

TRAINING OPTIMIZES SHOULDER LAUNCHED MUNITION EFFECTIVENESS

Over the last several decades, Shoulder Launched Munitions (SLM) have provided Soldiers with the capability to **defeat light armored vehicles, bunkers and other field fortifications**. Reports from the field, however, indicated that the performance and purposes of these munitions were **not well understood**.

The solution? Training.

To **quickly acquire the critical training support**, PM CCS requested that an urgent contractual action be approved to immediately **streamline the acquisition process**. They were then able to pull together a New Equipment Training (NET)

team, including trainer certification and materials and get the training out to the Soldiers quickly.

Using a 'train-the-trainer' approach that theater-bound units can take into the field and propagate among their units, the SLM NET set up training events, both CONUS and OCONUS. To date, 17 Brigade Combat Teams with **more than 1,095 Soldiers have been trained**. They, in turn, will train their fellow Soldiers in theater. Feedback indicates that a greater understanding of the weapon, its intended use and operation, has **greatly enhanced the SLMs success** in combat.



SHOULDER LAUNCHED MUNITIONS

SLMs allow Soldiers to engage enemy personnel, light armored vehicles, bunkers and other field fortifications in close combat. They are highly mobile and lightweight; improved versions can be safely fired from confined spaces found in urban environments.



M136 AT4 LIGHT ANTI-TANK WEAPON (AT4)

The M136 AT4, the Army's primary light antitank weapon, is a recoilless rifle used primarily by infantry forces for engagement and defeat of armor threats. The rifle's design permits accurate delivery of an 84mm High Explosive Anti-Tank warhead providing excellent penetration capability and lethal after-armor effects. PM CCS discontinued purchase of the AT4 in favor of its newest iteration, the AT4 Confined Space system.

M136E1 AT4 CONFINED SPACE (AT4-CS)

The AT4-CS is a man-portable, single shot, disposable anti-armor shoulder launched munition that can be fired from a confined space, significantly increasing the Soldier's ability to engage in urban conflict. It weighs 7.5 kg and has an effective range of 300m. The self-contained weapon consists of a free flight, fin stabilized, rocket-type cartridge packed in an expendable, 1-piece, fiberglass-wrapped tube. Its recoilless design is superior to that of rocket-type weapons for confined space applications. Resistance to shock damage contributes to the AT4's high reliability.



M141 BUNKER DEFEAT MUNITION (BDM)

The BDM or SMAW-D is a shoulder launched munition that meets a requirement to fill the lightweight "Bunker Buster" void in the Army inventory. The man-portable system is highly effective against targets including fortified positions (earth and timber bunkers) and is also capable of breaching masonry walls and neutralizing light armored vehicles at ranges of 15-250 meters. In a U.S. News and World Report article, American Soldiers said, "After a brief rest, the team set off to pursue the Ansar fighters fleeing toward the border. Arabs were rumored to stay in these caves. A hail of gunfire erupted from the caves as the Kurds approached. [Grit] pulled out a new cave-busting antitank missile called a 'SMAW-D.' The sound of the explosion was deafening. The SMAW-D demolished the cave. The firing from inside ceased."



M72 LIGHT ANTI-ARMOR WEAPON (LAW)

The M72 LAW is a lightweight, self-contained, anti-armor system consisting of a 66mm rocket packed in a compact, disposable launcher. It is man-portable and can be fired from either shoulder. The launcher also serves as a watertight packing container for the rocket and houses a percussion-type firing mechanism that activates it. The weapon is capable of penetrating 305mm of armor with an effective range of up to 220 meters.

INDIVIDUAL ASSAULT MUNITION (IAM)

This next generation shoulder launched munition is being designed for use by the Objective Force Warrior to dominate complex and urban terrain. IAM will also contribute to survivability by enabling the Soldier to engage targets from protected positions without exposing himself to enemy fires and effects. The disposable, shoulder launched weapon will combine all the best capabilities of the M72 LAW, M136 AT4, M136E1 and M141 BDM and replace them in the Army arsenal.

