



## NATIONAL INFANTRY MUSEUM, SOLDIER CENTER TO HONOR US INFANTRY LEGACY

The new National Infantry Museum and Soldier Center at Patriot Park will honor the legacy of the United States Infantry on a 200-acre site that links Columbus, Ga., with Fort Benning, the Home of the Infantry. The National Infantry Foundation, a 501 (c) (3) private foundation, was created to act as the sponsoring organization for the project.

The museum's galleries will trace infantry history from colonial times to the present and will feature interactive and immersive exhibits to enhance the visitor's experience. It will be designed to attract and educate all segments of the population with interactive learning opportunities, high-tech classrooms, theaters, and dramatic venues for sacred ceremonies. An active education program will make the venue a must-see attraction for school groups and students of all ages. The foundation has an education coordinator on its staff to work with school groups and assist teachers in the preparation of lesson plans and field trips. The focus of the educational effort will be to teach history, as the history of the U.S. Army Infantry parallels the history of our country.

Additional instruction will focus on leadership skills and the Army Values of loyalty, duty, respect, selfless-service, honor, integrity and personal courage. Research done by an internationally known museum planning firm estimates annual visitation at 480,000 to 520,000.

In addition to the 190,000-square-foot museum, there will be a five-acre parade field for infantry and basic training graduations and change of command ceremonies. A Walk of Honor flanked by gardens and memorials will lead visitors to the museum. A recreated World War II era Company Street, featuring the headquarters and sleeping quarters used



National Infantry Foundation

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by General George S. Patton in 1941, will take visitors back to the scenes of our country's largest wartime build-up. The facility will also include a 3-D IMAX theater, restaurant and museum store.

The project is a cooperative endeavor with funding being sought from both public and private sectors. To date more than \$90 million has been raised in cash and pledges toward a campaign goal of about \$100 million.

The National Infantry Museum is fortunate to have one of the world's greatest collections of military artifacts; however, the foundation is dedicated to building a museum of people, not things.

Visitors will meet the infantryman face to face, and join him on his journey. They will come to understand why an infantryman

does what he does, why he puts himself in harm's way in defense of an idea, and they will leave transformed, just as the infantry transforms the man into the Soldier.

A graduation and dedication ceremony will take place March 19. Graduates, family members, guests and members of the public will then be invited to visit the Soldier Center, the portion of the new museum comprising an IMAX theater, restaurant, gift shop, lobby, 2nd Regiment gallery, classrooms and Ranger and Officer Candidate School Halls of Honor. The official opening of the remaining galleries will be in June.

For more information on the National Infantry Museum, visit [www.nationalinfantrymuseum.com](http://www.nationalinfantrymuseum.com) or call (706) 653-9234.

# LIGHTWEIGHT .50-CAL: LETHALITY AT HALF THE WEIGHT

DEBI DAWSON

As Soldiers training for combat look to lighten their load, they can look forward to the lightweight .50-caliber (LW50) machine gun.

The LW50, an addition to the Army's arsenal of machine guns at one-half the weight of the M2 .50-caliber machine gun and with 60-percent less recoil, does not require the setting of headspace and timing. The LW50 provides Soldiers with the punch of a .50-caliber machine gun in the footprint of a 7.62mm weapon system, allowing them to bring .50-caliber lethality to the fight in situations where using a light to medium machine gun is the only available option.

The LW50 is still in the early stages of system design and development, and officials at the Program Executive Office Soldier at Fort Belvoir, Va., said they expect the weapon to be fielded in 2011. They said a limited two-part Early User Assessment for the weapon was conducted with Special Operations Command (SOCOM) personnel in March and May.

The LW50, a technological spinout from the 25mm XM307 Advanced Crew Served Weapon program, is capable of firing all current .50-caliber ammunition in the inventory, including the standard M33 ball; the M8 armor-piercing incendiary; the M903 sabot light armor penetrator; and the MK211 multipurpose round that combines armor-piercing, explosive, and incendiary effects.

