

# INFANTRY NEWS



THE INFANTRY HOTLINE provides Infantry soldiers in the field with a way to communicate their problems or concerns about Infantry proponent issues. By dialing AUTOVON 835-7693 or commercial (404) 545-7693, anyone can contact the Infantry School's Directorate of Evaluation and Standardization. The Directorate acts as the School's quality assurance agency for all products and collects data from sources both inside and outside the School.

The hotline is connected with a telephone answering machine, and messages are usually responded to within two working days.

The School welcomes comments and issues on School products (courses, graduates, literature, training, and equipment) as well as deficiencies and will help a caller with doctrinal and tactical questions.

The School wants to know what it is doing right, what it can improve upon, and how it can best meet the needs of the Infantryman.

THE CMF 11 SOLDIER'S Manuals are under revision and will be fielded in January 1989. The revised manuals will be consolidated into one manual for each MOS for Skill Levels 1 through 4, as opposed to separate manuals for Skill Level 1 and Skill Levels 2 through 4.

The Trainer's Guide, formerly a separate publication, will be contained in Chapter 2 of the Soldier's Manual for each MOS.

The 11B Soldier's Manual will contain the tasks shared by all CMF 11 MOSs and will be distributed to all infantrymen. MOSs 11C, 11H, and 11M will have Soldier Training Publications (STPs) that contain only MOS-specific tasks.

The CMF 11 SQT date has been

moved to June 1989 to allow Soldier's Manuals six months in the field before the test.

THE REVISED BASIC RIFLE Marksmanship (BRM) program has been implemented at all Army Training Centers throughout the Training and Doctrine Command since mid-1987. The prescriptive program standardizes the conduct of training as well as the evaluation of progressively learned marksmanship in Basic Combat Training and One Station Unit Training.

The program of instruction places more emphasis on the basic soldier skills and the shooting fundamentals early in the training and reinforces it for the rest of the time. Additional feedback firing is conducted on known distance ranges out to 300 meters.

The procedures for the conduct of individual qualification and allowable alibis have been made more stringent in order to better evaluate the many skills that make up the individual qualification standards.

All soldiers must complete nuclear, biological, and chemical training and night fire training exercises to standard as part of the overall BCT/OSUT basic rifle marksmanship program.

THE EXPERT INFANTRYMAN Badge (EIB) Test has been revised, and the effective date of the new EIB publication (DA Pamphlet 350-88-1) is 1 August 1988.

The following are the major points addressed in the revision:

- The content of the EIB test does not change all the tasks, and the events remain the same as currently found in the final approved draft, DA Circular 350-87-XX.
- All of the tasks will match estab-

lished standards in the field as outlined in the Soldier's Manuals.

- An EIB board must contain at least one commissioned officer.
- The testing sequence is left to the discretion of the unit commander. The Army Physical Fitness Test and the 12-mile road march are no longer suggested as first in the testing sequence.

- Land navigation no longer requires a perfect score of six out of six but allows a soldier to miss one point.

- Soldiers should be tested by squad with the squad leader taking his troops through the test stations. Unit integrity should be maintained.

The EIB test is a training opportunity for a unit, and all soldiers should be given ample opportunity to try for an EIB. (The current pass rate throughout the Army is 14.33 percent.)

AN ERRATA SHEET for FM 23-1, Bradley Fighting Vehicle Gunnery, September 1987, has been sent to major commands and battalion S-3s. It contains clarifications and revisions of terms and procedures.

The changes are to be added to the manual in ink as an interim measure until the Change 1 packet is published. Units are encouraged to reproduce the sheet for local distribution.

Any comments or suggestions concerning the errata sheet or FM 23-1 should be directed to Commander, Bradley Instructor Detachment, ATTN: ATSH-IN-1B-BID-GPO, Fort Benning, GA 31905-5594; AUTOVON 784-7417/7250.

THE BRADLEY INSTRUCTOR Detachment at Fort Benning is asking all instructor/operator (I/O) certified

soldiers who plan to attend the Master Gunners Course to bring their certification diplomas with them.

Soldiers who are not I/O qualified are being enrolled in an I/O course during the Master Gunners Course. Those who have proof of their I/O certification can engage in more productive training instead of retraining on the U COFT.

Any questions concerning this request should be directed to Commander, Bradley Instructor Detachment, ATTN: ATSH-IN-1B-ID-MG, Fort Benning, GA 31905-5594; AUTOVON 784-6901/6433.

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HAVING PROFICIENT Dragon gunners in its infantry squads is critical to a platoon's ability to defeat an armored enemy. The selection, training, and sustainment of Dragon gunners must therefore be an area of command interest.

