

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2004

BUDGET ACTIVITY

3 - Advanced technology development

PE NUMBER AND TITLE

0603607A - JOINT SERVICE SMALL ARMS PROGRAM

PROJECT

627

COST (In Thousands)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
627	JT SVC SA PROG (JSSAP)	16396	9575	5968	6844	7160	7303	7470

A. Mission Description and Budget Item Justification: This Program Element matures and demonstrates advanced technologies that integrate into individual and crew-served weapons to provide greater lethality, utility and range at a significantly reduced weight for the Future Force and, where feasible, exploits opportunities to enhance Current Force capabilities. Efforts include: the Objective Crew-Served Weapon (OCSW) Advanced Technology Demonstration (ATD); and Objective Individual Combat Weapon (OICW) System Enhancement; and the Lightweight Machine Gun and Ammunition (LMGA). OCSW demonstrated the next generation crew-served weapon with improved combat effectiveness by being able to hit protected personnel targets in defilade (obscured or non-visible), and over 60% reduced weight when compared to the MK19 grenade machine gun and M2 machine gun it will replace. The OICW system enhancement efforts will mature, demonstrate and transition lethality-enhancing and cost/weight-reducing technologies into the OCSW and OICW. The LMGA, complementing both the highly lethal OICW and OCSW will offer significantly reduced weight over the currently fielded M249 Squad Automatic Weapon and its associated ammunition. This weapon will lighten the soldier's load, provide improved battlefield mobility and reduced logistics burden to maximize operational utility and survivability, while maintaining current levels of performance. All Joint Service Small Arms Program (JSSAP) efforts follow the Joint Service Small Arms Master Plan (JSSAMP) and Service Mission Need Statements and 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). The program element contains no duplication with any effort within the Military Departments. Work is performed by the US Army Armament Research, Development and Engineering Center, Picatinny Arsenal, NJ. Work in this PE is derived and fully integrated with the 6.2 efforts found 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 Soldier, Project Manager Soldier Weapons, Product Manager (PM) Crew Served Weapons, PM Individual Weapons, USMC Director, Ground Weapons; and US Special Operations Command (SOCOM).

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
OCSW: In FY03, demonstrated accuracy and functionality of air-bursting high explosive munition; fabricated test quantities of munitions; conducted environmental testing of weapon; extended limits of man-rated firing; conducted final system integration test; conducted system acceptance test. Completed ATD. Provided technical support to OCSW Milestone B decision review.	3148	0	0
OCSW .50 Caliber Variant: In FY03, efforts focused on developing and test firing a .50 cal variant of the weapon resulting in a significant cost saving for reliability testing and a new weapon variant for potential field use to replace the existing M2 machine gun.	3500	0	0

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Accomplishments/Planned Program B(continued)		FY 2003	FY 2004	FY 2005
OICW System Enhancement: In FY03, performed Microelectrical Mechanical Systems (MEMS) based Safe & Arm (S&A) and fuze integration and initiated fuze/warhead performance and safety tests. In FY 04, continue OICW 20mm system integration, conduct test firing of MEMS S&A in test barrel and demonstrate in the XM29; will quantify production costs.		2400	4236	0
LMGA: In FY04, award contracts to design a lightweight, reliable machine gun and ammunition. In FY05, will conduct initial integration tests with OFW Lead Technology Integrator and down select to final weapon design; build and test initial weapon and ammunition components.		0	1732	5968
OCSW: This one year Congressional add reduced risk in the System Development and Demonstration Phase by further maturing the OCSW airburst fuze; demonstrated a fully integrated airburst round; further increased the reliability of the system and support the conduct of OCSW Milestone B.		3341	0	0
Anti-material Sniper Rifle (AMSR): This one year Congressional add evaluated weapon technologies in the areas of light weight materials, recoil mitigation and energy recovery and demonstrated these in a 25mm Anti-Material Sniper Rifle technology based on the XM107 .50 caliber Sniper Rifle, which is compatible with the XM307, Objective Crew Served Weapon Ammunition. The FY04 Congressional add addresses the building and safety certification of additional prototype weapons; the design, development, fabrication and testing of 25mm OCSW, and AMSR-compatible light armor piercing ammunition; and overall system demonstration of the XM109 AMSR in conjunction with several User components		4007	3352	0
Small Business Innovative Research/Small Business Technology Transfer Programs		0	255	0
Totals		16396	9575	5968

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627**B. Program Change Summary**

	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	12998	6193	5979
Current Budget (FY 2005 PB)	16396	9575	5968
Total Adjustments	3398	3382	-11
Congressional program reductions		-82	
Congressional rescissions			
Congressional increases		3500	
Reprogrammings	3398	-36	
SBIR/STTR Transfer			
Adjustments to Budget Years			-11

Significant Change Explanation.

FY03 - Funds increased to support OCSW acceleration.

FY04 - One FY04 Congressional add totaling \$3500 was added to the PE.