"A major benefit of the LW50 is the weight and recoil savings and no requirement to adjust the headspace and timing," said Shailesh Parmar, a product director for Product Manager Crew Served Weapons in the office of Project Manager Soldier Weapons. "The LW50 is expected to weigh less than 65 pounds, including

tripod and traversing and elevation mechanism, compared with the M2 system's weight of 128 pounds, a savings of 63 pounds or more," said Parmar. He also noted that the LW50 can be set up faster than an M2 because it does not need ballast to weigh down the tripod due to less recoil.

The LW50's greatly reduced recoil enables Soldiers to use weapon-magnified optics and maintain sight picture of the target, which was unthinkable and potentially painful with the M2.

"Lower recoil also means less dispersion of rounds and better accuracy," Parmar said. "That, in turn, makes it easier to qualify with the LW50, allows Soldiers to use rounds more economically, and reduces the logistical burden."

The LW50's weight savings, reduced recoil, and increased accuracy allow for its use in places that were not feasible for an M2, such as in light infantry operations.

Once the LW50 is deployed, all vehicles that mount the M2 will be able to mount the new system. Tests have been successfully conducted mounting the system to the Stryker Combat Vehicle and the Common Remotely Operated Weapon Station.

Other benefits of the LW50 include safety and training applications. The LW50 eliminates the need for the operator to adjust the headspace and timing and for any special maintenance tools, reducing the amount of training required. The current LW50 has 131 parts, compared with 244 for the M2.

According to the current program cycle, the LW50 could be fielded at the end of FY11. Light units, such as the 82nd Airborne Division, the 101st Airborne Division (Air Assault), 10th Mountain

Division, 25th Infantry Division, and SOCOM forces, are expected to benefit most from the new weapon.

Seeing what PEO Soldier is bringing to bear in the Global War on Terrorism "inspires and sustains our young Soldiers" as they prepare to deploy to Operation Iraqi Freedom and Operation Enduring Freedom, said CSM Neil Ciotola of III Corps, Fort Hood, Texas. "Many of our first-term troopers and even our veterans who have one tour can look at that and go: 'That's what's waiting for me.'"

*(Debi Dawson serves as the PEO Soldier Strategic Communications Officer.)*



PEO Soldier

*A Soldier at Fort Hood, Texas, test fires the LW50 lightweight .50-caliber machine gun.*

# ARMY UNVEILS NEW STABILITY OPERATIONS FM

JOHN HARLOW

The commanding general of the U.S. Army Training and Doctrine Command, GEN William S. Wallace, unveiled the new *Stability Operations* field manual October 6.

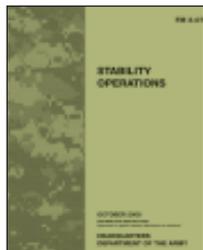
FM 3-07 puts stability operations into doctrine after it was recently introduced in FM 3-0, *Operations*, where its importance was elevated to the same level as offensive and defensive operations.

“We recognize that in a contemporary operational environment in the 21st century, conventional military operations, offensive and defensive, will be conducted simultaneously with stability operations,” GEN Wallace said. “Our hope is that FM 3-07 becomes a source document not just for the military and agencies within our government, but also non-governmental agencies with whom we routinely work.”

LTG William B. Caldwell IV, commanding general of the U.S. Army Combined Arms Center at Fort Leavenworth, Kan., said, “America’s future abroad is unlikely to resemble Afghanistan or Iraq, where we grapple with the burden of nation-building under fire. Instead, we will work through and with the community of nations to defeat insurgency, assist fragile states and provide vital humanitarian aid to the suffering.”

“Achieving victory will assume new dimensions as we strengthen our ability to generate ‘soft’ power to promote participation in government, spur economic development and address the root causes of conflict among the disenfranchised populations of the world, LTG Caldwell said. “At the heart of this effort is a comprehensive approach to stability operations that integrates the tools of statecraft with our military forces, international partners, humanitarian organizations, and the private sector.”

