOSS Material Development Decision (MDD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VOSS MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RCIS Material Development Decision (MDD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RCIS MS B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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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 0604808A: Landmine Warfare/Barrier - Eng Dev | | | | | | | | | PROJECT 415: Mine Neutral/Detection | | | | | | | | | | |
| | 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 |
| RCIS Engin and Mftg. Devel.Contract Award | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RCIS MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RCIS Low Rate Initial Production (LRIP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MFD Prototype Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MFD Low Rate Initial Production (LRIP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MFD Testing | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MFD Full Rate Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prototype Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low Rate Initial Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LRIP Testing | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Full Rate Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMDS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMDS Milestone B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMDS Preliminary Design Review (PDR) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMDS Critical Design Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMDS Milestone C LRIP | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMDS Full Rate Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MWD Full Rate Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: *Research, Development, Test & Evaluation, Army*
BA 5: *System Development & Demonstration (SDD)*

R-1 ITEM NOMENCLATURE

PE 0604808A: *Landmine Warfare/Barrier - Eng Dev*

PROJECT

415: *Mine Neutral/Detection*

Schedule Details

| Events | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| HMDS Material Development Decision (MDD) | 2 | 2012 | 2 | 2012 |
| HMDS Increment A - MS B | 4 | 2013 | 4 | 2013 |
| HMDS Critical Design Review (CDR) Inc A | 3 | 2014 | 3 | 2014 |
| HMDS Limited User Testing (LUT) | 3 | 2015 | 3 | 2015 |
| HMDS Increment A GPR - MS C | 4 | 2014 | 4 | 2014 |
| HMDS Increment B - MS B | 2 | 2015 | 2 | 2015 |
| HMDS Increment A - MS C | 3 | 2015 | 3 | 2015 |
| HMDS Increment B - MS C | 4 | 2016 | 4 | 2016 |
| HMDS Increment A - Full Rate Production Decision | 4 | 2016 | 4 | 2016 |
| HMDS Increment B - Full Rate Production Decision | 1 | 2018 | 1 | 2018 |
| HMDS Increment A - FUE | 3 | 2017 | 3 | 2017 |
| HMDS Increment B - FUE | 3 | 2018 | 3 | 2018 |
| EHP | 3 | 2012 | 3 | 2012 |
| EHP Roller Material Development Decision (MDD) | 2 | 2013 | 2 | 2013 |
| EHP Roller MS C | 3 | 2014 | 3 | 2014 |
| EHP Roller Low Rate Initial Production (LRIP) | 4 | 2014 | 4 | 2014 |
| EHP Roller Full Rate Production (FRP) Decision | 2 | 2015 | 2 | 2015 |
| VOSS Material Development Decision (MDD) | 2 | 2013 | 2 | 2013 |
| VOSS MS C | 2 | 2014 | 2 | 2014 |
| RCIS Material Development Decision (MDD) | 3 | 2013 | 3 | 2013 |
| RCIS MS B | 3 | 2014 | 3 | 2014 |
| RCIS Engin and Mftg. Devel.Contract Award | 1 | 2015 | 1 | 2015 |

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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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | PROJECT 415: <i>Mine Neutral/Detection</i> |
| | | Start | | End |
| Events | Quarter | Year | Quarter | Year |
| RCIS MS C | 4 | 2016 | 4 | 2016 |
| RCIS Low Rate Initial Production (LRIP) | 4 | 2017 | 4 | 2018 |
| MFD Prototype Development | 1 | 2014 | 4 | 2014 |
| MFD Low Rate Initial Production (LRIP) | 1 | 2015 | 1 | 2015 |
| MFD Testing | 2 | 2015 | 4 | 2015 |
| MFD Full Rate Production | 1 | 2016 | 1 | 2016 |
| Prototype Development | 1 | 2014 | 3 | 2015 |
| Low Rate Initial Production | 2 | 2014 | 3 | 2015 |
| LRIP Testing | 4 | 2014 | 4 | 2015 |
| Full Rate Production | 2 | 2015 | 2 | 2016 |
| AMDS | 4 | 2013 | 1 | 2014 |
| AMDS Milestone B | 4 | 2013 | 4 | 2013 |
| AMDS Preliminary Design Review (PDR) | 3 | 2014 | 3 | 2014 |
| AMDS Critical Design Review | 1 | 2015 | 1 | 2015 |
| AMDS Milestone C LRIP | 3 | 2016 | 3 | 2016 |
| AMDS Full Rate Production | 4 | 2017 | 4 | 2017 |
| MWD Full Rate Production | 4 | 2013 | 4 | 2013 |

