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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	36.826	89.661	66.943	-	66.943	72.844	69.613	61.511	96.155	Continuing	Continuing
ES9: <i>Advanced Tactical Parachute System</i>	-	0.000	0.000	1.487	-	1.487	5.709	10.020	3.528	1.851	0.000	22.595
EW4: <i>Crew Served Weapons Engineering Development</i>	-	0.000	0.000	14.447	-	14.447	15.566	14.270	14.689	25.838	Continuing	Continuing
S58: <i>Soldier Enhancement Program</i>	-	3.212	15.554	6.776	-	6.776	6.197	6.337	6.476	6.607	Continuing	Continuing
S60: <i>Clothing & Equipment</i>	-	2.422	5.980	10.166	-	10.166	7.814	5.593	7.813	9.414	Continuing	Continuing
S61: <i>Acis Engineering Development</i>	-	1.742	3.463	3.811	-	3.811	3.849	3.840	1.897	1.749	Continuing	Continuing
S62: <i>Counter-Defilade Target Engagement - SDD</i>	-	11.945	21.077	10.862	-	10.862	10.895	2.487	0.000	2.000	Continuing	Continuing
S63: <i>Small Arms Improvement</i>	-	11.172	23.084	11.801	-	11.801	15.169	10.833	10.844	23.848	Continuing	Continuing
S64: <i>Common Remotely Operated Wpn Sys (CROWS)</i>	-	1.164	4.076	4.331	-	4.331	3.354	8.962	8.351	15.826	0.000	46.064
S70: <i>Personnel Recovery Support System (PRSS)</i>	-	0.522	1.252	1.121	-	1.121	1.137	1.149	1.176	1.051	Continuing	Continuing
VS5: <i>Soldier Protective Equipment</i>	-	4.647	15.175	2.141	-	2.141	3.154	6.122	6.737	7.971	Continuing	Continuing

A. Mission Description and Budget Item Justification

Fiscal Year (FY) 2016 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.

Project ES9 (Advanced Tactical Parachute System) supports efforts to improve Static Line (SL) and Military Free Fall (MFF) personnel parachutes and associated equipment to include canopy improvements based on integration of new technology with the goal of enhancing the insertion capability of the airborne soldier and increasing the performance, safety and durability of personnel airdrop equipment.

UNCLASSIFIED

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<p>Project EW4 (Crew Served Weapons Engineering) supports efforts 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.</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 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 area 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. Programs include Improved Weapons Coatings, Personal Defense Weapon, 30 Round 5.56mm Magazine, Modular Handgun and Precision Sniper Rifle.</p> <p>Project S64 (CROWS) continues enhancing CROWS capability and reliability to increase its application across combat and tactical platforms. This capability enhances 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> <p>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.</p>		

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B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	34.575	74.128	72.273	-	72.273
Current President's Budget	36.826	89.661	66.943	-	66.943
Total Adjustments	2.251	15.533	-5.330	-	-5.330
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	2.251	15.533	-5.330	-	-5.330

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: S63: *Small Arms Improvement*

Congressional Add: *New Weapons Congressional Add*

Congressional Add: *Small Arms Weapons Enhancements Congressional Add*

Congressional Add: *Combat Optics Congressional Add*

Congressional Add Subtotals for Project: S63

Congressional Add Totals for all Projects

	FY 2015	FY 2016
	4.875	-
	0.700	-
	1.085	-
Congressional Add Subtotals for Project: S63	6.660	-
Congressional Add Totals for all Projects	6.660	-

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) ES9 / <i>Advanced Tactical Parachute System</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
ES9: <i>Advanced Tactical Parachute System</i>	-	0.000	0.000	1.487	-	1.487	5.709	10.020	3.528	1.851	0.000	22.595
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding line established in FY17 for the Advanced Tactical Parachute System. Efforts were previously executed in Program Element 0604601A S60.

A. Mission Description and Budget Item Justification

This funding supports engineering and manufacturing development tasks related to Static Line (SL) and Military Free Fall (MFF) personnel parachutes and auxiliary equipment with the goal of enhancing the insertion capability of the airborne soldier and increasing the performance, safety and durability of personnel airdrop equipment. Funds improvements and testing/evaluation of personnel parachute systems. Includes integration and interface on the Soldier system.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Advanced Tactical Parachute System	-	-	1.487
Description: Funds are a new Project established in FY17. Efforts were previously executed in Program Element 0604601A S60.			
FY 2017 Plans: Efforts include enhanced capabilities transition from ET8 to include DT/OT, and purchasing contract data requirements for the Enhanced Electronic Automatic Activation Device (E/EAAD) for use with the RA-1 Advanced Ram Air Parachute System. Complete DT/OT for PARANAVSYS. Develop and test T-11 design and pack changes, develop Technical Manual (TM) updates and Modification Work Order (MWO) for the T-11R ripcord redesign. Prove out enhanced capability transitioned from ET8 to ensure viability in modernizing airdrop equipment across the airdrop portfolio to optimize parachutes and ancillary equipment for static line and military free fall parachutists.			
Accomplishments/Planned Programs Subtotals	-	-	1.487

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• OPA, MA7801 ATPS: <i>Advanced Tactical Parachute System</i>	25.996	26.088	16.611	-	16.611	18.860	24.610	26.890	22.040	0.000	161.095
• RDTE, 643827ET8: <i>Personnel Airdrop System Development</i>	-	-	0.690	-	0.690	0.500	0.400	0.300	-	0	1.890

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Army	Date: February 2016
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) ES9 / <i>Advanced Tactical Parachute System</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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Remarks

D. Acquisition Strategy

Acquisition strategies for these programs vary in methods, and range from: 1) Material Change programs that result in engineering changes to existing systems to; 2) traditional development programs that include an Engineering and Manufacturing Development phase ranging in duration from 12 to 48 months, depending on the level of complexity and testing required.

E. Performance Metrics

N/A

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) ES9 / <i>Advanced Tactical Parachute System</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
Prove out enhanced capabilities trans from ET8 to include DT/OT																												
E/EAAD Operational Testing																												
(1) Enhanced EAAD MS C																												
PARANAVSYS DT/OT																												
(2) PARANAVSYS MS C																												
(3) Military Altimeter MS B																												
Military Altimeter Testing																												
(4) Military Altimeter MS C																												
Parachutists Oxygen Delivery System Testing																												
(5) Parachutists Oxygen Delivery System MS C																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) ES9 / <i>Advanced Tactical Parachute System</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Prove out enhanced capabilities trans from ET8 to include DT/OT	1	2017	4	2021
E/EAAD Operational Testing	1	2018	3	2018
Enhanced EAAD MS C	4	2018	4	2018
PARANAVSYS DT/OT	1	2017	2	2017
PARANAVSYS MS C	3	2017	3	2017
Military Altimeter MS B	4	2018	4	2018
Military Altimeter Testing	1	2019	3	2020
Military Altimeter MS C	1	2021	1	2021
Parachutists Oxygen Delivery System Testing	3	2018	4	2019
Parachutists Oxygen Delivery System MS C	1	2020	1	2020

UNCLASSIFIED

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Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
EW4: <i>Crew Served Weapons Engineering Development</i>	-	0.000	0.000	14.447	-	14.447	15.566	14.270	14.689	25.838	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding line established in FY17 for the Crew Served Weapons Engineering Development. Efforts were previously executed in Program Elements 0603827A S54 and 0604601A S63.

New Starts in FY 2017 include Next Generation Squad Automatic Rifle (NGSAR), Gunner Integrated Protection and Restraint System (GIPRS), Increased Barrel Life/ Replace Chrome, Advanced Fire Control with Hyperspectral Target.

A. Mission Description and Budget Item Justification

The Crew Served Weapons 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. Crew Served Weapons 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, usability, 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 (to include human-systems), 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)

	FY 2015	FY 2016	FY 2017
Title: New Weapons	-	-	5.682
Description: Development of new crew served weapons			
FY 2017 Plans: FY17 New Start. Transition of technologies from Program Element 0603827A S54: Next Generation Squad Automatic Rifle (NGSAR): Will work to coordinate and develop the Capability Development Document (CDD), Acquisition Strategy, Capability Production Document (CPD), and provide data from various technologies to better inform stakeholders. M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS): Will complete operational and limited user test activities to obtain Type Classification and Full Material Release.			

UNCLASSIFIED

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
Precision Sniper Rifle (PSR): Will continue to work in conjunction with SOCOM to 1) support development, acquisition and qualification of primary PSR anti-personnel ammunition and 2) perform acquisition and qualification efforts for PSR anti-materiel ammunition. Both rounds are necessary as a precursor for acquisition efforts slated in FY18 related to source selection activities of a new multi-caliber PSR weapon.				
<p>Title: Crew Served Weapons Enhancements</p> <p>Description: Enhancements and developments of Crew Served weapons</p> <p>FY 2017 Plans: The Gunner Integrated Protection and Restraint System (GIPRS): Will improve the force protection, survivability, and effectiveness of the gunner and exposed crew by addressing capability gaps associated with open hatch operations in armored vehicles when exposed to enemy fires. The system integrates the Objective Gunner Protection Kit (OGPK), and Gunner Restraint System (GRS), fielded separately in support of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). GIPRS improves current and future armored vehicles by providing the Army with an adaptive gunner and exposed crew protection capability, integrating the current inventory of machine guns, close combat missile systems, and target acquisition sensors.</p> <p>FY2017 New Start Increased Barrel Life: Transition of technologies from Program Element 0603827A Project S54. Will complete refinement of drawing and specification package, build full length barrels for final qualification and safety confirmation testing. Will perform testing at a Government facility.</p> <p>Compact Semi-Automatic Sniper System (CSASS): Will conduct operational assessments and evaluations with a Limited User Test (LUT) as well as airborne drop testing . Will complete Scoring Conference activities prior to release of the Operational Test Agency Milestone Assessment Report (OMAR). Complete provisioning activities and National Stock Number (NSN) assignment. Complete all documentation and prepare for MS-C /TC STD, Full Rate Production, and Full Material Release decisions in FY17.</p> <p>Individual Non-Lethal System: Will continue to test and evaluate technology and fine tune requirements and ensure all planning documentation is accurate and complete.</p> <p>Sniper Upgrades: Will perform feasibility, analysis of alternatives, and cost benefit analysis studies for various fire control and supporting precision enablers to include Shot Counter for Reliability and Maintainability (SCRAM) and cross wind sensing technologies. SCRAM is a system that collects a weapon's shock profile that is translated into diagnostic data to provide life cycle prognosis on individual weapon maintenance. It will increase a weapon life span and reduce maintenance cost and supports Condition Based Maintenance (CBM). Will also conduct barrel studies for improvements to reliability and accuracy that can be gained through new barrel materials and geometrics.</p>		-	-	5.150

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
Weapon Upgrades and Accessories: Test, evaluate and analyze ongoing and new activities to enhance Crew Served Weapons.				
<p>Title: Ammunition</p> <p>Description: Improvement of Crew Served Weapons Ammunition</p> <p>FY 2017 Plans: XM1112 Airburst Non-Lethal Munition (ANLM): Complete type classification and transition to Project Manager Close Combat Systems.</p> <p>Ammunition Upgrades: Will continue to test, evaluate and analyze the effect of current and new ammunition on Crew Served Weapons. Specific focus on alignment of requirements between crew served fire control and 40mm air burst munition.</p>		-	-	0.100
<p>Title: Combat Optics</p> <p>Description: Improvement of Combat Optics</p> <p>FY 2017 Plans: Mounted Machinegun Optic: Will continue staffing Capability Production Document (CPD) towards final approval and preparation for MDD for Program of Record. Will continue to finalize TEMP, Acquisition Strategy/Acquisition Plan, and PRR for program execution. Work to prepare Procurement package, plan and develop Request for Proposals for down select. Contract award for initial source selection and down select.</p> <p>Optic Upgrades: Will continue engineering evaluations, verification and validation of weapon optics performance requirements.</p>		-	-	0.500
<p>Title: Fire Control</p> <p>Description: Improvement of Crew Served Weapons fire control.</p> <p>FY 2017 Plans: Advanced Fire Control with Hyperspectral Target: Will continue to assess, evaluate and test manufacturability and fire control system integration. Will continue to conduct technical evaluations to determine if Advanced Hyperspectral Target Acquisition (AHTA) should be integrated within an Optics Suite of a Vehicle Mounted Weapon System (e.g. Common Remotely Operated Weapon System) or within the Optics of a Dismounted Weapon System or both.</p>		-	-	2.915

