ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2006

BUDGET ACTIVITY	PE NUMBER AND TITLE
3 - Advanced technology development	**0603607A - JOINT SERVICE SMALL ARMS PROGRAM**

COST (In Thousands)		FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
Total Program Element (PE) Cost		5732	7474	7202	7360	7472	7536	7594
627	JT SVC SA PROG (JSSAP)	5732	6488	7202	7360	7472	7536	7594
62D	SMALL ARMS ADVANCED TECHNOLOGY DEV (CA)	0	986	0	0	0	0	0

A. Mission Description and Budget Item Justification: This Program Element (PE) matures and demonstrates advanced technologies that integrate into individual and crew-served weapons for all Services to provide greater lethality, utility and range at a significantly reduced weight for Future Combat Systems (FCS), the Future Force and, where feasible, exploits opportunities to enhance Current Force capabilities. The main effort is the Lightweight Small Arms Technologies (LSAT). The LSAT will offer significantly reduced weight over the currently fielded weapons and ammunition. These technologies will lighten the Soldier's load, provide improved battlefield mobility and reduced logistics burden to maximize operational utility and survivability, while maintaining or improving current levels of performance. All Joint Service Small Arms Program (JSSAP) efforts follow the Joint Service Small Arms Master Plan (JSSAMP), the Joint Capabilities Integration Development System (JCIDS) Small Arms Analysis, and the resulting Capabilities Development Documents. The cited work is consistent with the Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP) and the Defense Technology Area Plan (DTAP). Work is performed by the US Army Armament Research, Development and Engineering Center, Picatinny Arsenal, NJ. 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). Transition paths have been established in coordination with Program Executive Officer (PEO) Soldier, Project Manager Soldier Weapons, Product Manager (PM) Crew Served Weapons, PM Individual Weapons, United States Marine Corps (USMC) PM Infantry Weapons; and PEO Special Programs, U.S. Special Operations Command (SOCOM). Project 627 contains Congressional Adds only.

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3 - Advanced technology development	**0603607A - JOINT SERVICE SMALL ARMS PROGRAM**

B. Program Change Summary	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2006)	9675	6581	6942
Current BES/President's Budget (FY 2007)	5732	7474	7202
Total Adjustments	-3943	893	260
Congressional Program Reductions		-32	
Congressional Rescissions		-75	
Congressional Increases		1000	
Reprogrammings	-3943		
SBIR/STTR Transfer			
Adjustments to Budget Years			260

FY05 decrease of $3.943 million attributed to reprogramming of Congressional Add for Advanced Demining Technology (after adjustment for Congressional Undistributed Reductions) to PE 0603606A for proper execution.

One FY06 Congressional add totaling $1000 was added to this PE.

FY06 Congressional add with no R-2A (appropriated amount is shown):
($1000) Lightweight Machine Gun and Ammunition

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February 2006

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
3 - Advanced technology development	**0603607A - JOINT SERVICE SMALL ARMS PROGRAM**	**627**

COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate
627 JT SVC SA PROG (JSSAP)	5732	6488	7202	7360	7472	7536	7594

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Accomplishments/Planned Program	FY 2005	FY 2006	FY 2007
Lightweight Small Arms Technologies (LSAT): In FY05, built weapon and ammunition subsystems, performed preliminary integration and functionality testing to assess weapon operation and ammunition lethality and establish reliability baseline; used virtual prototyping (dynamic models) to advance the design and analysis of system level trade offs. In FY06, build integrated weapon prototypes to test weapon and ammunition functionality and human factors and validate/update virtual prototypes; adjust weapon system to incorporate improvements, mature weapon system to increase reliability; modify ammunition as necessary to attain required lethality; assess maintenance and training issues and make modifications as necessary. In FY07, will perform final integration testing to demonstrate lethality and reliability of the lightweight weapons and ammo; will conduct user demonstration to update and complete human factors, maintenance, and training assessment.	5732	6488	7202
Total	5732	6488	7202