Infantry One Station Unit Training selects, trains, and qualifies Dragon gunners and awards them Additional Skill Identifier (ASI) C2. Currently, the soldier's Dragon Scorecard (DA 5286-R) and his DA Form 2-1, coded with the ASI of C2, accompany him to his first assignment.

Personnel managers and commanders must see that mechanisms are in place that will distribute Dragon gunners to the battalions equitably.

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FM 23-1, BRADLEY Fighting Vehicle Gunnery, has caused some confusion concerning the use of tactical scenarios on Bradley gunnery ranges.

The manual says, "The intermediate gunnery tables are not to be fired using wingman techniques. The intermediate gunnery tables are marksmanship and engagement technique tables. They are used to train the crews to properly acquire and engage targets through various target or firing vehicle conditions; therefore, they are not to be used under a tactical scenario." (Section III, Chapter 10, page 10-15).

This statement was not intended to

result in the generic reading of score-card tasks, conditions, and standards as in an administrative small arms qualification range. The Infantry School continues to support scenarios that accurately portray a combat situation but that do not overwhelm the gunnery evaluation with tactical requirements associated with ARTEP-like tasks.

Combat oriented scenarios should be designated that accurately replicate Threat capabilities but do not complicate the technical requirements of running a gunnery qualification range. Scenarios should reveal only the information necessary for the proper conduct of a task—that is, type of fire command, visibility conditions, sighting system, and engagement type (offensive/defensive).

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THE U.S. ARMY INFANTRY Board submitted the following items:

**Bullet-Trap Rifle Grenades (BTRGs).** As the Army's proponent for small arms, the Infantry School is constantly seeking ways to improve the effectiveness of small arms ammunition. Recent developments in foreign munitions have shown the possibility of increasing the firepower of riflemen through the employment of BTRGs.

These grenades are designed to be fired using service ammunition already loaded in the rifle; special non-projectile (blank) ammunition is not required to launch the grenade. The "bullet trap" in the base of the grenade catches the fired rifle bullet; the combined propulsion forces of the fired bullet and the expanding gases in the rifle barrel then launch the grenade.

The Infantry Board conducted a concept evaluation program (CEP) test for the Infantry School to assess the operational feasibility of the BTRG during the period 21 March through 8 April 1988. During this test, eight qualified M203 grenadiers fired training practice BTRG and 40mm rounds (M781) against a series of point and area targets to generate hit performance data. A limited number of

antipersonnel and antiarmor BTRGs were also fired by manufacturers' representatives to compare their effects with those of the 40mm high explosive dual-purpose round.

Illumination provided by BTRG and 40mm illumination rounds were compared, and the smoke obscuration provided by the smoke BTRG was assessed. The visual and audible signatures, human factors, and safety of the BTRG were also assessed.

The School will use the data in making decisions concerning any future use of BTRGs.

**M16 Rifle Training Devices.** As the Army's proponent for rifle marksmanship, the School is also seeking ways to improve the effectiveness of rifle marksmanship training. The results of evaluations conducted over the past several years indicate that improvements in effectiveness and economy may be achievable through the use of device-based training.

During the period 30 September 1987 through 29 April 1988, the Infantry Board conducted a CEP test to assess the relative effectiveness of six rifle marksmanship sustainment training programs (STPs) designed to be used in TOE or TDA units. Although primarily focused on the relative effectiveness of the alternative STPs rather than any materiel system, the test involved the use of the Multipurpose Arcade Combat Simulator, a low-fidelity part-task trainer.

The STPs were varied with regard to the frequency of training, the use or nonuse of a training device, and the amount of live fire. Six company-sized units (one per STP) participated in the six-month training programs. This ensured that a minimum sample of 75 soldiers would complete all of the training, exercises, and tests for each STP.

The School will use the test results to develop the best training strategies and to initiate actions for obtaining appropriate training devices.

**M113 Block II Modifications.** There have been several improvements in the M113 armored personnel carrier over the years, from the basic M113 through the M113A2. Additional

improvements (Block II modifications) in the areas of the power-to-weight ratio and the vehicle's ability to withstand small arms fire have been incorporated into the M113A3.

These improvements include a 275-horsepower turbocharged version of the 6V53 diesel engine powering an XT-200-4 cross-drive transmission with steering and braking functions; spall liners to provide additional protection for occupants; and external fuel tanks to reduce the chance of fire and to increase interior space. Additional bolt-on applique armor protection and an armored machinegun shield were added to the M113A3 for testing. With the applique armor installed, the vehicle weighs about 31,000 pounds.