UNCLASSIFIED

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Advanced Fire Control with Precision Projectile/Dynamic: Will continue to support integration of component advanced tracking technologies. Will continue efforts to include initial integration of technologies including Contracting, System Requirements Review, System Functional Review, and preparations for Preliminary Design Review (PDR).			
Small Arms Fire Control - Precision (SAFC-P): Will continue leveraging previously developed Sniper Rifle Fire Control (SRFC)/ Integrated Ballistic Reticle System (IBRS): Will continue efforts to tailor and qualify IBRS technology in order to address Fire Control System for Precision accuracy requirements identified in the Small Arms Fire Control Capability Development Document (CDD).			
Small Arms Fire Control - Crew Served (SAFC-C): Will develop CDD for SAFC-CS.			
Fire Control Upgrades: Will continue to test, evaluate, and analyze ongoing and new activities to enhance crew served weapons fire control.			
Title: Research and Analysis Description: Market Research and Cost Benefit Analysis FY 2017 Plans: Will continue Market Research and Cost Benefit Analysis of new small arms weapon and/or enhancements for engineering and manufacturing development.	-	-	0.100
Accomplishments/Planned Programs Subtotals	-	-	14.447

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• Advanced Development: <i>RDTE S54, Program Element 0603827A - Soldier Systems</i>	-	-	10.554	-	10.554	7.285	7.377	7.472	15.421	Continuing	Continuing
• Precision Sniper Rifle: <i>WTCV, G015060, Precision Sniper Rifle</i>	-	-	-	-	-	3.147	9.840	15.732	13.502	Continuing	Continuing
• Sniper Rifle MODS: <i>WTCV, GZ1500, Sniper Rifle MODS</i>	-	-	0.971	-	0.971	1.488	1.984	1.488	2.481	Continuing	Continuing

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>
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C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• M249 SAW MODS: <i>WTCV, GZ1290, M249 Squad Automatic Weapon (SAW) MODS</i>	-	-	1.179	-	1.179	1.179	1.179	1.181	-	0	4.718
• M240 Medium Machine Gun MODS: <i>WTCV, GZ1300, M240 Medium Machine Gun MODS</i>	-	-	1.784	-	1.784	1.931	1.938	1.966	0.992	Continuing	Continuing
• MK-19 Grenade Machine Gun MODS: <i>WTCV, GB3000, MK-19 Grenade Machine Gun MODS</i>	-	-	4.959	-	4.959	5.061	5.161	5.263	14.985	Continuing	Continuing
• M2 .50 CAL Heavy Machine Gun MODS: <i>WTCV, GB4000, M2 .50 CAL Heavy Machine Gun MODS</i>	-	-	48.582	-	48.582	37.013	42.936	11.703	10.916	Continuing	Continuing
• XM153 CROWS: <i>WTCV, G04700, XM153 CROWS</i>	-	-	25.164	-	25.164	12.265	8.247	-	-	0	45.676
• Modifications Less Than \$5.0M: <i>WTCV, GC0925, Modifications Less Than \$5.0M</i>	-	-	3.157	-	3.157	3.462	3.468	3.489	3.521	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 Crew Served Weapons Engineering Development, Project EW4, 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

N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>							
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.000	-		-		0.668	Mar 2017	-		0.668	Continuing	Continuing	Continuing
Travel	MIPR	PM Soldier Weapons, : Picatinny Arsenal	0.000	-		-		0.133	Mar 2017	-		0.133	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.801		-		0.801	-	-	-
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	Various	Various : Multiple Contractors	0.000	-		-		0.593	Mar 2017	-		0.593	Continuing	Continuing	Continuing
Hardware Development	MIPR	Army Research Development Engineers Centers : Multiple	0.000	-		-		0.074	Mar 2017	-		0.074	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.667		-		0.667	-	-	-
Remarks															
593															
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.000	-		-		8.730	Mar 2017	-		8.730	Continuing	Continuing	Continuing
Logistics	MIPR	TACOM, : Warren	0.000	-		-		0.269	Mar 2017	-		0.269	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604601A / Infantry Support Weapons				EW4 / Crew Served Weapons Engineering Development							
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Human Research and Engineering	MIPR	Army Research Laboratory, : Aberdeen Proving Ground	0.000	-		-		0.269	Mar 2017	-		0.269	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		9.268		-		9.268	-	-	-
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.000	-		-		1.365	Mar 2017	-		1.365	Continuing	Continuing	Continuing
Operational Testing	MIPR	Army Test and Evaluation Command, : Aberdeen Proving Ground	0.000	-		-		2.077	Mar 2017	-		2.077	Continuing	Continuing	Continuing
Validation Testing	MIPR	Army Test and Evaluation Centers, : Multiple	0.000	-		-		0.269	Mar 2017	-		0.269	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		3.711		-		3.711	-	-	-
Project Cost Totals			0.000	-		0.000		14.447		-		14.447	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
NEW WEAPONS																												
Next Generation Squad Automatic Rifle (NGSAR)																												
M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS)																												
Precision Sniper Rifle (PSR)																												
CREW SERVED WEAPON ENHANCEMENTS																												
Gunner Integrated Protection and Restraint System (GIPRS)																												
Increased Barrel Life																												
Compact Semi-Automatic Sniper System (CSASS)																												
Individual Non-Lethal System																												
Sniper Upgrades																												
Weapons Upgrades and Accessories																												
AMMUNITION																												
XM1112 Airburst Non-Lethal Munition (ANLM)																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
Ammunition Upgrades																												
COMBAT OPTICS																												
Mounted Machinegun Optic																												
Optic Upgrades																												
FIRE CONTROL																												
Advanced Fire Control with Hyperspectral Target																												
Advanced Fire Control with Precision Projectile/Dynamic																												
Small Arms Fire Control - Precision																												
Smal Arms Fire Control - Crew Served																												
Fire Control Upgrades																												
RESEARCH AND ANALYSIS																												
Research and Analysis																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NEW WEAPONS	1	2017	4	2021
Next Generation Squad Automatic Rifle (NGSAR)	1	2017	4	2021
M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS)	1	2017	4	2017
Precision Sniper Rifle (PSR)	1	2017	3	2020
CREW SERVED WEAPON ENHANCEMENTS	1	2017	4	2021
Gunner Integrated Protection and Restraint System (GIPRS)	1	2017	4	2018
Increased Barrel Life	1	2017	4	2021
Compact Semi-Automatic Sniper System (CSASS)	1	2017	4	2018
Individual Non-Lethal System	1	2017	4	2020
Sniper Upgrades	1	2017	4	2021
Weapons Upgrades and Accessories	1	2017	4	2021
AMMUNITION	1	2017	4	2021
XM1112 Airburst Non-Lethal Munition (ANLM)	1	2017	4	2017
Ammunition Upgrades	1	2017	4	2021
COMBAT OPTICS	1	2017	4	2021
Mounted Machinegun Optic	1	2017	4	2018
Optic Upgrades	1	2017	4	2021
FIRE CONTROL	1	2017	4	2021
Advanced Fire Control with Hyperspectral Target	1	2017	4	2019
Advanced Fire Control with Precision Projectile/Dynamic	1	2017	4	2019
Small Arms Fire Control - Precision	1	2017	4	2021
Smal Arms Fire Control - Crew Served	1	2017	4	2021

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) EW4 / <i>Crew Served Weapons Engineering Development</i>

Events	Start		End	
	Quarter	Year	Quarter	Year
Fire Control Upgrades	1	2017	4	2021
RESEARCH AND ANALYSIS	1	2017	4	2021
Research and Analysis	1	2017	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S58: <i>Soldier Enhancement Program</i>	-	3.212	15.554	6.776	-	6.776	6.197	6.337	6.476	6.607	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

The Soldier Enhancement Program (SEP) was established by the National Defense Authorization Acts for Fiscal Years 1990 and 1991. The purpose of the SEP is to evaluate Commercial Off the Shelf/Government Off the Shelf/Non-Developmental Items (COTS/GOTS/NDI) that have the potential to increase the combat effectiveness of the Soldier. SEP uses a buy, try and decide methodology to support accelerated evaluation, integration, modernization, and enhancement efforts for lighter, more lethal weapons, and improved Soldier items including lighter, more comfortable load-bearing equipment, field gear, survivability items, communications equipment, and navigational aids. Proposals are submitted by Soldiers and others at any time, and are reviewed for approval twice a year by the SEP Council of Colonels (COC). Approved proposals are validated by G/3/5/7 and become SEP initiatives that are evaluated by Soldiers. The process, to include a completed evaluation report is completed within 12 months. The RDT&E funding is used for Soldier evaluations, evaluation planning and documentation of results.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Soldier Enhancement Program (SEP) Evaluations	2.715	5.048	6.255
Description: Procured and evaluated COTS/GOTS/NDI items that has the potential to enhance Soldier combat effectiveness.			
FY 2015 Accomplishments: Evaluated 23 approved initiatives. Evaluations included safety testing, collection, and analysis of user feedback/results.			
FY 2016 Plans: Funding will support evaluation of approximately 68 initiatives. Product evaluations will include safety testing, collection, and analysis of user feedback/results and documentation of results.			
FY 2017 Plans: Funding will support evaluation of approximately 30 new initiatives. Evaluations will include safety testing, collection, and analysis of user feedback/results and documentation of results.			
Title: Soldier Enhancement Program Evaluations	-	10.000	-
Description: Additional funding will support evaluation of SEP initiatives.			
FY 2016 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Additional funding will support evaluation of approximately 41 initiatives. Product evaluations will include safety testing, collection, and analysis of user feedback/results and documentation of results.			
Title: Systems Engineering and Program Management.	0.497	0.506	0.521
Description: Systems Engineering and Program Management.			
FY 2015 Accomplishments: The SEP team received incoming proposals, submitted via the SEP Web application (http://peosoldier.army.mil/SEP). Coordinated with industry/TRADOC to ensure proposals satisfied user needs and were COTS/GOTS/NDI solutions which could be readily purchased and evaluated. Conducted two Council of Colonels and prepared documentation for Army G-3/5/7 validation. Proposals determined to be SEP initiatives completed an evaluation and received a recommendation to either inform a requirement, transition to an existing Program of Record or was included in the GSA and/or DLA catalogs for future procurements.			
FY 2016 Plans: The SEP team will continue to receive and review incoming proposals. Coordination with industry/TRADOC to ensure that submitted proposals satisfy user needs. Evaluated SEP initiatives will receive a recommendation to either inform a requirement, transition to an existing Program of Record or be included in the GSA and/or DLA catalogs for future procurements.			
FY 2017 Plans: The SEP team will continue to receive and review incoming proposals. Coordination with industry and TRADOC to ensure submitted proposals will continue to satisfy needs. Evaluated SEP initiatives will receive a recommendation to either inform a requirement, transition to an existing Program of Record or be included in the GSA and/or DLA catalogs for future procurements.			
Accomplishments/Planned Programs Subtotals	3.212	15.554	6.776

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPA3 MA6800: <i>Soldier Enhancement - Other Support Equipment - MA6800</i>	1.677	2.287	2.138	-	2.138	2.190	2.234	2.278	2.324	Continuing	Continuing
• OPA2 BA5300: <i>Soldier Enhancement - Comms & Electronics Equipment - BA5300</i>	0.294	0.349	-	-	-	-	-	-	-	0	0.643
• AMMO: <i>Soldier Enhancement Program (SEP) Ammo</i>	-	-	0.341	-	0.341	0.348	0.355	0.362	0.369	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army	Date: February 2016
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• WTCV GC0076: <i>Soldier Enhancement - Smalls Arms Weapons - GC0076</i>	1.682	2.392	3.155	-	3.155	3.122	3.283	3.349	3.417	Continuing	Continuing

Remarks

D. Acquisition Strategy

SEP focuses on COTS/GOTS/NDI initiatives submitted by Soldiers and industry. SEP proposals are reviewed and approved semi-annually. Procurement funds SEP COTS/GOTS/NDI items for evaluation. Research, Development, Test and Evaluation is used to conduct product evaluations which includes safety testing, data collection, analysis of Soldier feedback/results and documentation of results.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Various	MIPR	PEO Soldier : Ft. Belvoir, VA	12.253	0.497	Mar 2015	0.506	Mar 2016	0.521	Mar 2017	-		0.521	Continuing	Continuing	Continuing
Subtotal			12.253	0.497		0.506		0.521		-		0.521	-	-	-

Remarks
Systems Engineering and Program Management includes engineering support, conducting technical evaluations, market research and program reviews.

