

# INFANTRY NEWS



**THREE ITEMS OF CLOTHING** and equipment for soldiers are scheduled for fielding soon, according to the Infantry School's Directorate of Combat Developments. The School is the TRADOC proponent for such items.

**Cold/Wet Boot.** A new cold/wet boot has been identified after testing at Dalton, Georgia, by the Ranger Training Brigade and in Alaska by the 6th Infantry Division. The stated requirements were for a waterproof march boot that would provide protection from the cold in temperatures ranging from -10° to +30° Fahrenheit.

The selection process began in 1989 with more than 50 candidate boots, all state-of-the-art, high-tech footwear. The first round of testing narrowed the field to eight, then to the best three, with the Matterhorn and Rocky boots selected for a 60,000-item interim buy and fielding this winter.

The priority of issue will be first to soldiers who fight on their feet, then to vehicle crews and all others.

**Cold/Wet Glove.** Since 1988, the Army has evaluated a number of five-finger gloves from around the world. The infantry's requirements for a cold/wet five-finger glove, however, are more difficult to meet than the requirements for a ski glove. For example, individual soldier tasks require gloves that give cold/wet protection in the temperature range of +40° to 0° Fahrenheit and allows a soldier the dexterity he needs. In addition, the gloves must be more durable than the current black light duty work glove.

This winter, 12,000 improved cold/wet gloves will go to the field for an expanded field test, which should dispel any doubts about this improved glove.

**Lightweight Flashlight.** The School has initiated efforts to identify a non-developmental lightweight, scaled down flashlight to replace the current angle-

head flashlight for some soldiers. A total of 1,400 flashlights will go to the field for an expanded test in the spring of 1991.

Three different prototypes are being evaluated to determine which type of flashlight matches the needs of the dismounted soldier, the vehicle crewman, and all others. One, some, or all of them may be selected. The new items will be procured and fielded next year. The basis of issue will be determined by the individual soldier's job or mission.

The three leading candidates are the Mini-Mag, the Air Force crew light, and a smaller version of the Army's current angle-head light.

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**ENGINEER SUPPORT** for the mobility of light forces includes detecting all types of mines and minefields in addition to breaching obstacles and breaching walls in built-up areas. New technology is being introduced that will greatly improve the mobility of light forces and enable them to counter obstacles on the future AirLand Battlefield. The first of these was recently fielded, and the others are still being developed:

**M58 Mine Clearing Line Charge (MICLIC).** The MICLIC is a rocket-projected explosive line charge, 350 feet long, that contains five pounds of composition C-4 explosives per linear foot. It will breach a lane eight meters wide by 100 meters long through a minefield of antitank (AT) and antipersonnel (AP) mines and wire. The system is mounted on the M353 3½-ton or the M200A1 2½-ton trailer chassis.

**Small Arms Projected Line Charge (SAPLIC).** This charge, developed under the soldier enhancement program, will breach a lane at least six-tenths of a meter wide by 50 meters long through an AP minefield. It will be lightweight and manportable and is projected for

fielding by 1993.

**Antipersonnel Obstacle Breaching System (APOBS).** This is a Marine Corps item that the Army will procure after development. It consists of two sections weighing 55 pounds each, and will breach a lane six-tenths of a meter wide by 45 meters long through obstacles of AP mines and concertina wire. It is scheduled to replace the M1A1 bangalore torpedo in Fiscal Year 1994.

**AN/PSS-12 Metallic Hand-Held Mine Detector.** This battery operated, non-developmental system weighs eight pounds and can be operated by one man in a walking, standing, or prone position. Scheduled for fielding by August 1992, it will replace the current AN/PSS-11 detector.

**Standoff Minefield Detection System (STAMIDS).** STAMIDS uses an infrared line scanner, infrared and laser sensors, or a combination of the two plus other devices that will allow the standoff detection of minefields. It is projected that the system will be a payload on an unmanned aerial vehicle (UAV) and that it will be used for detecting minefields during intelligence seeking missions. It is projected for fielding in Fiscal Year 1995.

