

40MM NON-DUD PRODUCING TRAINING AMMO NOW AVAILABLE

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PEO Soldier's Project Manager Soldier Weapons in Picatinny Arsenal, New Jersey, has three 40mm product standouts in the Green Ammunition category.

Yes, that's "Green Ammunition." These training cartridges enable 24/7 day/night combat training on the high velocity MK19, MK47 grenade machine guns and low velocity M203, MK13, M79 and XM320 grenade launchers. The MK281 MOD 0 and MOD 1 are for high velocity, and the XM1110 is for low velocity.

Commanders and warfighters that have used the cartridges value the realistic fire and maneuver training they deliver, the good "hit signatures," and the convenience of unrestricted training in dry conditions with no "cease fires" associated with pyrotechnic cartridges.

Warfighters have, or will have, access to this ammunition. That's because Project Manager Soldier Weapons leveraged the DoD's Foreign Comparative Test (FCT) program to fast track qualification of a commercial-off-the-shelf (COTS) product used in a NATO country.

Established in the early 1990s, the FCT program consolidates testing and evaluation of foreign nondevelopmental items to satisfy user requirements across the armed forces. The Department of Defense established the FTC program with a mission to improve warfighting capability, accelerate fielding, and save taxpayer funds.

MK281: The two versions of the MK281 40mm training cartridges began as a Marine request in 1997, a couple of years after the DoD sent the Defense Science Board (DSB) on a mission to evaluate the armed forces unexploded ordnance (UXO) problems. The DSB's 1996 report stated clean-up numbers were in the billions.

The Office of the Secretary of Defense approved funding, and in 1999 the Marine's request became a joint program between the Army Research Development and Engineering Center at Picatinny Arsenal and the USMC in Quantico, Virginia.

Despite combined efforts, when the top product made its way through the final stages of testing, the Army dropped the program. Regardless of the Army's reasons for exiting the program, USMC's Mike Miller took the reins and brought the program to completion with the technical support of the Naval Surface Warfare Center Dahlgren in Virginia, hence the Mk Navy nomenclature. They classified the Mod 0 day training cartridge in 2003 and had enough successes to secure additional funding. The Mod 1 day/night training, visible in IR spectrum and the naked eyes, was classified in 2006.

Throughout the program's transition, Army warfighters' interest in the 40mm non-dud producing training cartridges

remained high. In 2004, PEO Soldier, Brigadier General James R. Moran acknowledged this. Subsequently, PEO authorized Project Manager Soldier Weapons to formalize the adoption of the MK281 MOD 0 into the Army system. This move enabled access to the cartridges by adopting the Marine's requirements.

To date, the Army has procured limited quantities of MK281 on an as-needed-basis through the USMC's 5-year Indefinite Delivery/Indefinite Quantity contract, a 2006 award that went to Rheinmetall and American teaming partner Cyalume, located in Massachusetts. Aligned to the DoD policy of stateside production for contract awards, Rheinmetall established a production facility to manufacture MK281 cartridges.

XM1110: The XM1110 training cartridge began in 2003 when the U.S. Special Operations Command (SOCOM) identified a need for night training ammunition for the MK13 grenade launcher. Recognizing Project Manager Soldier Weapons' expertise with the MK281 cartridges, SOCOM issue a Program Specific Memo of Agreement (PSMOA), tasking PEO Soldier's Project Manager Soldier Weapons to manage the XM1110 FCT program for them with SOCOM executive oversight.

A market survey was conducted, and a training cartridge manufactured by Rheinmetall/Cyalume was viewed as a candidate likely to satisfy SOCOM's need. This cartridge had the same propulsion system as the DoD's Standard M781 day-time-only training cartridge. The cartridge needed nighttime capability as well, so Cyalume's glow-stick component was added to the orange powder payload. Accomplished in good timing, in 2005 SOCOM awarded Rheinmetall/Cyalume a contract to produce test quantities of their cartridge for testing and evaluation.

The XM1110 is progressing well. Compliance with Key Performance Parameters (KPP) was demonstrated in April of 2007 in Germany, followed by a successful Initial Operator Test (IOT) in April of 2008 in Avon Park, Florida. Final Qualification Testing is planned for December 2008 with initial fielding expected in early 2010.

To date, commanders of the National Guard have taken notice and recognized the convenience of being able to train on ranges in their respective states, instead of sending warfighters on long convoys to active duty installations. Installation commanders have also taken notice of the convenience of being able to redirect limited operations and maintenance funds for needed projects. And, the DoD has recognized the convenience of enabling overseas commanders to train on makeshift ranges without the international concerns of civilians picking up unexploded training duds.

(Kate Roa is a former media specialist for PEO Soldier, who transitioned to full-time writing.)