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Various	MIPR	Various : Various	39.573	-		-		-		-		-	0	39.573	Continuing
Subtotal			39.573	-		-		-		-		-	0.000	39.573	-

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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Various	MIPR	PEO Soldier : Ft. Belvoir, VA	6.424	-		-		-		-		-	0	6.424	0
Subtotal			6.424	-		-		-		-		-	0.000	6.424	0.000

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Various	MIPR	Various : Various	16.810	2.715	Aug 2015	15.048	Aug 2016	6.255	Aug 2017	-		6.255	Continuing	Continuing	Continuing
Subtotal			16.810	2.715		15.048		6.255		-		6.255	-	-	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
Evaluate Initiatives 1-2Q FY15	Test approved proposals																											
(1) SEP Council of Colonel approval/prioritization process 2Q FY15	▲ 1 Approval/prioritization of SEP Proposals																											
Evaluate Initiatives 3-4Q FY15	Test approved proposals																											
(2) SEP Council of Colonel approval/prioritization process 4QFY15	▲ 2 Approval/prioritization of SEP Proposals																											
Evaluate Initiatives 1-2Q FY16	Test approved proposals																											
(3) SEP Council of Colonel approval/prioritization process 2Q FY16	▲ 3 Approval/prioritization of SEP Proposals																											
Evaluate Initiatives 3-4Q FY16	Test approved proposals																											
(4) SEP Council of Colonel approval/prioritization process 4QFY16	▲ 4 Approval/prioritization of SEP Proposals																											
Evaluate Initiatives 1-2Q FY17	Test approved proposals																											
(5) SEP Council of Colonel approval/prioritization process 2Q FY17	▲ 5 Approval/prioritization of SEP Proposals																											
Evaluate Initiatives 3-4Q FY17	Test approved proposals																											
(6) SEP Council of Colonel approval/prioritization process 4QFY17	▲ 6 Approval/prioritization of SEP Proposals																											
Evaluate Initiatives 1-2Q FY18	Test approved proposals																											
	Test approved proposals																											

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
(1) SEP Council of Colonel approval/prioritization process 2Q FY18																	▲ Approval/prioritization of SEP Proposals											
Evaluate Initiatives 3-4Q FY18																												
(2) SEP Council of Colonel approval/prioritization process 4QFY18																	▲ 2 Approval/prioritization of SEP Proposals											
Evaluate Initiatives 1-2Q FY19																												
(3) SEP Council of Colonel approval/prioritization process 2Q FY19																	▲ 3 Approval/prioritization of SEP Proposals											
Evaluate Initiatives 3-4Q FY19																												
(4) SEP Council of Colonel approval/prioritization process 4QFY19																	▲ 4 Approval/prioritization of SEP Proposals											
Evaluate Initiatives 1-2Q FY20																												
(5) SEP Council of Colonel approval/prioritization process 4QFY20																	▲ 5 Approval/prioritization of SEP Proposals											
Evaluate Initiatives 1-2Q FY21																												
(6) SEP council proposal approval/prioritization 2QFY21																	▲ 6 Approval/prioritization of SEP Proposals											
Evaluate Initiatives 3-4Q FY21																												
(7) SEP Council of Colonel approval/prioritization process 4QFY21																	▲ 7 Approval/prioritization of SEP Proposals											

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Evaluate Initiatives 1-2Q FY15	1	2015	2	2015
SEP Council of Colonel approval/prioritization process 2Q FY15	2	2015	2	2015
Evaluate Initiatives 3-4Q FY15	3	2015	4	2015
SEP Council of Colonel approval/prioritization process 4QFY15	4	2015	4	2015
Evaluate Initiatives 1-2Q FY16	1	2016	2	2016
SEP Council of Colonel approval/prioritization process 2Q FY16	2	2016	2	2016
Evaluate Initiatives 3-4Q FY16	3	2016	4	2016
SEP Council of Colonel approval/prioritization process 4QFY16	4	2016	4	2016
Evaluate Initiatives 1-2Q FY17	1	2017	2	2017
SEP Council of Colonel approval/prioritization process 2Q FY17	2	2017	2	2017
Evaluate Initiatives 3-4Q FY17	3	2017	4	2017
SEP Council of Colonel approval/prioritization process 4QFY17	4	2017	4	2017
Evaluate Initiatives 1-2Q FY18	1	2018	2	2018
SEP Council of Colonel approval/prioritization process 2Q FY18	2	2018	2	2018
Evaluate Initiatives 3-4Q FY18	3	2018	4	2018
SEP Council of Colonel approval/prioritization process 4QFY18	4	2018	4	2018
Evaluate Initiatives 1-2Q FY19	1	2019	2	2019
SEP Council of Colonel approval/prioritization process 2Q FY19	2	2019	2	2019
Evaluate Initiatives 3-4Q FY19	3	2019	4	2019
SEP Council of Colonel approval/prioritization process 4QFY19	4	2019	4	2019
Evaluate Initiatives 1-2Q FY20	1	2020	2	2020
SEP Council of Colonel approval/prioritization process 4QFY20	4	2020	4	2020
Evaluate Initiatives 1-2Q FY21	1	2021	2	2021

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S58 / <i>Soldier Enhancement Program</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
SEP council proposal approval/prioritization 2QFY21	2	2021	3	2021
Evaluate Initiatives 3-4Q FY21	3	2021	4	2021
SEP Council of Colonel approval/prioritization process 4QFY21	4	2021	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S60 / <i>Clothing & Equipment</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S60: <i>Clothing & Equipment</i>	-	2.422	5.980	10.166	-	10.166	7.814	5.593	7.813	9.414	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 and camouflage, to include evaluation, test, and conduct of Soldier evaluations of Organizational Clothing and Individual Equipment appropriate for use in jungle/tropical and Arctic environments. Goal is to increase the capabilities and durability of tactical and non-tactical clothing and individual equipment. Includes integration and interface on the Soldier system. It also funds improvements and testing/evaluation of personnel parachute systems.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Soldier Uniforms and Clothing	0.518	4.168	4.000
Description: Develop and provide superior and sustainable integrated clothing for the Soldier in a rapidly changing global environment.			
FY 2015 Accomplishments: Flame Resistant Clothing. Obtained Materiel Development Decision (MDD) and Milestone C (MS-C) Decision for the Army Combat Pants (ACP) in 2QFY15.			
Procured prototypes of Garrison Food Service Uniform (GFSU), and conducted user evaluation to test modified patterns to incorporate commercial standards for burn protection, stain release, and professional appearance into the GFSU. Achieved GFSU MDD and MS-C in 4QFY15. Developed revised patterns and conducted follow-on user evaluation on Army Service Uniform (ASU) slacks to address women's concerns in fit and function of the ASU.			
FY 2016 Plans: Uniform Clothing and Environmental Clothing System. Establish shade standards for fabrics and components used in Operational Camouflage Pattern (OCP) organizational clothing. Conduct operational tests of improved fabrics for reduced weight of winter overwhites.			
Flame Resistant Clothing. Conduct developmental test of Government designed/owned Knee Pad for the Army Combat Pants.			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S60 / <i>Clothing & Equipment</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>Clothing Bag. Continue to refine designs and incorporate alternate materials and designs in clothing bag items including the Women's Army Service Uniform (ASU) slacks, and alternate fabrics for the Army Physical Fitness Uniform (APFU).</p> <p>FY 2017 Plans: Flame Resistant Clothing: Conduct User Evaluation of FR Uniforms to incorporate design changes to improve fit and comfort based on Soldier feedback and incorporate more durable and affordable FR fabrics. Obtain MDD and MS B to procure prototypes and conduct Limited User Evaluation of FR Fuel Handler Coveralls to improve fit and breathability and reduce weight.</p> <p>Clothing Bag. Continue to refine designs and incorporate alternate materials and designs in clothing bag items including testing of lighter weight improved fabrics and designs of men's shirts and women's blouses worn with the Army Service Uniform to improve comfort. Procure prototypes and conduct user evaluation of the Women's Maternity Utility Uniform.</p>				
<p>Title: Individual Equipment</p> <p>Description: Develop and provide superior and sustainable integrated individual equipment for the Soldier in a rapidly changing global environment.</p> <p>FY 2015 Accomplishments: Personnel Airdrop. Modified PARANAVSYS software to utilize Nett Warrior as the PARANAVSYS End User Device. Procured Developmental Test 2 (DT2) assets and conducted DT on PARANAVSYS which provides GPS navigation capabilities to Military Free Fall (MFF) parachutists.</p> <p>NBC /Load Carriage: Procured test assets and conducted User Evaluation of the Modular Lightweight Load Carrying Equipment (MOLLE) 4000 Rucksack (formerly Airborne Rucksack) in 4QFY15.</p> <p>FY 2016 Plans: NBC/Load Carriage. Conduct developmental test and evaluation of MOLLE 4000 rucksack with airborne units. Following MS B in 3QFY16 complete safety release testing for the Individual Water Treatment Device (IWTD). Modify poncho liner to improve performance as a shelter. Environmental Equipment. Following approval of Material Change Proposal, modify poncho liner to integrate with the larger field tarp and modify field tarp to add central connection point to improve performance as a shelter.</p> <p>Airdrop. Conduct bench top testing of updated PARANAVSYS software (v 2.0) with new Nett Warrior End User Device and new Soldier Radio. After program initiation for the Electronic EEAD Program of Record, procure design validation assets and conduct DT to support a MS C in 1QFY18. Conduct tests on the ripcord design and pack tray of the T-11 Reserve (R) parachute to reduce potential of accidental activation. Procure prototype T-11 main canopies and conduct Developmental Testing of revised</p>		1.904	1.812	6.166

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S60 / <i>Clothing & Equipment</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
packing procedures and redesigned corner vent panels to reduce corner vent inversions. Develop prototypes and test redesigned RA-1 Main Riser Trim Straps and Reserve Pilot Chute Spring. Test updated air permeability treatments for RA-1 canopies to support new production contract award. Conduct Mean-Time-Between Failure (MTBF) tests of MC-6 and T-11 parachutes to determine if the service life of these parachutes can be extended. FY 2017 Plans: NBC/Load Carriage/Hydration: Procure samples and conduct live chemical agent testing for the Multi-Purpose Hydration System (MPHS) to increase operational life to reach 365 days once placed into service an operational environment. Procure samples and conduct testing of tactical holster to be fielded with the new Modular Handgun System. Conduct technical testing of DT/OT on IWTD candidates.			
Accomplishments/Planned Programs Subtotals	2.422	5.980	10.166

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• Clothing and Individual Eqp S53: <i>RDTE, 0603827.S53, Clothing and Equipment</i>	1.555	9.985	3.582	-	3.582	3.571	1.845	2.495	3.113	Continuing	Continuing
• Central Funding and Fielding: <i>OMA, 121017, Central Funding and Fielding</i>	126.972	56.088	37.748	-	37.748	37.719	37.709	37.550	57.119	Continuing	Continuing
• Advanced Tactical Parachute System: <i>OPA, MA7801, Advanced Tactical Parachute System</i>	25.996	26.088	16.611	-	16.611	18.860	24.610	26.890	22.040	Continuing	Continuing

Remarks

D. Acquisition Strategy
 Acquisition strategies for these programs vary in methods, and range from: 1) Material Change programs that result in engineering changes to existing systems to; 2) traditional development programs that include an Engineering and Manufacturing Development phase ranging in duration from 12 to 48 months, depending on the level of complexity and testing required.

