Objective Individual Combat Weapon (OICW) (XM29)  
Increment I

SUMMARY

- The Objective Individual Combat Weapon (OICW) Increment I family of rifles may replace the M16/M4 family of weapons throughout the Army, as well as other selected systems such as the M9 pistol, M203 grenade launcher, M500 shotgun, and M249 squad automatic weapon.
- The XM8 family of rifles is a candidate system to fulfill the OICW Increment I requirement.
- The Army is scheduled to conduct an OICW Milestone C/low-rate initial production (LRIP) review in June 2005.
- Since the XM8 carbine and special compact variants have shorter barrels than the M16/M4 family of rifles, there is the potential for decreased lethality with the XM8 when firing the standard M855 5.56mm cartridge.

SYSTEM DESCRIPTION AND MISSION

The XM8 is a candidate system for Increment I of the OICW. The XM8 is a conventional, direct fire, kinetic energy family of weapons that has three variants:

- Special Compact: 9-inch barrel; intended for combat in close quarters; replaces the M9 pistol.
- Carbine: 12.5-inch barrel; replaces the M16/M4 family of rifles.
- Designated Marksman: 20-inch barrel; intended for long-range precision engagements.

The XM8 initial baseline capabilities include a sighting system that facilitates both rapid-close and precision long-range engagements, and a pointer/illuminator system that facilitates night engagements in combination with the soldier’s image intensification night vision devices. The XM8 includes an area suppression lethality module, which replaces the M203 grenade launcher and includes the shotgun lethality module that replaces the M500 shotgun.

TEST AND EVALUATION ACTIVITY

The Army has not updated the OICW Test and Evaluation Master Plan (TEMP) since the June 2000 Milestone I decision. The program manager is currently revising the OICW TEMP to address the incremental approach development, which includes the Increment I family of weapons. The U.S. Army Infantry Center approved a capabilities development document in July 2004 that identifies the OICW Increment I as a family of kinetic energy rifles.
The Army approved the Capability Development Document (CDD) in October 2004. The Army’s Training and Doctrine Command has yet to approve the critical operational issues and criteria.

The first generation of XM8 rifles completed developmental testing and completed a Proponent Assessment conducted by the U.S. Army Infantry Center at Fort Benning, Georgia, in early FY04. Several changes were made to the rifle because of reliability and soldier-weapon interface issues:

- Hand guard redesign
- Bolt housing group redesign
- Additional iron back-up sight

The second generation of XM8 weapons is currently undergoing developmental testing.

**TEST AND EVALUATION ASSESSMENT**

The Army has not conducted XM8 operational testing to date, and developmental testing is ongoing, but has not yet produced sufficient data to assess XM8 effectiveness or suitability. Preliminary lethality data from the Army’s Armament Research and Development Center indicate that the wound potential of the M855 cartridge, when fired from the XM8 special compact and carbine variants, may be less than that of the M855 cartridge when fired from the fielded M16 rifle with a 20-inch barrel. Quantitative testing by the Army, however, has not yet been conducted. The XM8 family has the capability to switch to different barrels at unit-level and longer barrels will be pursued by the program if lethality requirements are not met. DOT&E will continue to monitor these preliminary results as data becomes available.