Given the complexities of the future operating environment, the Army must



look at the different ways the elements of national power (military, economic, diplomatic and information) are employed, according to the new manual. It states that military success alone will not be sufficient to prevail during a time of protracted confrontation among state, non-state, and individual actors fueled by expanding religious extremism, competition for energy, globalization outcomes, climate and demographic changes, and the increased use of violence to achieve political and ideological ends.

“Our objective when we go into a foreign country is to leave, but to leave with that country safe and secure,” said LTG Caldwell.

During stability operations, doctrine states U.S. military forces will partner with different U.S. government agencies, non-governmental agencies and coalition partners to bring help and return the quality of life to the people. This doctrine will make stability operations a more conscious portion of that which a Soldier prepares for and executes in the future by institutionalizing the recognition that stability operations are part of operations, TRADOC officials said.

“Field Manual 3-07, *Stability Operations*, represents a milestone in Army doctrine,” said LTG Caldwell. “It is a roadmap from conflict to peace, a practical guidebook for adaptive, creative leadership at a critical time in our history. It institutionalizes the hard-won lessons of the past while charting a path for tomorrow. This manual postures our military forces for the challenges of an uncertain future, an era of persistent conflict where the unflagging bravery of our Soldiers will continue to carry the banner of freedom, hope and opportunity to the people of the world.”

(John Harlow works for the TRADOC Public Affairs Office.)

## NEWS BRIEFS

**War College Announces Strategic Landpower Essay Contest** — The U.S. Army War College and U.S. Army War College Foundation announce the annual Strategic Landpower Essay Contest. The topic of the essay must relate to “Perspectives on Stability Operations and their Role in U.S. Landpower.” Essays should be postmarked by February 17, 2009.

Anyone is eligible to enter and win except those involved in the judging. The Army War College Foundation will award a prize of \$3,000 for the first place winner, \$1,500 to the second place winner, and \$500 for third.

For more information or for a copy of the essay contest rules, contact Dr. Michael R. Matheny of the U.S. Army War College Department of Military Strategy, Planning and Operations at (717) 245-3459 (DSN 242-3459) or e-mail michael.matheny@us.army.mil.

**USAMU Hosts Small Arms Championships** — The U.S. Army Marksmanship Unit will host the 2009 U.S. Army Small Arms Championships in conjunction with the U.S. Army Infantry Center February 21-28 at Fort Benning, Ga.



The Army Rifle and Pistol Championships are open to all Soldiers of all Army components, of any rank, with of any military occupational specialty, including West Point and college ROTC cadets.

All Soldiers will fire both the M-16 rifle and M-9 pistol in helmet and load-bearing equipment from 25 to 500 yards with the M-16 and 7 to 25 yards with the M-9. Teams from battalion-level compete for unit recognition and team awards. All Soldiers will receive advanced marksmanship instruction and training materials to conduct train-the-trainer clinics on return to their home station. The U.S. Army Long Range Championships will provide M-24 long-range shooting training from 600 to 1,000 yards.

To register, contact Clarence Fedrick at (706) 545-5279 or Clarence.Fedrick@usaac.army.mil. A copy of the program/schedule will be available on the USAMU Web site at www.USAMU.com.

# 40MM NON-DUD PRODUCING TRAINING AMMO NOW AVAILABLE

KATE ROA

**P**EO Soldier's Project Manager Soldier Weapons in Picatinny Arsenal, N.J., 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 who 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 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 Marines' request became a joint program between the Army Research Development and Engineering Center at Picatinny Arsenal and the USMC in Quantico, Va.

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 Navy MK nomenclature. They classified the day training cartridge in 2003 and had enough successes to secure additional funding. The Mod 1 day/night training, visible in IR spectrum and to the naked eye, 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, BG 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 five-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 issued 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 daytime-only training cartridge. The cartridge needed nighttime capability as well, so Cyalume's glow-stick component was added to the orange powder payload. In 2005 SOCOM awarded Rheinmetall a contract to produce test quantities of its cartridge for testing and evaluation.

The XM1110 is progressing well. Compliance with Key Performance Parameters was demonstrated in April of 2007 in Germany, followed by a successful Initial Operator Test (IOT) in April of 2008 in Avon Park, Fla. 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.)*