E. Performance Metrics
 N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S60 / <i>Clothing & Equipment</i>
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
In-House Support	Various	PM SPIE : Various	8.475	0.104		0.500		0.623		-		0.623	Continuing	Continuing	Continuing
Subtotal			8.475	0.104		0.500		0.623		-		0.623	-	-	-

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering Support	Various	NSRDEC : Natick, MA	14.889	0.408		0.498		0.490		-		0.490	Continuing	Continuing	Continuing
Development Contracts	Various	Various : Various	41.431	1.010		1.192		3.500		-		3.500	Continuing	Continuing	Continuing
Subtotal			56.320	1.418		1.690		3.990		-		3.990	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Misc Support Costs	Various	Various : Various	15.296	-		0.790		0.500		-		0.500	Continuing	Continuing	Continuing
Subtotal			15.296	-		0.790		0.500		-		0.500	-	-	-

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Testing	MIPR	Various : Various	17.405	0.900		3.000		5.053		-		5.053	Continuing	Continuing	Continuing
Subtotal			17.405	0.900		3.000		5.053		-		5.053	-	-	-

			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			97.496	2.422	5.980	10.166	-	10.166	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S60 / <i>Clothing & Equipment</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
	UNIFORM CLOTHING																											
(1) Army Combat Pant MS C																												
Continue Fabric & FR Upgrades																												
Clothing Bag Upgrades and Evaluations																												
APFU Product Improvement																												
Garrison Food Service Uniform Improvements																												
(2) Garrison Food Service Uniform Milestone C																												
(3) EPS MS B																												
Environmental Protection System (EPS) DT																												
(4) Jungle Boot MS C																												
(5) Military Free Fall Environment Equipment MS C																												
(6) Torso and Extremity Environmental Protection MS C																												
INDIVIDUAL EQUIPMENT																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S60 / <i>Clothing & Equipment</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	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				
(1) EEAAD MDD/Program Initiation					▲																											
EEAAD Developmental Testing					■																											
PARANAVSYS DT/OT	■				■																											
Poncho Liner/Field Tarp Testing					■																											
MPHS Operational Life Testing									■				■																			
Tactical Holster Testing									■																							
Integrated Load Carriage System DT/OT													■				■															
(2) Integrated Load Carriage System MS C																					▲											
IWTD Candidate Technical Testing																	■															
(3) IWTD MS C																									▲							

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S60 / <i>Clothing & Equipment</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
UNIFORM CLOTHING	1	2010	4	2015
Army Combat Pant MS C	2	2015	2	2015
Continue Fabric & FR Upgrades	3	2009	4	2018
Clothing Bag Upgrades and Evaluations	1	2012	4	2018
APFU Product Improvement	1	2012	3	2015
Garrison Food Service Uniform Improvements	1	2015	3	2015
Garrison Food Service Uniform Milestone C	4	2015	4	2015
EPS MS B	1	2018	1	2018
Environmental Protection System (EPS) DT	1	2018	2	2019
Jungle Boot MS C	4	2018	4	2018
Military Free Fall Environment Equipment MS C	4	2018	4	2018
Torso and Extremity Environmental Protection MS C	4	2019	4	2019
INDIVIDUAL EQUIPMENT	2	2008	4	2015
EEAAD MDD/Program Initiation	3	2016	3	2016
EEAAD Developmental Testing	3	2016	4	2016
PARANAVSYS DT/OT	1	2015	4	2016
Poncho Liner/Field Tarp Testing	2	2016	1	2017
MPHS Operational Life Testing	2	2017	4	2018
Tactical Holster Testing	2	2017	4	2017
Integrated Load Carriage System DT/OT	2	2018	1	2019
Integrated Load Carriage System MS C	3	2019	3	2019
IWTD Candidate Technical Testing	1	2018	1	2018
IWTD MS C	2	2018	2	2018

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S61 / <i>Acis Engineering Development</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S61: <i>Acis Engineering Development</i>	-	1.742	3.463	3.811	-	3.811	3.849	3.840	1.897	1.749	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project conducts Engineering and Manufacturing Development (EMD) for the Air Soldier System (Air SS). The Air SS is Army aircrew survival and mission equipment that improves safety, survivability, and human performance. The Air SS Capability Development Document addresses capability gaps identified during sustained combat operations in Iraq and Afghanistan including inadequate crew station compatibility caused by equipment bulk, aircraft mishaps as a result of limited Situational Awareness (SA), and lack of functionally integrated aircrew mission and survival equipment. Air SS delivers reduced bulk and weight of survival equipment; improved crew station compatibility; and improved pilot SA and safety. The Air SS provides enhanced terrain, threat, and obstacle avoidance information; improved heads-up display (HUD) technologies that increase the aviator's ability to safely land or takeoff in Degraded Visual Environments (DVE); and the capability to perform extended missions in extreme environmental and chemical/biological threat conditions. This project also funds the development and test of the Air SS pre-planned product improvement (P3I) phase that includes the Electronic Flight Bag (EFB), a digital replacement for paper-based Department of Defense (DoD) Flight Information Publications for Army aircrews; improved laser eye protection; and tactile cueing that enhances aviator SA in a DVE. This program does not duplicate any aircraft platform program efforts. Includes integration and interface of products on Soldiers.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Aircrew Integrated Systems (ACIS) Engineering Development	1.742	3.463	3.811
Description: Development, Integration, evaluation, testing, and qualification of Air Soldier System multi-phased capabilities as technologies mature.			
FY 2015 Accomplishments: Tested and evaluated Air Soldier System operational capabilities supporting a Full Rate Production Decision for the initial increment of Air Soldier System capabilities.			
FY 2016 Plans: Initial evaluation, modification, integration, and qualification of P3I candidate commercial products focusing on an Electronic Flight Bag solution. Initial focus will be on market research and performance demonstration of available Commercial Off the Shelf (COTS) devices. Down selection to preferred COTS solution followed by the preliminary design of any modifications and platform integration activities necessary to support initial deployment of an EFB capability which are also planned for FY 17.			
FY 2017 Plans: Continued evaluation, modification, integration, and qualification of P3I candidate commercial products. Primary focus will be on the detailed design and qualification of a COTS or modified COTS EFB tablet, including formal developmental and operational flight testing scheduled to begin in Fiscal Year (FY) 2017. Other activities will include market research and preliminary evaluation			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army	Date: February 2016
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S61 / <i>Acis Engineering Development</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
of candidate technologies for applicability to Air SS requirements for improved laser eye protection, integrated soldier power, and/or wireless personal networks.			
Accomplishments/Planned Programs Subtotals	1.742	3.463	3.811

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• Aircrew Integrated Sys Adv Dev: <i>RDTE, A PE</i> <i>0603827A, PROJ S51 - Adv Dev</i>	0.161	0.152	-	-	-	-	-	-	-	0	0.313
• Aircrew Integrated Systems: <i>Aircraft Procurement,</i> <i>Army SSN AZ3110 - ACIS</i>	48.081	44.085	30.297	-	30.297	47.066	30.896	32.684	30.457	Continuing	Continuing

Remarks

D. Acquisition Strategy

Engineering and Manufacturing Development efforts for the Air SS program include development, integration, test, and airworthiness qualification of aviator flight display symbology technologies that will increase crew member situational awareness in DVE, and aircrew protective and survival equipment that reduces bulk and weight and improves crew station compatibility and mission effectiveness. Air SS includes improvements to the current flight helmet; improvements to the survival gear carriage system; lightweight body armor; environmental protective clothing and personal survival equipment; and a day/night helmet-mounted flight symbology display with head tracking and 3D flight symbology for UH-60 and CH-47 aviators. The Air SS P3I phase includes the development and qualification of the EFB, a digital Army aviation replacement for paper-based DoD Flight Information Publications, and the continuing development of deferred capabilities as defined within the draft Capability Production Document (CPD). P3I capabilities also include tactile Situational Awareness enhancements and laser eye protection. Contracts with industry include both Cost and Firm Fixed Price using full and open competition, each evaluated and selected to appropriately share risk between industry and the government.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604601A / Infantry Support Weapons				S61 / Acis Engineering Development							
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
PM Administration	Allot	Various Government : Huntsville, Alabama	2.839	0.102		0.273		0.387		-		0.387	Continuing	Continuing	Continuing
Subtotal			2.839	0.102		0.273		0.387		-		0.387	-	-	-
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Air Warrior and Air Soldier System Development	C/CPFF	Various Government : Various Locations	56.353	0.158		2.705		1.577		-		1.577	Continuing	Continuing	Continuing
Subtotal			56.353	0.158		2.705		1.577		-		1.577	-	-	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Matrix Support	RO	Various Government : Various Locations	3.464	0.093		0.258		0.292		-		0.292	Continuing	Continuing	Continuing
Subtotal			3.464	0.093		0.258		0.292		-		0.292	-	-	-
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental and Operational Testing	RO	Various Activities : Various Locations	10.601	1.389		0.227		1.555		-		1.555	Continuing	Continuing	Continuing
Subtotal			10.601	1.389		0.227		1.555		-		1.555	-	-	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S61 / <i>Acis Engineering Development</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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 Soldier System System (Air SS) Dev, Dem and Qual Test																												
Air SS Full Rate Production (FRP) Decision																												
Air SS Pre-planned Product Improv (P3I) Phase																												
Electronic Flight Bag (EFB) Development & Qualification																												
Market Research and Trade Study Eval																												
EFB downselect to preferred alternative																												
EFB Preliminary Design and Platform Integration																												
EFB Detailed Design & Qualification																												
EFB Developmental Test/Operational Test (DT/OT)																												
EFB Production Decision																												
Deferred Air SS Capabilities Develop & Qual																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S61 / <i>Acis Engineering Development</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Air Soldier System System (Air SS) Dev, Dem and Qual Test	1	2012	4	2015
Air SS Full Rate Production (FRP) Decision	3	2016	3	2016
Air SS Pre-planned Product Improv (P3I) Phase	1	2016	4	2020
Electronic Flight Bag (EFB) Development & Qualification	1	2016	3	2016
EFB downselect to preferred alternative	3	2016	3	2016
EFB Preliminary Design and Platform Integration	3	2016	4	2016
EFB Detailed Design & Qualification	1	2017	3	2017
EFB Developmental Test/Operational Test (DT/OT)	3	2017	1	2018
EFB Production Decision	3	2018	3	2018
Deferred Air SS Capabilities Develop & Qual	1	2018	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S62: <i>Counter-Defilade Target Engagement - SDD</i>	-	11.945	21.077	10.862	-	10.862	10.895	2.487	0.000	2.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Maneuver Center of Excellence (MCoE), FT Benning, GA (User Community) identifies the Counter Defilade Target Engagement (CDTE) as 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 35-500m) 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 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) and training rounds. The XM25 comes with a target acquisition/fire control subsystem that integrates thermal capability with direct-view optics, laser rangefinder, environmental sensors, fuze setter, ballistic computer, and internal display. The XM25 has a 500-meter point target range and a 800-meter area target range capable of defeating defilade targets.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
<p>Title: Engineering and Manufacturing Development/Fabricate</p> <p>Description: Description: Engineering Development and Fabrication</p> <p>FY 2015 Accomplishments: Established an open system component design to incorporate technical and producible design improvements for critical electronics and optics. Reduced integration complexity of components. Initiated build of hardware to support contractor and government testing.</p> <p>FY 2016 Plans: Conduct pre Milestone C system level trade studies and design reviews to improve system effectiveness and reliability. Implement design modifications to address issues identified during contractor and government testing. Explore Engineering Change Proposals (ECPs) to potentially reduce weight, size, and power consumption.</p> <p>FY 2017 Plans: Will complete build of hardware to support contractor and government testing. Will continue to implement modifications and explore additional engineering changes to potentially reduce weight, size, and power consumption.</p>	9.800	13.990	7.236
<p>Title: Engineering and Training Development</p> <p>Description: Description: Engineering and Training Development</p>	0.459	0.860	0.430

