

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	DATE February 2000
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BUDGET ACTIVITY 3 - Advanced Technology Development	PE NUMBER AND TITLE 0603607A Joint Service Small Arms Program	PROJECT D627
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COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D627 Joint Service Small Arms Program (JSSAP)	12532	8760	4469	5804	5905	6308	6613	Continuing	Continuing

A. Mission Description and Justification: The objective of this Program Element (PE) is to develop and demonstrate advanced technologies that integrate into individual and crew-served weapons with greater lethality, utility and range at a significantly reduced weight. The Joint Service Small Arms Program (JSSAP) includes the Objective Crew-Served Weapon (OCSW) Advanced Technology Demonstration (ATD) and the new Joint Service Combat Shotgun. The Objective Individual Combat Weapon (OICW) transitioned to the Program Manager for Small Arms, PE 060480A, in FY99. It demonstrated an individual weapon capable of hitting obscured targets with a 300-500% increase in probability of hit and increased effective range of 1000 meters. OCSW demonstrates the next generation crew-served weapon with improved combat effectiveness such as being able to hit obscured targets and a reduced weight of 65-75% over weapons it replaces. This weapon is designed to replace selected M2 machine guns, MK19 grenade machine guns and M240 machine guns. The Joint Service Combat Shotgun will demonstrate a weapon with high combat versatility and reduced logistics burden. All JSSAP efforts follow the Joint Service Small Arms Master Plan (JSSAMP) and the approved Joint Service Science and Technology Objectives (JSSTO). The also meet their respective Mission Need Statements and Operational Requirement Documents. This work is also consistent with the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and Project Reliance. The US Army Armament Research, Development and Engineering Center (ARDEC), Picatinny Arsenal, NJ, primarily manages this PE. 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). JSSAP OICW and OCSW Technology Base efforts transition to PE 0604802A (Weapons and Munitions Engineering Development) and PE 0604601A (Objective Crew-Served Weapon - Engineering Development), respectively. Transition paths have been established in coordination with Program Manager (PM) Small Arms; USMC Director, Ground Weapons; and US Special Forces Operations Command (SOCOM).

FY 1999 Accomplishments:

- 7204 - Completed hardware build for OICW ATD.
 - 1467 - Conducted OICW live fire simulation/field test and prepared for Milestone I.
- Conducted OICW transition activities and completed ATD.
 - 3861 - Integrated initial system design refinements into OCSW prototype weapon.
- Conducted OCSW 2000 meter dispersion critical test demo; completed precision air burst design effort plus fragmentation study.
- Designed OCSW fire control system and addressed interface for combat identification (friend/foe), plus Land Warrior interoperability.
- Completed joint combat shotgun selection and operational and engineering testing.
- Total 12532

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FY 2000 Planned Program:

- 1200 - Complete OCSW system design refinements of a lightweight (less than 50 lb.) weapon (gun, pintle, traverse and elevation, and tripod).
 - 1300 - Demonstrate OCSW fuze setting in rapid-fire (3-5 round burst mode).
 - 2139 - Build and test initial OCSW fire control system.
- Conduct 1000-2000 meter firing tests of OCSW launched, high explosive, airburst munition.
 - 3900 - Ensure robust fuze design and system reliability; build ATD simulator
 - 221 - Small Business Innovation Research/ Small Business Technology Transfer (SBIR/STTR) Programs
- Total 8760

FY 2001 Planned Program:

- 311 Demonstrate OCSW interface with Land Warrior and Future Warrior advanced warfighting experiments; demonstrate functionality
 - 1040 Demonstrate OCSW thermal module capability, leveraging OICW and other applicable technologies.
 - 2158 Complete planning of OCSW safety release testing; fabricate and test initial hardware.
 - 960 Conduct initial system level demonstration of integrated OCSW: weapon/ammunition/fuze/fire control.
- Total 4469

<u>B. Program Change Summary</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget (FY 2000 / 2001 PB)	9608	4869	5468
Appropriated Value	9673	8869	
Adjustments to Appropriated Value			
a. Congressional General Reductions	-65		
b. Small Business Innovative Research / Small Business Technology Transfer (SBIR/STTR) Program	-242		
c. Omnibus or Other Above Threshold Reductions		-34	
d. Below Threshold Reprogramming	+3204		
e. Rescissions	-	-75	
	38		
Adjustments to Budget Years Since (FY 2000 / 2001 PB)			-999
Current Budget Submit (FY 2001 PB)	12532	8760	4469

Change Summary Explanation: Funding – FY 1999: Reprogrammed 3204 from various sources for OICW program.