**Light Assault Bridge (LAB).** LAB will give the light forces a lightweight, mobile, trailer-mounted system that can support them with a rapidly emplaced assault bridge. It is a military load class 30 double-fold scissor bridge with a 23-meter span capability. It is currently undergoing early user test and evaluation at Fort Leonard Wood. It will be a corps asset used in support of light forces and is projected for fielding in the first quarter of Fiscal Year 1993.

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THE NEW AN/PAQ-4A INFRARED aiming light will enable soldiers wearing night vision goggles (NVGs) to fire their

rifles more accurately at night.

The light, intended primarily for use with the M16A1 and the M16A2 rifles, is mounted and zeroed on a rifle and used to send out invisible pulsing light beams that can be seen only with the NVGs.

The AN/PAQ-4A has several distinct advantages over the AN/PAG-4A, which it replaces. It weighs about half as much, has a longer range, can operate on two BA3058/U (AA) batteries, and can be attached to the M16A2 rifle.

In addition to the M16 rifles, the AN/PAQ-4A is also intended for use with the M249 and M60 machineguns, the M67 recoilless rifle, and the M72 rocket launcher, and it can be used with all current NVGs.

The device is now in production and has been fielded to units in Europe. It will be fielded to special operations forces and Ranger units during Fiscal Year 1991 and to all other infantry units during FY

1992. The basis of issue will be the same as for the AN/PAQ-4—three per light, airborne, air assault, and Ranger rifle squad, and two per BFV and M113 rifle squad.

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**THE ARMY CORRESPONDENCE** Course Program (ACCP) at the Infantry School now includes several new subcourses. Some of these will support the Reserve Component Infantry Officer Basic and Advanced Courses.

Other new courses are the Mortar Ballistic Computer, Mobility and Company/Battalion Countermobility Operations, Infantry Scout Platoon, and Threat Recognition subcourses. Bradley commander offense and defense subcourses have been in the field for several months.

The ACCP Branch at the School is also involved in a pilot program aimed at integrating nonresident instruction into

the School's resident instruction. To get advanced training in certain cognitive areas, students will take the ACCP subcourses before they enter resident training. Courses scheduled for integration at the Infantry School are the TOW Trainer Course and the Long Range Surveillance Leader Course.

Further information is available from the ACCP Branch, AUTOVON 835-7151, or commercial (404) 545-7151.

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**AN OPTICAL SIGHT** is being considered for use on a modified M16A2 rifle and the M249 machinegun. A day optical sight mounted on a rifle extends a soldier's ability to acquire and engage targets at longer ranges. It also extends a rifleman's operational day—he can shoot accurately in dawn and dusk conditions when his opponent with iron sights is significantly handicapped. The use of optics gives the user more confidence in his weapon and in his ability to hit targets.

The TEXCOM Infantry Board conducted a concept evaluation program test earlier this year to provide data for a procurement decision to field such a sight.

This test assessed the effectiveness and suitability of three off-the-shelf militarized optical sights for use with the two weapons, and all of them either met or exceeded the capabilities of the iron sights in all areas. The optics performed significantly better than the iron sights during day fire at short ranges (50 to 300 meters) and at known distances (400 to 600 meters), and they performed as well as the iron sights during day fire at long ranges (300 to 600 meters). The test soldiers preferred the optical sights over the iron sights.

On the basis of these findings, a six-month field evaluation is tentatively scheduled to begin in August 1991. The field evaluation will equip the rifle platoons of three infantry battalions with modified weapons, modified training aids, and a new POI for marksmanship instruction and standards. The goal is to outfit all members of a rifle squad except the grenadiers with the improved weapons.

A two-phase program is now in pro-



**THE SOLDIER INTEGRATED** Protective Ensemble (SIPE) is being proposed by the U.S. Army Natick Research, Development, and Engineering Center. The objective is to develop a modular, head-to-toe individual fighting system that will increase the combat effectiveness of soldiers and protect them against battlefield hazards.