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p><i>FY 2015 Accomplishments:</i> Provided engineering support for weapon systems, subsystems, target acquisition/fire control (TA/FC) and software design enhancements based on lessons learned from the Limited User Evaluations (LUE) and updated training materials. Provided engineering support for the development of the XM25 virtual training concept.</p> <p><i>FY 2016 Plans:</i> Continue to provide engineering support for weapons systems, subsystems, target acquisition/fire control (TA/FC), ammunition and software design modifications based on lessons learned from Pre-Production Qualification Testing (PPQT) #2. Refine and update training material based on lessons learned during user assessments, Soldier training and pre log demo activities, as well as, PPQT#2. Continue to provide engineering support for the development of the virtual training concept for the XM25.</p> <p><i>FY 2017 Plans:</i> Will continue to provide engineering support for weapons systems, subsystems, target acquisition/fire control (TA/FC), ammunition and software design modifications. Will complete training material based on lessons learned during user assessments, Soldier training and log demo activities. Will provide engineering support to complete the development of the virtual training concept for the XM25.</p>				
<p><i>Title:</i> Development / Operational Test and Evaluation Activities</p> <p><i>Description:</i> Description: Test and Evaluate</p> <p><i>FY 2015 Accomplishments:</i> Conducted government, contractor, user assessment, design verification and other test activities to evaluate engineering changes to the weapon system and TA/FC. Government and user evaluated test efforts related to pre-planned product improvements. Planned, coordinated, and resourced PPQT#2, LUT and Pre Logistics Demonstrations.</p> <p><i>FY 2016 Plans:</i> Conduct PPQT#2 consisting of government test efforts to evaluate engineering changes, fixes and design modifications to address anomalies. Conduct Design Verification Testing and Pre-Logistics Demonstrations. Plan and coordinate Low Rate Initial Production (LRIP), Production Qualification Testing (PQT), Live Fire Tests and Evaluations (LFT&E) and final Logistics Demonstration (Log Demo)</p> <p><i>FY 2017 Plans:</i> Will conduct PQT of LRIP quantities consisting of government test efforts to evaluate weapon system and TA/FC design and production maturity. Will also conduct Limited User Testing (LUT), LFT&E, and the final log demo.</p>		1.239	5.820	2.950
<p><i>Title:</i> Program Management</p>		0.447	0.407	0.246

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
<p>Description: Description: Program Management</p> <p>FY 2015 Accomplishments: Provided Program Management oversight pre Milestone C required to test and evaluate engineering changes and pre-planned product improvements to the weapon system.</p> <p>FY 2016 Plans: Provide program management, logistical and life cycle support, to organize, coordinate and control program activities leading up to Milestone C and transition to Low Rate Initial Production (LRIP).</p> <p>FY 2017 Plans: Will provide program management, logistical and life cycle support, to organize, coordinate and control program activities through Low Rate Initial Production (LRIP).</p>			
Accomplishments/Planned Programs Subtotals	11.945	21.077	10.862

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• G16101: (G16101) <i>Integrated Air Burst Weapon System Family</i>	-	-	9.764	-	9.764	14.852	24.930	32.158	25.798	Continuing	Continuing
• E92500: (E92500) <i>CTG, 25MM, XM1083 High Explosive Air Burst (HEAB)</i>	-	-	0.198	-	0.198	2.180	4.957	5.000	-	Continuing	Continuing
• E92510: (E92510) <i>CTG, 25MM, XM1081 Target Practice (TP)</i>	-	-	-	-	-	0.396	0.892	1.000	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

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 currently scheduled for 1QTR FY2017. The Research and Development acquisition strategy is to use sole source contracting with Orbital 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 ammunition and target acquisition/fire control development.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>

<u>E. Performance Metrics</u> N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
2040 / 5				PE 0604601A / Infantry Support Weapons				S62 / Counter-Defilade Target Engagement - SDD								
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	2.743	0.447	Jan 2015	0.407	Oct 2015	0.246	Oct 2016	-		0.246	Continuing	Continuing	Continuing	
Subtotal			2.743	0.447		0.407		0.246		-		0.246	-	-	-	
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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/CPFF	ATK : Plymouth, MN	105.395	9.800	Feb 2015	10.240	Feb 2016	5.305	Feb 2017	-		5.305	Continuing	Continuing	Continuing	
Subtotal			105.395	9.800		10.240		5.305		-		5.305	-	-	-	
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	7.826	0.449	Mar 2015	0.637	Jan 2016	0.400	Jan 2017	-		0.400	Continuing	Continuing	Continuing	
Training Development Support	MIPR	TACOM/PEO STRI : TACOM/PEO STRI	0.760	0.010	Mar 2015	0.223	Feb 2016	0.030	Feb 2017	-		0.030	Continuing	Continuing	Continuing	
Subtotal			8.586	0.459		0.860		0.430		-		0.430	-	-	-	
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	15.854	-		3.750	Feb 2016	1.931	Feb 2017	-		1.931	0	21.535	0	

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021																															
	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	[Red shaded area covering FY 2015-2016]																																																							
Engineering and Training Development																																																								
Development Tests & Evaluation																																																								
Program Management																																																								
Design, Develop, Engineer, Test & Manage Improvements	[Red shaded area covering FY 2015-2016]																																																							
Pre-Production Qualification Testing (PPQT #2)																																																								
Limited User Testing (LUT)																																																								
(1) MS C/Type Classification-Limited Procurement																													▲																											
Low Rate Initial Production (LRIP)-IOT&E																																																								
Production Qualification Test (PQT)																																																								
Live Fire Test & Evaluation (LFT&E)																																																								
Initial Operational Test & Evaluation (IOT&E)																																																								
Natural Environments/Airborne LUT																																																								

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
(1) Type Classification - Standard Full Rate Production (FRP)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S62 / <i>Counter-Defilade Target Engagement - SDD</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Design, Develop & Fabricate	1	2011	4	2019
Engineering and Training Development	1	2011	4	2019
Development Tests & Evaluation	1	2011	4	2019
Program Management	1	2011	4	2019
Design, Develop, Engineer, Test & Manage Improvements	1	2021	4	2021
Pre-Production Qualification Testing (PPQT #2)	2	2016	4	2016
Limited User Testing (LUT)	1	2017	1	2017
MS C/Type Classification-Limited Procurement	1	2017	1	2017
Low Rate Initial Production (LRIP)-IOT&E	1	2017	3	2019
Production Qualification Test (PQT)	4	2017	1	2018
Live Fire Test & Evaluation (LFT&E)	1	2018	2	2018
Initial Operational Test & Evaluation (IOT&E)	3	2018	1	2019
Natural Environments/Airborne LUT	2	2018	1	2019
Type Classification - Standard	3	2019	3	2019
Full Rate Production (FRP)	3	2019	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S63 / <i>Small Arms Improvement</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S63: <i>Small Arms Improvement</i>	-	11.172	23.084	11.801	-	11.801	15.169	10.833	10.844	23.848	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Program Element 0604601A Project S63 - Infantry Support Weapons is renamed Program Element 0604601A Project S63 - Individual Weapons Engineering Development

New start in FY 2017 includes Additive Manufacturing (3D Printing).

Transition of technologies from Program Element 0604601A Project S63 Individual Weapons Engineering Development to Program Element 0604601A Project EW4 Crew Served Weapons Engineering Development in FY 2017 include M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS), Precision Sniper Rifle (PSR), Combat Semi-Automatic Sniper System (CSASS), Sniper Upgrades, Mounted Machine Gun Optic, and XM1112 Airburst Non-Lethal Munition (ANLM).

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, usability, 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 (to include human-systems), 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)

	FY 2015	FY 2016	FY 2017
Title: New Weapons	2.460	7.452	9.025
Description: Description: Development of new weapons			
FY 2015 Accomplishments: Modular Handgun System (MHS): Prepared documentation required for MS-C decision including the Acquisition Strategy, the Test & Evaluation Master Plan (TEMP), and the Acquisition Plan. Completed System Threat Assessment Report (STAR). Conducted Industry Days 3 & 4 to clarify the Army's handgun requirement to industry, to inform them of any changes and to determine the technical maturity, and manufacturing capabilities readily available to meet/exceed the Army's requirement. Funded the Integrated Product Team (IPT), released a draft and final solicitations.			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS): Prepared and staffed all documentation required for the MDA to render an official program of record decision. Planned, coordinated, resourced, and completed evaluation activities. Completed the analysis of alternatives, health hazard assessment, affordability analysis, system safety risk assessment and required documentation to support the MAAWS.</p> <p>FY 2016 Plans: Modular Handgun System (MHS): Complete staffing of documentation required for MS-C decision. Conduct bid sample testing, operational assessments for the weapon systems and ammo. Will initiate source selection activities, conduct the Early Warfighter Acceptance shoot. Obtain a safety release and plan, coordinate and resource the first of two Logistics Demonstration events.</p> <p>M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS): Complete performance specifications, supportability plans and other required acquisition documents. Conduct operational test and evaluation activities and required acquisition and safety documentation necessary to Type Classify the weapon system and ammunition. Obtain Type Classification-Standard. In parallel with the Type Classification effort, the IPT will prepare the necessary documentation in support of Full Material Release.</p> <p>Precision Sniper Rifle (PSR): Continue to work in conjunction with SOCOM to 1) support development, acquisition and qualification of primary PSR anti-personnel ammunition and 2) perform acquisition and qualification efforts for PSR anti-materiel ammunition. Both rounds are necessary as a precursor for acquisition efforts in FY18 for a new multi-caliber PSR weapon.</p> <p>Squad Designated Marksman Rifle (SDM): Continue to inform requirements and the Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, and Facilities (DOTMLPF) analysis. Will develop Acquisition Strategy and initiate execution.</p> <p>FY 2017 Plans: Modular Handgun System (MHS): Will continue source selection activities to narrow the competitive range. Will award contracts for up to three (3) COTS/NDI weapon systems and ammunition. Perform second Logistic Demonstration and begin the ammunition energetic materials qualification testing. Will conduct verification, validation, Joint CONOP and limited user test activities to facilitate down selecting to one (1) vendor. Will continue to fund the IPT and prepare Type Classification documentation.</p> <p>Squad Designated Marksman Rifle (SDM): Will continue to inform requirements and the Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, and Facilities (DOTMLPF) analysis. Will continue to develop Acquisition Strategy and initiate execution.</p>				
Title: Small Arms Weapons Enhancements		0.596	4.735	0.250
Description: Description: Enhancements and developments of small arms weapons				