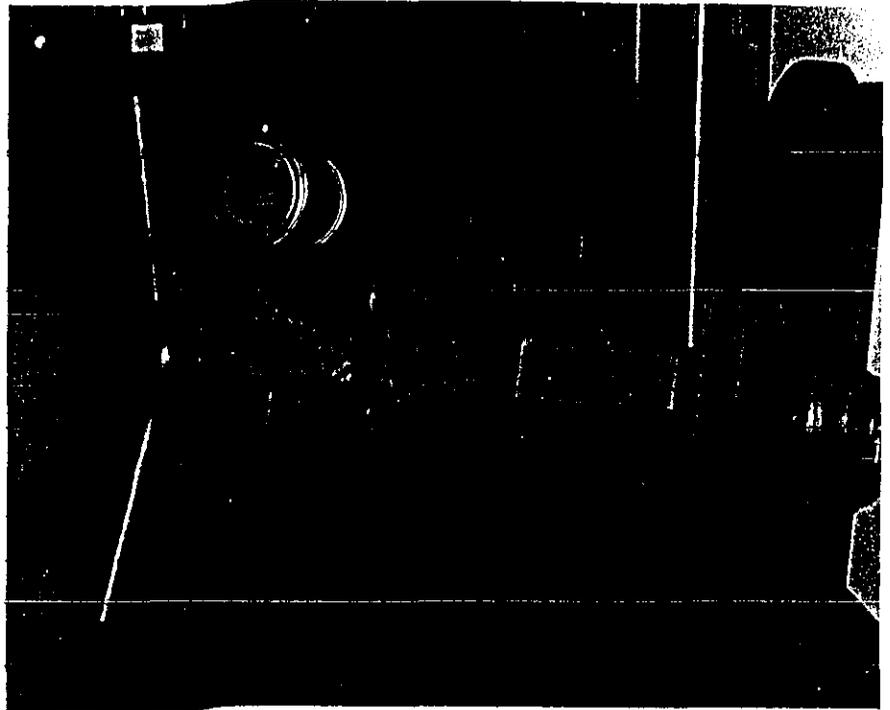
During the period 28 March through 28 April 1988, the Board conducted a CEP test to assess the effects of the external armor kit on the vehicle's operational mobility and reliability and of the Block II modifications on the soldiers' ability to accomplish mission-essential functions.

Two nine-man mechanized infantry squads conducted a side-by-side comparison of a modified M113A3 with applique armor and a standard M113A2 during a series of mobility, swim, and recovery exercises and crew drills in an operational environment.

Data was also collected on human factors, safety, training, logistical supportability, and reliability, availability, and maintainability. The School will use the test results to assist in making decisions regarding the utility of the external armor kit and the revised load plan.

THE NATIONAL INFANTRY Museum is proud of its outstanding Civil War collection. Among the items on display are a number of Currier and Ives lithographs, and others as well, showing battles, heroes, and military installations of the Civil War period. During that time, patriotic citizens displayed pictures such as these in their homes.

A particularly interesting piece is a



James 12-pounder cannon

folding cot known as the "strong officer's day bed," which is made of wood, leather, and canvas. In use, it folded out with collapsible supports and posts that extended upward to support mosquito netting. When not in use, it could be folded into its case. It then became a suitcase complete with handle for transporting. These were not official issue but gift items from loving families who had the wealth to send their relatives off to war in style and as much comfort as could be bought.

There is a surgeon's kit, complete with knives, saws, and tourniquets. There were many amputations resulting from the use of Minie ball ammunition (named for its inventor, French Army Captain Claude Etienne Minie) which caused massive wounds, shattered bones, and left little choice for a doctor if he was to save lives. Also shown are a trephine (which is a saw used to remove bone from the skull), bleeders, and an ivory handled tooth extractor.

A rare Confederate Napoleon 12-pounder made in 1863 in Columbus, Georgia, as well as a Union James 12-pounder made in 1861 by the Ames Company at Chicopee, Massachusetts, are on display. The James

cannon is complete with carriage and limber. There are also other rifles, muskets, pistols, bayonets, pikes, swords, a Ketchum hand grenade, and a Coehorn mortar to be seen.

Some examples of uniforms worn by both sides are also displayed, all in excellent condition. An interesting and unusual one is a rare New York State volunteer Zouave uniform. A flamboyant red, it was patterned after the uniforms of the French Zouaves who fought in the Crimea in the 1850s. (The Zouaves thought that the Civil War would be short-lived and that their service would be more fraternal than military.) Both sides had Zouave units, however, and the uniforms proved impractical and easy targets and were soon abandoned. A complete butternut uniform, also rare, is on display, as are kepis and other headwear, various insignia, epaulets, buckles, buttons, and footwear.