The ensemble will work as a system to protect a soldier against ballistic, chemical-biological, flame-thermal, surveillance, directed energy, acoustic, and environmental hazards. In addition, it will integrate improved communications and

weapon interface capabilities.

The ensemble's subsystems include advanced clothing, integrated headgear, and microclimate conditioning. This modular approach will allow commanders to tailor the ensemble to their particular mission needs. Although the emphasis of this program is on the infantry soldier, other major Army users and other services as well are also involved.

The program began in Fiscal Year 1990 and a field operational demonstration is scheduled for late Fiscal Year 1992.

gress to field an optic on the M249 by September 1992 and on the modified M16A2 by December 1992.

**THE NATIONAL INFANTRY MUSEUM** recently prepared a major exhibit to honor the 1st Cavalry Division during its recent reunion in the Fort Benning/Columbus area. The exhibit included a number of large photographs of division members in action in World War II, Korea, and Vietnam, as well as equipment, uniforms, and mementos used by members and their opponents. There was even a memento of Maggie the Mule, the division mascot, who was killed in action in Vietnam.

*The 1st Cavalry Division, nicknamed "The First Team,"* was activated 13 September 1921 at Fort Bliss, Texas, but its history and traditions date back to the time when the United States was expanding westward across the Great Plains. Its original mission was to patrol the land along the Mexican border while at the same time training for, and maintaining, combat readiness.

The division saw service during World War II, and later during both the Korean and Vietnam wars. Although the division kept its cavalry designation for historical reasons, it fought in each of these wars as an infantry division. Elements of the division recently deployed to participate in Operation DESERT SHIELD in Saudi Arabia.

The museum also has on display in its World War II section a plaque, donated by a member, that honors the men of the 411th Infantry Regiment. This regiment served with the 103d Infantry Division in Europe.

The museum is purchasing a video tape series titled "The Different Drummer," which details the important role black soldiers have played in the U.S. armed forces from colonial times to the Vietnam War. This excellent educational series will be shown to visitors in the museum's auditorium and will also be used in black history programs.

The museum has lent its support to an effort to begin a museum at Camp Blanding, Florida, a World War II training camp that is now used for Flori-

da National Guard training. In addition, the museum's director was involved in planning the renovation of Fort Benning's historic Building 35, the old Infantry School headquarters. Assisted by the museum's collection of old photographs, the Georgia Historic Preservation Office wrote and approved the contract for the renovation so that the building's integrity and historic character would be preserved. The building is being prepared for use by the School of the Americas.

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, GA 31905-5273; AUTOVON 835-2958 or commercial (404) 545-2958.

**THE M-17 LIGHTWEIGHT** Decontaminating System is now being issued to schools of the Army's Training and Doctrine Command (TRADOC).

The system—managed through the U.S. Army Chemical Research, Development, and Engineering Center—resulted from improvements to a non-developmental item produced in Norway. Called the SANATOR (a Norwegian name that has stuck), it consists of three main parts—a collapsible 1,580-gallon water tank, a 360-pound pump-heater assembly, and a 150-pound accessory kit containing spray wands, showers, and suction hoses.

Essentially, it works like this: The rubberized nylon water tank is filled, one end of the suction hose is attached to the pump-heater assembly, and the other end is placed in the tank. The spray wands with their hoses are also connected to the pump-heater, which pumps water from the tank, heats it, and delivers it as steam to the wands. The pump can also draw water directly from a lake or stream.

For hasty decontamination, the sys-

tem uses hot water and steam to rinse chemical agents off vehicles and equipment in the field. For deliberate decontamination operations, it uses a general purpose detergent.

As an added dimension, the temperature of the water can be regulated to provide hot showers for up to 12 soldiers at a time, and the system comes with the necessary hardware.

The M-17 is an improved version of the SANATOR, which was first procured through an Air Force contract and fielded by the Army in 1986-1989. Each of the earlier versions will be retrofitted to the new design and re-issued.