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army	Date: February 2016
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
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<p><i>FY 2015 Accomplishments:</i> Compact Semi-Automatic Sniper System (CSASS): Received bid samples from vendors and conducted three phases of bid sample testing to down-select to a single qualified vendor for initial contract award and entry into Production Qualification Testing (PQT). Obtained Safety Release and developed test plan in preparation to conduct a user evaluation with active duty snipers during Phase 3 Bid Sample Testing. Convened a Source Selection Evaluation Board (SSEB) to evaluate written proposals and provide Acquisition Center with final results. Completed and submitted Test and Evaluation Master Plan (TEMP) for staffing through the CSASS Test and Evaluation IPT.</p> <p>Powered Rail / Intelligent Rail: Integrated with weapon platform and soldier borne power and data management systems as well as integrating enablers to the weapon platform.</p> <p>Weapon Upgrades and Accessories: Will continue to test, evaluate and analyze ongoing and new activities to enhance small arms weapons.</p> <p><i>FY 2016 Plans:</i> Compact Semi-Automatic Sniper System (CSASS): Award a single contract for thirty (30) Non Developmental Items (NDI) weapon systems. Conduct verification and validation Production Qualification Testing (PQT). Conduct a depot assessment and plan, coordinate, resource and conduct Pre-Logistics Demonstration events. Develop fielding plan. Continue to fund the IPT and initiate preparation of Type Classification and MS-C/TC STD decision documentation.</p> <p>Powered Rail now known as Intelligent Rail: Continue further integration with weapon platform and soldier borne power and data management systems as well as integrating enablers to the weapon platform. Continue supporting efforts related to Ballistic Compensation Over Rail, Polymer Optic Integration, and development of a General Purpose Transceiver to support the integration of various data applications, including network communications. Will acquire developmental systems to prepare for and conduct developmental testing and Soldier evaluations.</p> <p>Sniper Upgrades: Perform feasibility, analysis of alternatives, and cost benefit analysis studies for various fire control and supporting precision enablers to include Shot Counter for Reliability and Maintainability (SCRAM) and cross wind sensing technologies. Pursue development activities for addressing Small Arms Fire Control -Precision CDD requirements, which include Spotting Scope Optical Display (SSOD), Sniper Rifle Fire Control System (SRFCS), Eagle Eye (EE), and Barrel Studies.</p> <p>Small Business Innovation Research (SBIR) Enhancements: Support Phase II Enhancement and/or initialization of Phase III SBIR activities.</p>			
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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>Weapon Upgrades and Accessories: Continue to test, evaluate, and analyze ongoing and new activities to enhance small arms weapons.</p> <p>FY 2017 Plans: FY17 New Start Additive Manufacturing 3D Printing: Will use additive manufacturing (3D Printing) methods to fabricate and test selected prototype weapons components for all weapons.</p> <p>Intelligent Rail (Formerly known as Powered Rail): To continue supporting efforts related to Ballistic Compensation Over Rail, Polymer Optic Integration, and development of a General Purpose Transceiver to support the integration of various data applications including network communications. Will support acquired developmental systems to conduct developmental testing and Soldier evaluations.</p> <p>Small Business Innovation Research (SBIR) Enhancements: Will continue to support Phase II Enhancement and/or initialization of Phase III SBIR activities.</p> <p>Weapon Upgrades and Accessories: Will continue to test, evaluate and analyze ongoing and new activities to enhance small arms weapons.</p>				
<p>Title: Ammunition</p> <p>Description: Description: Improvement of small arms ammunition</p> <p>FY 2015 Accomplishments: XM1112 Airburst Non-Lethal Munition (ANLM): Completed Developmental Testing and Limited Operational Excursion testing and reports.</p> <p>Ammunition Upgrades: Evaluated effect of new ammunition on small arms weapons.</p> <p>FY 2016 Plans: XM1112 Airburst Non-Lethal Munition (ANLM): Complete Milestone C package and conduct reliability retest.</p> <p>Ammunition Upgrades: Continue to evaluate the effect of new ammunition on small arms weapons.</p> <p>FY 2017 Plans: Ammunition Upgrades: Will continue to evaluate the effect of new ammunition on small arms weapons.</p>		1.356	1.597	0.250
<p>Title: Combat Optics</p> <p>Description: Description: Improvement of combat optics</p>		-	1.800	0.250

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>FY 2016 Plans: Grenadier Sighting System (GSS): Complete Source Selection evaluations and award developmental contract for the GSS, test and evaluation efforts, system engineering analysis, and reviews. Following award of the developmental contract the government will conduct a user experiment, system requirements review, and preliminary design review. Further test plans will also be developed, and plans for fielding, new equipment training, and development of a deployment logistics package.</p> <p>Mounted Machine Gun Optic: Finalize Machine Gun Optic Capability Production Document (CPD), including anticipated final JROC approval. Conduct final pre-Milestone C activities in preparation for transition to Program of Record in FY2017; emphasis will be on development of Test & Evaluation Master Plan (TEMP) and Production Readiness Review (PRR). Develop Acquisition Strategy and initial package for Milestone C, Type Classification and Materiel Release. Prepare Milestone Decision Document for program of record.</p> <p>Optics Upgrades: Continue engineering evaluations, verification and validation of weapon optics performance requirements.</p>				
<p>FY 2017 Plans: Grenadier Sighting System (GSS): Will continue with the 2-vendor Research and Development effort and the government will conduct a second user engagement, a critical design review, and further technical testing. Initiate Source Selection evaluation for possible down select going into Phase II activities. Further refine test plan, plans for fielding, new equipment training, and the deployment logistics package.</p> <p>Optics Upgrades: Will continue engineering evaluations, verification and validation of weapon optics performance requirements.</p>				
<p>Title: Fire Control Description: Description: Improvement of small arms fire control</p> <p>FY 2016 Plans: Advanced Fire Control with Precision Projectile/Dynamic Target Tracking: Will support integration Small Arms Fire Control - Squad: Continue to inform requirements for Squad weapons in the Small Arms Fire Control Capability Development Document (CDD).</p> <p>Fire Control Upgrades: Continue to test, evaluate and analyze ongoing and new activities to enhance small arms weapons fire control.</p> <p>FY 2017 Plans: Small Arms Fire Control - Squad: Will finalize Fire Control Capability Development Document (CDD), Squad requirements, including anticipated final Joint Requirements Oversight Council (JROC) approval. Will initiate contracting effort to support pre-</p>		-	7.400	1.926

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
Milestone B activities, including Acquisition Strategy and System Engineering Plan (SEP), in preparation for transition to Program of Record.				
Fire Control Upgrades: Will continue to test, evaluate and analyze ongoing and new activities to enhance small arms weapons fire control.				
Title: Research and Analysis		0.100	0.100	0.100
Description: Market Research and Cost Benefit Analysis				
FY 2015 Accomplishments: Continued Market Research and Cost Benefit Analysis of new small arms weapon and/or enhancements for engineering and manufacturing development.				
FY 2016 Plans: Continue Market Research and Cost Benefit Analysis of new small arms weapon and/or enhancements for engineering and manufacturing development.				
FY 2017 Plans: Will continue Market Research and Cost Benefit Analysis of new small arms weapon and/or enhancements for engineering and manufacturing development.				
Accomplishments/Planned Programs Subtotals		4.512	23.084	11.801
		FY 2015	FY 2016	
Congressional Add: New Weapons Congressional Add		4.875	-	
FY 2015 Accomplishments: Precision Sniper Rifle (PSR): Provided technical and programmatic support of SOCOM PSR efforts in anticipation of Army adoption upon successful SOCOM qualification and HQDA CPD approval. Army PSR efforts supported CPD staffing activities and pre-Milestone-C program planning. Technical performance challenges forced SOCOM to abandon the contracted PSR materiel solution and seek a renewed, alternate first quarter FY16 SOCOM acquisition strategy in sync with addressing Army CPD.				
Squad Designated Marksman Rifle (SDM): Informed requirements and the Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, and Facilities (DOTMLPF) analysis. Contracted technical and user assessments with surrogate systems. Developed Acquisition Strategy and initiated execution.				
Congressional Add: Small Arms Weapons Enhancements Congressional Add		0.700	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>

	FY 2015	FY 2016
<p>FY 2015 Accomplishments: Small Business Innovation Research (SBIR) Enhancements: Supported Phase II Enhancement efforts on Nano-structured Anti-reflective Coating and Down-Range Wind Sense SBIR's, including system level integration of the developed technologies, and limited user demonstration and evaluation of those technologies.</p> <p>Weapon Upgrades and Accessories: Tested, evaluated and analyzed ongoing and new activities to enhance small arms weapons.</p>		
<p>Congressional Add: Combat Optics Congressional Add</p> <p>FY 2015 Accomplishments: Grenadier Sighting System (GSS): Created procurement package for Draft Request for Proposal (RFP) release. Conducted second GSS industry day to provide an opportunity to answer any industry questions. Released the RFP and initiate Source Selection evaluation.</p> <p>Mounted Machine Gun Optic (MMO): Supported staffing of MMO Capability Production Document (CPD), including response to comments. Developed key documents in support of pre-Milestone C activities, with emphasis on Acquisition Strategy and draft System Engineering Plan. Conducted technical tests and Operational experiments with off the shelf candidates to inform and clarify requirements.</p> <p>Squad Fire Control Optic (SFCO): Coordinated with MCoE to finalize draft of Fire Control Capability Development Document (CDD), and the associated Squad Annex, and ensured this draft enters world-wide staffing. Continued evaluation of commercially available fire control solutions to determine utility and leverage opportunities. Established technical team to ensure that capability requirements are technically achievable, and identify appropriate technologies to meet gaps.</p>	1.085	-
Congressional Adds Subtotals	6.660	-

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017	FY 2017	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Cost To	
			Base	OCO	Total					Complete	Total Cost
• Small Arms Improvement: <i>RDTE S54, Program Element 0603827A - Soldier Systems - Advanced Development</i>	4.004	7.449	10.554	-	10.554	7.285	7.377	7.472	15.421	Continuing	Continuing
• XM25 ISAAS: <i>WTCV, G16101, XM25 (ISAAS) Individual Semi- Automatic Airburst System</i>	-	-	9.764	-	9.764	14.852	24.930	32.158	25.798	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• M4A1 Carbine: <i>WTCV, G13503, M4A1 Carbine</i>	20.616	31.260	40.493	-	40.493	40.123	40.339	31.538	10.101	Continuing	Continuing
• M4 Carbine MODS: <i>WTCV, GB3007, M4 Carbine MODS</i>	7.735	27.566	29.752	-	29.752	31.104	32.551	18.524	37.358	Continuing	Continuing
• XM320 GLM: <i>WTCV, G01501, XM320 GLM</i>	27.892	26.294	3.062	-	3.062	18.578	20.324	19.866	19.848	Continuing	Continuing
• Handgun: <i>WTCV, G15325, Handgun</i>	-	-	-	-	-	8.326	18.790	21.184	27.788	Continuing	Continuing
• Items Less Than \$5.0M: <i>WTCV, GL32000, Items Less Than \$5M</i>	1.604	2.848	2.331	-	2.331	2.295	2.616	2.949	2.978	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
N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management	Allot	PM Soldier Weapons, : Picatinny Arsenal	8.017	0.500	Mar 2015	0.908	Mar 2016	0.534	Mar 2017	-		0.534	Continuing	Continuing	Continuing
Travel	MIPR	PM Soldier Weapons, : Picatinny Arsenal	1.084	0.103	Mar 2015	0.100	Mar 2016	0.109	Mar 2017	-		0.109	Continuing	Continuing	Continuing
Subtotal			9.101	0.603		1.008		0.643		-		0.643	-	-	-

