Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army											Date: March 2014	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 3: *Advanced Technology Development (ATD)*					R-1 Program Element (Number/Name) PE 0603607A *I JOINT SERVICE SMALL ARMS PROGRAM*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	-	5.478	5.027	7.321	-	7.321	5.143	5.875	5.823	5.913	-	-
627: *Jt Svc Sa Prog (JSSAP)*	-	5.478	5.027	7.321	-	7.321	5.143	5.875	5.823	5.913	-	-

The FY 2015 OCO Request will be submitted at a later date.

Note

FY13 decreases attributed to General Congressional Reductions (-10 thousand); SBIR/STTR transfers (-131 thousand) and Sequestration reductions (-476 thousand)

A. Mission Description and Budget Item Justification

This project matures and demonstrates advanced technologies that provide greater lethality, target acquisition, fire control, training effectiveness and range at a significantly reduced weight. These technologies lighten the Soldier's load, provide improved battlefield mobility, and reduce logistics burden while maintaining or improving current levels of performance.

Efforts in this program element support the Soldier Science and Technology portfolio.

Work in this PE is related to and fully integrated with the efforts funded in PE 0602623A (Joint Service Small Arms Program) and PE 0602624A (Weapons and Munitions Technology).

The cited work is consistent with the Assistant Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy.

Work in this project is performed by the US Army Armament Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, NJ.

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	6.095	5.030	7.317	-	7.317
Current President's Budget	5.478	5.027	7.321	-	7.321
Total Adjustments	-0.617	-0.003	0.004	-	0.004
• Congressional General Reductions	-0.010	-0.003			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.131	-			
• Adjustments to Budget Years	-	-	0.004	-	0.004

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army					Date: March 2014
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 3: *Advanced Technology Development (ATD)*		R-1 Program Element (Number/Name) PE 0603607A *I JOINT SERVICE SMALL ARMS PROGRAM*			
• Sequestration	-0.476	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603607A / *JOINT SERVICE SMALL ARMS PROGRAM*	Project (Number/Name) 627 / *Jt Svc Sa Prog (JSSAP)*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
627: *Jt Svc Sa Prog (JSSAP)*	-	5.478	5.027	7.321	-	7.321	5.143	5.875	5.823	5.913	-	-

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

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Work in this project is performed by the US Army Armament Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, NJ.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Title: Small Arms Weapons and Fire Control Integration	2.264	2.302	5.668
Description: The best breadboard concepts from the Advanced Fire Control Technology for Small Arms (0602623A/H21) will be integrated into lab demonstrators and evaluated on relevant current (M4, M16, M249, M240) and developmental small arms systems to optimize affordability, target acquisition, fire control, weight, and lethality. Project transitions to Project Manager Soldier Weapons (PM SW).			
FY 2013 Accomplishments: Matured and demonstrated improvements to target tracking and range determination component technologies and algorithms; integrated subcomponents into realistic fire control system envelope; used modeling and simulation to evaluate system level effectiveness; used results to assist in selection of best systems.			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603607A / *JOINT SERVICE SMALL ARMS PROGRAM*	**Project (Number/Name)** 627 / *Jt Svc Sa Prog (JSSAP)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Complete integration of the daytime electro-optic fire control demonstrator with target tracking algorithms and range determination component technologies for machine gun mounted optics; demonstrate capability to track multiple targets and increase probability of hit by 100% out to a range of 1200 meters. ***FY 2015 Plans:*** Will perform final developmental testing and assessments in a relevant environment; will demonstrate compatibility with current M240 machine gun in actual system environments; will achieve TRL 6 for matured component technologies and will transition Technical Data Package (TDP).			
Title: Small Arms Grenade Munitions Integration and Evaluation ***Description:*** The best breadboard concepts from the Advanced Lethality Armament Technology for Small Arms (0602623A/H21) project will be integrated into a 40mm ammunition prototype and evaluated on current (M203, M320, and M32 40mm grenade launchers) small arms systems to optimize affordability, effects and lethality. Project transitions to Project Manager Maneuver Ammunition Systems (PM MAS). ***FY 2013 Accomplishments:*** Integrate alternate fuze detonation modes into the smaller modified MK550 fuze to improve initiation location and improve Probability of Incapacitation (P(I)) against threat personnel in defilade; integrate smart fuze and sensors into 40mm low velocity grenades for demonstration; assess performance improvement results to assist in selection of best systems; transition fuze design improvements to PM-MAS. ***FY 2014 Plans:*** Minimize dispersion and drag variation of the M433 40mm grenade through exterior design modifications in order to maximize the range of the projectile; integrate the smaller fuze and sensor components into the improved projectile body; demonstrate improved warhead and ballistic performance; transition grenade design improvements to PM-MAS. Initiate weapon effectiveness study to understand target and advanced projectile interactions for overwhelming lethal effects.	3.214	2.725	-
Title: Advanced Small Unit (Squad) Small Arms Technology Demonstration ***Description:*** Identify, advance, and demonstrate advanced technologies leading to the ability to improve Small Unit level effectiveness and utilize new small arms technological concepts to improve range overmatch capability against like-sized threat elements. ***FY 2015 Plans:***	-	-	1.653

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 3	**R-1 Program Element (Number/Name)** PE 0603607A / *JOINT SERVICE SMALL ARMS PROGRAM*	**Project (Number/Name)** 627 / *Jt Svc Sa Prog (JSSAP)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Will demonstrate enabling technologies that a double maximum effective range of door-breaching munition from 33m to 66m; double the maximum effective range to 2km for .50 caliber ammunition; increase probability of hit and hard target penetration; and double probability of hit for rifles from 0-600m.			
Accomplishments/Planned Programs Subtotals	5.478	5.027	7.321

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A