ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)						Jı	ıne 2001			
BUDGET ACTIVITY 3 - ADV TECHNOLOGY DEV		(PE NUMBER AND TITLE 0603607A - Joint Service Small Arms Program (JSSAP)				PROJECT 627			
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
627 JT SVC SA PROG (JSSAP)	8539	4428	5828	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification:

<u>PLEASE NOTE:</u> This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

This Program Element (PE) matures and demonstrates advanced technologies that integrate into individual and crew-served weapons with greater lethality, utility and range at a significantly reduced weight that will enable the Army Transformation to the Objective Force. Efforts include: the Objective Crew-Served Weapon (OCSW) Advanced Technology Demonstration (ATD) and Objective Individual Combat Weapon (OICW) System Enhancement. OCSW demonstrates the next generation crew-served weapon with improved combat effectiveness such as being able to hit protected personnel targets in defilade (obscured or non-visible), with a reduced weight of 65-75% over M2 machine guns, MK19 grenade machine guns and M240 machine guns. The system enhancement efforts will develop, demonstrate and transition lethality enhancing and cost reducing technologies into the OCSW and OICW. All Joint Service Small Arms Program (JSSAP) efforts follow the Joint Service Small Arms Master Plan (JSSAMP) and Service Mission Need Statements and Operational Requirement Documents. The cited work is consistent with the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and Project Reliance. 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 Product Manager (PM) Small Arms; USMC Director, Ground Weapons; and US Special Operations Command (SOCOM). This program supports the Objective Force transition path of the Transformation Campaign Plan (TCP).

FY 2000 Accomplishments

- Completed OCSW system design refinements of a lightweight (less than 50 lb.) weapon (gun, pintle, traverse and elevation, and tripod).
- Conducted weapon/mount reliability and durability testing; established OCSW interface with Land Warrior and demonstrated functionality.
- 2272 Completed manufacture and test of OCSW fire control system.
- 3853 Completed build of first OCSW weapon; conducted subcomponent integration of OCSW fire control; demonstrated OCSW fuze setting in rapid-fire (3-5 round burst mode).

Total 8539

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FY 2001 Planned Program

- Conduct 1000-2000 meter firing tests with full solution fire control of OCSW launched, high explosive, airburst munition; test and evaluate integrated OCSW weapon/fire control system; conduct ruggedness and environmental testing; complete planning of OCSW safety release testing; fabricate and test initial system hardware; build ATD small arms simulator and conduct OCSW virtual simulations.
- Conduct initial system level demonstration of integrated OCSW (weapon/ammunition/fuze/fire control); complete build of follow-on OCSW system in preparation for ATD FY 2002.
- Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs.

Total 4428

FY 2002 Planned Program

- 1807 Fabricate OCSW ATD munitions (Target Practice, Target Practice-Spotter, High Explosive); complete fabrication of OCSW ATD fuzes; complete OCSW transition activities and complete ATD; conduct OCSW Milestone I Decision Review.
- 4021 OICW System Enhancement: Update initial designs, fabricate test hardware, and evaluate in inert warheads the performance of micro-electro-mechanical systems (MEMS) based safe and arming (S&A) mechanism employing Micro Energetic Initiation (MEI). MEI provides a 75% volume/50% cost reduction in the fuze S&A.

Total 5828

B. Program Change Summary	FY 2000	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2001 PB)	8760	4469	5804	0
Appropriated Value	8869	4469	0	0
Adjustments to Appropriated Value	0	0	0	0
a. Congressional General Reductions	0	0	0	0
b. SBIR/STTR Program	-221	0	0	0
c. Omnibus or Other Above Threshold Reductions	-34	0	0	0
d. Below Threshold Reprogramming	0	0	0	0
e. Rescissions	-75	-41	0	0
Adjustments to Budget Years Since FY2001 PB	0	0	24	0
Current Budget Submit (FY 2002/2003 PB)	8539	4428	5828	0

ARMY RDT&E BUDGET ITEM JUSTI	June 2001		
BUDGET ACTIVITY 3 - ADV TECHNOLOGY DEV	PE NUMBER AND TITLE 0603607A - Joint Service Small Arms 1 (JSSAP)	Program	PROJECT 627