Over the next five years or so, these systems are scheduled to be fielded first to overseas commands and then to units in the continental United States.

**THE LINE-OF-SIGHT ANTITANK (LOSAT)** weapon system is being developed as a highly mobile, adverse weather, day and night, direct fire, long range replacement for the improved TOW vehicle (ITV).

LOSAT will consist of a missile and weapon module mounted on a "stretched Bradley M2A2 chassis. The Army's missile of choice is the kinetic energy missile, which will be lethal against any known or projected armor in the world but other missile technologies are also being examined.

The system is being designed for a crew of three and will carry a total of 20 missiles—four ready to fire and 16 stowed. It will be organic to the antiarmor company of a heavy maneuver battalion.

Missile firing tests are being conducted, and the concept will be evaluated for full-scale development in May 1991, with fielding projected for Fiscal Year 1997.

**THE INFANTRY OCS ALUMNI** Association has been busy since April 1990 and the president and his board of directors are moving forward with an ambitious program to increase awareness of the Association and its activities.

One of these activities is the Jess Wal-

Distinguished Officer Candidate Award. The award consists of an Army saber, symbolic of a leadership position in an officer candidate class, an engraved plaque, and a complimentary life membership in the Association. Recent winners of the award are Second Lieutenant Raymond L. Strickland, Class 3-90; Second Lieutenant Anell Berry, Class 4-90; and Second Lieutenant Daniel A. Talbot, Class 5-90.

Another major activity is planning for the celebration of the 50th Anniversary of the OCS program, which will be held 13-15 February 1991. This joint activity between the 3d Battalion (OCS), 11th Infantry, and the Alumni Association, will be held in conjunction with the Patterson Award ceremony and the OCS Hall of Fame induction.

Regular membership in the Alumni Association is open to graduates of the Officer Candidate Schools at Fort Benning, Georgia, and Fort Riley, Kansas, regardless of branch. Associate membership is open to graduates of other OCS programs and other persons who have made and will continue to make significant contributions to the OCS program. Annual dues are \$10.

Anyone who is interested in joining may write to Secretary, The Infantry OCS Alumni Association, P.O. Box 2192, Fort Benning, GA 31905.

**MICROCLIMATE COOLING SYSTEMS**, both air and liquid, are being de-

veloped by the U.S. Army Natick Research, Development, and Engineering Center for soldiers inside combat vehicles and aircraft. In extremely hot, humid interior conditions, standard clothing, even in combination with a vehicle's cooling system, often fails to keep body temperatures within acceptable limits. This not only affects the soldiers' performance, it can also produce casualties.

An air-cooled system has been type



classified with the M1A1 tank and is now standard issue with the vehicle. It uses a specially constructed lightweight vest that is connected by a hollow umbilical cord to a source of cooled, conditioned air from the tank's turbine engines. It is worn over a soldier's underclothing but under all his outer garments and equipment. The cool air flows around the soldier's torso, removes excess body heat

and sweat, and keeps his temperature within acceptable limits.

An improved version of the air vest is now being tested that can be used in other Army vehicles and aircraft. (For compatibility with aircraft, the cord has been shifted from the front to the side.)

Soldiers wearing these vests can endure higher temperatures and can work longer without a reduction in performance. Maintaining a lower body temperature also reduces sweating and with it the danger of dehydration.

**THE ARMY RESERVE PERSONNEL** Center (ARPERCEN) in St. Louis receives a truckload of mail each day, and mail that arrives without office symbols can be delayed or lost.

Fortunately, ARPERCEN has a user-friendly guide available that will help its customers get their paperwork where it belongs.

The ARPERCEN Quick Reference Action Guide is keyed to the more than 200 most common forms that ARPERCEN customers use. It identifies each form by its number, proponent agency, and name, and then provides the office symbol at ARPERCEN to which it should be sent.

The guide is free for the asking to any soldier who requests it in writing and sends a return mailing label. The address is Commander, ARPERCEN, ATTN: DARP-IMG-A, St. Louis, MO 63132-5200.