The weapons of the Civil War that are on display include a .50 caliber sharpshooter's rifle used by a member of Company G, 1st Battalion, New York Sharpshooters from August 1862 to June 1865, along with his bullet mold and powder flask and a packet of letters that he wrote during his military tenure. Many times in the let-

ters, he refers to the 13-pound rifle with pride. In 1862 he wrote, "We are the only company in the regiment that has got telescopic rifles," and again, "Our guns are the kind of guns to have. I have got as good a gun as there is, and I can hit a man three-quarters of a mile away with it."

Many small but important miscellaneous items used by soldiers during this period are in the Museum. Among them are a handmade wooden button-polishing board that helped a soldier keep brass polish off his dark blue uniform; various entrenching tools; articles of mess equipment; lanterns; candleholders; blankets; a stove; cartridge boxes and pouches; telescopes; a small tin handwarmer; an 1865 muster for B Company of the 84th Infantry Regiment of Colored Infantry; drums; canteens; flags; handmade bone dominoes; Confederate currency; photographs; powder horns; books; posters; a dog tag; a trunk; and a duffel bag.

The collection has been studied and photographed by a number of researchers who have found items in it that they had not seen elsewhere. One such researcher was seeking information for inclusion in the Time-Life Books series on the Civil War.

The National Infantry Museum Society, formed at Fort Benning a number of years ago to assist the Museum with financial and volunteer support, is open to anyone who is interested in joining. The cost is \$2.00 for a one-year membership or \$10.00 for a lifetime membership.

Additional information about the Museum and the Society is available from the Director, National Infantry Museum, Fort Benning, Georgia 31905-5273; AUTOVON 835-2958 or commercial (404) 545-2958.

THE DIRECTORATE OF COMBAT Developments at the Infantry School has submitted the following items:

**Lasers on the Future Battlefield.** The infantryman of the future

will have to be prepared to fight and survive in a laser environment. The thousands of laser rangefinders and laser designators already on the battlefield will be the least of our problems. More sophisticated and powerful lasers will also be found there, and these will present a real threat to our weapon systems and the way we normally conduct warfare.

For example, it was reported recently that the new Soviet FST-1 tank has a laser weapon system on board that can detect and locate surveillance and target acquisition optics and jam them with a laser beam, blinding the operator. In addition, several months ago, off Hawaii, a Soviet ship reportedly used lasers to jam a surveillance aircraft that was monitoring its operations.

Those who are in leadership positions must think seriously about how we are going to protect our soldiers and enable them to perform their assigned tasks against a laser threat. The progress that has begun in the area of laser hazard training must be continued, and each small unit commander must become aware of the hazards associated with the use of lasers in combat and work to develop countermeasures that will decrease their effectiveness against our equipment and personnel.

In addition, our tactics and our doctrinal "How to Fight" concepts should be reviewed with an eye toward the characteristics of laser weapon systems and the effect of these on the way we conduct our daily business. It may be necessary for us to return to some of the ways we used to do things without our sophisticated and long range optics.

Combat developers and trainers must start looking seriously at materiel improvements that will protect our soldiers and our weapon systems. Eye-safe surrogate laser weapon systems must be developed and fielded along with battle drills and tasks to train our soldiers in the techniques they will need to survive against threat lasers.

Laser warning devices should be considered for our combat vehicles,

crew-served weapon systems (such as TOWs), and individual soldiers. The technology is available, but the integration of these systems into our force will take time and, more important, funds that are also badly needed elsewhere.

While we are not in a state of crisis, we are at a point where the subject of lasers on the battlefield needs serious review by all combat leaders.

**LAW Night Sight.** Units in the field have asked for information on how to fire the M72 light antitank weapon (LAW) at night or during periods of limited visibility. An adapter is now available for mounting the AN/PVS-4 individual weapon night vision sight on the LAW. This adapter and the M72 sight reticle for the AN/PVS-4 are shown in the AN/PVS-4 operator's manual. It can be ordered through normal supply channels: Mounting Bracket Assembly, M72A1 (NSN 5855-01-039-2841; Reticle Cell Assembly, M72A1 (NSN 5855-01-039-2844).

The use of this adapter and the AN/PVS-4 allows the LAW to be fired at night without the target having to be illuminated.

The AT-4 weapon system is being fielded as a short-range antiarmor supplement to the LAW, and the need for a night firing capability is being emphasized. The Infantry School is also currently evaluating an adapter to mount the AN/PVS-4 on the AT-4 and is investigating methods by which the adapter can be tested and fielded as quickly as possible.

VISTA (VERY INTELLIGENT Surveillance and Target Acquisition) test bed capabilities were demonstrated in April at Harry Diamond Laboratories. VISTA is designed to correct deficiencies in battlefield information processing at brigade level.