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Fabrication	Various	Various : Multiple Contractors	1.450	0.450	Mar 2015	1.000	Mar 2016	0.486	Mar 2017	-		0.486	Continuing	Continuing	Continuing
Hardware Development	MIPR	Army Research Development Engineering Centers, : Multiple	7.954	0.050	Mar 2015	-		0.061	Mar 2017	-		0.061	Continuing	Continuing	Continuing
Subtotal			9.404	0.500		1.000		0.547		-		0.547	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering	MIPR	Army Research Development Engineering Centers, : Multiple	39.734	6.897	Mar 2015	12.176	Mar 2016	5.224	Mar 2017	-		5.224	Continuing	Continuing	Continuing
Logistics	MIPR	TACOM, : Warren	4.146	0.200	Mar 2015	0.400	Mar 2016	0.219	Mar 2017	-		0.219	Continuing	Continuing	Continuing
Human Research and Engineering	MIPR	Army Research Laboratory, : Aberdeen Proving Ground	2.921	0.200	Mar 2015	0.500	Mar 2016	0.219	Mar 2017	-		0.219	Continuing	Continuing	Continuing

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
	NEW WEAPONS																											
Modular Handgun System (MHS)																												
M3 Multi-Role Anti-Armor Personnel Weapon System (MAAWS)																												
Precision Sniper Rifle (PSR)																												
Squad Designated Marksman Rifle (SDM)																												
SMALL ARMS WEAPONS ENHANCEMENTS																												
Compact Semi-Automatic Sniper System (CSASS)																												
Powered Rail now known as Intelligent Rail																												
Sniper Upgrades																												
Small Business Innovation Research (SBIR) Enhancements																												
Weapon Upgrades and Accessories																												
XM1112 40MM Airburst Non-Lethal																												
Ammunition Upgrades																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
	COMBAT OPTICS																											
Mountged Machine Gun Optics (MMO)																												
Squad Fire Control Optic																												
Grenadier Sighting System (GSS) for the M320 Grenade Launcher																												
Optics Upgrades																												
FIRE CONTROL																												
Small Arms Fire Control-Squad																												
Fire Control Upgrades																												
RESEARCH AND ANALAYSIS																												
Research and Analysis of Small Arms																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S63 / <i>Small Arms Improvement</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NEW WEAPONS	1	2007	4	2021
Modular Handgun System (MHS)	1	2012	4	2018
M3 Multi-Role Anti-Armor Personnel Weapon System (MAAWS)	1	2015	4	2016
Precision Sniper Rifle (PSR)	1	2015	4	2016
Squad Designated Marksman Rifle (SDM)	1	2014	4	2021
SMALL ARMS WEAPONS ENHANCEMENTS	1	2008	4	2021
Compact Semi-Automatic Sniper System (CSASS)	1	2015	4	2016
Powered Rail now known as Intelligent Rail	1	2013	4	2017
Sniper Upgrades	1	2016	4	2016
Small Business Innovation Research (SBIR) Enhancements	1	2015	4	2017
Weapon Upgrades and Accessories	1	2008	4	2021
XM1112 40MM Airburst Non-Lethal	1	2010	4	2016
Ammunition Upgrades	1	2008	4	2021
COMBAT OPTICS	1	2008	4	2021
Mountged Machine Gun Optics (MMO)	1	2015	4	2016
Squad Fire Control Optic	1	2014	4	2016
Grenadier Sighting System (GSS) for the M320 Grenade Launcher	1	2009	4	2017
Optics Upgrades	1	2008	4	2021
FIRE CONTROL	1	2008	4	2021
Small Arms Fire Control-Squad	1	2017	4	2021
Fire Control Upgrades	1	2008	4	2021
RESEARCH AND ANALAYSIS	1	2012	4	2021
Research and Analysis of Small Arms	1	2015	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S64: <i>Common Remotely Operated Wpn Sys (CROWS)</i>	-	1.164	4.076	4.331	-	4.331	3.354	8.962	8.351	15.826	0.000	46.064
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Maneuver Support Center of Excellence (MSCoE) at FT Leonard Wood, MO (user community) has identified continued development of the Common Remotely Operated Weapon Station (CROWS) as a critical improvement for the Soldier in a 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.

Next generation requirements for the CROWS are identified in the CROWS Increment II Capability Development Document (CDD). CROWS Increment II capability improvements will bolster overall situational awareness, survivability and lethality. Increment II requirements include improved sensor systems for enhanced identification ranges; wider fields of view; improved on-the-move accuracy; training capability; battlefield obscurants; mission data recording for After Action Reviews (AAR); increased lethality using legacy and future anti-personnel and anti-materiel precision scalable lethal and non-lethal weapon systems; improved ballistics protection; adaptability to integrate on a variety of legacy and future platforms including ground vehicles, watercraft, semi-autonomous and autonomous platforms; precision targeting including visible and infrared (IR) pointers; target hand-off; slew-to-cue; escalation of force (EOF) capabilities; and other additional system modifications and improvements.

Obsolescence and Increment II requirements will address recommendations identified in the Operational Test Agency Milestone Assessment Report (OMAR) and user community feedback. These modifications include, but are not limited to: improved optics survivability; auto-zoom; improved auto-tracking; improved sensors for increased situational awareness; and improved rounds counter. Additionally, development efforts will include system and component level reliability improvements that will extend system life and reduce overall CROWS logistics footprint.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Technology Refresh and Obsolescence	-	2.743	0.920
Description: Description: Technology Refresh and Obsolescence			
FY 2016 Plans: Contractor designing and fabricating an improved Thermal Imaging Module (TIM) with a smaller pixel pitch and higher pixel density focal plane array, and enhanced video processing capability allowing the module to provide a wider field of view for increased situational awareness.			
FY 2017 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
Contractor will continue the development of system enhancements addressing obsolescence issues, user community feedback, OMAR recommendations, reliability improvements and increased situational awareness and targeting capability.				
<p>Title: Engineering Support</p> <p>Description: Description: Government Engineering Support.</p> <p>FY 2015 Accomplishments: Provided engineering support and oversight of design improvements, development of enhanced sensors, infrared sights, video capabilities and situational awareness.</p> <p>FY 2016 Plans: Continuing to provide engineering support and oversight of design improvements and contractor performance; development of enhanced sensors, infrared sights, video capabilities and situational awareness. Developing training and technical publications associated with the system improvements.</p> <p>FY 2017 Plans: Will continue to provide engineering support and oversight of design improvements and contractor performance of Technology Refresh efforts and enhanced sensor development. Will begin requirements distillation, performance tradeoffs, feasibility studies and analysis of alternatives for system enhancements supporting Increment II requirements, user feedback, and reliability improvements.</p>		0.645	0.638	1.656
<p>Title: Development Test and Evaluation</p> <p>Description: Description: Test and Evaluation</p> <p>FY 2015 Accomplishments: Developed testing and evaluation criteria and documentation and conducted initial developmental testing and evaluation of improvements.</p> <p>FY 2016 Plans: Continuing initial developmental testing and evaluation of improvements and develop testing and evaluation criteria and documentation for the Thermal Imaging Module.</p> <p>FY 2017 Plans: Will continue developmental testing and evaluation of system enhancements addressing obsolescence issues, user community feedback and reliability improvements. Will begin testing sensor enhancements improving situational awareness and targeting</p>		0.110	0.195	0.651

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
capability. Will develop test and evaluation criteria and documentation for the system enhancements supporting Increment II requirements, user feedback and reliability improvements.			
Title: Program Management	0.409	0.500	1.104
Description: Description: Program Management.			
FY 2015 Accomplishments: Provided oversight of product design and development, to include engineering support, contract actions and test activities throughout the fiscal year. Facilitated test events at various government laboratories to test prototype units of the improved fire control unit processor and system slip ring, in order to quantify performance with the most current sensors and effectors, and managed the life cycle of the program to include future acquisition and sustainment plans.			
FY 2016 Plans: Continuing to provide oversight of product design and development, to include engineering support, contract actions and test activities throughout the fiscal year. Program management office facilitating test events at various government laboratories to test prototype units of the improved fire control unit processor and system slip ring, in order to quantify performance with the most current sensors and effectors, and managing the life cycle of the program to include future acquisition and sustainment plans.			
FY 2017 Plans: Will continue to provide oversight of product design and development, to include engineering support, contract actions and test activities throughout the fiscal year. Additionally, will provide program oversight of the system enhancements supporting Increment II requirements. Program management office will facilitate test events at various government laboratories to test prototype components, sub-system and systems. Will continue to manage the life cycle of the program to include future acquisition and sustainment plans.			
Accomplishments/Planned Programs Subtotals	1.164	4.076	4.331

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• CROWS (G04700, W&TCV): W&TCV, G04700, CROWS	14.149	33.750	25.164	-	25.164	12.265	8.247	-	-	0.000	93.575
Remarks											

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>

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 and Full Rate Production in 4QFY12, in accordance with the Capability Production Document (CPD) Increment I, as clarified in June 2009. Capability Development Document Increment II was approved in October 2015 addressing requirements for the next generation of CROWS.

The program objective is to continue developing, improving and fielding the current generation (Increment I) and next generation (Increment II) of CROWS on various platforms in accordance with the Basis of Issue Plan (BOIP). The program supports new and emerging urgent requirements like the integration of the Mine Resistant Ambush Protected (MRAP) family of vehicles, ground combat systems, Joint Lightweight Tactical Vehicles (JLTV) and fixed site mounting systems to support Integrated Base Defense (IBD).