**PYROTECHNICS & SHOULDER
LAUNCHED MUNITIONS**



COUNTERMEASURE FLARES TEAM MOVES QUICKLY TO MEET URGENT WARFIGHTER NEED

A moving target is hard to hit but that was the **challenge** posed to the Countermeasure Flares team at PM CCS when the Army **drastically increased** their monthly **requirements** for the M211, M212 and M206 Countermeasure Flares from 9k to 54k in the space of three months. Driving the demand was the highly accelerated, fleet-wide fielding of the new helicopter-mounted Common Missile Warning System. **Additional munitions were needed** to support its mission in theater.

PM CCS immediately put **streamlined contracting** processes in motion, setting the stage for **multiple ramp-ups**, product improvements and a significant increase in production quantities. New tooling and manufacturing processes were adopted and deliveries to the field were expedited.

Throughout this entire process, the PM CCS Countermeasure Flares team took it upon themselves to provide close coordination from production to transportation in order to **meet warfighter needs**.

SIGNALS

The family of Hand Held Signals consists of two sets of signals, a star cluster and a parachute. Signals such as the M158 Red Star Cluster and M127A1 White Parachute are used by downed airmen or others who may be exposed for emergency escapes.

MARINE MARKERS

Marine Markers (Mk 25, Mk58 and Mk124) are used in sea-surface reference-point marking that use both smoke and flame. Applications include charting the course of enemy submarines, locating survivors during search and rescue operations, locating target areas in antisubmarine warfare or determining wind direction and velocity.

BATTLEFIELD EFFECTS SIMULATOR

M31A1 Direct/Indirect Fire Cue Simulator and the M30 Main Tank Gun Simulators are pyrotechnic training devices that produce visual and audio effects used in training.

GROUND EFFECTS SIMULATORS

The M115A2 Ground Burst Simulator and M116A1 Hand Grenade Simulator simulate battle noises and battlefield effects – shells in flight, ground burst explosions or grenades. Their greatest use is at the combined training centers and infiltration courses at troop training sites. The M117/M118/M119 Booby Trap Simulators teach troops installation, detection and caution by simulating booby traps a Soldier might encounter on the battlefield.

SIMULATORS

PM CCS handles battlefield and ground effects simulators among others. Simulators produce a flash of sparks to cue the user that a target has been hit.



PYROTECHNICS

Pyrotechnics, ranging from flares to signals, provide important capabilities to the warfighter, such as communication, illumination, training and protection against advanced air-to-air and surface-to-air weapon systems.



XM216 AIRCRAFT COUNTERMEASURE FLARE

The XM216 is considered essential to provide Army aircraft protection against advanced air-to-air and surface-to-air Infrared (IR) weapon systems. It will be used as a decoy to counter an attack on aircraft from various infrared-guided missile threats at both low and high altitudes.

AP25 PERSONAL DISTRESS SIGNAL KIT

This kit is used by downed airmen or others exposed to emergency escape and evasion situations to signal distress. The kit has a hand fired projector and a bandoleer assembly which contains a plastic molded bandoleer holding seven red signals.

M211 AND M212 AND M206 AIR COUNTERMEASURE FLARES

These flares are part of a family of advanced IR decoy flares designed for use by Army aircraft and helicopters to meet advanced threats in current and future operational environments. The M211 uses a special high surface area metal foil, which rapidly oxidizes when exposed to oxygen. When one of the flares is dispensed from the host aircraft, the special pyrophoric alloy material payload reacts with air to emit intense IR radiation that is not visible to the naked eye. The IR radiation diverts heat-seeking missiles away from the aircraft. When used together, the M212, a spectrally matched flare and the M206, a magnesium Teflon flare, provide protection against a wide range of surface to air threats.