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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 0604808A: Landmine Warfare/Barrier - Eng Dev | | | | PROJECT 434: Anti-Personnel Landmine Alternatives (NSD) | | | |
| 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 |
| 434: Anti-Personnel Landmine Alternatives (NSD) | - | 8.727 | 14.110 | 27.200 | - | 27.200 | 17.385 | 4.400 | 0.000 | 0.000 | Continuing | Continuing |
| Quantity of RDT&E Articles | | | | | | | | | | | | |
| # FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012 | | | | | | | | | | | | |
| ## The FY 2014 OCO Request will be submitted at a later date | | | | | | | | | | | | |
| A. Mission Description and Budget Item Justification | | | | | | | | | | | | |
| Spider Networked Munitions (NM) is an integrated system of effects (lethal and non-lethal Anti Personnel (AP), existing anti-vehicle (AV) munition), software, and communications. The Spider system is a hand emplaced, remotely controlled (Man-In-The Loop) system that provides highly responsive terrain-shaping and protection capabilities. Spider Inc 1 replaces persistent anti-personnel landmines, is compliant with US National Landmine policy, and has been fielded to Afghanistan. Spider Inc 1A will build upon the existing Spider system, develop additional capabilities to enhance the Spider Remote Control Station and demonstrate the ability to employ legacy Government-Off-The-Shelf (GOTS) lethal and non-lethal AP, lethal AV munitions, and the Spider Non-Lethal Launcher (NLL). | | | | | | | | | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| Title: Spider Increment 1A and Spider NLL Development Contracts Articles: Description: Develop NM Increment 1A Controller with the ability to employ/control and initiate AP & legacy AV munitions. Continue with the development of the Spider NLL for use with the Spider Inc 1A system. FY 2012 Accomplishments: Awarded NLL Development Contract. FY 2013 Plans: FY13 Spider Increment 1A pre Engineering Manufacturing and Development (EMD) contract development efforts to support 3QFY13 contract award. Continue with the development of the Spider NLL for use with the Spider Inc 1A system, and type classification for limited procurement. FY 2014 Plans: Continue with Spider Increment 1A EMD development efforts. | | | | | | | | | | 0.667 | 10.511 | 19.500 |
| | | | | | | | | | | 0 | 0 | |
| | | | | | | | | | | | | |
| Title: Engineering Support Articles: | | | | | | | | | | 5.065 | 3.050 | 4.882 |
| | | | | | | | | | | 0 | 0 | |
| Description: Perform engineering support. | | | | | | | | | | | | |

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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 0604808A: Landmine Warfare/Barrier - Eng Dev | PROJECT 434: Anti-Personnel Landmine Alternatives (NSD) | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | FY 2012 | FY 2013 | FY 2014 |
| FY 2012 Accomplishments: Support development of Capability Development Document, Pre-EMD and Milestone B documentation, development/issuance of procurement package (SOW, Performance Requirements Document, etc) and conduct of Industry Day. Support RFP negotiations and award of NLL contract. | | | | | |
| FY 2013 Plans: Support development of Capability Development Document, Pre-EMD and Milestone B documentation, development of procurement package (SOW, Performance Requirements Document, etc), and engineering support to award EMD/LRIP Option contract. Continue to support NLL development. | | | | | |
| FY 2014 Plans: Continue development of the Spider Inc 1A system. Provide engineering support, conduct Preliminary Design Review and Post-PDR Assessment, provide MANPRINT and HFE support to contractor Developmental Testing. | | | | | |
| Title: Test and Evaluation Articles: Description: Provide support to Contractor/Government test activities (Contractor DT, Pre Log Demo, FDTE, and Pre-LUT activities). | | | 0.050 0 | 0.000 | 0.975 |
| FY 2012 Accomplishments: AMSAA provided technical and testing support for the development of milestone documents. | | | | | |
| FY 2014 Plans: Provide support to Contractor/Government test activities (Contractor DT, Pre Log Demo, FDTE, User Jury, Technical Interchange Meetings, and Pre-LUT activities). | | | | | |
| Title: PM Management and Oversight Articles: Description: Program Management and support Spider NM Increment 1A. | | | 0.593 0 | 0.549 0 | 1.100 |
| FY 2012 Accomplishments: Perform program management to support acquisition activities, program execution, Pre-EMD and Milestone B documentation, and conduct of Industry Day. Continue to support NLL development. | | | | | |
| FY 2013 Plans: | | | | | |