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
2040 / 5				PE 0604601A / Infantry Support Weapons				S64 / Common Remotely Operated Wpn Sys (CROWS)								
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.053	0.409	Mar 2015	0.500	Feb 2016	1.104	Dec 2016	-		1.104	Continuing	Continuing	0	
Subtotal			0.053	0.409		0.500		1.104		-		1.104	-	-	0.000	
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Technology Refresh, Obsolescence and Increment II Enhancements	SS/FFP	Kongsberg Protech Systems USA : Johnstown, PA	9.145	-		2.743	May 2016	0.920	Mar 2017	-		0.920	Continuing	Continuing	0	
Subtotal			9.145	-		2.743		0.920		-		0.920	-	-	0.000	
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.103	0.645	Mar 2015	0.638	Feb 2016	1.656	Dec 2016	-		1.656	Continuing	Continuing	0	
Subtotal			0.103	0.645		0.638		1.656		-		1.656	-	-	0.000	
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.017	0.110	Mar 2015	0.195	Feb 2016	0.651	Dec 2016	-		0.651	Continuing	Continuing	0	
Subtotal			0.017	0.110		0.195		0.651		-		0.651	-	-	0.000	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army								Date: February 2016					
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>					
	Prior Years	FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	9.318	1.164		4.076		4.331		-		4.331	-	-	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
Contractor Design and Fabrication	[Redacted]				[Redacted]				[Redacted]																			
Engineering Support (Government)									[Redacted]																			
Development Test & Evaluation									[Redacted]																			
Program Management									[Redacted]																			
Increment II Product Improvement																	[Redacted]											

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S64 / <i>Common Remotely Operated Wpn Sys (CROWS)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Contractor Design and Fabrication	3	2016	1	2019
Engineering Support (Government)	3	2015	4	2021
Development Test & Evaluation	3	2015	4	2021
Program Management	3	2015	4	2021
Increment II Product Improvement	2	2017	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>				Project (Number/Name) S70 / <i>Personnel Recovery Support System (PRSS)</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
<i>S70: Personnel Recovery Support System (PRSS)</i>	-	0.522	1.252	1.121	-	1.121	1.137	1.149	1.176	1.051	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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 Continental United States (CONUS), and the demonstration of a production representative encrypted Personnel Recovery Device (PRD) that operates over a secure architecture.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Development of Personnel Recovery Support System (PRSS)	0.522	1.252	1.121
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 2015 Accomplishments: Completed integration and test of receivers onto the communications infrastructure.			
FY 2016 Plans: Conduct evaluation and test of PRD production representative articles in support of competitive production contract down-select.			
FY 2017 Plans: Perform end-to-end testing to exercise all aspects of the PRSS communications system worldwide and conduct operational testing of production PRD in support of a full rate production decision.			
Accomplishments/Planned Programs Subtotals	0.522	1.252	1.121

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• Personnel Recovery Support Sys OPA: <i>Other Procurement</i> ,	10.728	7.733	10.856	-	10.856	11.552	11.776	11.756	11.756	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S70 / <i>Personnel Recovery Support System (PRSS)</i>

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
<i>Army, G01101-Personnel Recovery Support System (PRSS)</i>											

Remarks

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 and hardware to ensure successful interoperability for personnel recovery, and to mitigate potential security compromises to the PRSS system.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604601A / Infantry Support Weapons				S70 / Personnel Recovery Support System (PRSS)							
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	0.767	0.052		0.105		0.110		-		0.110	Continuing	Continuing	Continuing
Subtotal			0.767	0.052		0.105		0.110		-		0.110	-	-	-
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	MIPR	Various Organizations : Various Locations	6.879	0.099		0.318		0.372		-		0.372	Continuing	Continuing	Continuing
Subtotal			6.879	0.099		0.318		0.372		-		0.372	-	-	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	MIPR	Various Organizations : Various Locations	1.600	-		-		-		-		-	0	1.600	0
Subtotal			1.600	-		-		-		-		-	0.000	1.600	0.000
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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 / Operational Testing	MIPR	Various Organizations : Various Locations	1.386	0.371		0.829		0.639		-		0.639	Continuing	Continuing	Continuing

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S70 / <i>Personnel Recovery Support System (PRSS)</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021								
	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					
Personnel Recovery Support System (PRSS) Development Oversight	PRSS Oversight																																
PRSS Development and Test	PRSS Development and Test																																
PRSS Prototype Hardware Build and Integration	PRSS Proto HW Bld & Integ																																
PRSS Operational Test									OT																								
PRSS Upgrades & Adaptations to New Platforms	PRSS Upgrades & Adaptations																																

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) S70 / <i>Personnel Recovery Support System (PRSS)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Personnel Recovery Support System (PRSS) Development Oversight	1	2010	4	2021
PRSS Development and Test	1	2010	4	2021
PRSS Prototype Hardware Build and Integration	3	2010	2	2016
PRSS Operational Test	2	2017	2	2017
PRSS Upgrades & Adaptations to New Platforms	1	2015	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) VS5 / <i>Soldier Protective Equipment</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
<i>VS5: Soldier Protective Equipment</i>	-	4.647	15.175	2.141	-	2.141	3.154	6.122	6.737	7.971	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding supports engineering and manufacturing development and full rate production decision reviews of Soldier Protection equipment. It leverages advancements in technology to continue improvements to hard and soft body armor components, helmets and other personal protective equipment.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Soldier Protective Equipment	4.647	15.175	2.141
<p>Description: Funding line established in FY12. Effort was previously executed in Program Element 0604601 S60. The objective of this effort is to increase the Warfighter lethality and mobility, by optimizing Soldier protection while effectively managing all life cycle aspects of Personal Protective Equipment (PPE).</p> <p>FY 2015 Accomplishments: Continued development of Soldier Protection System (SPS) subsystems (Torso & Extremity Protection (TEP, soft armor), Vital Torso Protection (VTP, hard armor plates), Transition Combat Eyewear Protection (TCEP), Integrated Head Protection System (IHPS) and the Integrated Soldier Sensor System (ISSS)). Completed characterization testing, Human Factors Evaluations (HFEs), system level blast, ballistic and non-ballistic characterization (including Pyroman) testing of SPS VTP, TEP TCEP and IHPS Subsystems in 3QFY15. Initiated a Phase III development cycle (build/test) to achieve IHPS performance requirements. Achieved a Milestone C Decision (Type Classification - Low Rate Initial Production) for VTP and TEP in June 2015. Continued support and sustainment tasks across all of the existing Personal Protection Equipment (PPE) portfolio (extremities, torso and vital torso, head, eye and face protection) to protect against current and emerging ballistic/blast threats. Continuation of efforts to characterize and increase durability and functional service life of PPE. Continued development of ballistic inserts for female and small statured Soldiers and transitioned them to LRIP as part of VTP.</p> <p>FY 2016 Plans: Continue system level development and integration of SPS subsystems and components transitioned from VS4 Advanced Component Development and Prototypes (ACD&P). Conduct system-level Initial Operating Test (IOT)/Live Fire testing of SPS TEP & VTP subsystems to support Full-Rate Production (FRP) decisions 3QFY16 & 4QFY16. Exercise DT Phase III contract options for the IHPS in 1QFY16 and conduct DT III (ballistic, non-ballistic & human factors testing). Award Phase II Developmental Testing/Operational Testing (DT/OT II) contract options of SPS Integrated Soldier Sensor System (ISSS) Personal Status Monitor (PSM) prototypes in 2QFY16. Initiate SPS ISSS DT/OT and complete in 2QFY17. Continue to evaluate system and subsystem technologies across the PPE portfolio (extremities, torso and vital torso, head, eye and face protection) from</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) VS5 / <i>Soldier Protective Equipment</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
<p>emerging ballistic/blast threats. Continue efforts to characterize and increase durability and functional service life of all PPE. Procure Non-Developmental Item (NDI) component candidates/prototypes by 2QFY16 for qualification/integration with existing fielded Advanced Bomb Suit (ABS) through 4QFY16.</p> <p>FY 2017 Plans: Continue system level integration of SPS subsystems and components transitioned from Advanced Component Development and Prototypes/Integrated System Design (ACD&P/ISD). Achieve a MS C decision (LRIP) for IHPS in 1QFY17. Prepare for Milestone C decisions (Type Classification - Low Rate Initial Production) and complete DT/OT of SPS subsystems (IHPS, TCEP and ISSS). Complete system-level IOT/Live Fire testing of IHPS and TCEP to support Full-Rate Production (FRP) decisions by 1QFY19. Continue to evaluate and develop system and subsystem technologies across the PPE portfolio (extremities, torso and vital torso, head, eye and face protection, sensors) from emerging ballistic/blast threats and physiological factors affecting Soldier performance (fatigue, heat stress, etc.). Continue to test ballistic properties of current PPE after exposure to extreme storage conditions for better shelf and service life predictions. Continue development of materials and technologies to reduce SPS weight and bulk at the system, subsystem and component level and continue efforts to characterize and increase durability and functional service life. Start SPS Material Changes for enhancements and specialized soldier functions (mounted and aviation platforms) and environments (including jungle (extreme heat and humidity)).</p>			
Accomplishments/Planned Programs Subtotals	4.647	15.175	2.141

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• VS4 6.4 RDTE: <i>RDTE, 0603827A.VS4, Soldier Protective Equipment</i>	2.629	5.408	16.294	-	16.294	11.711	8.224	2.869	2.647	0.000	49.782
• OMA: <i>OMA, 121017, Central Funding & Fielding</i>	126.972	64.631	96.468	-	96.468	74.833	75.368	63.753	76.563	0	578.588

Remarks

D. Acquisition Strategy

Acquisition strategies for these programs vary in methods, and range from: 1) Material Change programs that result in engineering changes to existing systems to; 2) traditional development programs that include an Engineering and Manufacturing Development phase ranging in duration from 12 to 48 months, depending on the level of complexity and testing required.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604601A / Infantry Support Weapons				VS5 / Soldier Protective Equipment							
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
In House Support	Various	Various SPIE : Various	0.000	0.017		0.450		0.150		-		0.150	0	0.617	0
Subtotal			0.000	0.017		0.450		0.150		-		0.150	0.000	0.617	0.000
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Dev/Integ Contracts	Various	Various : Various	23.327	2.410		5.350		1.633		-		1.633	Continuing	Continuing	0
Prod Sys Engineering Spt	MIPR	various : various	2.592	0.530		4.987		-		-		-	Continuing	Continuing	0
Subtotal			25.919	2.940		10.337		1.633		-		1.633	-	-	0.000
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Misc Support Costs	MIPR	Various : Various	1.800	-		1.003		-		-		-	0	2.803	0
Subtotal			1.800	-		1.003		-		-		-	0.000	2.803	0.000
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
DT/Ballistic & OT Test Costs	MIPR	Various DTC & OTC : Various DTC & OTC	5.253	1.690		3.385		0.358		-		0.358	Continuing	Continuing	0
Subtotal			5.253	1.690		3.385		0.358		-		0.358	-	-	0.000
Project Cost Totals			32.972	4.647		15.175		2.141		-		2.141	-	-	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army	Date: February 2016
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) VS5 / <i>Soldier Protective Equipment</i>
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	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
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Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) VS5 / <i>Soldier Protective Equipment</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
Conduct Phase II SPS System Level DT/OT 1																												
(1) SPS VTP Milestone C Decision (LRIP)			▲																									
(2) SPS TEP Milestone C Decision (LRIP)			▲																									
Test and Qualify Improvements to SPS Gen 1 through FY19																												
Conduct IOT/LFT for VTP and TEP to Spt FRP																												
(3) VTP & TEP FRP Decision																												
Conduct IHPS DT III																												
(4) IHPS Milestone C Decision (LRIP)																												
IHPS/TCEP IOT/LFT/TCEP																												
(5) IHPS/TCEP FRP																												
ISSS DT II																												
(6) ISSS Milestone C Decision (LRIP)																												
Conduct OT for ISSS																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) VS5 / <i>Soldier Protective Equipment</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
(1) ISSS FRP Decision																	▲											

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604601A / <i>Infantry Support Weapons</i>	Project (Number/Name) VS5 / <i>Soldier Protective Equipment</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Conduct Phase II SPS System Level DT/OT 1	4	2014	3	2015
SPS VTP Milestone C Decision (LRIP)	3	2015	3	2015
SPS TEP Milestone C Decision (LRIP)	3	2015	3	2015
Test and Qualify Improvements to SPS Gen 1 through FY19	4	2015	4	2019
Conduct IOT/LFT for VTP and TEP to Spt FRP	2	2016	3	2016
VTP & TEP FRP Decision	4	2016	4	2016
Conduct IHPS DT III	2	2016	3	2016
IHPS Milestone C Decision (LRIP)	1	2017	1	2017
IHPS/TCEP IOT/LFT/TCEP	4	2017	1	2018
IHPS/TCEP FRP	3	2018	3	2018
ISSS DT II	3	2016	2	2017
ISSS Milestone C Decision (LRIP)	3	2017	3	2017
Conduct OT for ISSS	1	2018	2	2018
ISSS FRP Decision	2	2019	2	2019