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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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | | | PROJECT 434: <i>Anti-Personnel Landmine Alternatives (NSD)</i> | | | | |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | | | | | | | | FY 2012 | FY 2013 | FY 2014 |
| Perform program management to support acquisition activities, program execution, Milestone B documentation, and program management support to award EMD/LRIP Option contract. Support and complete NLL development.. | | | | | | | | | | | | |
| FY 2014 Plans: Perform overall program management support for the execution of the Spider Inc 1A development effort. | | | | | | | | | | | | |
| Title: FY12-14 Reductions | | | | | | | | | | 2.352 | 0.000 | 0.743 |
| Articles: | | | | | | | | | | 0 | | |
| Description: Small Business Innovative Research/Small Business Technology Transfer Program (SBIR/STTR) and Federally Funded Research & Development Centers (FFRDC) Reductions | | | | | | | | | | | | |
| FY 2012 Accomplishments: FY12 reductions are \$239K in SBIR & STTR and \$14K in FFRDC. Withhold funding from ABO \$2099K. | | | | | | | | | | | | |
| FY 2014 Plans: Projected FY14 reductions are \$743K in SBIR & STTR. | | | | | | | | | | | | |
| Accomplishments/Planned Programs Subtotals | | | | | | | | | | 8.727 | 14.110 | 27.200 |
| 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 | |
| • Spider Network Munitions: PAA <i>Spider Increment 1 Program</i> | 43.123 | 17.408 | | | | | | | | 0.000 | 60.531 | |
| • Spider - APLA Remote Control Unit: OPA2 Spider Increment 1 <i>Program B55501</i> | 36.224 | 34.365 | | | | | | | | 0.000 | 70.589 | |
| • Spider Family Of Networked Munition: OPA2 Spider Increment <i>1A Program B54020</i> | | | | | | 7.200 | 18.500 | 13.500 | | 0.000 | 39.200 | |
| Remarks | | | | | | | | | | | | |
| D. Acquisition Strategy | | | | | | | | | | | | |
| The Spider program is being developed as an incremental effort. The strategy will address all Spider requirements in the Requirements Document. The base Spider program meets US National Landmine Policy for Anti Personnel (AP) and is currently fielded in Afghanistan. Increment 1A will build upon the existing Spider system, develop additional capabilities to enhance the Spider Remote Control Station and demonstrate the ability to employ legacy Government-Off-The-Shelf (GOTS) lethal | | | | | | | | | | | | |

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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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | PROJECT 434: <i>Anti-Personnel Landmine Alternatives (NSD)</i> |
| and non-lethal AP, lethal anti-vehicle (AV) munitions, and the Spider Non-Lethal Launcher (NLL). The Engineering Manufacturing Development (EMD) contract will be a competitive contract with one Low Rate Initial Production (LRIP) option. | | |
| 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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | | | | | PROJECT 434: <i>Anti-Personnel Landmine Alternatives (NSD)</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 |
| Spider - Program Mgmt | Various | PM-CCS,:Picatinny Arsenal, NJ | 0.000 | 0.593 | | 0.549 | | 1.100 | | - | | 1.100 | Continuing | Continuing | 0.000 |
| SBIR/STTR, FFRDC and ABO FY12- Reductions | Various | PM CCS,:Picatinny Arsenal, NJ | 0.000 | 2.352 | | - | | 0.743 | | - | | 0.743 | 0.000 | 3.095 | 0.000 |
| Subtotal | | | 0.000 | 2.945 | | 0.549 | | 1.843 | | 0.000 | | 1.843 | | | 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 |
| Spider Non-Lethal Launcher (FY12) | C/CPIF | Alliant Techsystems Operations, LLC:Plymouth, MN | 0.000 | 0.667 | Sep 2012 | - | | - | | - | | - | 0.000 | 0.667 | 0.000 |
| Spider Inc 1A (FY13-14) | C/CPIF | Alliant Techsystems Operations, LLC:Plymouth, MN | 0.000 | - | | 10.511 | May 2013 | 19.500 | Feb 2014 | - | | 19.500 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.667 | | 10.511 | | 19.500 | | 0.000 | | 19.500 | | | 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 |
| Spider - Eng support | MIPR | ARDEC,:Picatinny Arsenal, NJ | 0.000 | 3.063 | | 2.000 | | 2.759 | | - | | 2.759 | Continuing | Continuing | 0.000 |
| Spider - Eng support | MIPR | Various,:Various | 0.000 | - | | 0.200 | | 0.565 | | - | | 0.565 | Continuing | Continuing | 0.000 |
| Spider - Non Lethal Launcher Eng Spt | MIPR | ARDEC,:Picatinny Arsenal, NJ | 0.000 | 0.650 | | - | | - | | - | | - | 0.000 | 0.650 | 0.000 |
| Mitre provide C4 Support | MIPR | Mitre,:McLean, VA | 0.000 | 0.830 | | 0.650 | | 0.780 | | - | | 0.780 | Continuing | Continuing | 0.000 |
| Spider - Contractor Engineering Support | Various | Various,:Various | 0.000 | 0.463 | | 0.200 | | 0.678 | | - | | 0.678 | Continuing | Continuing | 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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | | | | | PROJECT 434: <i>Anti-Personnel Landmine Alternatives (NSD)</i> | | | |

| Support (\$ in Millions) | | | | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | | | | | |
|--------------------------------------|------------------------|--------------------------------|-----------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------|-------|------------------|------------|--------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Spider Increment 1A Training Support | MIPR | PEO STRI:Orlando, FL | 0.000 | 0.050 | | - | | 0.050 | | - | | 0.050 | | 0.000 | 0.100 | 0.000 | |
| MANPRINT/HFE Support | MIPR | ARL HRED:Adelphi, MD | 0.000 | 0.009 | | - | | 0.050 | | - | | 0.050 | | 0.000 | 0.059 | 0.000 | |
| Subtotal | | | 0.000 | 5.065 | | 3.050 | | 4.882 | | 0.000 | | 4.882 | | | | 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 | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Support Contractor/ Government Test Activities | MIPR | OTC ,AMSAA, AEC, ATEC:Various | 0.000 | 0.050 | | - | | 0.975 | | - | | 0.975 | | 0.000 | Continuing | Continuing | 0.000 |
| Subtotal | | | 0.000 | 0.050 | | 0.000 | | 0.975 | | 0.000 | | 0.975 | | | | | 0.000 |

| | | | | | | | | | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Remarks Not Applicable | | | | | | | | | | | | | | | | | |
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| | | | 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 | 8.727 | | 14.110 | | 27.200 | | 0.000 | | 27.200 | | | 0.000 |

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| Remarks | | | | | | | | | | | | | | | | | |
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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 0604808A: *Landmine Warfare/Barrier - Eng Dev*

PROJECT

434: *Anti-Personnel Landmine Alternatives (NSD)*

| | 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 |
| Industry Day | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pre-EMD Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RFP | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Source Selection | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MS B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contract Award | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spider Increment 1A Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contractor DT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Government DT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LUT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MS C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initial Operational Test | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Full Rate Production Decision | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initial Operational Capability | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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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 0604808A: <i>Landmine Warfare/Barrier - Eng Dev</i> | PROJECT 434: <i>Anti-Personnel Landmine Alternatives (NSD)</i> | |

Schedule Details

| Events | Start | | End | |
|---------------------------------|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Industry Day | 3 | 2012 | 3 | 2012 |
| Pre-EMD Review | 1 | 2013 | 1 | 2013 |
| RFP | 1 | 2013 | 1 | 2013 |
| Source Selection | 2 | 2013 | 3 | 2013 |
| MS B | 2 | 2013 | 2 | 2013 |
| Contract Award | 3 | 2013 | 3 | 2013 |
| Spider Increment 1A Development | 3 | 2013 | 4 | 2015 |
| Contractor DT | 2 | 2014 | 1 | 2015 |
| Government DT | 2 | 2015 | 4 | 2015 |
| LUT | 3 | 2015 | 3 | 2015 |
| MS C | 4 | 2015 | 4 | 2015 |
| Initial Operational Test | 4 | 2016 | 4 | 2016 |
| Full Rate Production Decision | 2 | 2017 | 2 | 2017 |
| Initial Operational Capability | 3 | 2017 | 3 | 2017 |